

GUILDFORD BOROUGH COUNCIL

CONTAMINATED LAND INSPECTION STRATEGY OCTOBER 2001



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EXECUTIVE SUMMARY

Guildford Borough Council is required to produce a strategy for the inspection of its district for contaminated land. This is then to be submitted to the Department for Environment, Food and Rural Affairs by July 2001, under the provisions of Part IIA of the Environmental Protection Act 1990.

The priorities for dealing with contaminated land are aimed primarily at protecting human and animal health, controlled waters and ecosystems. In addition to these, prevention of damage to property and further contamination are included along with encouragement to voluntarily remediate brownfield sites.

A five-year programme of inspection was commenced in April 2001 to run until April 2006. It is in 6 stages and based on a category system. Priority is given to land in areas of population and controlled waters and the final category being in undeveloped areas including the Green Belt. Sites that require urgent attention, whether through complaint or new information coming to light, will be dealt with immediately under procedures outlined in this strategy.

Before land can be formally designated as contaminated it has to meet certain criteria, however once this has been attained, the information will be kept on a public register to be accessible during office hours.

Guildford Borough Council will work in partnership with all other organisations and consultees specified within the guidance notes on this document and at every stage of the inspection process.

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1.0 INTRODUCTION

1.1 General Policy of Guildford Borough Council

The Council's mission statement is "to be the Local Government of Guildford, providing high quality and good value services to meet the needs of the local community".

The Environmental Health Service plays an important role in meeting the social, economic and environmental strategic objectives of the Council, which are set out in the Council's "Core Values and Strategic Priorities".

1.1.1 Core Values of the Council

CVI	<u>Communicating authority</u>	one that informs and listens to the public and its staff about matters that concern them.
CVII	<u>Partnership authority</u>	committed to working with the private sector, the voluntary sector, the business community, other agencies and local communities for the benefit of the people of Guildford Borough.
CVIII	<u>Responsive authority</u>	in the way it cares for its customers and provides services.
CVIV	<u>Community - oriented</u>	believing in the value and significance of local communities and committed to local communities making decisions of local significance.

CVV The values of public service believing the real benefits of continuing to provide services on an in-house basis wherever this can be done cost-effectively and to sustained quality.

1.1.4 Strategic Priorities

SPI “Retaining and enhancing its qualities as a place to live, work and visit but sharing its benefits more equally and, in particular:

SPII Seeking to make Guildford a safer Borough.

SPIII Diminishing the adverse impact of motor vehicles on the quality of life in the Borough (particularly the town centre) without reducing our competitiveness.

SPIV Protecting and enhancing the quality of Guildford Borough’s environment (working through Local Agenda 21).

SPV Responding positively to inequality and disadvantage in the Borough particularly in relation to:

- a) The frail and vulnerable.
- b) The unemployed / poorly paid.
- c) Young people.

SPVI Increasing housing opportunities for the homeless and those in lower incomes with special attention to the supply of housing land.

SPVII Maintaining the viability of Guildford Borough as a centre of employment and recreation with particular emphasis on:

- a) Enhancing the business community.
- b) The Borough as a centre of excellence in the Arts and Science.

1.1.5 The Environmental Health Division Mission Statement

The Division's Mission Statement (Vide Minute 65/93/94) is:

To protect and wherever possible, improve the health and environment of the people of Guildford Borough through the following:

- People - safeguarding, monitoring and promoting the health of the population.
- Air quality - monitoring and improving both indoor and outdoor.
- Water - maintaining safety and quality in respect of drinking water supplies and recreational water use.
- Land occupation - ensuring safer conditions for residential and workplace
- Food - assuring safe preparation and supply of food.

Local Agenda 21

Contaminated land is one of the key areas identified for action in the Guildford Borough Local Agenda 21 document.

1.2 Strategy Development

Guidance produced by DEFRA requires that local authorities adopt a strategic approach to ensuring that the contaminated land inspection process is rational, ordered, efficient, clear, transparent and open.

An inspection strategy has been developed to meet the requirements under Part IIA for Guildford Borough Council. Particular reference has been made to the DETR document '*Contaminated Land Inspection Strategies – Technical Advice for Local Authorities*'. These are described in detail in the following sections and appendices.

1.3 Objectives of Strategy Document

The Inspection Strategy sets out how Guildford Borough Council proposes to identify contaminated land in the Borough (this is examined in more detail in Section 3.1).

The objectives are:

- To meet the requirement to produce a strategy.
- To demonstrate how Guildford Borough Council meet the criteria.

The statutory guidance requires that the approach adopted should:

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

Dealing with contaminated land should be dealt with corporately.

A Contaminated Land Working Party has been set up consisting of representatives from the following Divisions:

- Environmental Health.
- Engineering Services.
- Clerks and Solicitors.
- Development Control.
- Borough Treasurers.
- Planning Policy.

Within Guildford Borough Council, the Director of Housing and Health Services has taken the lead role for implementing the Inspection Strategy

required by Part IIA and the relevant service manager will take the lead role regarding the new requirements for the management of Council-owned land.

The Inspection Strategy draft will be submitted for approval to the Council's Policy (Environment and Transport) Panel for consideration and recommendation to the Executive. The final version will be submitted to DEFRA after the consultation process.

1.4 Regulatory Mechanisms

The framework on contaminated land legislation under Environment Act 1995 was introduced as Part IIA of the Environmental Protection Act 1990 following extensive consultation exercises.

The new regime commenced in April 2000 when the Contaminated Land Regulations 2000 were introduced, giving local authorities the primary responsibility for administration. It is intended that the new regulatory framework will improve the transparency and focus of regulatory controls and allow all contamination problems to be dealt with as part of the same process. Of paramount importance is a rigorous procedure of risk assessment that is used to determine if land is statutorily "contaminated land" according to a new definition (section 1.4.1). It is based on the "suitable for use" approach to remediation and the "polluter pays" dictum in terms of liability for remediation costs.

All local authorities are required to produce a contaminated land strategy to ensure that regulators take a strategic approach to providing a more tailored and consistent regulatory mechanism that is better able to reflect the complexity and range of circumstance found on individual sites.

Prior to the implementation of Part IIA, contaminated land has been dealt with under existing legislation including the Town and Country Planning Act 1990 and the Building Act 1984. Any issues of land contamination that may have

previously been dealt with under the statutory nuisance regime will now be dealt with through Part IIA.

1.4.1 Definition of Contaminated Land

Contaminated land is defined for the purposes of Part IIA 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:

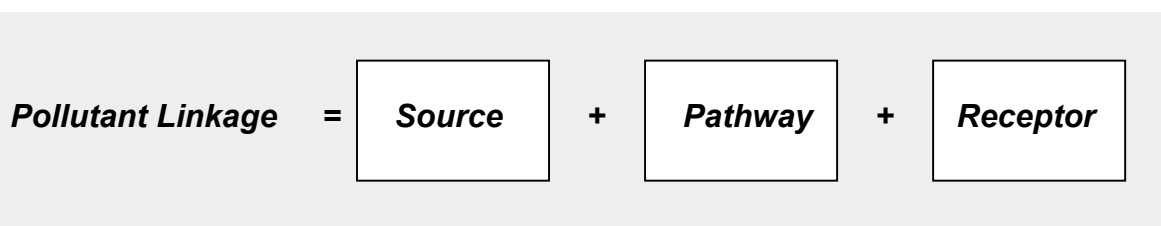
- (a) Significant harm is being caused or there is a significant possibility of such harm being caused, or**
- (b) Significant pollution of controlled waters is being, or is likely to be, caused’**

Environmental Protection Act 1990 (Section 78A (2))

The regulatory authority is required to act in accordance with guidance issued by the Secretary of State in determining significance and likelihood.

