Harlow District Council

Statutory Contaminated Land Strategy

Framework Document

Required under the provisions of the Environmental Protection Act 1990 Section 78B 2008 REVIEW

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INTRODUCTION & OVERVIEW

i.1 - BACKGROUND TO THE LEGISLATION

Industrial change and demographic shift during the 20th century resulted in the need for a large scale re-organisation of our towns and cities. Industries moved out or disappeared altogether leaving large, 'brown field', gaps in our urban landscape. At the same time, changing in heating methods, and the advent of the consumer society, has had a significant effect on the type and volume of refuse it has been necessary to landfill. Inevitably, these changes have left behind a legacy of contaminated land which in some cases, may be harmful.

The Government, in its response to the 11th report of the Royal Commission on Environmental Pollution in 1985, announced that the Department of the Environment was preparing a circular on the planning aspects of contaminated land. The draft of the circular stated that:

Even before a planning application is made, informal discussions between an applicant and the local planning authority are very helpful. The possibility that the land might be contaminated may thus be brought to the attention of the applicant at this stage, and the implications explained.

Thus suggesting that it would be advantageous for the planning authorities to have available a list of potentially contaminated sites.

In 1988 the Town & County Planning (General Development) Order required local planning authorities to consult with waste disposal authorities if development was proposed within 250m of land which had been used to deposit refuse within the last 30 years.

In January 1990 the House of Commons Environment Committee published its first report on contaminated land. This document for the first time, expressed concern that the Government's suitable for use approach, "... may be underestimating a genuine environmental problem and misdirecting effort and resources". The committee produced 29 recommendations, including the proposals that:

The department of the Environment concern itself with all land which has been so contaminated as to be a potential hazard to health or the environment regardless of the se to which it is to be put, and;

The Government bring forward legislation to lay on local authorities a duty to seek out and compile registers of contaminated land.

Immediately following the House of Commons report the Environmental Protection Act 1990 had at section 143, a requirement for local authorities to compile, 'Public registers of land which may be contaminated'. If enacted this would have required local authorities to maintain registers of land which was, or may have been contaminated, as a result of previous (specified) uses. In March 1992 however, the concern about the blighting effect of such registers resulted in a press release published by the Secretary of State delaying the introduction of section 143 stating:

The Government were concerned about suggestions that the land values would be unfairly blighted because of the perception of the registers.

Introduction

- 1. Lawyers and environmental consultants became concerned about the implications of blighting land as a result of including it on public registers as contaminated land.
- 2. When Part IIA of the Environmental Protection Act 1990 was finally introduced in April 2000 it imposed a duty on local authorities to compile registers that identified contaminated land. However these registers require more detail than those originally proposed by Section 143, in that they were required to:
 - 1. Identify the source of pollution or harm
 - 2. To name the polluting substances
 - 3. To identify the current use of the site
 - 4. To detail any remediation measures.

The result was the number of sites to be kept on registers was considerably reduced and included only the more seriously contaminated sites, rather than the potentially contaminated sites envisaged by section 143.

This problem may well arise again under a proposed European Parliament Directive on Soil Protection. This will propose a duty on Member States to establish national and regional public inventory of contaminated sites to be made public, and reviewed every five years.

The EU proposals are more prescriptive than Part IIA and may impose further costs on local authorities, particularly if the definition of contaminated land varies from the current one in national legislation.

The Directive will allow Member States to decide their own Agricultural Policy in relation to soil: However, in the context of climate change MEP's want Member States to improve soil capacity to capture carbon.

i.2 – EXPANATION OF TERMS

The legislation and guidance is heavily punctuated with many complex and often unusual terms. To assist in the interpretation of these an extensive glossary has been included in Circular 02/2000. (For convenience this has been re-produced at Appendix 7).

i.3 – NATIONAL OBJECTIVES OF THE REGIME

The government believes contaminated land to be, "an archetypal example of our failure in the past to move towards sustainable development". The first priority has therefore been specified as the prevention of new contamination via the pollution control regimes.

Secondly there are three stated objectives underlying the suitable for use approach as follows:

- a) to identify and remove unacceptable risks to human health and the environment;
- b) to seek to bring damaged land back to beneficial use; and
- c) to seek to ensure that the cost burdens faced by individuals, companies and society as a whole are proportionate, manageable and economically sustainable.

The suitable for use approach recognises that risk can only be satisfactorily assessed in the context of specific use with the aim of maintaining an acceptable level of risk at minimum cost, thereby, "not disturbing social, economic and environmental priorities".

The specific stated objectives of the regime are:

- a) to improve the focus and transparency of the controls, ensuring authorities take a strategic approach to problems of land contamination;
- b) to enable all problems resulting from contamination to be handled as part of the same process (previously separate regulatory action was needed to protect human health and to protect the water environment);
- c) to increase the consistency of approach taken by different authorities; and
- d) to provide more tailored regulatory mechanism, including liability rules, better able to reflect the complexity and range of circumstances found on individual sites.

In addition to providing a more secure basis for direct regulatory action, the Government considers that the improved clarity and consistency of the new regime, in comparison with its predecessors, is also likely to encourage <u>voluntary remediation</u>. It is intended that companies responsible for contamination should assess the likely requirements of regulators and plan remediation in advance of regulatory action.

There will also be significant incentive to undertake <u>voluntary remediation</u> in that the right to exemption to pay Landfill Tax will be removed once enforcement action has commenced.

The Government also considers that the new regime will assist developers of contaminated land by reducing uncertainties about so called, "residual liabilities", in particular it should:

- a) reinforce the suitable for use approach, enabling developers to design and implement appropriate and cost-effective remediation schemes as part of their redevelopment projects;
- b) clarify the circumstances in which future regulatory intervention might be necessary (for example, if the initial remediation scheme proved not to be effective in the long term); and
- c) set out the framework for statutory liabilities to pay for any further remediation should that be necessary.

i.4 – LOCAL OBJECTIVES

The Harlow District Council welcomed the introduction of Part IIA of the Environmental Protection Act 1990 which compliments the Council's own corporate aims and objectives.

The Council has developed a Community Strategy for Harlow which will identify priorities for sustainable economic development.

Service plans for each service area identified within the Strategy incorporate the necessary objectives and identify resources to permit them to be obtained.

The Local Harlow Local Plan, Adopted April 1995 places strong emphasis on the need to meet the needs of the area for housing, employment, and leisure, without compromising the design of the Town which integrates urban development with the natural environment.

This plan based on the concepts set out in Sir Frederick Gibbards master plan, was replaced by the Adpoted Replacement Local Harlow Plan in July 2006.

This sets out the policies and proposals for future development and land use up to 2011.

The purpose of the local plan is

- a) to provide a clear and detailed basis for the determination of planning applications
- b) to provide local policies relevant to Harlow that interprets the adopted Essex and Southend-on-Sea Replacement Structure Plan.
- c) to provide a clear framework for coordinating, directing and promoting development, infrastructure provision and the use of land for both public and private sectors.
- d) to bring planning issues before the public in a clear and transparent format.

The local plan has taken account of national and regional strategies and Planning Policy guidance.

The local plan recognises that contaminated land is important for sustainable development in Harlow as it reduces the pressure on green field sites. The Council will encourage the reuse of contaminated land for appropriate development, and as useful amenity and recreational space, subject to the elimination of unacceptable risks to health and safety, and the environment. Developers will be required to undertake site investigations and remedial action where necessary.

i.5 – ABOUT THIS STRATEGY

The Act itself states at section 78B (1) that:

Every local authority shall cause its area to be inspected from time to time for the purpose -

- g) of identifying contaminated land; and
- g) of enabling the authority to decide whether any such land is land which is required to be a special site (see appendix 1)

Section 78B (2) states that the authorities must act in accordance with guidance issued by the Secretary of State in this respect. Statutory guidance has now been published within the department of the Environment Transport & regions: Circular 02/2000, dated the 20th March 2000. Specific technical guidance on the drafting of Inspection Strategies has also been circulated in draft form for consultation on the 7th of April this year.

The statutory guidance makes it clear that in order to carry out this duty Authorities must produce a formal contaminated land strategy document which clearly sets out how land which merits detailed individual inspection will be identified in an ordered, rational and efficient manner, and in what time scale.

The first strategy as completed, formally adopted by the Council, and published in October 2002. Copies of the final document have been forwarded to the Environment Agency. Subsequently the strategy has been kept under periodic review.

To satisfy the far reaching objectives of the regime it was necessary to investigate land throughout the whole of the District and collate significant volumes of information. This has enabled the Authority to make the sometimes difficult and inevitably complex decisions relating to its condition, the risks it presents and who may be liable for it at law. This strategy is the result of that process.

It should be noted that there is no formal mechanism in place for approval of local authority strategy, though the Environment Agency, County Council, English Nature, English Heritage, MAFF, and any statutory regeneration bodies, should be consulted initially.

i.6 – ROLES AND RESPONSIBILITIES

The primary regulator in respect of these new powers are the **local authorities.** In Harlow policy making responsibility lies with Full Council with implementation of the strategy under the control of the Executive Director, Environment and the relevant Executive Committee. It is possible that changes to political management structure will result in change to delegated authority to deal with matters related to this strategy. Any such changes will be reflected in amendments to the strategy on review.

It should be noted that this is a complex and demanding enforcement role which will be carried out in accordance with the prevailing Environmental Health Services' Enforcement Policy. The Council has adopted a corporate enforcement policy which reflects the principals of the Cabinet Office Enforcement Concordat (March 1998) and the Enforcement policy of the Environmental Health Service.

The statutory guidance states: "The local authority has the sole responsibility for determining whether any land appears to be contaminated land."

This is a significant responsibility which reflects existing local authority duties under the statutory nuisance regime and Town & Country Planning, development control. The role in broad terms includes.

- To cause the area to be inspected to identify potentially contaminated sites
- To determine whether any particular site is contaminated (by definition)
- To determine whether any such land should be designated a 'special site'
- To act as enforcing authority for contaminated land not designated as a 'special site'

The Environment Agency also has four main roles:

- To assist local authorities in identifying contaminated land (particularly where water pollution is involved)
- To provide site specific guidance to local authorities on contaminated land
- To act as enforcing authority for contaminated land designated a 'special site'

To publish periodic reports on contaminated land

Where the presence of contaminated land has been confirmed the enforcing authority must:

- Establish who should bear responsibility for remediation
- Decide after consultation what must be done in the form of remediation and ensure it is effectively carried out
- Determine liability for the costs of the remedial works
- Maintain a public register of regulatory action in relation to contaminated land

i.7 – OUTLINE OF THE STATUTORY PROCEDURE

Contaminated land is defined as:

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 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

What may and may not constitute the various categories of harm is described in the statutory guidance. Controlled waters include inland freshwater, ground waters and coastal waters (see appendix 3).

Local authorities must search their Districts for land which has both sensitive receptors and sources of potential contamination. Where they have good reason to believe these both exist, they must undertake a formal risk assessment in accordance with established scientific principles in order to establish whether there is the potential for them coming together and causing harm or pollution as described. This is known as a pollutant linkage.

Where they are satisfied that significant harm is occurring, or there is a significant possibility of such harm, or pollution of controlled waters, they must declare that a significant pollutant linkage exists and that the land is therefore contaminated land by definition. In every case where the land does not fall within the category of a special site, they must commence regulatory action

This involves a series of complex procedures which must include:

- ✤ A formal written record of the determination
- Formal notification of all interested parties
- Determination the physical extent of the land
- The extent and seriousness of the risks (need for urgent action)
- The number and type of pollutant linkages
- The effect such significant pollutant may have on controlled waters (if any)
- The most appropriate and cost effective remedial scheme for each significant pollutant linkage

- Identification of liability groups and, appropriate persons, for each pollutant linkage
- Assessment of hardship in the case of each appropriate person
- Effective remediation of the site and recovery of costs where appropriate

A series of consultations must also be carried out at each stage with the ultimate aim of securing <u>voluntary remediation</u> (without the need for enforcement action). Where the land does fall within the definition of a special site the Environment Agency becomes the enforcing authority. In these cases, however, the local authority must still make the determination and formally notify the interested parties.

In certain circumstances the local authority may carry out the remedial works. In general terms it has this power where:

- Urgent action is necessary (see part 5 and appendix 5)
- There is no appropriate person
- The authority is precluded from taking enforcement action (specified reasons)
- The authority agrees to carry out the works on behalf of an appropriate person
- ✤ A remediation notice has not been complied with

In non urgent cases where a remediation notice is necessary and all the required consultations have been completed, the notice must be served on the appropriate person(s) no sooner than three months after the contaminated land has been determined or declared a special site. The notice itself may require further investigation of the site and as a result more pollutant linkages may be identified.

Where this is the case the enforcing authority must go through the same processes again to identify appropriate persons and remedial actions.

The enforcing authority must at all times consider the potential for hardship and undertake cost benefit analysis in respect of all remedial actions. Where remedial actions are undertaken in default of a notice the enforcing authority has the power to recover costs in certain circumstances.

i.8 – SITUATIONS WHERE THIS REGIME DOES NOT APPLY

As stated in i.3 above, the primary aim of the Government is to prevent new contamination occurring. There are several situations therefore where existing pollution control legislation would apply to control the effects of land contamination:

- a) Integrated Pollution Control (Environmental Protection Act 1990 Part I / Prescribed Processes and Substances Regulations 1991 Schedule 1 Part A) – There are certain processes prescribed under the above regulations, for a pollution control regime known as Integrated Pollution Control (IPC). This is enforced by the Environment Agency and includes prevention of pollution to land. Section 27 of the Act gives the Environment Agency power to take action to remedy harm caused by a breach of IPC controls, including land contamination.
- b) Integrated Pollution Prevention and Control (Pollution Prevention and Control Act 1999 and Pollution Prevention and Control Regulations 2000). The Integrated Pollution Prevention and Control Regime which came into force on the 1st October 2000, requires a site report to be submitted as part of an application. The site report will describe the condition of the site and will, in particular, identify any substances in, on, or under the land that may be a pollution risk.