Pollutant Linkages

For a site to meet the statutory definition of contaminated land a pollutant linkage must be established. A pollutant linkage consists of a three part relationship comprising:



Source - *A substance or substances IN, ON or UNDER the ground that could affect health or the environment – such as heavy metals in soil*

Pathway - *A means by which a contaminant can come out of the ground and into contact with the receptor, for example hydrocarbons from fuel tanks leak into a watercourse and/or groundwater via underground fissures or permeable rock. The presence of pathways on a particular site is often related to the soil type and geological/hydrogeological features present IN, ON or UNDER the ground.*

Receptor - *Humans, ecological systems or living organisms, controlled water or property that could be affected if exposed to the contaminants.*

The identification of each of the three elements - **source**, **pathway** or **receptor** - is linked to the identification of the others. A pathway can only be identified if it is capable of exposing an identified receptor to an identified contaminant. That particular contaminant should likewise be capable of harming or, in the case of controlled waters, be capable of polluting that particular receptor. A list of potentially sensitive receptors can be seen in Appendix F.

A pollutant linkage relates to a single contaminant but there can be the potential for more than one pollutant linkage on a piece of land. Any pollutant linkage that forms the basis that the land is contaminated is a '**significant pollutant linkage**.'

1.4.2 Role of Local Authorities

Local authorities have been given the primary regulatory role under Part IIA as they have historically had responsibility for dealing with any statutory

nuisance caused by land contamination and are also the lead authorities on land use planning.

In all there are 12 issues for local authorities to consider under Part IIA:

1. Preparation of an inspection strategy, setting out how the Council intends to inspect its area for the purpose of identifying contaminated land. This forms the basis of this document.
2. Determine whether particular areas of land are contaminated, in accordance with the Secretary of States guidance.
3. Decide whether any contaminated land is to be designated as a special site.
4. Undertake immediate remediation action where there is an imminent danger of serious harm and serious pollution of controlled waters.
5. Decide on the applicability of other regimes and whether they provide a more appropriate means of control than Part IIA.
6. Identify and notify those who may need to take action in relation to contaminated land or a special site.
7. Determine who may be liable to bear responsibility for remediation.
8. Consult with the relevant parties on what remediation action is required and how it is to be carried out.
9. Serve a remediation notice unless restrictions apply.
10. Monitor the effectiveness of any remediation carried out.

11. Maintain a public register containing details of regulatory action taken under Part IIA and through other means.
12. Report progress under Part IIA to the Environment Agency to allow preparation of a National Report on Contaminated Land.

1.4.3 The Role of the Environment Agency

The Environment Agency has a secondary regulatory role in assisting local authorities.

The main duties of the Environment Agency are:

1. To provide site-specific guidance to local authorities.
2. To act as the regulator for any contaminated land categorised as a 'special site'.
3. To publish a National Report on contaminated land.
4. To make arrangements for carrying out technical research and to act as a centre of expertise.
5. To assist local authorities in identifying contaminated land, particularly in cases involving the pollution of controlled waters.

1.4.4 Dealing with Contaminated Land

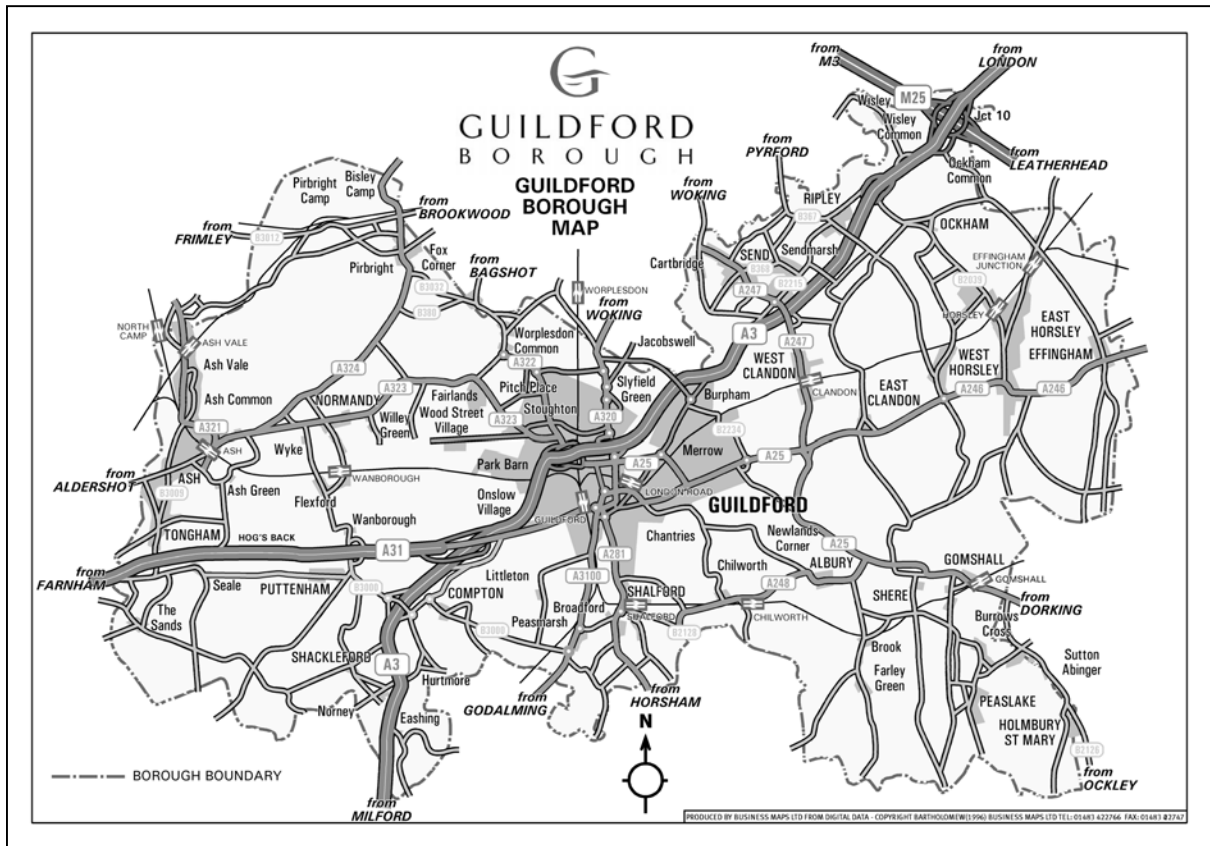
Regardless of whether the local authority or the Environment Agency is the regulator, if an area of contaminated land has been identified, the approach for dealing with it will be the same. There are four main stages to this approach:

1. To establish the identity of the 'appropriate person' to take responsibility for the remediation of the land.

2. To decide what remediation is required and to ensure that this occurs through:
 - Reaching a voluntary agreement.
 - Serving a remediation notice if agreement cannot be reached.
 - Carry out works in default if the notice is not complied with.
3. To determine whom should bear what proportion of liability for meeting the costs of the work.
4. To record certain information about regulatory action on a public register.

2.0 CHARACTERISTICS OF THE GUILDFORD BOROUGH COUNCIL AREA

2.1 Geographical Location



Guildford Borough is situated in the south western part of Surrey some 30 miles from Central London and 45 miles from the South Coast. Bordered by Waverley Borough to the south, the District of Mole Valley to the east, by Elmbridge, Woking and Surrey Heath Boroughs to the north and Rushmoor Borough (in Hampshire) to the west.

2.2 Brief Description and History

The Borough of Guildford, formed in local government reorganisation in 1974, is centred around the town but also includes a number of small villages within its hinterland.

The first written reference to the town is at the end of the ninth century when Alfred the Great left to his nephew the royal residence at 'Gyldeforda', the Golden Ford (possibly named after the sand that forms the river bed at this point).

By the last quarter of the tenth century, Guildford had emerged as an important town, minting its own silver coins (a privilege of towns with Borough status). At some time before the Norman Conquest, a planned extension was made to the town. A boundary ditch was dug along what is now Friary Street, along North Street, across Trinity churchyard and down Castle Street. When the Normans came in 1066 their first priority was to prevent any rising of the newly conquered Saxons and was achieved by building castles. Guildford Castle was sited primarily to dominate the town itself rather than for more elaborate strategic reasons. Reaching the height of its splendour under Henry III, the castle was neglected after his death and was a ruin by the end of the Middle Ages all except for the keep, which acted as the county gaol until 1611.

Although comparatively small, Guildford was the county town of Surrey, a status confirmed by the charter of 1257. It became wealthy because of the wool trade with cloth made in the surrounding area coming to the town to be dyed and finished. In fact, some of the earliest fulling mills for this process are recorded at Guildford in 1250.

Guildford's importance as a centre of communications was increased with the growth of Portsmouth as a naval base and the opening of the Wey Navigation in 1653, enabling barges to reach the town from London and the railways.

Amongst the older settlements in the Borough that may be of interest to this topic are the industry's associated with Gomshall, Ripley and Chilworth, plus the influence of the military occupation in Ash and Pirbright.

2.3 Size and Topography

The Borough of Guildford covers approximately 104 sq. miles (269km²) and has a population of just about 128,000 inhabitants, approximately half of which live within the urban area. The topography of Guildford is also very varied, with the North Downs being the boundary between the Weald to the south of the town and the London Basin to the north. The River Wey runs from the south northwards towards the River Thames through a gap in the North Downs. The River Tillingbourne adjoins the River Wey just south of the town of Guildford and flows towards the east of the Borough. The River Blackwater flows from north to south in the western parts of the Borough. The town is therefore situated in a valley at a point where the River Wey cuts through the North Downs and has been a significant influence historically in the town's development.

The countryside of the Borough is extensive and contains a number of villages, isolated areas of housing, long established businesses, farms and woodland. The landscape is generally attractive, particularly in the south of the District, which forms part of North Downs.

Four major roads pass through the Borough. The M25 enters the Borough briefly at Wisley at its junction with the A3. The A3 runs from north to south through the Borough and provides road links to both London and the South Coast. The A31 runs along the top of the Hogs Back and joins with the A331 Blackwater Valley Road at the western end of the Borough.

The Borough is well served by rail with direct lines to London, Portsmouth, Reading and Gatwick.

2.4 Population Distribution

The Borough of Guildford is Surrey's most populous district. The two principal urban areas being the town of Guildford and, in the west of the Borough, the large parishes of Ash and Tongham.

Approximately half the Borough's population live in Guildford Town, a thriving county town with an attractive historic core and a wide range of commercial, retail and leisure facilities. The University of Surrey is located in the town while the Guildford Cathedral is a dominant landmark.

Ash and Tongham have a population of approximately 17,500 and are mostly residential in character. Ash has a local shopping centre and some small industrial estates.

2.5 Guildford Borough Council Owned Land

The Borough has a considerable property portfolio, which is managed on a day-to-day basis by the following Departments:

- **Clerks and Solicitors** has the responsibility for the management of several industrial estates, closed landfill sites, town centre retail property and municipal buildings.
- **Housing and Health Services** mainly deal with housing estates.
- **Leisure Services** functions including parks, sports facilities, recreation grounds and woodland.

The strategic aspect of the Council's property management function is performed by the Corporate Asset Group under the chairmanship of the Deputy Clerk and Solicitor, who holds the full list of Council owned properties.

2.6 Current Land Use Characteristics

The land use is predominantly residential, outside of the urban areas most of the District is designated as Green Belt. The detailed boundaries were established in the Guildford Borough Local Plan 1987 and have remained unchanged since then. A small area of countryside in the west of the Borough lies beyond the outer edges of the Green Belt and is valued for its landscape quality and opportunities for informal recreation.

2.6.1 The southern part of the Borough lies within the Surrey Hills Area of Outstanding Natural Beauty, with further areas designated as Area of Great Landscape Value.

2.6.2 On the western edge of the Borough lies the Blackwater Valley strategic gap which retains the open character of the valley and where increased recreational opportunities are promoted.

2.6.3 The Borough has a rich and varied architectural heritage with over 1,200 listed buildings and 39 Conservation Areas.

2.6.4 Due to falling average household sizes the number of households will have increased by 2,400 to 52,800 in 1998, most of which were accommodated in the urban areas. The requirement for new dwellings imposed by the Surrey Structure Plan has decreased from a peak of 492 dwellings per year between 1978 and 1991 to a rate of 200 between 2001 and 2006.

2.7 Protected Locations (Natural Habitats etc)

2.7.1 The Borough contains a wealth of natural habitats, not only sites of Special Scientific Interest (SSSI's) but also areas of county and national significance for nature conservation.

The Borough has:

- 16 Sites of Special Scientific Interest (SSSI).
- 10 Regionally Important Geological Sites (RIGS).
- 140 Sites Of Nature Conservation Importance (SNCI).

2.8 Key Property Types

The Borough has:

- 37 Scheduled Monuments and County Sites of Archaeological Importance.
- 1,200 Listed Buildings.
- 120 Locally Listed Buildings.

2.9 Water Resource / Protection Issues

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

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

The concept in classifying an area as falling within a source protection zone is one of travel time of a substance from a point at or below the water table to the point of abstraction. The primary use of groundwater SPZ is to signal that within specified areas there are likely to be particular risks posed to the quality of abstracted groundwater at the source(s) to which the SPZ refer should certain activities (potentially polluting) take place nearby. However, it is worth noting that the SPZ relate purely to groundwater flow below the water table and do not take account of the depth to groundwater and the nature of the overlying soils and rock which may have an important influence on groundwater vulnerability. The Environment Agency encourages the investigation of potentially contaminated land within a Source Protection

Zones to be of greatest priority when considering risks to groundwater resources.

The drinking water in the Borough is served by four water companies: Thames Water, Three Valleys, Sutton and East Surrey and Southern Water. Water abstraction for human consumption takes place at boreholes in Clandon, West Horsley, Albury plus town centre sites at Ladymead, Dapdune and Millmead. At Shalford Treatment Plant water is abstracted from the River Tillingbourne. As indicated in Appendix E, the Guildford Clandon and West Horsley sources draw upon the Upper Chalk aquifer and the sources at Albury and Shere abstract groundwater from the Lower Greensand aquifer. Eight private water supplies are under the local authority regulation and are in rural locations away from any known contaminative sources.

The source protection and ground water zones have been detailed and are included in the Borough's Geographical Information System (GIS), it is anticipated that these links will form an integral part of the site assessments. A map is included in Appendix E.

2.10 Known Information on Contamination

The Council holds extensive records of sites with previous industrial use, existing and old landfill sites and areas revealed during the development process.

The sources of the information are held as follows:

- Planning archives.
- Environmental Health records.
- Clerks and Solicitors files and property deeds.
- Museum archives.

2.11 Current and Past Industrial Land Use History

A number of categories of historical land use can be identified as the basis for drawing up the inspection strategy. These are outlined set out below including illustrative cases (the list is not comprehensive):

1. Current

The industry within the Borough is classified as light and is restricted to industrial estates such as Slyfield, Lysons Avenue and Middleton Road. There are 46 processes registered under Part B of the Environmental Protection Act 1990, including 26 petrol stations. Current landfill operations are restricted to large-scale sites at Albury and Seale, where sand extraction still takes place along with a site in Send.

2. Iron

The Guildford Iron foundry was set up near the town mills about 1794 by E. Filmer, patent mangles, iron and stoves were made here. Castings for the Portsmouth railway were also made there. Iron extraction was carried out in Shere at a much earlier date.

3. Brewing

Numerous smaller breweries existed within the Borough which operated alongside the two major breweries based at the Friary Centre and Farnham Road car park.

4. Mineral Extraction

Clay was fired for bricks at a number of locations including at Guildford Park Brickworks. This was in the later Victorian times and were made there for the new cathedral. Sand extraction has also taken place in Albury, Shere, Ripley, Send and Seale/Sands.

5. Production

In 1625 the East India Company set up Chilworth Gunpowder Mills and became an important source of gunpowder.

A vulcanised fibre factory existed at Broadford, Shalford and operated until the 1980's.

Dennis Brothers originally started out making bicycles in Guildford before moving on to make motorbikes, cars and commercial vehicles. The various sites they have occupied in the Borough are well documented.

Tanneries existed at Bramley and Gomshall with the latter working until the 1980's.

6. Navigational Links

Railway sidings existed beside the 10 stations within the Borough.