The report will aid the Regulator in deciding whether the site is suitable and in setting appropriate conditions. It will then act as a reference point used to identify any change in the condition of the site on surrender of the permit and any necessary remediation to achieve that pre-existing level. The local authority will need to investigate whether there is a requirement to take action under part IIA for pre-existing contamination on submission of the IPPC application or on surrender of the IPPC permit.

c) Waste Management Licensing (Environmental Protection Act 1990 Part II) – All waste disposal and processing sites (including scrap yards) should be subject to licensing. Contamination causing harm, or pollution of controlled waters, should be dealt with as a breach of the conditions of the licence. In exceptional circumstances, where the problem arises from an unlicensed activity, it is possible that Part 11A could apply. An example of this would be a leak from an oil tank outside the licensed tipping area.

Where there has been an illegal tipping of controlled waste (fly tipping) this should also be dealt with under the Environmental Protection Act 1990 Part II (section 59).

- d) Pollution of Controlled Waters not arising from land (Water Resources Act 1991 section 161)

 Where a pollution incident has occurred and the pollutant is discharged directing into the body of water, or it has left land and it is entirely in the body of water (ie the land is no longer causing pollution), the Water Resources Act 1991 will apply.
- e) **Discharge Consents** (Water Resources Act 1991 Part III) No remediation notice can require action to be taken which would affect a discharge authorised by consent.
- f) Change of Land Use Where land becomes a risk to potential new receptors as a result of a change of use, the Town & Country Planning Development Control regime will continue to apply as before.
- g) Risk of harm to Employees Where there is a risk of harm to persons at work from land contamination, this should be dealt with under the Health & Safety at Work etc Act 1974. The enforcing authority will be either the Health & Safety Executive or the Council depending on the work activity.
- h) Risk of Harm Following an Incident at a COMAH site (Control of Major Accident Hazard Regulations 1999) – Where there has been a release, explosion or other major incident, which has caused land contamination, the restoration should be carried out as part of the COMAH on site / off site emergency restoration plan.

In addition there are several other situations where the relationship with Part IIA needs clarification:

- i) Contaminated Food (Food Standards Act 1999) Part I of the Food and Environment Protection Act 1985 gave Ministers emergency powers to prevent the growing of food on, *inter alia*, contaminated land. Following the establishment of the Food Standards Agency this power is now vested in the Secretary of State. Where the Council suspects crops may be affecting from contaminated land to such an extent they may be unfit to eat, the will consult the Food Standards Agency and Ministry of Agriculture Fisheries and Food to establish whether an emergency order may be necessary. It should be noted, however, that remediation of the site if necessary would be carried out through the new powers in Part IIA.
- j) Radioactivity Part IIA was extended by the Radioactive Contaminated Land (Enabling Powers) England Regulations 2005; four sets of Regulations under guidance of circular 01/2006 to include radioactive substances. This is intended to sit alongside existing systems of identification and remediation, to identify contamination likely to give rise to exposure of human beings to significant harm.

The extension of Part IIA to include radioactive waste applies only to human beings as a receptor, and not to other receptors or the pollution of controlled water.

The duty to inspect its district falls upon the local authority but only where there are reasonable grounds for believing land may be contaminated by radioactive substances.

Should land be identified as posing significant harm the site will be determined as a "special site" and become the responsibility of the Environment Agency, which will then become the enforcement authority.

In response to the needs this extension of the law imposes the Council purchased a further ionising radiation ground monitor. Apart from a specific site investigation raised by public concern, a percentage of our programmed surveys have included a walk over survey with the monitoring equipment. No abnormal levels of radioactivity were noted above the background radiation level.

- k) Organisms Part IIA does not apply to contamination caused by organisms such as bacteria, viruses or protozoa, as they do not fall within the definition of substances. This could affect land contaminated with Anthrax spores, E-coli, etc. The Council will liaise with the Environment Agency in relation to MOD land and the Ministry of Agriculture Fisheries and Food on all other sites. It should be noted that even though contaminated sites used in connection with biological weapons must be designated Special Sites (see appendix 1), this applies only to non biological contamination.
- I) Statutory Nuisance (Environmental Protection Act 1990 Part III) The relationship between Part IIA and statutory nuisance is not straightforward. Suffice to say if land is declared contaminated land by definition, it cannot be considered a statutory nuisance. This is understandable and ensures there is no duplication or confusion between the two regimes. If however the land is investigated and found not to be contaminated land but, "land in a contaminated state" (defined as land where there are substances in, on or under the land which are causing harm, or there is a possibility of harm being caused), it also cannot be considered a statutory nuisance for the purposes of Part III of the Act. Precisely in what circumstances might land be declared, "in a contaminated state", remains to be seen. Where land is not contaminated land or in a contaminated state, but is causing a nuisance from smell, it could be considered a statutory nuisance as before.

i.9 – LAND UNDER OWNERSHIP OF AN ENFORCING AUTHORITY

Where the local authority determines that it is itself the appropriate person for the remediation of contaminated land, it is precluded from serving a Remediation Notice. The Head of Assets and Facilities Management will however, prepare and publish a remediation statement, and where necessary, a remediation declaration for the land.

To this end a formal relationship will be maintained between Environmental Health Services, responsible for enforcement of the new regime and the Service responsible for the Council owned land. All information relating to the identification, assessment and remediation of Council owned land must be fully reported to satisfy the needs for transparency. See also i.10 below.

i.10 – TEAM WORKING

Harlow is a member of the Essex Contaminated Land Consortium (ECLC), and CIRIA, both organisations involving local authorities, and their activities with regard to the use of brown field site development. In the case of CIRIA this represents the construction industry providing a useful link between potential developers and local authorities.

To assist in processing Town Planning applications ECLC produced a technical guidance for applicants and developers with a view to a common approach for dealing with known and potentially contaminated sites.

The original Essex Technical Guidance Notes were published in January 2007 and were revised in December 2007.

This strategy impacts on potentially all departments of the Council, in particular:

- a) Planning and Development Control the inspection of the district has identified areas of potentially contaminated land which might be developed, awaiting development, derelict, protected or green belt. This may results in the need to re-examine past development control files or identify development routes for contaminated sites which may subsequently impact on the Local Development Plan.
- b) Building Control have the duty to enforce protection measures in new build projects to mitigate the impact of contamination on property and to protect those working on sites, NHBC and other regulatory organisations will not provide Building Warrantees with a contaminated land investigation and report.
- c) Legal Services this is a highly complex piece of legislation which could have significant implications for the Council, land owners and occupiers. The advice of Legal Services may be required on many aspects including those relating to enforcement, liability, powers of entry, data protection, access to information etc.
- d) Design and Engineering land under highways, pavements, verges and common areas may be contaminated and present a risk to potential receptors. Highways Authorities must maintain registers under Part III of the New Roads and Street Works Act 1991 regarding, amongst other things, streets with "special engineering difficulties". This includes risks from contamination.
- e) Information Technology significant volumes of data will need to be held both on data base and geographical information systems. Support will be required on the use of these systems and data protection. Initially the information available was that held by Essex County Council, and sites identified by them from historic sources of information and use. Subsequently the Council has developed its own GIS system, backed by a database of information resulting from additional site surveys and investigation.

During the 2006/07 year the whole of the Councils database was revisited, and staff employed to undertake over site surveys of new and existing sites. The number of sites potentially contaminated has increased slightly from 109 to 118. The over site surveys included mapping, photography and a percentage were scanned for ionising radiation. Following survey; sites were assessed for risk rating, and placed into one of four categories, and colour coded.

- f) Housing, Parks and Landscapes land in use and controlled by these Services may be contaminated, and possibly require remediation. The Councils Arboricultural Officer would be consulted on remediation and the impact on plant growth. Advice of Ecological matters may also be required.
- g) Financial Implications the enforcement of contaminated land legislation has had a significant resource implication for the Council.

i.11 – FINANCE AND MANPOWER

The Government in introducing the Environmental Act 1995 and the Contaminated Land Regime had not initially recognised there to be any financial or manpower implications. However, responses and demands on the Council has resulted in finances and manpower having to be made available to undertake site investigations and to take enforcement action.

THE STRATEGY

<u> PART 1</u>

DESCRIPTION OF THE HARLOW DISTRICT AND HOW ITS PARTICULAR CHARACTERISTICS IMPACT ON THE INSPECTION STRATEGY

INTRODUCTION

1.1 General description of Harlow

Harlow was established as a New Town in 1947 with development guided by a Master Plan which has been updated twice since that date.

The aim of development was to provide healthy living and working conditions for the overspill population of London.

The Town was to be large enough to provide a full range of facilities, whilst at the same time being small enough to be surrounded by a rural belt.

The Plan set out self sufficient neighbourhoods with school, public house, church, shops, and a common room within walking distance. Landscape wedges separate neighbourhoods to bring the countryside within easy reach of every resident.

Two large industrial areas to the Northern and Western perimeters of the Town, with smaller concentrations of mainly small light industry elsewhere provide employment opportunities.

The Church Langley area, a residential development of 3,500 homes, has been growing since extension of the eastern boundary of the district to the M11 motorway in 1989. A 50 acre business park at the North West extremity of the Town is also continuing to be developed. North of Church Langley the New Hall Farm Development continues to be developed.

The administrative District for which Harlow Council is responsible is tightly drawn around the New Town development. The District has a total area of 3018 hectares and at the 2001 Census the population was 74,629. The population at the time of writing is estimated in excess of 80,000.

The District is bordered on the north by East Hertfordshire District Council and surrounded on other sides by Epping Forest District Council.

1.2 Aspects of the District Relevant to a Strategic Approach to Contaminated Land

Harlow New Town is generally regarded as a "green-field" development. Certainly the majority of land occupied by the New Town now was previously used for agriculture. This means that the concentration of development was that is now known as Old Harlow. Although a small market town, it was large enough to have needed services, employment opportunities, waste disposal sites and other potential sources of land contamination.

Other clusters of development were smaller but will similarly require investigation to identify any potential contaminated land.

Industrial development since 1947 has been concentrated in areas which are still used for that purpose. This is likely to diminish the likelihood of harm arising from any contamination which may be present. Electronic engineering has been a strong strand in the industrial history of the New Town.

London boulder clay and chalky boulder clay underlie the majority of the District. Some areas are capped with sandy soil, and there are some areas, chiefly in Templefields to the north of the district, in which the level has been made up.

Water supply obtained locally is almost exclusively from a deep aquifer in a greensand layer: Negligible use is made of surface and shallow sources.

Because the mobility of contaminants in the clay soils typical of the area is very modest, the likelihood of migration off site to influence sensitive receptors including ground water is modest.

STRATEGIC APPROACH TO THE INDENTIFICATION OF CONTAMINATED LAND IN THE HARLOW DISTRICT.

1.3 In developing a strategic approach it is necessary to consider -

- * The extent to which any specified receptors are likely to be found in the District;
- * The history, scale and nature of industrial or other potentially contaminative uses;
- 1.4 Land can only be considered contaminated if it impacts in a certain way on specified receptors, these are:
- a) Human beings

b)	Eco systems:	Areas of special scientific interest Wildlife & Countryside Act 1981 section 28 National / local nature reserves Wildlife & Countryside Act 1981 section 35/National Parks & Access to the Countryside Act 1949 section 21 Marine nature reserves Wildlife & Countryside Act 1981 section 36 Areas for the special protection of birds Wildlife & Countryside Act 1981 section 3 Special areas of conservation & special protection areas Conservation (Natural Habitats etc) Regulations 1994 regulation 10 Any candidate special areas of conservation or potential special protection areas Any habitat or site afforded planning policy protection Planning Policy Guidance Note 9 – Nature Conservation, para 13
c)	Property:	Buildings (including below ground) Ancient monuments All crops including timber Produce grown domestically or on allotments for consumption

Livestock

Other owned or domesticated animals

Wild game subject to shooting or fishing rights

- d) Water: Territorial sea water (to three miles) Coastal waters Inland fresh waters (rivers, streams, lanes, including the Bottom / bed if dry) Ground waters Water Resources Act 1991 s104 (see also appendix 3)
- 1.5 In undertaking its duties to inspect the District under section 78B (1) of the Act, the Council will take into consideration the particular characteristics of he area, including:

Relevant geology, hydro geology and hydrology

The location of: sensitive water receptors sensitive property receptors relevant ecological receptors all existing human receptors, and; potential sources of contamination

1.6 Consideration will also be given to the existence of sites and receptors which if found to be contaminated land would be designated special sites (see appendix 1)

1.7 POTENTIAL SOURCES OF CONTAMINATION

- a) INDUSTRIAL HISTORY A comprehensive list of potentially contaminative uses has been appended at 4. The first step in the process of identifying potentially contaminated sites will be to closely examine historical data in the form of old Ordnance Survey plans and photographs from the early part of the century to the present day. These will be obtained from this Council's archives and the Country records office. A lot of past industry will also still be within recent memory so local knowledge will be important at this stage. To aid this process internal consultation will be carried out.
- b) CURRENT INDUSTRY The present industrial areas of the District are potential sources of contamination and these will be inspected in accordance with the statutory guidance to establish whether there is a potential for contamination to exist, and, if there is, whether it is controlled by another agency.
- c) ENVIRONMENTAL PROTECTION ACT 1990 Part I 'Part B' processes authorised for air pollution control by this Council. There are currently 22 processes authorised by the Council under Part I of the Act. These range from Glass Manufacture to Petrol Filling Stations. Many of these processes have the potential to pollute the land, but there are no other statutory methods of control.
- d) ENVIRONMENTAL PROTECTION ACT 1990 Part 1 'Part A' processes authorised for integrated pollution control (IPC) by the Environment Agency.
 There are currently five processes authorised by the Environment Agency under Part I of the Act. The IPC regime should control unauthorised discharges to land but their presence will need to be noted and the potential for long term pollution assessed, particularly post closure.
- e) HAZARDOUS SUBSTANCES this Council is a Hazardous Substances Authority for the purposes of the Planning (Hazardous Substances) Act 1990 and the Planning (Hazardous Substances) Regulations 1992. This legislation requires consent to allow the presence on land of hazardous substances above a specified quantity. These regulations were recently amended by the Planning (Control of Major Accident Hazards) Regulations 1999 (SI 981) to

take account of the new COMAH Regulations (see f below). There are currently no authorised sites in the District. A register with details of sites authorised in the future would be maintained for these purposes by Planning Services.

- f) COMAH sites The Control of Major Accident Hazards Regulations 1999 (SI 743) are enforced by the Environmental Agency and Health & Safety Executive (joint competent authority) to control both on and off site risks from industries with a high potential for disaster from dangerous substances (flammable, toxic or explosive). There are currently no COMAH sites within the District.
- g) It should be noted that all sites notified to the HSE under the Notification of Installations Handling Hazardous Substances Regulations 1982 (NIHHS sites) and COMAH sites, will be held on the hazardous substances register, so there should be no need to consult with the HSE on their location.
- h) EXPLOSIVES are not directly covered by the hazardous substances regulations but are controlled by the Health & Safety Executive under licences issued under the Explosives Act 1875. Any licensed sites will be identified.
- i) CURRENT LANDFILL AND WASTE PROCESSING SITES are licensed by the Environment Agency under the provisions of Part II of the Environmental Protection Act 1990. Details of all these sites have already been provided by the Agency for this purpose.
- j) CLOSED LANDFILL SITES are a potentially significant source of risk, especially those which operated before the licensing requirements of the Control of Pollution Act 1974. All recorded closed landfills in the District will be identified and their association with any specified receptors considered in detail.
- k) SEWAGE WORKS AND LAND USED FOR DISPOSAL OF SEWAGE SLUDGE land dedicated for the disposal of sewage sludge is notified to the Environment Agency under the Sludge (Use in Agriculture) Regulations 1989. This land, together with any redundant sewage works will be identified and assessed.
- I) MINES AND MINERALS EXTRACTIONS the geology of the area has resulted in some use for the extraction of minerals, particularly gravel and small scale clay extraction for brickmaking. Use of the resulting quarries for filling with refuse or other materials could present a risk of water resources. An attempt will be made to identify all past quarrying sites and assess the risk they present.
- m) WASTE OR DERELICT LAND often owned by the utilities, railways or local authorities, such land is left seemingly abandoned because it has no particular use or is difficult to access. These areas can accumulate unwanted materials and can be used to dispose of wastes and effluents illegally.
- n) MINISTRY OF DEFENCE LAND The potential for contamination could be significant: however there are no significant areas occupied by Defence Agencies.
- o) PREVIOUSLY DEVELOPED CONTAMINATED SITES the inspection of the District will identify potentially contaminated sites which have been developed over the years. In some cases the methods and extent remediation may be unknown; in others they may be known, but it may be suspected that the remediation was inadequate.

As mentioned above, a more comprehensive list of previous uses considered potentially contaminative is given in appendix 4 for information. Any site with the potential to cause contamination will be identified as this preliminary stage.

1.8 POTENTIAL SPECIFIED RECEPTORS

- a) HUMAN The present population of the District is estimated at 80,000. As a New Town the district boundaries are drawn tightly around the developed area of the New Town itself. Human receptors may therefore be present to some degree at almost any location within the District. The potential for persons either living on or frequenting a potentially contaminated site will be considered in every case, but priority will be given to sites with infants.
- b) PROPERTY. BUILDINGS All buildings and underground services (within the footprint of the building) are potential receptors and will be considered in every case where contamination and buildings exist.
- c) PROPERTY. ANCIENT MONUMENTS as listed by English Heritage will be specifically identified as part of the strategy and potential impact of contaminants considered. A full list of scheduled Ancient Monuments is provided in the Statutory Local Plan.
- PROPERTY. AGRICULTURAL AND HORTICULTURAL CROPS being a largely urban area crop growing regions are few. Where contamination is known or suspected associations with poor yield and crop failure will be investigated.
- e) PROPERTY. TIMBER CROPS There is no organised forestry in the District. Poor growth as a result of contamination is, most likely except perhaps where trees have been planted on contaminated land as part of a remediation programme. Tree growth other than forestry can be considered as an ecosystem receptor however.
- f) PROPERTY. HOME GROWN PRODUCE There are many acres of allotment within the District and these will be identified and their potential for contamination considered as a result of previous uses or activities. Similarly any domestic gardens likely to be contaminated will be identified and assessed.
- g) PROPERTY. AGRICULTURAL LIVESTOCK, GAME AND OTHER OWNED ANIMALS Again being a largely urban area the presence of livestock in the district is modest. It will be taken into consideration as necessary.
- h) ECOLOGICAL RECEPTORS All receptors listed in 1.5 (b) above will be identified as part of the inspection as part of the inspection strategy. There are several specified sites including SSSis and other areas of ecological importance. Significant impact of contamination is unlikely but all areas will be identified, examined and any risks carefully quantified with English Nature and the Environment Agency.
- i) WATER. AQUIFERS As mentioned in 1.2 above the area relies heavily on the principal greensand aquifer below the district. All aquifers will be specifically identified with their location, depth and vulnerability according to cover. Potential risks from identified sources of contamination will be considered carefully with the Environment Agency.
- j) WATER. PUBLIC WATER SUPPLIES All public water supply abstraction points will be identified with their location, depth, strata / surface water supply they draw from and volume of supply.
- k) WATER. PUBLIC WATER SUPPLIES There are very few private water supplies in the District. No supply serves premises outside the control of the supply owner. The Council has monitored these from time to time as part of its duties under the Water Industry Act 1991 Part II and Private Water Supplies Regulations 1991.
- I) WATER. OTHER AUTHORISED ABSTRACTION POINTS All authorised abstraction points will be identified such as those used for agricultural or recreational use.

m) WATER. OTHER SPECIFIED RECEPTORS – All other water receptors such as rivers, streams, tributaries, ponds etc. will be identified as part of the inspection strategy.

Details of statutory and non statutory consultees and contact points are included in appendix 2.

IDENTIFICATION OF POTENTIALLY CONTAMINATED SITES AND THEIR PRIORITISATION ACCORDING TO RISK

The identification of contaminated land will be carried out in an ordered, rational and efficient manner based firmly on the principles of risk assessment. Significant and imminent risks to human health will always be given the highest priority.

Before land can be declared contaminated by definition, a <u>significant</u> pollutant linkage must be identified.

Pathway (via air soil or water) Contaminant >>>>>>>>>>>>>>>>>>Receptor (hazard) (target)

pollutant linkage

Unless all three elements of a pollutant linkage are identified land can not be considered contaminated. All search strategies will therefore be prioritised on areas where both contaminants <u>and</u> receptors are known or likely to exist. It is important to fully understand this concept as it will form the basis of all future site investigation and prioritisation procedures.

If, for example, an area of land is known to be badly affected with potentially dangerous contaminants, it will not be considered of the highest priority if studies confirm there are no specified receptors within the area of influence. If there are receptors evident, the risk assessment process will seek to determine the likelihood of them coming together at any time. If the chances of this are calculated as significant, and the consequences would result in significant harm, or pollution of controlled waters, then a significant pollutant linkage will be said to exist and the land will be declared contaminated land by definition.

In summary, for contaminated land to exist the following are pre-requisites:

- i. One or more contaminant substances
- ii. One or more specified receptors
- iii. At least one plausible pathway between contaminant and receptor (Then a pollutant linkage exists)
- iv. A good chance that the pollutant linkage will result in significant harm to one of the specified receptors, or, pollution of controlled waters.

The strategy for identification will therefore be based on a desk top survey of the District to identify areas of land where:

- a) Previous uses indicate contamination may exist
- b) There is no existing pollution control regime in place
- c) There are known receptors within a determined area of influence

Previous uses considered potentially contaminative are listed in appendix 4.

Potentially contaminated land shall, prior to detailed investigation, be listed and categorised according to a **preliminary assessment** of risk. The method used will be based on that described in DETR Contaminated Land Research Report 6, entitled, 'Prioritisation & Categorisation Procedure for sites which may be contaminated' (CLR6). This is to ensure all further investigative work relates directly to seriousness of the potential risk and therefore the most pressing problems are identified and quantified first.

CLR6 was published in 1995 and the terminology is not ideal for this purpose therefore some of the wording has been slightly changed in the description of the Priority Categories below, new words have been identified by underlining.

CLR6 describes four Priority Categories (PCs):

Priority Category 1	-	Site <u>likely</u> not <u>to be</u> suitable for present use and environmental setting. Contaminants probably or certainly present and very likely to have an unacceptable impact on key targets. Urgent <u>assessment</u> action needed in the short term.
Priority Category 2	-	Site may not be suitable for present use and environmental setting. Contaminants probably or certainly present and likely to have an unacceptable impact on key targets. <u>Assessment</u> action needed in the medium term.
Priority Category 3	-	Site may not be suitable for present use and environmental setting. Contaminants may be present but unlikely to have an unacceptable impact on key targets. <u>Assessment</u> action unlikely to be needed whilst the site remains in present use or otherwise remains undisturbed.
Priority Category 4	-	Site considered suitable for present use and environmental setting. Contaminants may be present but very unlikely to have an unacceptable impact on key targets. No <u>assessment</u> action needed while site remains in present use or undisturbed.

To assist in the prioritisation procedure a simple scoring system has been devised as follows:

Likelihood of <i>contaminants</i> on the site	1 5 10	-	most unlikely good chance known to be present
Existence of <i>receptors</i> within the area	1 5 10	- - -	most unlikely good chance known to be exist
Likelihood of impact of contaminants On receptors <i>(pathway):</i>	1 5 10	- - -	most unlikely good chance certain

2. 11 This preliminary process is known as a CRP (contaminant receptor pathway) assessment. Initial trawls may identify sites where either particular contaminants are likely or known to exist, or sensitive receptors are known to exist. No assessment should be undertaken unless both are suspected or confirmed. Where there is doubt the situation will be kept under review.

CRP Score	PC
26 - 30	1
21 - 25	2
16 - 20	3
10 - 15	4

Relationship of CRP score to Priority Category:

2.12 How this system is used can best be demonstrated by examples and several are shown in appendix 6 using a simple multi-stage assessment form.

2.13 As Priority Category 1 sites are likely not to be suitable for their present use, these will be investigated as soon as possible after they are identified.

ENQUIRIES FROM THE PUBLIC

2.14 Enquiries will continue to be received about fly tipping, accumulations, and the potential for contaminated land. These will be investigated in accordance with existing procedures and enforcement policy to establish whether the complaint is justified. If so, the particular circumstances will be evaluated to establish which enforcement process would be most appropriate. See also i.8 above, where the new contaminated land regime does not apply.

2.15 Enquiries may also be received about the fact that a particular site has been identified for further investigation. This could give rise to concern, especially where a potential sale has failed as a direct result of the suggestion that the land may be contaminated. Those so affected may seek an early investigation to clarify their position, thereby seeking to circumvent the prioritisation process. Such requests for priority inspection will, where resources allow, be dealt with as considerately as possible and as far as possible in accordance with the Council's current customer service policy. This is considered also in Part 6 on data handling and access to information.

CONCLUDING COMMENTS ON IDENTIFICATION AND PRIORITISATION

2.16 It must be understood that the assessments at this preliminary stage are made on a limited amount of incomplete basic data and information, such as old surveys, maps, and geological information. As more knowledge of the site is obtained, these assessments will be revised and their Priority Category may change. The assessment of a site as Priority Category 1 does not necessarily imply the existence of a significant risk to one of the specified receptors, but it does identify the need for priority assessment of risk potential.

PART 3

OBTAINING FURTHER INFORMATION ON POLLUTANT LINKAGES AND THE RISK ASSESSMENT PROCESS

3.1 The Council has the sole responsibility for determining whether any land appears to be contaminated land, it can not delegate this responsibility. This applies even where the Environment Agency has carried out an investigation on behalf of the Council (see 3.11 below).

3.2 Once the Council becomes aware of the (possible) existence of a pollutant linkage they must, in accordance with their prioritisation procedure, commence the risk assessment process. The definition of contaminated land (see i.7 above) is based on the principles of risk assessment. For the purposes of the guidance risk is defined as the combination of:

- a) The probability, or frequency, of occurrence of a defined hazard; and
- b) The magnitude of the consequences.

There are two steps in applying the definition of contaminated land:

3.3 STEP 1

The Council must satisfy itself that at least one pollutant linkage exists -

pollutant linkage

This, for the purposes of this strategy is termed a stage 1 risk assessment.

The contaminant(s) must have the potential to make a defined detrimental impact on the receptor(s) and the pathway has to be plausible. It is not necessary for direct observation of the pathway but if a reasonable scientific assessment suggests the two could come together then a pollutant linkage is said to exist and the authority must proceed to step two.

3.4 STEP 2

At this stage a more detailed investigation must be undertaken to confirm that the pollutant linkage identified is:

* resulting in significant harm (or the significant possibility of such harm) being caused to the receptor(s), or

* resulting in (or likely to result in) the pollution of controlled waters.

If either of these are confirmed then the land becomes contaminated land by definition and the pollutant linkage becomes, 'significant'.

significant pollutant linkage

This, for the purposes of this strategy is termed a stage 2 risk assessment.

3.5 The detailed investigation of contaminated land is invariably a very time consuming and expensive process, therefore it must be emphasised that all investigations will be carried out on a phased basis and terminated immediately it is clear that no significant pollutant linkage exists.

3.6 In cases where imminent risk of serious harm or serious pollution of controlled waters has been confirmed, the Council will authorise urgent action in accordance with paragraph 5.13 of this strategy.

3.7 OBTAINING DESK TOP INFORMATION – As has been explained in the introduction to this strategy, the suggestion that land may be contaminated can have a significant impact on the way others view it, and in particular, its perceived value. The Council will therefore seek to obtain as mush information as possible about a suspected site without causing unnecessary alarm. This may involve detailed inspection of historical data in its possession such as Planning and Building Control files. Also consulting with others who may possess information such as:

The Environment Agency Ministry of Agriculture Fisheries and Food The Health & Safety Executive Developers Previous occupiers and others

Details of several sources of information are listed in i.8 above.

Once sufficient information has been obtained which confirms a pollutant linkage does not exist, or, if it does, it is not significant, then the investigation will cease and no further action will be taken. It may be, however, that circumstances will be identified whereby a significant pollutant linkage could occur at some time in the future. Then arrangements will be made to keep the situation under review.