7. Ministry of Defence

The Ministry of Defence occupies facilities notably in the Ash and Pirbright areas. There are also historical links with sites in Stoughton.

8. Landfill sites

Previous areas of landfill have had various forms of control dependent on the date of infill. These have taken place in quarries and pits originally utilised for mineral extraction.

9. Petrol and Oil Storage

Records maintained by Trading Standards at Surrey County Council demonstrate the existence of petrol stations in a number of locations, many of which have been redeveloped. Fuel storage facilities associated with goods yards and depots are still in use whilst some,

including Shere Coal yard and Riverside Road, Guildford have been redeveloped.

10. Utilities

Gas works, power stations and sewage works have operated in various locations within the Borough although only the sewage works remain.

11. Redevelopment

Planning conditions imposed by Borough and Environment Agency on the redevelopment of sites with previous industrial use have already 'remediated' a number of locations. The extent of the works carried out are dependent on the intended use, technology and guidance available at the time of development. Depending on their vulnerability, these already remediated sites will be reviewed as a matter of course as part of the strategy.

For example, the large closed landfill site at Slyfield was provided with a physical gas curtain inserted in the sub-soil to a depth of 4 metres in order to protect the surrounding industrial properties from possible migration of landfill gas.

2.12 Broad Geological / Hydrogeological Characteristics

The Strategy must consider the geological and hydrogeological features of the Borough, as these will be vital in determining whether contaminant pathways exist.

The Borough includes the North Downs comprise the chalks of the upper cretaceous scarp slope on the south side, beyond which are the Green Sand and Silt Beds followed by exposures of the Lower Green Sand and Weald Clay. To the north there is a band of Reading Beds exposed by the London Clay, which extends across the northern boundary and through the main centre of residential areas in Guildford. The London Clay and Reading Beds

which cover the north of the Borough overlie Chalk strata of the Upper Cretaceous age. The Chalk outcrops in the east-west trending ridge of the North Downs, and is classed as a major aquifer. To the south, the stratigraphic sequence passes through the Upper Greensand to the Gault Clay and then the sandstone deposits of the Lower Greensand formation. The Folkestone and Hythe Beds units of the Lower Greensand are both classed as major aquifers. The Gault Clay is a non-aquifer that separates the Chalk aquifer from the Lower Greensand aquifer units. The Weald Clay is another non-aquifer, underlying the Lower Greensand and outcropping to the south of Shamley Green.

The Guildford Borough area is covered by three separate Local Environment Agency Plans (LEAP) with the Wey LEAP covering the majority of the area. These plans are devised with the assistance of many bodies including local authorities, with the principal objectives to identify sources of pollution and protect both human health and ecosystems. Specific details of the characteristics of the areas covered are included in the respective plans.

3.0 GUILDFORD BOROUGH COUNCIL STRATEGY - OVERALL AIMS

3.1 The Aims and Objectives of the Guildford Borough Council Inspection Strategy

The aims and objectives of the strategy for the period 2001 - 2006 are described in the following sections:

Aims

- To identify unacceptable risks to human health.
- To identify unacceptable risks to controlled waters and ecosystems.
- To protect designated ecosystems.
- To prevent damage to property.
- To encourage redevelopment of brownfield sites and voluntary remediation.
- To prevent any further contamination of land.

Objectives

- To undertake an inspection programme in the Borough of potentially contaminated sites to identify unacceptable risks to humans, controlled waters, ecosystems and property receptors.
- To ensure compliance and enforcement of the new statutory requirements of the Environmental Protection Act 1990.
- To encourage market confidence in the redevelopment of brownfield sites in the Borough and thus promote the recycling of brownfield sites rather than greenfield sites.
- To address the liability issues associated with the Council's existing land holdings, minimize and manage any new liability associated with land acquisitions.

- To ensure that procedures are wherever possible in place for the open provision of information to the public, developers and property surveyors etc.
- To ensure where redevelopment of sites take place that the process deals safely and effectively with any land contamination.

4.0 PROCEDURES

4.1 Internal Management Arrangements For Inspection and Identification

4.1.1 Procedures - Roles of various disciplines

The Director of Housing and Health Services holds the responsibility to deal with contaminated land issues which arise as a result of a resident's or business service request, mainly through the statutory nuisance provisions of the Environmental Protection Act 1990.

As the process involves interaction with other disciplines, details are outlined below:

Environmental Health

An inquiry regarding contaminated land will be dealt with following the procedure outlined below:

All clients are asked to supply their names and addresses and, if appropriate, the address giving rise to the issue. The identity of the client will remain confidential at all times. The only circumstance in which this information might be made public would be in the case of a remediation notice being appealed in the Magistrates Court.

Any anecdotal evidence provided to the Council relating to contaminated land is noted but no determination of contaminated land can occur without robust scientific evidence. In all cases, the Environmental Health Division will use knowledge and experience to decide whether further investigation is required following a complaint or a provision of information. Further details of the new procedures for inspection and investigation are detailed in the following sections.

Additional information requests are received from developers, solicitors and homeowners this issue is dealt with in Section 7.5 - Dissemination of Information.

Planning

The vast majority of contaminated land issues are currently addressed through the planning regime where contamination is a material consideration. While the introduction of Part IIA will lead to additional sites being addressed, it is anticipated that the redevelopment of brownfield sites and the associated planning controls will remain the primary mechanism for dealing with contaminated land. Any remediation agreed as a planning condition will be dealt with under planning controls and not under Part IIA.

Contaminated land is a material consideration for the purposes of the Town and Country Planning Act 1990. '*Planning Policy Guidance Note 23*' (PPG23) provides advice to local authorities on dealing with contaminated land during the planning process. The Council will have regard to this advice during the process of development control to identify, through a process of internal consultation, those areas of land subject to redevelopment that may be contaminated. Where contaminated land is identified, the Council will seek to secure the investigation and remediation of that land to a standard suitable for the intended use through the use of appropriate planning conditions.

The Council consults with the Environment Agency on certain types of application. The Environment Agency can take the opportunity to request the inclusion of conditions requiring the investigation and remediation of land where contamination could result or is resulting in the pollution of controlled waters.

The Council's Environmental Health and Planning Divisions regularly liaise on all issues relating to pollution and arrangements for inter-departmental consultation are in place. The emphasis in this process is on the developer or his agent to provide the necessary documentation to satisfy the planning regime including a validation report on any remedial processes undertaken.

Verification of any conditions recommended by the Environment Agency or Environmental Health is carried out by the latter who report their findings to the Planning Division.

The Council will require developers to provide validation reports including any remedial measures and supporting documentation.

Building Control

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

If a Building Control Officer inspects buildings or extensions to buildings erected on contaminated land, liaison with Environmental Health Officer will occur. In the event that precautions are not considered to be reasonable, plans will not be approved (or conditionally approved with specific conditions as to further information / precautions required) and / or enforcement action will be pursued under the Building Act 1984.

Where works are inspected by outside bodies, such as the National House Building Council (NHBC), the developer will have to provide certification of the works carried out.

Clerk and Solicitors Department

Details of land that has been and is currently owned and leased by the Council are held on a Land Terrier. The system will be examined by the Contaminated Land Officer in conjunction with officers from the Department to

identify any land that may have been contaminated by former activities such as landfilling.

The Deputy Clerk and Solicitor chairs the Corporate Asset Management Group. It is intended that should this body examines any council owned or leased sites and identify any site as being potentially contaminated. Engineering Services Officers will prioritise it for more detailed inspection in conjunction with the Environmental Health Division.

The Clerk and Solicitor Department also conducts searches of the local Land Charges Register, which include enquiries on Form Con.29. Question 16A which is based on contaminated land, and any action taken under the Environmental Protection Act 1990 (as amended):

- 16A.1, Section 78R, Register entries.
- 16A.2, Section 78B, Notices of identification of contaminated land.
- 16A.3, Section 78G, Consultation as to adjoining or adjacent land.
- 16A.4, Identification of risk from adjoining or adjacent land.

Currently, the answer to this question is negative as the legislation has not been fully implemented.

Additionally the Clerk and Solicitor Department is responsible for providing advice on the Council's duties under Part IIA. In particular, the Council's legal officers may be required to assist the Chief Environmental Health Officer in identifying appropriate persons who may be responsible for the investigation and / or remediation of land.

Engineering Services

The role of the Engineering discipline is to provide advice to the respective land holding departments on technical issues, in conjunction with the Environmental Health and Building Control Officers. Project management and monitoring are other key functions controlled by the Engineering Manager in relation to contaminated land.

4.2 Local Authority Interests in Land

As outlined in Section 2.5 and following on from the previous section, the ability for the Borough to deal with its own land is vital. Inspection of Council owned sites will be amongst the first considered as it is to be prudent to lead by example. The process must inform Members of progress in regular updates and include management regimes to deal with problems as they occur.

4.3 Information Collection

The collection of information and data is a fundamental discipline that is explained in more detail in section 6 - Stage 1 Data Collection.

Sources

The types of information that can be utilised are outlined with the originating source below:

- Historic maps - Museum.
- Geological and hydrological data - Environment Agency.
- Source Protection Zones - Environment Agency.
- Planning records - Guildford Borough Council and Surrey County Council.
- Local studies library in Woking - Surrey County Council.
- Local Plan - Guildford Borough Council.
- Surrey County Structure Plan.
- Environmental Health records - previous site surveys / LAPC - Guildford Borough Council.
- Waste Management Licences - Environment Agency.
- Kelly's directory.
- Commercial proprietary products consisting of digitalized historic maps and databases of previous land uses.
- Derelict Tank Database - Surrey County Council, Trading Standards.
- Sites and Monuments records - Surrey County Council.

- Surrey History Centre, Woking.

It is anticipated that the above information will be freely available, with the exception of the proprietary products, which are being marketed in conjunction with the Ordnance Survey. An estimated cost for this Borough has been quoted at circa £13,000 for the database and £7,000 for the maps. This facility and the use of the museum is discussed in Section 6.3.

5.0 GENERAL LIAISON AND COMMUNICATION

Guildford Borough Council is required to consult with external consultees on the Inspection Strategy. The final version of the strategy will be submitted to the Environment Agency and to DEFRA by July 2001

Statutory consultees

- Environment Agency (Thames Region).
- English Nature.
- English Heritage.
- English Partnerships.
- Department for Environment, Food and Rural Affairs (DEFRA).
- Food Standards Agency.
- Surrey County Council.
- Southeast England Development Agency (SEDA).

Non-statutory consultees

- Guildford Environmental Forum.
- Parish Councils and amenity groups.
- Surrey local authorities, forming the Surrey Contaminated Land Forum, and Rushmoor Borough (neighbouring authority).

6.0 PROGRAMME FOR INSPECTION

6.1 Arrangements for Carrying Out Detailed Inspections

Establishment of a programme for inspection can be broken down into the following three elementary stages:

- Initial screening of all sites within the Borough.
- Detailed site investigations.
- Notification, declaration and enforcement of contaminated land.

In accordance with the risk prioritisation strategy, the land belonging to the Council will be addressed as a separate entity but incorporated into the overall ranking of sites.

6.2 Work Programme

In order to address these issues in a structured manner, an inspection process broken down into a number of milestones has been drawn up (illustrated in Appendix A) in the form of a Gantt chart. The reader will note that the stages run concurrently and that some may continue beyond the final date.

6.3 Stage 1 - Dataset Collection (Ongoing April 2001 - April 2006)

The appointment of the Contaminated Land Officer in April 2001 on a fixed term two year contract has commenced the formal process of addressing the contaminated land strategy, principally setting up a database and GIS layers on sites in question.

Geographical Information System

The Council's Geographical Information System (GIS) forms the basis of the storage system to manage contaminated land information. The current MapInfo system is being developed with the intention of providing corporate

use. Potentially the use of the spatial data will allow the user to interrogate the system to determine the proximity of receptors to contamination sources. The information is currently stored within restricted layers with levels of access subject of scrutiny. The GIS can be linked to a Microsoft Access database that will allow statistical information to be drawn together for reporting. All information will be the subject of quality control checks

The quality of the information gathered is a limiting factor to the efficient and valid completion of land inspections (detailed in the following sections) in that the initial data collected may be inaccurate for a number of reasons. It is therefore important to verify the site accurately and every effort must be made to ensure the verification process is as thorough as possible. Quality assurance and control procedures will be put in place for all final data entries.

In order to aid the process of data collection there are a number of options and proposals:

1. Utilise the current facilities on historical land use held within the Council, the Planning Division and in particular at the Museum, as they are all valuable resources. Searches conducted by the Museum should attract some recompense to acknowledge the amount of input from the staff.
2. Purchase historical maps and land use layers, potentially from Ordnance Survey Landmark.
3. Purchase a customised Access database system and risk assessment package that will be linked to the GIS and allow large amounts of information to be linked from multiple sites. Current quotes for this kind of database package are in the region of £8,000.

6.4 Stage 2 - Consult And Publish Strategy - (July 2001)

The draft strategy will be subject to consultation and comments received will be taken into account within the final strategy, including any amendments from within the Authority. Once the Council has approved the document, it will be submitted to DEFRA with a copy to the Environment Agency.

6.5 Stage 3 - Inspection Priority - (November 2001 - April 2003)

Sub stage set up timetable for the investigation of sites based on the priority ratings (January 2002 - April 2003)

This is the initial desktop prioritisation inspection of the Borough to identify potential pollutant linkages as required by Part IIA. This will be undertaken by the Contaminated Land Officer using the GIS database and data collected in the previous stage.

The '*pollutant linkage = source + pathway + receptor*' concept is the basis for the inspection. It is envisaged that the maps of sites of potentially contaminative historical uses will overlay those maps of current potential receptors to identify sites where viable pollutant linkages may exist.

Information on specific sites from external consultees and internal contacts will be identified and given a high priority in the process. This information gathering will enhance the dataset held for each site and enable a more informed judgement (in terms of the separate elements of source, receptor and pathway) as to whether pollutant linkage exists.

The number of receptors in an area will determine the order in which the sites are inspected. The order of priority for receptors is as follows:

- Humans.
- Controlled waters.
- Ecosystems.
- Organisms.
- Other vegetation.
- Property (buildings and monuments).

The largest urban areas in the Borough will be inspected first, followed by the villages and smaller settlements and finally the remaining Green Belt. The total number of sites that will need to be investigated in this inspection programme cannot yet be determined. The prioritisation inspection of Council-owned land would be carried out alongside the urban inspection schedule and will be amongst the first to undergo the site prioritisation process.

When the inspection process reveals the existence of a pollutant linkage then the site will be ranked in accordance with risk prioritisation methodology to determine the order in which sites proceed to the detailed site investigation stage described in the next section.

Where information indicates that there is an imminent danger of serious harm or serious pollution of controlled waters as a result of the presence of a significant pollution linkage being present the Council will notify the Environment Agency and other external consultees and consider the need for urgent action. Should it be decided that urgent action is required this shall be entered into as soon as reasonably practicable.

The prioritisation process should be a reasonable scientific assessment of the potential of a contaminant to have a defined detrimental effect on the receptors present on or close to a site. The presence or absence of a viable pathway is one of the core components of the detailed site investigation stage presented in the next section.

This stage will include the land owned by the local authority, of which internal procedures are to be drawn up to address points on managing and preventing land contamination. It is envisaged that this will be a task for the contaminated land working party.

A list of potentially contaminative land uses is given in Appendix D.

6.6 Stage 4 - Detailed Site Investigations - (January 2002 - April 2005)

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

The provisions of Part IIA require prioritisation of all contaminated land sites and this will be undertaken to determine which sites are first submitted to the Detailed Site Investigation Stage. The Council has the sole responsibility for determining whether any land appears to be contaminated land and it cannot delegate this responsibility.