3.8 INSPECTION OF LAND – Where evaluation of all available data suggests a significant pollutant linkage may exist, it may be necessary to visit the site and carry out some form of on site testing, or take away samples for analysis. In every case this will be carried out by a, "suitable person", adequately qualified to undertake the work (see appendix 5). The utmost discretion will be used at all times to minimise the effect on occupiers of the land.

Any intrusive investigations will be carried out in accordance with appropriate technical procedures to ensure that they:

- a) are effective;
- b) do not cause any unnecessary damage or harm; and
- c) do not cause pollution of controlled waters.

To ensure the most appropriate technical procedures are employed the Council will have regard to the most up to date guidance available.

3.9 POWERS OF ENTRY – Statutory powers of entry are conferred on the Council to enable it to carry out its functions under Part IIA. These are also considered in appendix 5. There are no circumstances in which the Council will use these powers to obtain information about the condition of land where:

* It can obtain the information from third parties without the need for entering the site; or

* A person offers to provide the information within a reasonable and specified time, and does so

3.10 LAND WHICH MAY BE A SPECIAL SITE (see Appendix 1) – Where the Council are aware the land it intends to investigate would, if declared contaminated land, be a special site, it will notify the Environment Agency in writing requesting any information it may have on the land and the likelihood of pollutant linkages. According to the wishes of the Environment Agency, it may be that a joint investigation will be undertaken.

Where the Environment Agency (or their agents) wish to carry out formal investigation on behalf of the Council their officers will need to be appointed as, "suitable persons", in accordance with appendix 5. The Environment Agency does not have the power under Part IIA to investigate land which may be contaminated land without the authorisation of the Council.

3.11 DETERMINING THAT LAND IS CONTAMINATED – There are four possible ground for determining that land is contaminated:

- a) Significant harm is being caused
- b) There is a significant possibility of significant harm being caused (SPOSH)
- c) Pollution of controlled waters is being caused
- d) Pollution of controlled waters is likely to be caused

In making any determination the Council will take all relevant information into account, carry out appropriate scientific assessments, and act in accordance with the statutory guidance. The determination will identify all three elements of the pollutant linkage and explain their significance, unless it is a special site.

3.12 In an attempt to ensure the situation can be understood as widely as possible, a simple conceptual model (initially in diagrammatic form) will be produced for all relevant pollutant linkages, and multi-stage assessment forms completed, to clearly demonstrate the decision making process. Examples are produced in appendix 6.

3.13 WHERE THE SIGNIFICANCE OF A POLLUTANT LINKAGE CANNOT BE ADEQUATELY DETERMINED – Situations may arise where, on the information available, it is not possible to determine whether a pollutant linkage is significant in accordance with the statutory guidance. In such case the Council will determine that, on the balance of probabilities, the land does not fall within that statutory definition of contaminated land, but the situation will be kept under review and investigation reopened at any time new information becomes available.

3.14 Similarly, inspection may identify contamination that would form a significant pollutant linkage should new receptors be introduced. In such circumstances this information will be carefully recorded and the site monitored where the introduction of relevant new receptors seems likely. Should such a site be identified for future development the information obtained during the investigation will be made available to the planning officer and the developer.

PART 4

THE WRITTEN RECORD OF DETERMINATION AND FORMAL NOTIFICATION

1.1 Once an area of land has been declared contaminated by statutory definition, the Council will prepare a written record to include:

- a) a description of the pollutant linkage(s) confirmed, including conceptual model;
- b) a summary of the evidence which confirms the existence of the pollutant linkage(s);
- c) a summary of the risk assessment(s) upon which the pollutant linkage(s) were considered to be significant;
- d) a summary of the way the requirements of the statutory guidance were satisfied.

1.2 The Council will then formally notify in writing all relevant parties that the land has been declared contaminated, these to include:

- a) the owner(s)
- b) the occupier(s)
- c) those who appear to be responsible for any remediation action ("appropriate person" in the legislation)
- d) the Environment Agency

4.3 At the notification stage it may not be possible to identify all the relevant parties, particularly the appropriate persons. The Council will, however, act on the best information available to it at this time and keep the situation continually under review as more information comes to light.

4.4 If the Council considers that the contaminated land might be a special site, it will need to consult the Environment Agency. If, having regard to their advice, it decides to designate the land as a special site; it must give notice of such to the Environment Agency. The Agency must notify the Council within 21 days if it does not agree and pass a copy of the notification to the Secretary of State. The Council must then refer the decision to the Secretary of State.

4.5 If the Environment Agency agrees with the Council, or it fails to notify the Council it disagrees within 21 days, the land will be designated a special site. The responsibility for securing remediation then passes to the Environment Agency, though the Council musty complete the formal notification process.

4.6 The legislation and statutory guidance has been designed to try to encourage <u>voluntary</u> <u>remediation</u> (without the need for enforcement action). The formal notification procedure commences the process of consultation on what remediation might be most appropriate. To aid this process the Council will there provide as much information to the relevant parties as possible, including where available:

- a) a copy of the written record of determination;
- b) copies of site investigation reports (or details of their availability)
- c) an explanation of why the appropriate persons have been chosen as such
- d) details of all the other parties notified

4.7 The appropriate persons will also be provided with written explanations of the test for exclusion and apportionment.

4.8 It may be at this stage that the Council will need further information on the condition of the site to characterise any significant pollutant linkages identified. If that is the case an informal attempt will be made to obtain this information from the appropriate persons already identified.

<u> PART 5</u>

LIABILITY & ENFORCEMENT

5.1 Land may be contaminated upon the identification of only one significant pollutant linkage. Full liability can not therefore be determined until all significant pollutant linkages on the site have been identified (see also 3.6 above). When all significant pollutant linkages have been identified the procedure relating to the apportionment of liability must commence. This has five distinct stages as follows:

- i. Identifying potential appropriate persons and liability groups
- ii. Characterising remediation actions
- iii. Attributing responsibility to liability groups
- iv. Excluding members of liability groups
- v. Apportioning liability between members of liability group

5.2 These procedures are complex and cumbersome. The process commences with the establishment of liability groups. All appropriate persons for any one linkage are a, 'liability group'. These may be class 'A' or class 'B' persons.

APPROPRIATE PERSONS – Class 'A' – These are, generally speaking the polluters, but also included are persons who, "knowingly permit". This includes developers who leave contamination on a site which subsequently results in the land being declared contaminated.

APPROPRIATE PERSONS – Class 'B' – Where no class 'A' persons can be found liability reverts to the owner or the occupier. These are known as class 'B' persons.

The Council will make all reasonable enquiries to identify class 'A' persons before liability reverts to innocent owner occupiers.

5.3 The matter of appropriate persons must be considered for each significant pollutant linkage. Therefore where a site has had a series of contaminative uses over the years, each significant pollutant linkage will be identified separately and liability considered for each.

5.4 APPOTIONMENT OF COSTS – Generally speaking the members of a liability group will have the total costs falling on the group as a whole apportioned between them. It may also be necessary to apportion costs between liability groups. There are three basic principles which apply to exclusion and apportionment tests:

- i. The financial circumstances of those concerned have <u>no</u> relevance;
- ii. The Council must consult persons affected to obtain information (on a reasonable basis having regard to the cost). If someone is seeking to establish an exclusion or influence an apportionment to their benefit then the burden of providing the Council supporting information lies with them.
- iii. Where there are agreements between appropriate persons the local authority has to give effect to these agreements.

5.5 LIMITATION ON COSTS TO BE BORN BY APPROPRIATE PERSONS – There are six tests specified to identify Class 'A' groups who should be excluded from liability. These will be applied in sequence and separately for each pollutant linkage. The exclusion of Class 'B' persons is much less complex, the single test merely excludes those who do not have an interest in the capital value of the land. Tenants therefore are excluded.

5.6 When the Council has apportioned the costs of each remediation action and before serving remediation notices, it will consider whether any of those liable may not be able to afford it. If, after taking into consideration the statutory guidance it decides that one or more of the parties could not, it will not serve a remediation notice on any of the parties. The Council will instead, consider carrying out the work itself and produce and publish a remediation statement.

THE ENFORCEMENT PROCESS

5.7 Before remediation notices are served the extensive consultation process will be completed and ample encouragement given to arrive at an informal solution. The Council will do all in its power to consult the appropriate person(s), owners, occupiers etc about their views on the state of the land. This could be a difficult and most protracted process and cause delays. Where a housing estate is affected for example, it would be reasonable to expect house owners, land owners, developers, lenders, insurers, surveyors, geotechnical engineers, residents groups, etc all to have differing views according to their position.

5.8 Remediation notices are served only as a last resort (notwithstanding urgent cases), and then only after this lengthy consultation process has been exhausted. Notices will be authorised after two tests are satisfied:

- * That the remediation actions will not be carried out otherwise.
- * That the Council has no power to carry out the work itself.

5.9 If these are met the Council will serve a remediation noise on each appropriate person. It can not be served less than three months after formal notification that the land is contaminated unless the urgent action is deemed necessary (where there is imminent risk of serious harm).

5.10 SPECIFYING REMEDIATION – The Head of Environmental Health Services will specify what remediation measures are to be carried out in the remediation notice. These will be both appropriate and cost effective employing what the statutory guidance terms 'best practicable techniques'. The aim of the remediation will be to ensure that the land no longer meets the statutory definition of "contaminated", taking the shortest and lowest cost route. This means in most cases attention will be focussed on the pathway, rather than the contaminant or receptor.

5.11 The "reasonableness" of the requirement is, however, paramount, a concept which is considered at some length in the guidance. It is determined in relation to the cost of carrying out the remediation against the cost of failing to (i.e. the costs, or potential costs, resulting from the continuing pollution).

REMEDIATION BY THE LOCAL AUTHORITY

5.12 Before the Council can serve a remediation notice it will first determine whether it has the power to carry out any remediation actions itself. There are five specified circumstances where this may be the case:

- * Where urgent action is required (see below)
- * Where no appropriate person can be found
- * Where one or more appropriate persons are excluded (on grounds of hardship)

* Where the local authority has made an agreement with the appropriate person(s) that it should carry out the remediation

* In default of remediation notice

URGENT ACTION

5.13 Urgent action must be authorised where the Council is satisfied that there is imminent danger of serious harm or serious pollution of controlled waters being caused as a result of contaminated land. In such circumstances the procedures identified in the statutory guidance will be followed which may involve entry under the power of a warrant (see appendix 5).

5.14 The terms "imminent" and "serious" are unfortunately not defined: local authorities are advised to use the normal meaning of the words. There is, however, guidance on what may constitute "seriousness" when assessing the reasonableness of remediation.

5.15 The Council will undertake the remediation in urgent cases where it is the enforcing authority if it is of the opinion that the risk would not be mitigated by enforcement action. In the case of a special site the Council will declare the land contaminated land in accordance with the statutory procedure, and then notify the Environment Agency who will then be responsible for the remediation.

5.16 In appropriate cases the Council will seek to recover costs of remediation works it has completed.

<u> PART 6</u>

DATA HANDLING AND ACCESS TO INFORMATION

6.1 The Council is required by Statute to produce this contaminated land strategy and formally publish it by the end of June 2001. Subsequently it must maintain a register of regulatory action taken under Part IIA, which must be made available for public inspection at all reasonable times (see 6.13 below). Also, subsequently the strategy document should be reviewed for changes to both policy and legislation.

THE ENVIRONMENTAL INFORMATION REGULATIONS 1992

6.2 Implementation of the strategy will, however, also result in significant volumes of data which will be held on computer data bases and geographical information systems, as well as in paper form. There is no statutory obligation to disclose this information there the Council must comply with the requirements of the Environmental Information Regulations when dealing with requests for disclosure.

6.3 These Regulations require local authorities to make any environmental information they hold available upon request, subject to certain exemptions. These are complex but it would be likely that the Council will have to respond to requests for information on land it has identified as part of, for example, the inspection of the District, as outlined in Part 2 of this strategy. See also 2.15 above on complaints about information held.

6.4 Below are broadly the exemptions to the right of environmental information. In all circumstances where there is doubt, the Council's Legal Services will be consulted.

Where held for judicial purposes. Where disclosure would affect legal proceedings. Where disclosure would affect international relations, national defence or public security. Where disclosure would affect the confidentiality of deliberations by a relevant person, or the confidentiality of commercially sensitive matters. Where it would involve the supply of a document or record which is still in the course of completion. Where the information is not accessible.

6.5 "Information", for the purposes of the Regulations includes records, registers, reports, returns, and information on computers.

6.6 It has been suggested that information held as a result of the Council's initial inspection of the District and subsequent prioritisation for further investigation, could be classified as, ' a record which is in the course of completion', for the purposes of the Regulations, and therefore not be disclosed. Whilst the interpretation is appealing, it should be understood that sites should not be so identified unless there are sound reasons, based on scientific judgement, that a pollutant linkage may exist. Also once the preliminary inspection of the district has commenced, each assessment about each and every site, should constitute a, 'record', in itself.

6.7 More significantly, however, should a third party purchase land following a refusal on the part of this Authority to supply information requested on its condition, and the Authority had identified it at that stage as potentially contaminated land, that party may wish to seek a remedy against the Council should the site be subsequently declared contaminated land and lose value as a result.

6.8 Requests for information will therefore be dealt with promptly: the Council will aim to respond no later than 21 days after they are made. A minimum charge of £35.00 will be made for the supply of information in accordance with the Regulations. Charges will be reviewed periodically. Where the Council must refuse a request for any of the reasons stated in the Regulations it will provide details of the reasons in writing at no cost to the applicant.

THE DATA PROTECTION ACT 1998

6.9 The Act seeks to give some protection to persons (known as data subjects) in respect of three potential dangers:

- The use of personal information that is inaccurate, incomplete or irrelevant
- The possibility of access to personal information by unauthorised persons
- The use of personal information in a context or for a purpose other than that for which the information was collected

6.10 Personal data is defined as data consisting of information which relates to a data subject who can be identified from the information, or from that and other information in the possession of the data user (the Council). Every individual member of the public can be considered a data subject, there is no age limit.

6.11 The implications of holding information relating to the condition of potentially polluted property, and the persons associated with that property and pollution, could be significant. The matter will therefore be considered in detail with the Council's Solicitor and Data Protection Administrator [Head of Internal Audit] before records begin to be complied.