6.6.1 Detailed Risk Assessment

This stage will involve fewer sites but there will be a need to hold greater amounts of data per site and conduct inspections of sites. Risk prioritisation is a means of ranking sites with potentially contaminative uses and will include a scheme for ranking of sources and receptors. Individual sites will be given a priority ranking based on a matrix of contaminative source, sensitive receptor and viable pathway score. Risk assessment needs to account for all potential pollutant linkages and assign a value of risk to each. The methodology to be used has yet to be determined and will probably be subject to changes as further guidance is published by DEFRA. New sets of guidelines, the Contaminated Land Exposure Assessment (CLEA) guidelines, are expected from the DEFRA shortly. At present, the methodology will be based on the

guidance included in the Contaminated Land Research Report No. 6, *'Prioritisation and categorisation for sites, which may be contaminated'*. The Council will incorporate new risk prioritisation and risk assessment guidelines into this Inspection Strategy when they become available. Until these guidelines are available, the Council will evaluate all information against the guidelines issued by the Interdepartmental Committee on Redevelopment of Contaminated Land (ICRCL), *'Guidance on the assessment and redevelopment of contaminated land' ICRCL 59/83 (2nd edition, July 1987)*. This gives the most widely used set of trigger and action levels for a range of contaminants and is likely to remain a key reference document even with the introduction of CLEA.

It is envisaged that this Council would use an Access database to store tables of source, pathway and receptors with scores based on degree of risk for each component. This would allow variables to be changed in the calculations as further information comes to light and as guidance methodology change. The hardware/software to run a dataset of this magnitude linked to GIS will need to continue to be assessed. Development of this database is currently beyond the scope and a capability of staff employed within this Authority and it is recommended that purchase of a commercial system designed for use by local authorities be considered.

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

Advice will be sought from the Environment Agency on risk assessment if controlled waters are the receptor in a particular pollutant linkage. It is anticipated that risk assessments and remediation will be carried out in

accordance with Environment Agency guidance - *'Methodology for the derivation of remedial targets for soil and groundwater to protect water resources'*, Environment Agency R&D Publication 20, (1999).

6.6.2 Intrusive Site Investigations

At this stage it is going to be necessary to make contacts with landowners, occupiers and 'appropriate persons' as defined by Part IIA. The Council will be seeking co-operation from 'appropriate persons' and ideally voluntary site investigations will be undertaken.

This approach requires effective communication with owners, occupiers and other interested parties. Within the Environmental Health Division, the Contaminated Land Officer will be the central contact point and will take care to keep all parties informed at each stage of an investigation.

The investigations will be designed on a site-specific basis taking account of all that is known of the site including the potential or actual contaminants based on site history and previous investigations (if any). Statutory powers of entry are available to the Council if needed.

The approach to identifying contaminated land will require intrusive site investigations (such as boreholes, trial pits) for only a small proportion of the land within the Borough. This is the land where the earlier stages of study suggest the possibility of statutory Contaminated Land and the scope of the investigation will be limited to that necessary to make the determination.

Careful attention to the DEFRA guidance will be given to ensure that investigations are really necessary and that best value is obtained.

Before using statutory powers of entry, the Council will consider whether if any land were designated it would fall under the definition of 'special site' as defined in Appendix G. If this is the case, the Council will seek to make arrangements with the Environment Agency to carry out the inspection on

behalf of the Council. This is because the Environment Agency is responsible for the regulation of 'special sites', although the Council is still responsible for the initial determination that the land is statutory Contaminated Land.

All inspections to be completed by April 2005.

6.7 Stage 5 - Statutory Contaminated Land - (January 2002 - April 2005)

The enforcement stage involves the notification/declaration for individual sites and culminates ultimately in setting up a public register.

6.7.1 Determination

As mentioned in section 1.4.1, determination of contaminated land can occur under a number of circumstances:

1. Significant harm is being caused.
2. There is a significant possibility of such harm being caused.
3. Pollution of controlled waters is being caused.
4. Pollution of controlled waters is likely to be caused.

Any determination that land is contaminated will be documented to include:

- A description of the pollution linkage(s), including any supporting evidence.
- A summary of the risk assessment(s) on which the pollution linkage(s) were considered to be significant.
- Confirmation that the assessment satisfies the statutory guidance.

6.7.2 Notification

If any significant pollutant linkage has been determined to the satisfaction of the Council for any particular site, the Director of Housing and Health Services will issue notifications of contaminated land to ensure there are no unacceptable risks posed to human health or to the wider environment.

Once the land has been declared contaminated by statutory definition, the Council will formally notify all relevant parties, including:

- Owners.
- Occupiers.
- 'Appropriate persons'.
- Environment Agency.

The formal notification procedure will commence the consultation process on what remediation is appropriate for the site.

6.7.3 Remediation

The legislation and statutory guidance has been designed to try to encourage voluntary remediation. To aid this process, the Council will provide as much information to the relevant parties as possible including, where available:

- Copy of the written notification.
- Copies of the site investigation(s) or details of their availability.
- Explanations of why the appropriate persons have been identified as such.
- Details of all other persons notified.

Remediation must:

- Be best practicable technology.
- Achieve a standard.
- Be reasonable.
- Be durable.
- Make the site suitable for end use.
- Not have a cheaper alternative that can achieve the same standard.

- Encourage remediation solutions that actually treat the contaminant.

Under the regulations, the Council is required to maintain a public register of remediated land. This will be maintained by the Environmental Health Division. It will be paper-based rather than electronic and be accessible on request by members of the public during office hours.

Formal Remediation

Before serving a remediation notice, the Council will be satisfied that the required remediation is unlikely to be carried out otherwise and will also ensure that the Council is not itself an appropriate person.

A remediation notice will be served not less than 3 months after the appropriate persons have been notified. It must be highlighted that it is an offence to fail to comply with a remediation notice. The Council may consider carrying out the remediation action itself (whilst instigating enforcement proceedings) and will normally seek to recover any associated costs from the responsible person(s).

Copies of all remediation notices will be included in the Public Register.

Voluntary Remediation

Whilst the Council will not hesitate to take formal action whenever necessary, it is recognised that in some cases that more effective remediation can be achieved by agreement rather than by enforcement. There is an incentive to undertake voluntary action in that any materials that require disposal as a result of voluntary remediation will be exempt from landfill taxes. This exemption does not apply to materials generated as a result of a remediation notice having been served.

This approach requires effective communication with owners, occupiers and other interested parties. The Environmental Health Division will be the central contact point within the Council on contaminated land issues and as such will

take care to keep owners, occupiers and complainants informed at each stage of an investigation regardless of whether there is a formal designation of contaminated land.

The person(s) responsible will have to prepare and publish a remediation method statement for Council approval. Where the proposed remediation scheme is accepted, the Council will not serve a formal remediation notice so long as works proceed in a satisfactory and timely manner.

Part IIA follows the polluter-pays principle so if a remediation notice has to be served or if this Council has to carry out emergency remediation, the costs of the works will normally lie with the person (s) who caused or knowingly permitted the contamination. However, if the owner/occupier of the land will be responsible (unless the problem is one of water pollution).

Urgent Remediation

In cases of imminent danger of significant harm or significant pollution to controlled waters, the Council carry out the remediation without delay and seek to recover the costs from the appropriate person(s).

Liability

Designation of statutory contaminated land can be made with the identification of only one significant pollution linkage, yet full liability cannot be determined until all linkages are identified. Apportioning liability may prove to be complex and contentious and the Council will do everything reasonably practicable to identify all potentially liable persons whilst following the procedures set out in Part IIA, EPA 1990.

6.7.5 Formal Designation of Contaminated Land in the Ownership of the Council

If there is a requirement to designate an area of Council-owned land or land where the Council is the 'appropriate person', there may be liability for

remediation costs and legal costs. Significantly, the Council may for be responsible for 'orphan sites' where no 'appropriate person' can be determined to take responsibility and the costs that run with that obligation.

Risk of Blight

The Council also recognises the potential for information gathered during the process of inspection to be misinterpreted. To prevent the possibility of blighting of land the Council, where possible, will maintain information gathered in a confidential manner. Requests for access to the confidential information and related databases will not be permitted whilst work is still in progress.