CONTENTS OF FORMAL CONTAMINATED LAND REGISTERS

6.12 The only information required to be stored on a formal register is that relating to regulatory action and remediation. The contents are specified at length in schedule 3 of the Contaminated Land (England) Regulations 2000. This formal contaminated land register will be maintained at Environmental Health Service, The Civic Centre, The Water Gardens, Harlow, CM20 1WG. Members of the public will be able to view the register free of charge during normal office hours. Requests for copies of documents must be made to the Administrative Staff at Environmental Health Services and will be charged at 10p per A4 sheet. Charges will be reviewed on a periodic basis.

6.13 GEOGRAPHICAL INFORMATION SYSTEM

<u> PART 7</u>

QUALITY CONTROL, PERFORMANCE INDICATORS AND ARRANGEMENTS FOR REVIEW

7.1 The Government has stated –

"The DETR will be developing performance indicators to assess overall progress in the task of identifying and remediating our inherited legacy of contaminated land".

7.2 ENQUIRIES AND INFORMATION FROM MEMBERS OF THE PUBLIC – This is also considered in 2.14 and 2.15 above. Procedures are in place to:

- Record that information or an enquiry has been received;
- Demonstrate that an appropriate officer has been designated to deal with the request;
- Record the request and response; and
- Ensure appropriate records are maintained.

7.3 As part of this Council's on going commitment to improving quality of service the following performance criteria have been agreed:

The Council will make a first response to telephone and personal enquiries within five working days.

The Council will where possible reply to correspondence received within five working days. Where this is not possible it will acknowledge correspondence within five working days and make a substantive reply within 20 working days. The procedure for monitoring responses is described in greater detail in the Council's Corporate Procedure for Letter Monitoring available from Performance Management and Quality Services.

7.4 No such performance indicators have been developed to date, but it is suggested they will include:

- a) Measures of the scale of regulatory activities; and
- b) Indicators of the overall progress in the task of identifying and remediating contaminated land.

7.5 It is the Government's intention in due course to establish targets for overall progress.

REVIEW

7.6 Whilst the Council has a duty to inspect the District, 'from time to time', to identify contaminated land, the frequency of inspection is not prescribed. In practice inspection may be a continuum, balancing a systematic approach with the availability of resources. The Council has a duty to review its inspection strategy on a regular basis and to meet its statutory responsibilities two main aspects of review need to be built into this strategy:

• Triggers for reviewing inspection decisions, and

• Review of the inspection strategy

7.7 In addition to the routine review of inspection findings (see 2.11, 2.16, 3.8, 3.14, 3.15, 4.3 above) there will be situations which will trigger re-assessment including:

- Change of use of surrounding land (introduction of new receptors)
- The potential for pollutant linkages to become significant or urgent as a result of unplanned events (e.g. flooding, subsidence, spillages etc), or a change in circumstances
- Identification of a localised effect which could be associated with the land
- Responding to new information

7.8 The strategy as a whole will be reviewed by the Executive Director, in conjunction with the Head of Environmental Health Services at least bi-annually, and any proposed changes will be reported to Members as appropriate to the political management arrangements in place. Particular matters that will be kept under review include:

- The content of the strategy generally
- Priorities for further investigation of potentially contaminated sites
- The potential for the introduction of new receptors
- The potential for new contamination
- Progress on voluntary remediation
- The enforcement process generally and the identification of appropriate persons particularly
- Identification of special sites
- Progress with the implementation

Clearly the Strategy will be adjusted as necessary to reflect any changes in the political structure of the Council, and changes in government policies and legislation.

<u> PART 8</u>

COSTS AND TIMETABLE

8.1 As outlined in i.10 above, the Government has identified that to implement this highly complex and demanding piece of legislation will involve local authorities in considerable expenditure. As a result some 95M was made available over three years as part of the standard spending assessment (12M each year), with the rest available through the contaminated land supplementary credit approval (SCA) programme.

8.2 The next stage was the inspection of the District, identification of potentially contaminated sites, and their prioritisation for further more detailed inspection. The Council had cooperated with other Local Authorities in Essex to create a database of sites where historical information indicated a potentially contaminative use, and associated it with site location on a Geographical Information system held at County Hall. This will assist substantially in the progress.

8.3 It should be noted that these arrangements relate specifically to the Council's <u>enforcement role</u> and not its position as land owner. Should land in possession of the Council be identified as contaminated land then funding of remediation will be considered on a case by case basis, again using the most appropriate funding mechanism in the prevailing financial circumstances.

TIMETABLE FOR THE IMPLEMENTATION OF PART IIA

Duty	Year
Initial production and publication of statutory	October 2002
contaminated land strategy Inspection of the District, identification of potentially contaminated sites and prioritisation for further investigation	Completed 2007
Detailed inspection and assessment of priority category 1 sites Site investigation of land subject to Planning Application or where remediation has taken place voluntarily – preliminary survey and assessment of existing and new potentially contaminated	As soon as possible after they become known to the Council 2006 - 2007
sites. Identify sites where remediation is being, or has taken place to be consistent with end use	2007 - ongoing

APPENDICES

SPECIAL SITES

- 1. Once a local authority has identified land as contaminated land by definition, it must also consider whether it falls into the category of a special site. Special sites are sites where, more often than not, the Environment Agency have had, or still have, an enforcement role.
- 2. What exactly constitutes a special site is specified in the Contaminated Land (England) Regulations 2000. For a legal definition the Regulations must always be consulted. In simple terms, however, they include land:-
- Polluting controlled waters (in certain circumstances see appendix 3);
- On sites subject to Integrated Pollution Control (see Environmental Protection Act 1990 Part I Prescribed Processes and Substances regulations 1991 schedule 1 part A;
- With waste sulphuric acid tar lagoons (on sites used for refining benzole, used lubricants or petroleum);
- Used as an oil refinery;
- Used to manufacture or process explosives;
- Used to manufacture or dispose of atomic, chemical or biological weapons (non biological contamination only);
- Used for nuclear purposes;
- Owned or occupied by a defence organisation for naval, military or air force purposes (not off base housing / NAFFI);
- Held for benefit of Greenwich Hospital.
- 3. Contaminated land beyond the boundary of these premises (but contaminated by them) also forms part of the special site.
- 4. Procedure in relation to the investigation and declaration of special sites is covered in 3.11, 4.4, 4.5 and 5.15 above.

LIST OF CONSULTEES AND CONTACT POINTS

COUNCILS

1. Internal

Regulation Mr. G. Bloomer, Head of Regulation, Civic Centre, The Water Gardens, Harlow, CM20 1WG

Environmental Health Mr. M. Pitt, Environment & Licensing Manager, Civic Centre, The Water Gardens, Harlow

Planning Services & Building Control Ms. D. Cooper, Planning & Building Control Manager, Civic Centre, The Water Gardens, Harlow

Solicitor Legal Services Manager, Civic Centre, The Water Gardens, Harlow

Information Technology Computer Services Manager

Data Protection Administrator Mr. A. Revels, Head of Internal Audit

Parks and Landscapes Landscapes Officer: Mr. P. Smith, Parks Operations Officer

Housing Head of Central Housing, Civic Centre, The Water Gardens, Harlow

Property Mr. J. McGill, Head of Assets and Facilities Management

Finance Head of Financial Services

2. County

Environmental Policy Planner Essex County Council County Hall Chelmsford Essex CM1 1QH

Department of Environment, Food – Rural Affairs (DEFRA) Contaminated Land Branch 0207 082 8568

ENGLISH HERITAGE

Details of all Ancient Monuments in the area can be obtained from the Planning Officer

Local contact:

English Heritage East of England Region 62 – 74 Burleigh Street Cambridge CB1 1DJ Tel: 01223 582720 Fax: 01223 582701

National contact:

Chief Scientist 23 Saville Row London W1X 1AB Tel: 0207 973 3321 Enquiries: 0207 973 3000 Fax: 0207 973 3001

ENGLISH NATURE

Local contact:

English Nature, Essex Harbour House Hythe Quay Colchester Essex CO2 8JF Tel: 01206 796666 Fax: 01206 794466

Special advisory teams:

Environmental Impacts Team (Taunton) English Nature Roughmoor Bishop's Hull Taunton Somerset TA1 5AA Tel: 01823 283211 Fax: 01823 272978 Environmental Impacts & Marine Team (Peterborough) English Nature Northminster House Peterborough Cambridgeshire PE1 1UA Tel: 01733 455000 Fax: 01733 568834

ENVIRONMENT AGENCY

The Council will consult and liaise with the Environment Agency on matters relevant to the Agency's various functions. It will also seek site specific advice where necessary in accordance with the Environment Agency's formal role.

This process will, as far as is reasonably practicable (taking into consideration the limitations on both parties), be carried out broadly in accordance with the Memorandum of Understanding.

Area contaminated land officer:

Area Contaminated Land Officer Environment Agency (North East Thames Region) Apollo Court 2 Bishop's Square, Business Park, St Albans Road West Hatfield AL10 9EX Tel: 01707 632300 Fax: 01707 632500

Regional contaminated land officer:

Environment Agency, Thames Region Kings Meadow House Kings Meadow Road Reading Berks Tel: 0118 953 5704

National Part IIA process manager:

Mike Hargett Environment Agency South West Manley House Kestrel Way Exeter EX2 7LQ Tel: 01392 444000 Fax: 01392 444238

National Head Quarters

Land Quality Rio House Waterside Drive Aztec West Bristol BS32 4UD Tel: 01454 624400 Fax: 01454 624032

National Centre for Groundwater and Contaminated Land

Olton Court 10 Warwick Road Solihull B92 7HX Tel: 0121 711 2324 Fax: 0121 711 5925

National Centre for Eco-toxicology and Hazardous Substances

Dr Danielle Ashton Evenload House Howberry Park Wallingford OX10 8BD Tel: 01491 828544 Fax: 01491 828427

National Centre for Risk Analysis and Options Appraisal

Dr Raquel Duarte-Davies Steel House 11 Tothill Street London SW1H 9NF Help desk: 0207 664 6897 Fax: 0207 664 6911

FOOD STANDARDS AGENCY

Patrick Millar Contaminants Division PO Box 31037 Room 238 Ergon House Horseferry Road London SW1P 3WG Tel: 0207 238 5751 Fax: 0207 238 5331

HEALTH & SAFETY EXECUTIVE

HSE 39 Baddow Road Chelmsford Essex CM2 0HL Tel: 01245 706246 Fax: 01245 252633

HER MAJESTY'S CUSTOMS AND EXCISE OFFICE

Landfill tax is the responsibility of the Birmingham business centre: 2 Broadway Broad Street Five Ways Birmingham B15 1BG Tel: 0121 697 4000 Fax: 0121 643 3454

MINISTRY OF AGRICULTURE FISHERIES AND FOOD

Local contact:

MAFF Southgate Street Bury St Edmunds IP33 2BD

CHARTERED INSTITUTE OF ENVIRONMENTAL HEALTH

Principle Policy Advisor Chartered Institute of Environmental Health Chadwick Court 15 Hatfields London SE1 5DJ Tel: 0207 827 5839 Switchboard: 0207 928 6006 Fax: 0207 827 6322

National policy advisor:

Roger Unwin Farming & Rural Conservation Agency Nobel House 17 Smith Square London SW1P 3JR Tel: 0207 238 6452

STATUTORY REGENERATION BODIES

Regional Development Agency (RDA)

East of England Development Agency The Business Centre Station Road Histon Cambridge CB4 9LQ Tel: 01223 713900 Fax: 01223 713940

English Partnerships Head Quarters

Mr Emyr Poole National Environmental Policy Co-ordinator 16 – 18 Old Queen Street London SW1H 9HP Tel: 0207 976 7070 Fax: 0207 976 7740

English Partnerships Senior Projects Manager

(Contaminated Land)

Mr John Navaratnam Arpley House 110 Birchwood Boulevard Birchwood Warrington WA3 7QH Tel: 01925 651144 Fax: 01925 644657

The Countryside Agency Head Quarters

John Dower House Crescent Place Cheltenham Gloucester GL50 3RA Tel: 01242 521381 Fax: 01242 584270

REFERENCES AND USEFUL SOURCES OF INFORMATION

British Standards Institution, BS10175:2001 Investigation of potentially contaminated sites – code of practice, 2001

CIEH/LQM, Generic Assessment Criteria for Human Health Risk Assessment, Nathanail et al, Land Quality Press, 2006

CIRIA, C659 – Assessing Risks Posed by Hazardous Ground Gases to Buildings, Wilson et al, 2006

DEFRA & Environment Agency, Contaminants in Soil: Collation of Toxicological Data and Intake Values for Humans, Environment Agency, 202

DEFRA & Environment Agency, Soil Guidelines Values, Environment Agency R&D Publication, 2002

DEFRA & Environmental Agency, Model Procedures for the Management of Land contamination. Contaminated Land Report 11 (CLR11), DEFRA, 2004

DEFRA, Circular 01/2006. Environmental Protection Act 1990: Part 2A. Contaminated Land. September 2006, The Stationery Office, 2006

DOE, DEFRA, Environment Agency et al, *Contaminated Land Report (CLR) Series,* Doe, DEFRA, EA et al, 1994 – 2007

Environment agency, Cost Benefit Analysis in the Remediation of Contaminated Land Environment Agency Technical Record No.p316, Environment Agency, 1999

Environment Agency, *Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources,* Environment Agency R&D Publication (20), 1999

Environment Agency, *Guidance on the Application of Waste Management Licensing to Remediation (version 2.),* January 2001

NHBC & Environment Agency, *Guidance on the Protection of Housing on Contaminated Land,* Environment Agency R&D Publication (66), 2000

ODPM, Approved Document "C" – Site Preparation and Resistance to Contaminants and Moisture, 2004 edition

ODPM, Planning Policy Statement 23 (PPS23): Planning and Pollution Control (Annex 2), 2004

Scotland & Northern Ireland Forum for Environmental Research (SNIFFER) *Framework for Deriving Site-Specific Human Health Assessment Criteria for use in the Assessment and Management of Contaminants in Soil* (SNIFFER project ref. LQ01) April 2003

Ground Gas Handbook, CIEH

POLLUTION OF CONTROLLED WATERS

1. Controlled waters are defined for the purposes of Part IIA as:

*Coastal waters including docks
* Relevant territorial waters (usually to three miles)
* Inland fresh waters (relevant rivers, watercourses, lakes, ponds, reservoirs – including bottom / channel / bed, even if dry)
*Ground waters
(section 104 of the Water Resources Act 1991)

2. The pollution of controlled waters is simply defined as:

The entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter

- 3. There is no power in the Act to enable the Secretary of State to issue guidance on what degree of pollution may constitute pollution of controlled waters. This has been accepted as a potential area of conflict. When, however, considering cases where it is though very small quantities of a contaminant are causing pollution, local authorities must consider what remediation it may be reasonable to require. This should act as a limiting factor thereby ensuring unrealistic demands are not made in relation to cases of very minor pollution.
- 4. Where pollution of ground waters has occurred and the source can not be identified, or the polluting substances are contained entirely within the body of water (and not in or on the land), then Part IIA does not apply and the matter would be dealt with by the Environment Agency under section Part III of the Water Resources Act 1991 (see also paragraph i.8 (c) above.)
- 5. Where pollution has occurred from land which subsequently affects the wholesomeness of drinking water within the meaning of section 67 of the Water Industry At 1991 (Water Supply [Water Quality] Regulations 1989 / Private Water Supplies Regulations 1991), then the land becomes a **special site**.
- 6. Where pollution has occurred from land which results in surface water failing to meet the criteria in Regulations* made under section 82 of the Water Resources Act 1991, then the land becomes a **special site:**

The Surface Water (Dangerous Substances) (Classification) Regulations 1989 The Bathing Waters (Classification) Regulations 1991 The Surface Water (Dangerous Substances) (Classification) Regulations 1992 The Surface Water (River Eco System) (Classification) Regulations 1994 The Surface Water (Abstraction for Drinking Water) (Classification) Regulations 1996 The Surface Water (Fish Life) (Classification) Regulations 1997 The Surface Water (Shellfish) (Classification) Regulations 1997 The Surface Water (Dangerous Substances) (Classification) Regulations 1997 The Surface Water (Dangerous Substances) (Classification) Regulations 1998

- 7. Where the pollution of a specified aquifer* is caused by any of the following contaminants the land becomes a **special site:**
- Organohalogen compounds and substances which may form such compounds in the aquatic environment;
- Organophophorus compounds;
- Organotin compounds;

- Substances which possess carcinogenic, mutagenic or teratogenic properties in or via the aquatic environment;
- Mercury and its compounds;
- Cadmium and its compounds;
- Mineral oil and other hydrocarbons;
- Cyanides.

*Specified aquifers are those contained in the following rocks:

- Pleistocene Norwich Crag;
- Upper Cretaceous Chalk;
- Lower Cretaceous Sandstones;
- Upper Jurassic Corallian;
- Middle Jurassic Limestones;
- Lower Jurassic Cotteswold Sands;
- Permo-Triassic Sherwood Sandstone Group;
- Upper Permian Magnesian Limestone;
- Lower Permian Collyhurst Sandstone;
- Lower Permian Basal Breccias, Conglomerates and Sandstones;
- Lower Carboniferous Limestones.
- 8. This, in effect, leaves local authorities with the potential responsibility for the pollution of controlled waters where:
 - a) Surface or coastal waters are affected but not breaching the Regulations in paragraph 7 above.
 - b) Ground waters (other than a principal aquifer specified as in 8 above) are contaminated and the water is not used for drinking.

LIST OF POTENTIALLY CONTAMINATED LAND USES

This list has been drawn up to provide a broad indication of the type of sites that are known to use, or have used in the past, materials that could pollute the soil. It must be understood that the list is not exhaustive; also that inclusion on this list does not necessarily infer the existence of a pollutant linkage.

Abattoirs Adhesives manufacture Agriculture Aircraft manufacture Airports Animal burial Animal by-product processing Anodisers Anti-corrosion treatment Asbestos products Asphalt works Automotive engineering Battery manufacture Bearings manufacture Blacksmiths **Boiler makers** Bookbinding Brass and copper tube manufacture **Brass founders** Brewing Car manufacture Carbon products manufacture Cement works Chemical manufacture and storage Chrome plating Ceramics manufacture Coal carbonisation Coal merchant Concrete batching Coppersmiths Descaling contractors (chemical) Detergent manufacture Distilleries Dockyards Drum cleaning Dry cleaners Dye works Dyers and finishers Electricity generation Electrical engineers Electro platers Engineering works Explosives manufacture (including fireworks) Farms Fertiliser manufacture Fellmongers Fibre glass works Food processing Foundries

Glue manufacture Gum and resin manufacture Hatters Hide and skin processors Ink manufacture Iron founder Iron works Knackers yard Laquer manufacture Laundries Leather manufacture Metal coating Metal manufacture Metal sprayers and finishers Minina Mirror manufacture Motor vehicle manufacture Oil fuel distributors and suppliers Oil merchants Oil refineries Oil storage Paint and varnish manufacture Paper works Pesticides manufacture Petrol stations Photographic film works Photographic processing Paper manufacture Plastic works Plating works Power stations Print works Printed circuit board manufacture Radioactive materials processing Railway land Railway locomotive and manufacture Refiners of nickel and antimony Resin manufacture Rubber manufacture Scrap metal dealers Sealing compound manufacture Sewage works Sewage sludge disposal areas Sheet metal merchants and works Ship breakers Ship builders Shooting grounds Skein silk dyers Small arms manufacture Smokeless fuel manufacture

Fuel manufacture Fuel storage Garages and depots Gas mantle manufacture Gas works Glass works Tank Cleaning Tanneries Tar and pitch distillers Textile manufacture Thermometer makers Timber treatment Timber preservatives manufacture Tin plate works Transport depots Tyre manufacture and retreading

Soap manufacture Solvent manufacture Solvent recovery Steel manufacture Stove enamellers Synthetic fibre manufacture Vehicle manufacture Vulcanite manufacture Vulcanisers Waste disposal Waste recycling Waste treatment Zinc works

POWERS OF ENTRY AND THE APPOINTMENT OF "SUITABLE PERSONS"

 Section 108 of the Environment Act 1995 gives the local authority power to authorise, in writing, "suitable persons", to investigate potentially contaminated land. These powers are extensive and will be considered in detail with the Council's Legal Adviser prior to any resisted entry being attempted. It should be noted that these powers are not available to the Environment Agency. The powers which a person may be authorised to exercise include:

* To enter at any reasonable time (or in urgent cases, at any time, if need be by force) any premises / land to make such examination and investigations necessary.

- * To take samples, photographs, carry out tests, install monitoring equipment etc.
- 2. At least seven days notice must be given to residential occupiers and to occupiers of land where heavy plant is to be used. Consent must be obtained to enter from the occupier, or failing that, a warrant obtained under Schedule 18 of the Act.
- 3. It should be noted that there are no circumstances in which the Council will use these powers to obtain information about the condition of land, where:
 - * It can obtain the information from third parties without the need for entering the site; or

* A person offers to provide the information within a reasonable and specified time, and does so.

URGENT ACTION

- 4. Urgent action must be authorised where the Council is satisfied that there is imminent danger of serious harm or serious pollution of controlled waters being caused as a result of contaminated land. In such circumstances the procedures identified in the statutory guidance will be followed which may involve the forced entry into the premises.
- 5. The terms "imminent" and "serious" are unfortunately not defined, local authorities are advised to use the normal meaning of the words. There is, however, guidance on what may constitute "seriousness" when assessing the reasonableness of remediation.
- 6. The Council will undertake the remediation in urgent cases where it is the enforcing authority if it is of the opinion that the risk would not be mitigated by enforcement action. In the case of a special site the Council will declare the land contaminated land in accordance with the statutory procedure, and then notify the Environment Agency who will then be responsible for the remediation.
- 7. In appropriate cases the Council will seek to recover costs of remediation works it has completed.
- 8. All intrusive investigations will be carried out in accordance with appropriate technical procedures to ensure:
 - a) They are effective
 - b) They do not cause any unnecessary damage or harm
 - c) They do not cause pollution of controlled waters

COMPENSATION

9. Schedule 18 of the Environment Act 1995 makes clear the circumstances when a local authority must pay compensation for loss or damage as a result of the use of these powers. The Principal Environmental Health Office, Housing and Pollution will therefore ensure that only appropriate technical procedures are deployed, the utmost care is taken at all times, and the conditions carefully recorded before, during and after completion of the necessary works.

"SUITABLE PERSONS"

- 10. The science and associated technical procedures relating to the investigation and assessment of contaminated land are extremely complex. Knowledge of several specialised disciplines is required together with an ability to interpret significant volumes of data and make a reasoned judgement, often in difficult circumstances.
- 11. The consequences of, "getting it wrong", could, in many cases, have a major impact on the District and on people's lives. On the one hand, an entire area could be unnecessarily blighted and homes rendered worthless over night, whilst on the other, a generation of children could be left at risk from an unidentified hazard.
- 12. Neither the Act nor the guidance considers what may constitute a, "suitable person", for the purposes of the investigation and assessment of contaminated land. There is no list of approved consultants or any professional organisation which oversees the training of contaminated land specialists. There is no minimum qualification and no recognised qualification. Consultants come from a range of backgrounds including:

Environmental Health Other environmental science disciplines (several) Surveyors Engineers Geologists Hydrologists Soil scientists Chemists etc

13. Ultimately, the responsibility for determining what land may and may not be declared contaminated, by definition, lies with the Head of Environmental Health Services. S/he will, however, often need to rely on the advice appointed, "suitable persons". In most cases such a suitable person will be an external consultant, although in house expertise is not excluded if the case is appropriate. Under these circumstances criteria have been developed to assist in the selection of suitable persons.

PROCEDURE FOR THE APPOINTMENT OF "SUITABLE PERSONS" FOR THE PURPOSES OF PART IIA

- 14. There are two prerequisites to commencing the process of appointing suitable external consultant / contractors, firstly:
 - * Adequate funding to support the process; and secondly
 - * A well qualified person, 'in house', to act in the Client role
- 15. Such a person, as well as having sufficient knowledge and experience to specify to contract, must have sufficient time to monitor it also.

The Senior Environmental Health Officer, Housing and Pollution, Environmental Health Services, Department has been identified for this purpose.

The person in this post will have the necessary background and experience for this purpose.

- 16. Additional training will be required to provide an adequate foundation of knowledge upon which to carry out the role. This will be ongoing.
- 17. The specification for each contract which clearly identifies the work to be carried out, its purpose, timetable and Client/Contract responsibilities. Then s/he will produce a list of appropriate companies, taking care to seek out those most prominent and successful in the field, rather than only those who promote themselves to the Council. Each of these will then be contacted in turn for an informal discussion as to their capability, expertise and experience. Prior to commencing this process the Client officer will produce a selection of questions relevant to the contract to ask each company. This should then hopefully result in a short list of six or so companies who will be asked to quote / tender for the work based on a final specification.
- 18. A check list of information requirements is included at the end of this section.
- 19. Once appointed the Client officer will be responsible for monitoring the contract to ensure:

The contractors are kept fully aware of their responsibilities at all times Quality control requirements are met Amendments are quickly agreed and documented The time table is strictly adhered to The aim of the contract is achieved

CHECKLIST OF INFORMATION REQUIREMENTS

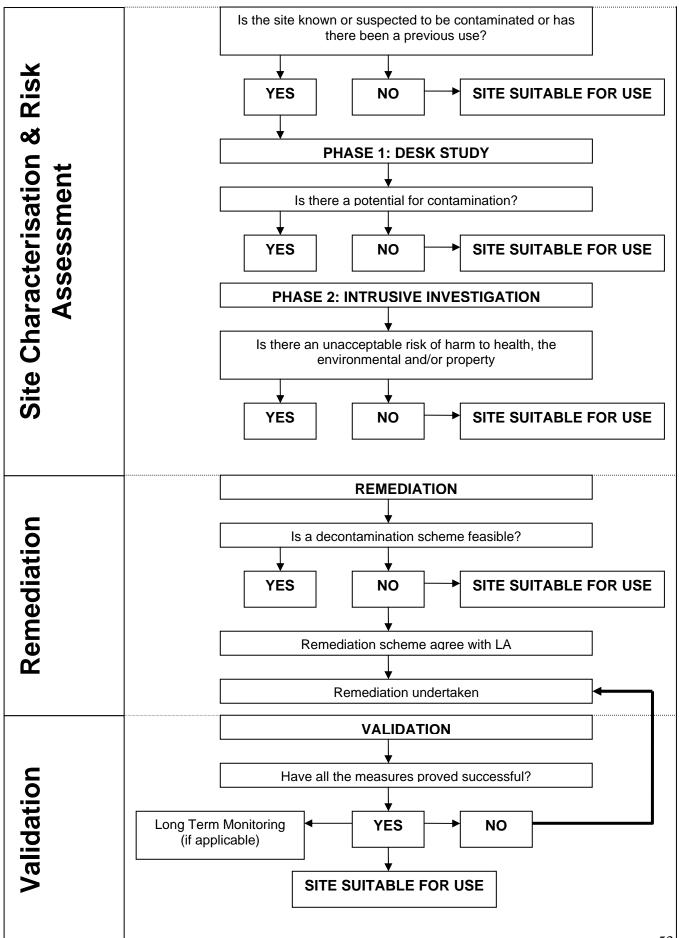
CLIENT'S INFORMATION REQUIREMENTS

REQUIREMENTS OF THE CONSULTANT

1. GENERAL	
1.1 Background on company	How long has the company been operating?
capability	What kind of work were they originally set up to do – is this an add on? Who traditionally are their clients
Numbers and	If a large company, what are the interests / sympathies of those in control? Do
qualifications of staff	they consider local authorities as a serious market?
	How many staff are available for this type of work, will they need to subcontract?
1.3 CV and availability of key staff	Who will actually be doing the job, what are their qualifications and experience? Practical experience is KEY.
	Do they understand Part IIA?
	Knowledge of environmental law & local government systems an important requirement.
1.4 Details of QA systems	Where appropriate, need details of quality management systems indicating
including:	whether accredited by a third party.
Allocation of responsibilities	What technical procedures to be used.
Project Management	Which staff responsible, which will undertake technical review.
Technical Procedures	Quality of subcontractors is to be ensured.
Technical review	
Training	
Assessment of external	
suppliers	
1.5 Management of Health &	Identify H&S management procedures where appropriate. Do they understand
Safety	the fundamental requirements of H&S legislation?
1.6 Track record on similar	Ever done similar work or is this a new departure?
projects	
1.7 Client references	Need several telephone numbers to enable rapid verification of statements
	made at interview.
1.8 Financial status	May not always be necessary but on large contracts where considerable
	financial outlay required need to demonstrate solvency. Bond may be required on large remediation contracts.
1.9 Details of insurance	Need to demonstrate insurance available 3 rd party liability and professional