6.8 Stage 6 - Review mechanisms - (Annually until 2006)

There is a requirement for local authorities to identify procedures for reviewing:

- The strategy.
- Assumptions about individual sites.
- Unforeseen incidents.

6.8.1 Strategy Review

As part of the overall quality management of this work the strategy will be reviewed annually until all of the stages have been completed.

6.8.2 Inspection Decisions

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

1. Significant changes in legislation
2. Establishment of significant case law or other precedent.
3. Revisions of statutory guidelines on exposure limits, risk prioritisation and risk assessment.

Decisions will be made and recorded in a consistent manner that will allow efficient review, to include written records of determination and formal notification.

There is also a right to appeal to the Magistrates Court on any decision made by the Council. Appeals against decisions made by the Environment Agency regarding 'special sites' will be made to the Secretary of State.

6.8.3 Inspection Priorities

There may be occasions where inspections may have to be carried out outside of the general inspection framework. Such occurrences can trigger emergency inspections.

Triggers for undertaking non-routine inspection will include:

- Information from other statutory bodies, owners, occupiers or other interested parties regarding a particular site or case.
- Introduction of new receptors.
- Supporting voluntary remediation where a potentially liable party wishes to undertake clean up before their land has been inspected by the local authority.
- Identification of localised health effects - where people or ecosystems appear to be affected by a particular area of land.
- Unplanned events - where an incident such as a spill has occurred.

7.0 INFORMATION MANAGEMENT

7.1 Geographical Information System

As highlighted in Section 6.3, GIS forms the basis of the storage system to manage contaminated land information. The current MapInfo system is being developed with the intention of providing corporate use. Potentially the use of the spatial data will allow the user to interrogate the system to determine the proximity of receptors to contamination sources. The GIS can be linked to a Microsoft Access database that will allow statistical information to be drawn together for reporting. Site-specific information including technical reports will be stored and managed on an Access database and linked to the GIS system, which has the capacity to store all relevant information related to a site on a linked system. All information within this database will be the subject of quality control checks and written procedures.

The information is currently held within a restricted field and access will be the subject of close scrutiny.

7.2 Risk Communication

The complex nature of contaminated land issues do not lend themselves to easy explanation and it is recognised that as well as a large amount of information being collected and stored there will be concerns with blight etc. Development of effective methods of risk communication is therefore essential.

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

- Familiarity - increased concern about unfamiliar issues.
- Control - increased concern if the individual is unable to exert any control over events.
- Proximity in Space -increased concern about nearby events.
- Proximity in Time - increased concern about immediate consequences rather than long term effects.
- Scale - particularly in terms of media coverage where one large incident appears to be much worse than several small incidents.

7.3 Receipt of Information

When information or an enquiry is received, as described in Section 4.1, the following steps will be taken to keep enquirers informed:

- i) The information will be acknowledged by letter.
- ii) The anonymity of the originator of the information will be preserved, where appropriate.
- iii) Owners and occupiers of the land to which the information relates, or potential appropriate persons, will be advised that it has been received and will be dealt with, along with an indication of time-scale.
- iv) If appropriate other regulatory authorities will be informed if the matter affects the regimes they deal with, for example, the Environment Agency, with water resources.
- v) The final action will be advising the informant and the owner/occupiers of the outcome of the Council's investigations.

7.4 Public Register

A public register of contaminated land will be held within the Environmental Health Division and be available for viewing during normal office hours on request at the Planning and Environmental Health reception desk. The Part IIA Regulations specify the information that must be recorded on this register.

This will include:

1. Remediation notices.
2. Details of site reports obtained by the authority relating to remediation notices.
3. Remediation declarations, remediation statements and notifications of claimed remediation.
4. Designation of sites as 'special sites'.
5. Any appeals lodged against remediation and charging notices.
6. Convictions.

The Council will not include any information on its register which relates to the affairs of any individual or business and is commercially confidential to that individual or the person carrying on that business.

The Council will give concerned parties 21 days to make a representation requesting exclusion of information the Council believes may be commercially confidential. Where information is excluded on the grounds of commercial confidentiality, the Council will include on the register a statement indicating that material has been excluded for this reason only.

A right of appeal to the Secretary of State exists where information is included on a public register that the person believes is confidential.

7.5 Dissemination of Information

Requests for information on contaminated land, have been received by the authority for a number of years, the questions asked are often far beyond

those included in the standard land search. Therefore, an internal procedure has been drawn up, which includes charging for the information at an hourly rate based on that for an Environmental Health Officer. The appointment of the Contaminated Land Officer and the development of the GIS system and databases will allow this service to be more comprehensive and potentially bring a larger return which can offset some of the development costs.

7.6 Provision of Information to the Environment Agency

The Environment Agency is required to prepare an annual report for the Secretary of State on Contaminated Land within England and Wales, which will include:

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

The dissemination of this information is based on the memorandum of understanding, which has been drawn up between the Environment Agency and the Local Government Association and it is anticipated that this authority will follow that protocol. In addition, the local authority should provide information to the Environment Agency whenever a site is designated as statutory contaminated land and whenever a remediation notice, statement or declaration is issued or agreed.

7.7 Data Protection

The Council must comply with all the requirements of the Data Protection Act 1998.

The local authority now has a duty to disclose some information received by it in the course of its contaminated land investigations. Whether the information

is disclosable will depend on whether the Council has received it in a public manner. Such information may be received under a number of Acts.

The Environmental Information Regulations 1992 require all information held by central or local government to be publicly accessible, although there are exemptions which include for reasons of commercial confidentiality, international relations and public and national security. The regulations exclude internal communications, unfinished documents, judicial matters and personal data. Once enacted, the requirements of the Freedom of Information Act may affect this situation, which will need to be reviewed.

8.0 RESOURCES

The implementation of the strategy must be kept within the resources of the Council:

Staff

Staffing has been addressed with the appointment of the Contaminated Land Officer. Other officers within the Environmental Health Division will supplement this work, two of which possess further qualifications in environmental management, and more Senior Officers having knowledge of the processes involved. It is intended to plan the investigatory work into the work assignments for at least five staff during the strategy period.

Consultants

At times the use of outside specialists will be required to provide a second opinion and appraise particularly difficult situations beyond the scope of any officers involved in the process. Budgetary provision has been made for the engagement of consultants.

Data entry

Entering large amounts of data may require review of the support available to the Contaminated Land Officer.

Research Databases and Maps

To date the research on historic sites has been carried out by the Museum staff. To support that work consideration should be given to the purchase of additional historical mapping information as highlighted within this report.

Income

There is no provision in the statutory regime for funding. The only source will be that resulting from the supply of information on request.

9.0 SUPPORTING INFORMATION INCLUDING APPENDICES

APPENDIX A - INSPECTION STRATEGY TIMETABLE

Stage	2001	2002	2003	2004	2005	2006
1 Dataset collection	Ongoing activity					
2. Consult and publish strategy	Report action					
3 Inspection priority		Ongoing activity		Report action		
4 Detailed site investigation		Ongoing activity				Report action
5 Statutory contaminated land		Ongoing activity				Report action
6 Review mechanisms		Report action	Ongoing activity	Report action	Ongoing activity	Report action

 Report action
  Ongoing activity

APPENDIX B

GLOSSARY OF TERMS AND ABBREVIATIONS

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

Ancient Monument (Scheduled)	Nationally important archaeological sites and monuments in the Schedule of Ancient Monuments compiled by the Secretary of State under the Ancient Monuments and Archaeological Areas Act 1979 (as amended by the National Heritage Act 1983).
Appropriate Person	As defined by section 78A (9) of Part IIA EPA 1990 as “any person who is an appropriate person in accordance with section 78F to bear responsibility for anything which may be done by way of remediation in any particular case.
AONB	Area of Outstanding Natural Beauty.
Aquifer	Underground water source; water bearing rock.
Brownfield Site	A site that has been generally abandoned or underused, where redevelopment is complicated by actual or perceived environmental contamination. Only a small proportion of brownfield sites will meet the definition of contaminated land.
CLEA	Contaminated Land Exposure Assessment: a methodology for carrying out risk assessment.
Contaminated Land	Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land such that: a) Significant harm is being caused or there is significant possibility of such harm being caused; or b) Pollution of controlled waters is being caused, or is likely to be caused.

Controlled Waters Defined in section 78A(9) of Part IIA EPA 1990 by reference to section 104, Part III of the Water Resources Act 1991. These include:

- Inland waters (rivers, streams, underground streams, canals lakes and reservoirs).
- Ground waters (any water contained in underground strata, wells or boreholes).
- Territorial waters (the sea within three miles of a baseline).
- Coastal waters (the sea within the baseline up to the line of highest tide, and tidal waters up to the fresh water limit).

DEFRA	Department for Environment, Food and Rural Affairs.
DETR	Department of the Environment, Transport and the Regions (Now DEFRA / DTLR).
DTLR	Department for Transport, Local Government and the Regions.
EA	Environment Agency.
Guildford Borough Council	Guildford Borough Council.
Ecosystem	All living and non-living matter within a defined space and their interactions.
GIS	Geographical Information System.
Groundwater	Any water contained in wells, boreholes or underground strata in the 'saturated zone'.
Harm	Harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of humans, harm to property.
ICRCL	Interdepartmental Committee on Remediation of Contaminated Land.
IPC	Integrated Pollution Control regime (regulated by the Environment Agency)
LAPC	Local Air Pollution Control.
Leachate	Liquid formed by the act of 'leaching', where liquids and soluble substances are removed from solid substances into groundwater. Commonly refers to polluted liquids arising for the disposal of wastes to landfill sites, which may percolate through the underground soil or rock.
LEAP	Local Environment Agency Plan.
NHBC	National House Building Council.
Part IIA	Part IIA of the Environmental Protection Act 1990 inserted by Section 57 of the Environment Act 1995.

Pathway	One or more routes by which a receptor can be exposed to or affected by a contaminant.
Pollutant Linkage	The relationship between a contaminant, a pathway and a receptor.
PPG	Planning Policy Guidance Notes issued by DEFRA.
R & D	Research and Development.
Receptor	Sometimes referred to as 'target' that could be affected by contamination – human health, controlled water, ecosystem or property.
Remediation	Generally accepted as being the carrying out of works to prevent or minimise effects of contamination. In the case of this legislation, the term also encompasses assessment of condition of land and the subsequent monitoring of the land. Defined in section 78A(7) of Part IIA, EPA 1990.
RIGS	Regionally Important Geological Site.
Risk Assessment	The study of the probability or frequency of a hazard occurring and the magnitude of the consequences.
SCC	Surrey County Council.
Secretary of State	The Secretary of State for the Environment, Transport of the Regions, specifically responsible under Part IIA of EPA 1990 for making certain decisions.
SEDA	Southeast England Development Agency.
SNCI	Site of Nature Conservation Importance.
Source	A substance in, on, or under the ground with the ability to cause harm and/or pollution.
Source Protection Zone (SPZ)	Protection zones around certain sources of groundwater used for public water supply. Within these zones, certain activities and processes are prohibited or restricted. Also includes categories of pollution of controlled waters as set out in Regulation 3 of the Contaminated Land (England) 2000 Regulations.
Special Site	Any contaminated land designated due to the presence of: <ul style="list-style-type: none"> • Waste acid tar lagoons. • Oil refining. • Explosives. • Integrated pollution control sites. • Nuclear sites.

SSSI's Site of Special Scientific Interest. A particular area of land notified by English Nature as an area under the Wildlife and Countryside Act 1981, or of special interest due to it's importance for nature conservation.

Surface Water(s) A watercourse (stream, river or lake) that lies or moves on the surface of the ground, rather than underground.

APPENDIX C

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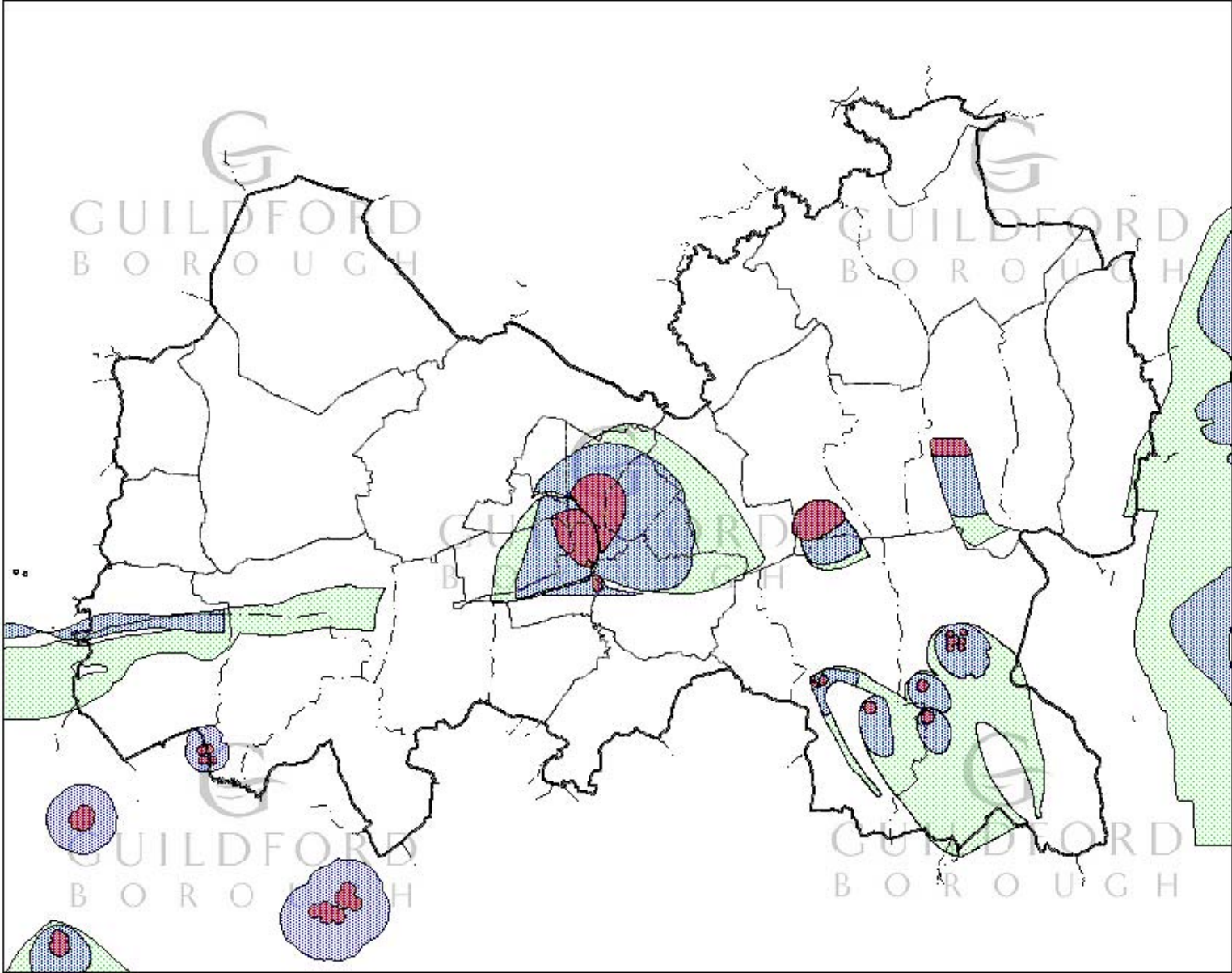
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Appendix D - Potentially Contaminative Land Uses

Industry	Process
Energy Industry	Combustion Activities Gasification, liquefaction and refining activities
Metal Processing Industry	Ferrous metals Non-ferrous metals Surface treating metals and plastic materials
Mineral Industry	Production of lime & cement Production of other mineral fibres Manufacturing glass & glass fibre Ceramic production Activities involving asbestos Other minerals activities e.g. crushing & grinding
Chemical Industry	Organic chemicals (see Table 1) Inorganic chemicals (see Table 1) Explosives production Chemical fertiliser production Plant health products & biocides Pharmaceutical