cover 1.10 Membership of professional and trade associations	indemnity. Identify limitations / exclusions. May be necessary to make checks, Corporate membership of professional organisations, meeting CPD requirements?				
1.11 Compliance with codes of practice 2. PROJECT SPECIFIC	Can they demonstrate knowledge of the appropriate guidance, codes of practice etc relevant to the job?				
2.1 Technical proposal	The proposal must make it absolutely clear that work will be carried out to comply with the requirements of the specification, what the results will be, and when they will be achieved.				
2.2 Project management plan / working plan	A clear timetable must be available which states what stage will be reached by when and who will be responsible to deliver.				
2.3 Details of sub contractors	Subcontractors will be necessary on large technical projects. Must state who they are, contact points and lines of responsibility.				
2.4 Details of technical procedures	Again, the working plan must clarify all procedures and lines of responsibility.				
2.5 Reporting	Reporting procedures must be made absolutely clear. It is essential not to have masses of reports landing on the desk of the client officer which puts the responsibility back on him / her. The responsibility for doing what has been agreed to the agreed standard must lie with the contractor.				
Programme & Financial proposal	It may be that the contractor will want to provide a guide price or include large contingency sums. The programme of work and the quotation must not be ambiguous. A lot depends on the quality of the original specification. Stage payments and timetables must be firm and with perhaps penalty clauses if fail to deliver on time.				
2.8 Conditions of engagement	Contacts h3 need not be long and wordy, should define responsibilities of both parties, liabilities etc succinctly.				

SITE ASSESSMENT PROCEDURE FLOW CHART



Contaminated Land – publications

Policy and law

Defra Circular 01/2006 "Contaminated land" (PDF 500 KB) Updated 23 October 2006.

This Circular replaces DETR Circular 02/2000, describes the "Part 2A" regime and sets out the statutory Guidance. There have been some minor amendments made to the document since it was initially published on 4 August 2006. Please note that <u>5/06</u> below provides details of the current regulations referred to by the Circular.

Environment Act 1995

ISBN 010542595 8

Section 57 of this Act contains the provisions which make up Part 2A of the Environmental Protection Act 1990.

Planning and Compenation Act 1991 (Amendment of Schedule 18) (England) Order 2002

Defra 2002 SI 2002/116 ISBN 0 11 039232 9 These prescribe how interest is to be calculated on compensation claims relating to the granting of rights of access under Part 2A.

Defra Contaminated Land Forum

The main "CLF" papers so far include <u>CLF 5</u> (PDF 30 KB), which includes the agenda and minutes of the first meeting plus terms of reference and member list.

Other useful publications

Contaminated Land Inspection Strategies – Technical Advise for Local Authorities – May 2001

This advice note (Adobe Acrobat format, 380 KB) sets out technical good practice for the formulation of inspection strategies which the regime requires authorities to prepare, including a checklist. Copies were sent to all English local authorities available for download only.

Local Authority Guide to Part 2A

With support from Defra and the Agency, a local authority "procedural" guide to applying the regime has been produced together with training for local authority staff. The work was led by a steering group which included representatives from Defra, the Local Government Association, the Chartered Institution of Environmental Health and the Agency. The guide is only available via the <u>CIEH</u> website.

The Department for Communities and Local Government (DCLG) publishes planning guidance which is also relevant to land contamination, including the following

Planning Policy Guidance: Planning and Waste Management (PPS10)

Planning Policy Guidance: Planning and Pollution Control (PPS23)

Contaminated Land Notes

This section contains notes issued by the Defra which will be of interest to those involved with contaminated private sectors.

The files listed below are published in Adobe Acrobat Portable Document Format (PDF).

- CLAN 1/02: Withdrawal of ICRCL Guidance Note 29/83 (2ND Edition) (15 KB)
- CLAN 2/02: Contamination Land Supplementary Credit Approvals 2003-04 (45 KB)
- CLAN 3/02: Withdrawal of ICRCL Trigger Values (30 KB)
- CLAN 1/03: An introduction to CLARINET (30 KB)
- CLAN 1/04: 2004/05 Capital Programme Guidance Note (60 KB)
- CLAN 2/04: Defra questionnaire on progress with land contamination summer 2003 (10 KB)
- CLAN 3/04: Section 86 of the Water Act 2003 (10 KB)
- CLAN 4/04: Contamination of Agricultural Land & Part IIA of the EPA 1990 (52 KB)
- CLAN 5/04: Ground waters & section 86 of the Water Act (10 KB)
- CLAN 6/04: Update on the Soil Guideline Values Taskforce (16 KB)
- CLAN 1/05: 2005/06 Capital Programme Guidance Note (57 KB)
- CLAN 2/05: New advice on SGVs (24 KB)
- CLAN 1/06: 2006/07 Capital Programme Guidance Note (57 KB)
- CLAN 2/06: Best Value Performance Indicators (BVPI) Q&A (122 KB)
- CLAN 3/06: Soil Guidance Values Taskforce (26 KB)
- CLAN 4/06: Defra update on SGVs (24 KB)
- CLAN 5/06: Extension of Part 2A to radioactivity (88 KB)
- CLAN 6/06: Soil Guidance Values: the Way Forward (619 KB)
- CLAN 1/07: Extension of Part 2A to radioactivity (CLAN 5/06) further update (25 KB)
- Copies can also be obtained, free of charge, from the Contaminated Land Branch.

Technical material, including CLEA and RCLEA

CLR Published Research Reports

The CLR series of reports and technical materials aim to provide regulators, developers and other interested parties with authoritative and researched advice and information to assist in identifying, assessing and managing the problems land contamination can pose.

CLR 1 A framework for assessing the impact of contaminated land on groundwater and surface water

Aspinwall & Co.

Volumes 1 & 2. DoE, 1994.

- CLR 2 **Guidance on preliminary site inspection of contaminated land.** Report by Applied Environmental Research Ltd.
 - Volume 1. DOE, 1994. Volume 2. DoE, 1994.
- CLR 3 **Documentary research on industrial sites.** Report by RPS Group plc. DoE, 1994.
- CLR 4 **Sampling strategies for contaminated land.** Report by The Centre for Research into the Built Environment Nottingham Trent University. DoE, 1994.
- CLR 5 Information systems for land contamination. Report by Meta Generics Ltd. DoE, 1994.
- CLR 6 **Prioritisation & categorisation procedure for sites which may be contaminated.** Report by M. J. Carter. DoE, 1995.
- CLR 7 Assessment of risks to human health from land contamination: an overview of the development of guideline values and related research. EA, 2002.
- CLR 8 **Priority contaminants report.** EA, 2002.
- CLR 9 **Contaminants in soil: collation of toxicological data and intake values for humans.** EA, 2002.
- CLR 10 The contaminated land exposure assessment model (CLEA): technical basis and algorithms. EA, 2002.
- CLR 11 **Model Procedures for the Management of Land Contamination.** EA, 2004. (Please note that this includes a structured guide to key relevant technical materials from a range of sources).
- CLR 12 A quality approach for contaminated land consultancy. Report by the Environmental Industries Commission in association with the Laboratory of the Government Chemist. DoE, 1997.
- CLR 13 Using RCLEA the Radioactively Contaminated Land Exposure Assessment Methodology PDF (346 KB) Defra, 2006. Draft.
- CLR 14 <u>The Radioactively Contaminated Land Exposure Assessment Methodology –</u> <u>Technical Report (PDF 350 KB) Defra, 2007, Interim.</u>
- CLR 15 <u>The RCLEA software application</u> (699 KB) Defra, 2006. Draft.

Availability:

CLRs 1 – 6 and 12 can be downloaded from the <u>Eugris website</u> (enter "CLR", and choose "resource library", in the search box.

CLRs 7 – 11 together with software, and related material can be viewed, downloaded or ordered from the Environment Agency's CLEA webpage.

CLRs 13 – 15 are available as downloads only.

Queries and comments from users concerning these three publications can be raised on a dedicated website about RCLEA.

Toxicological (tox) and Soil Guideline Value (SGV) reports for individual substances can be viewed, downloaded or ordered from the <u>Environment Agency's CLEA webpages.</u>

ICRCL (Inter-Departmental Committee on the Redevelopment of Contaminated Land) Publications.

The ICRCL was set up in 1976 and consisted of representatives from various Government Departments. Its role was to develop and co-ordinate advice and guidance on human health hazards arising from the re-use of contaminated land and to co-ordinate advice on remedial measures. Some of the data in these publications is being superseded by new material in the CLR series above.

Please note that ICRCL 59/83 has been withdrawn – see <u>Contaminated Land Advice Notes</u> CLAN 1/02 and 3/02 above.

ICRCL 59/83	Guidance on the assessment and redevelopment of contaminated land. 2 nd ed, July 1987 <i>Withdrawn – for historical reference only.</i>
ICRCL 17/78	Notes on the development and after-use of landfill sites. 8 th ed, December 1990.
ICRCL 18/79	Notes on the redevelopment of gasworks sites. 5 th ed, April 1986.
ICRCL 23/79	Notes on the redevelopment of sewage works and farms. 2 nd ed, November 1983.
ICRCL 42/80	Notes on the redevelopment of scrap yards and similar sites. 2 nd ed, October 1983.
ICRCL 61/84	Notes on the fire hazards of contaminated land. 2 nd ed, July 1986
ICRCL 64/85	Asbestos on contaminated sites. 2 nd ed, October 1990.
ICRCL 70/90	Notes on the restoration and aftercare of metalliferous mining sites for pasture and grazing. February 1990.

Industry Profiles

These DOE publications describe the contamination problems associated with various industries and land-uses are now on the <u>Environment Agency's Land Quality Webpages.</u>

A new industry profile has been prepared which focuses on land uses which may be subject to radiological contamination.

Industry Profile: <u>Industrial Activities Which Have Used Materials Containing Radioactivity</u>. (PDF 450 KB)

Other useful material

- *Workshop 1 **Professional standards, April 1994.** DoE, 1995. * Superseded by CLR 12 see under section 3 "Technical Guidance" for availability.
- Workshop 2 Insurance standards, July 1994. DoE, 1995.
- Workshop 3 Risk assessment and the use of guidelines, July 1994. DoE, 1995.
- Workshop 4 Analytical methods for soils from contaminated land, October 1994. DoE, 1995.
- Workshop 5 **Specifications, contracts, insurances and warranties, February 1995.** DoE, 1995.

- Volume 2 A Compendium of Public and Private Sector Supported Research Relevent to Contaminated Land Research Programmes and Research Contacts
- Volume 3 International Treatment Technology Research Themes
- Volume 4 A Review of Full Scale Treatment Technologies for the Remediation of Contaminated Soil.

EXAMPLES OF PRELIMINARY AND STAGE 1 & 2 RISK ASSESSMENTS

Preliminary assessments are those carried out at the time of the inspection of the District and are designed only to assess priorities for further investigation. See Part 2 above.

Stage 1 risk assessments are those which seek to confirm (or otherwise) that a suspected pollutant linkage actually does exist. See 3.3 above.

Stage 2 risk assessments are those which seek to confirm (or otherwise) that a confirmed pollutant linkage is significant. See 3.4 above.

EXAMPLE 1 – Closed landfill with houses built on the site with no recognised capping.

Contaminant score	-	10	(As a landfill site contaminants are known to be present)
Receptor score	-	10	(As persons are living on the site receptors are known to exist)
Pathway score	-	10	(As persons are living on the site they are potentially able to access the contamination – a pathway exists)
TOTAL	-	<u> 30 – F</u>	PC1

This is a very simple example but it indicates why houses on a landfill site with minimal protection will always be PC1 as a *pollutant linkage* always exists.

EXAMPLE 2 - Closed landfill site with houses built on the perimeter

Contaminant score	-	10	(As a landfill site contaminants are known to be present)
Receptor score	-	10	(As persons are living very close by receptors are known to exist within an area of influence of the site)
Pathway score	-	6	(As persons are living so close there may be a presumption that there is a significant possibility that the contamination could impact on the receptors, maybe landfill gas)

TOTAL - <u>26 – PC1</u>

In this case, if there was data to show that the pathway between the contaminant of concern (say landfill gas) and the receptors, had been effective broken, then the pathway score may be significantly reduced or even become zero.

EXAMPLE 3 – Closed land raise in the country, no houses or property receptors nearby but watercourses identified on both sides of the site with leachate staining.

Contaminant score	-	10	(As a landfill site contaminants are known to be present)
Receptor score	-	10	(The water courses are controlled waters and therefore specified receptors within an area of influence of the site)

Pathway score - 8 (It is very likely – possibly certain, that the contamination on this site will access the water courses)

TOTAL - <u>28 – PC1</u>

EXAMPLE 4 – Old derelict gas works site, no structures, no access to the public, clay geology, no significant deep aquifer, but PWS nearby. Recent sample results satisfactory.

Contaminant score	-	10	(As a gas works site contaminants are known to be present)
Receptor score	-	5	(Initial investigations seem to suggest the existence of sensitive receptors unlikely except the PWS)
Pathway score	-	3	(Adverse impact on receptor unlikely but could not be ruled out in the long term – seems satisfactory at the moment from recent sample results)
TOTAL	-	<u> 18 – F</u>	PC3

EXAMPLE 5 – Old power station site, now derelict, no structures, children play on the site, motorcyclists use it for scrambling. River adjacent and part of site is a flood plain.

Contaminant score	-	8	(As a power station site contaminants are very likely, including asbestos)
Receptor score	-	10	(Person frequenting the site are receptors with direct access to any surface contamination. The river is controlled water and could be picking up contaminants from the site during periods of flood heavy rain)
Pathway score	-	5	(Chronic adverse impact on receptors possible)
TOTAL	-	<u>23 – I</u>	PC2

GLOSSARY OF TERMS

The statutory guidance (and other parts of formal guidance) uses a number of terms which are defined in Part IIA of the 1990, other Acts or in the guidance itself. The meanings of the most important of these terms are set out below, along with a reference to the section in the Act or the paragraph in which the relevant term is defined.

The Glossary is taken from formal guidance issued by DETR, circular 02/2000 and references are to that guidance and the Act.

Animal or crop effect: significant harm of a type listed in box 3 of Table A of Chapter A.

Apportionment: any determination by the enforcing authority under section 78F(7) (that is, a division of the costs of carrying out any remediation action between two or more appropriate persons). *Paragraph D.5(e)*

Appropriate person: defined in section 78A(9) as:

"any person who is an appropriate person, determined in accordance with section 78F...., to bear responsibility for any thing which is to be done by way of remediation in any particular case."

Assessment action: a remediation action falling within the definition of remediation in section 78A(7)(a), that is the doing anything for the purpose of assessing the condition of the contaminated land in question, or any controlled waters affected by that land or any land adjoining or adjacent to that land. *Paragraph C.8(e)*

Attribution: the process of apportionment between liability groups. *Paragraph D.5(e)*

Building: any structure or erection, and any part of a building including any part below ground, but not including any part below ground, but not including plant or machinery comprised in a building. *Table A*

Building effect: significant harm of a type listed in box 4 of Table A of Chapter A.

Caused of knowingly permitted: test for establishing responsibility for remediation, under section 78F(2); see paragraphs 9.8 to 9.14 of Annex 2 for s discussion of the interpretation of this term.

Changes to Substances: an exclusion test for Class A persons set out in Part 5 of Chapter D. *Paragraphs D.62 to D.64.*

Charging notice: a notice placing a legal charge on land served under section 78P(3)(b) by an enforcing authority to enable the authority to recover from the appropriate person any reasonable cost incurred by the authority in carrying out remediation.

Class A liability group: a liability group consisting of one or more Class A persons. *Paragraph D.5(c)*

Class A person: a person who is an appropriate person by virtue of section 78F(2) (that is, because he has caused or knowingly permitted a pollutant to be in, on or under the land). *Paragraph D.5(c)*

Class B liability group: a liability group consisting of one or more Class B persons. *Paragraph D.5(c)*

Class B person: a person who is an appropriate person by virtue of section 78F(4) or (5) (that is, because he is the owner or occupier of the land in circumstances where no Class A person can be found with respect to a particular remediation action). *Paragraph D.5(b)*

Collective action: a remediation action which addresses together all of the significant pollution linkages to which it is referable, but which would not have been part of the remediation package for every one of those linkages if each of them had been addressed separately. *Paragraph D.22(b)*

Common action: a remediation action which addresses together all of the significant pollution linkages to which it is referable, and which would have been part of the remediation package for each of those linkages if each of them had been addressed separately. *Paragraph D.22(a)*

Contaminant: a substance which is in, on or under the land and which has the potential to cause harm or to cause pollution controlled waters. *Paragraph A.12*

Contaminated land: defined in section 78A(2) as

"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."

Contaminated Land (England) Regulations 2000: regulations (SI 2000/227) made under Part IIA – described in Annex 4

Controlled waters: defined in section 78A(9) by reference to Part III (section 104) of the Water Resources Act 1991; this embraces territorial and coastal waters, inland fresh waters, and ground waters.

Cost recovery decision: any decision by the enforcing authority whether:

- a) to recover from the appropriate person all the reasonable costs incurred by the authority in carrying out remediation, or
- b) not to recover those costs or to recover only part of those costs. Paragraph E.8

Current use: any use which is currently being made, or is likely to be made, of the land and which is consistent with any existing planning permission (or is otherwise lawful under town and country planning legislation). This definition is subject to the following qualifications:

- a) the current use should be taken to include any temporary use, permitted under town and country planning legislation, to which the land is, or is likely to be, put from time to time;
- b) the current use includes future uses or developments which do not require a new, or amended, grant of planning permission;
- c) the current use should, nevertheless, be taken to include any likely informal recreational use of the land, whether authorised by the owners or occupiers or not, (for example, children playing on the land); however, in assessing the likelihood of any such informal use, the local authority should give due attention to measures taken to prevent or restrict access to the land; and
- d) in the case of agricultural land, however, the current agricultural use should not be taken to extend beyond the growing or rearing of the crops or animals which are habitually grown or reared on the land. *Paragraph A.26.*

Ecological system effect: significant harm of a type listed in box 2 of Table A of Chapter A.

Enforcing authority: defined in section 78A(9) as:

- a) in relation to a special site, the Environment Agency;
- b) in relation to contaminated land other than a special site, the local authority whose area the land is situated.

Escaped Substances: an exclusion test for Class A persons set out in Part 5 of Chapter D. *Paragraphs D.65 to D.67*

Excluded Activities: an exclusion test for Class A persons set out in Part 5 of Chapter D. *Paragraphs D.47 to D.50*

Exclusion: any determination by the enforcing authority under section 78F(6) (that is, that a person is to be treated as not being an appropriate person). *Paragraph D.5(d)*

Favourable conservation status: defined in Article 1 of Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.

Hardship: a factor underlying any cost recovery decision made by an enforcing authority under section 78P(2). See paragraphs 10.8 to 10.10 of Annex 2 for a discussion of the interpretation of this term.

Harm: defined in section 78A(4) as:

"harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property."

Human health effect: significant harm of a type listed in box 1 of Table A of Chapter A.

Industrial, trade or business premises: defined in section 78M(6), for the purpose of determining the penalty for failure to comply with a remediation notice, as:

"premises used for any industrial, trade or business purposes or premises not so used on which matter is burnt in connection with any industrial, trade or business process, and premises are used for industrial purposes where they are used for the purposes of any treatment or process as well as where they are used for the purpose of manufacturing."

Inspection using statutory powers of entry: any detailed inspection of land carried out through use of powers of entry given to an enforcing authority by section 108 of the Environment Act 1995. *Paragraph B.21*

Introduction of Pathways or Receptors: an exclusion test for Class A persons set out in Part 5 of Chapter D. *Paragraphs D.68 to D.72.*

Intrusive investigation: an investigation of land (for example by exploratory excavations) which involves actions going beyond simple visual inspection of the land, limited sampling or assessment of documentary information. *Paragraph B.20*©

Liability group: the persons who are appropriate persons with respect to a particular significant pollutant linkage. *Paragraph D.5(c)*

Local authority: defined in section 78A(9) as meaning any unitary authority, district council, the Common Council of the City of London, the Sub-Treasurer of the Inner Temple and the Under-Treasurer of the Middle Temple.

Monitoring action: a remediation action falling within the definition in section 78A(7)(c), that is "making of subsequent inspections from time to time for the purpose of keeping under review the condition of the land or waters". *Paragraph C.8(g)*

Orphan linkage: a significant pollutant linkage for which no appropriate person can be found, or where those who would otherwise be liable are exempted by one of the relevant statutory provisions. *Paragraphs D.12, D.14 and D.17*

Owner: defined in section 78A(9) as:

"a person (other than a mortgagee not in possession) who, whether in his own right or as a trustee for any other person, is entitled to received the rack rent of the land, or where the land is not let at a rack rent, would be so entitled if it were so let."

Part IIA: Part IIA of the Environmental Protection Act 1990.

Pathway: one or more routes or means by, or through, which a receptor:

- a) is being exposed to, or affected by, a contaminant, or
- b) could be so exposed or affected. Paragraph A.14

Payments Made for Remediation: an exclusion test for Class A persons set out in Part 5 of Chapter D. *Paragraphs D.51 to D.56*

Person acting in a relevant capacity: defined in section 78X(4), for the purposes of limiting personal liability, as any of the following:

"(a) a person acting as an insolvency practitioner, within the meaning of section 388 of the Insolvency Act 1986 (including that section as it applies in relation to an insolvent partnership by virtue of any order made under section 421 of that Act;

"(b) the official receiver acting in a capacity in which he would be regarded as acting as an insolvency practitioner within the meaning of section 388 of the Insolvency Act 1986 if subsection (5) of that section were disregarded;

"(c) the official receiver acting as a receiver or manager;

"(d) a person acting as a special manager under section 177 or 370 of the Insolvency Act 1986;...

"(e) a person acting as a receiver or receiver and manager under or by virtue of any enactment, or by virtue of his appointment as such by an order of a court or by any other instrument."

Pollutant: a contaminant which forms part of a pollutant linkage. *Paragraph A.17*

Pollutant linkage: the relationship between a contaminant, a pathway and a receptor. *Paragraph A.17*

Pollution of controlled waters: defined in section 78A(9) as:

"the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter."

Possibility of significant harm: a measure of the probability, or frequency, of the occurrence of circumstances which would lead to significant harm being caused. *Paragraph A.27*

Receptor: either:

- a) a living organism, a group of living organisms, an ecological system or a piece of property which:
 - i. is in a category listed in Table A in Chapter A as a type of receptor, and
 - ii. is being, or could be, harmed, by a contaminant; or
- b) controlled waters which are being, or could be, polluted by a contaminant. *Paragraph A. 13*

Receptor: the public register maintained by the enforcing authority under section 78R of particulars relating to contaminated land.

Related companies: are those which are, or were at the "relevant date" members of a group of companies consisting of a "holding company" and its "subsidiaries". The "relevant date" is that on which the enforcing authority first served on anyone a notice under section 78B(3) identifying the land as contaminated land, and the terms "holding company" and "subsidiaries" have the same meaning as in section 736 of the Companies Act 1985.

Relevant information: information relating to the assessment of whether there is a significant possibility of significant harm being caused, which is:

- a) scientifically-based;
- b) authoritative;
- c) relevant to the assessment of risks arising from the presence of contaminants in soil; and
- d) appropriate to the determination of whether land is contaminated land for the purposes of Part IIA, in that the use of the information is consistent with providing a level of protection of risk in line with the qualitative criteria set out in Tables A and B of Chapter A. *Paragraph A.31*

Relevant land or waters: the contaminated land in question, any controlled waters affected by that land and any land adjoining or adjacent to the contaminated land on which remediation might be required as a consequence of the contaminated land being such land. *Paragraph C.8(d)*

Remedial treatment action: a remediation action falling within the definition in section 78A (7)(b), that is the doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land or waters for the purpose:

- a) of preventing or minimising, or remedying or mitigating the effects of any significant harm, or any pollution of controlled waters, by reason of which contaminated land is such land, or
- b) of restoring the land or waters to their former state. Paragraph C.8(F)

Remediation: defined in section 78A(7) as

- "(a) the doing of anything for the purpose of assessing the condition of -
 - "(i) the contaminated land in question;
 - "(ii) any controlled waters affected by that land; or
 - "(iii) any land adjoining or adjacent to that land;

"(b) the doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land or waters for the purpose –

"(i) of preventing or minimising, or remedying or mitigating the effects of any significant harm, or any pollution of controlled waters, by reason of which the contaminated land is such land; or

"(ii) of restoring the land or waters to their former state; or

"(c) the making of subsequent inspections from time to time for the purpose of keeping under review the condition of the land or waters."

Remediation action: any individual thing which is being, or is to be, done by way of remediation. *Paragraph C.8(a)*

Remediation Declaration: defined in section 78H(6). It is a document prepared and published by the enforcing authority regarding remediation actions which it would have specified in a remediation noise, but which it is precluded from specifying by virtue of sections 78E9(4) or (5), the reasons why it would have specified those actions and the grounds on which it is satisfied that it is precluded from specifying them in notice.

Remediation notice: defined in section 78E(1) as a notice specifying what an appropriate person is to do by way of remediation and the periods within which he is required to do each of the things so specified.

Remediation package: the full set or sequence of remediation actions, within a remediation scheme, which are referable to a particular significant pollutant linkage. *Paragraph C.8(b)*

Remediation scheme: the complete set or sequence of remediation actions (referable to one or more significant pollutant linkages) to be carried out with respect to the relevant land or waters. *Paragraph C.8(c)*

Remediation statement: defined in section 78H(7). It is a statement prepared and published by the responsible person detailing the remediation actions which are being, have been, or are expected to be, done as well as the periods within these things are being done.

Risk: the combination of:

- a) the probability, or frequency, of occurrence of a defined hazard (for example, exposure to a property of a substance with the potential to cause harm); and
- b) the magnitude (including the seriousness) of the consequences. Paragraph A.9

Shared action: a remediation action which is referable to the significant pollutant in more than one significant pollutant linkage. *Paragraph D.21(b)*

Single-linkage action: a remediation action which is referable solely to the significant pollutant in a single significant pollutant linkage. *Paragraph D.21(a)*

Significant harm: defined in section 78A(5). It means any harm which is determined to be significant in accordance with the statutory guidance in Chapter A (that is, it meets one of the descriptions of types of harm in the second column of Table A of that Chapter).

Significant pollutant: a pollutant which forms part of a significant pollutant linkage. *Paragraph A.20*

Significant pollutant linkage: a pollutant linkage which forms the basis for a determination that a piece of land is contaminated land. *Paragraph A.20*

Significant possibility of significant harm (SPOSH): a possibility of significant harm being caused which, by virtue of section 78A(5), is determined to be significant in accordance with the statutory guidance in Chapter A.

Sold with Information: an exclusion test for Class A persons set out in Part 5 of Chapter D. *Paragraph D.57 to D.61*

Special site: defined by section 78A(3) as:

"any contaminated land -

"(a) which has been designated as such a site by virtue of section 78C(7) or 78D(6)...; and

"(b) whose designation as such has not been terminated by the appropriate Agency under section 78Q(4)...".

The effect of the designation of any contaminated land as a special site is that the Environment Agency, rather than the local authority, becomes the enforcing authority for the land.

Substance: defined in section 78A(9) as:

"any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour."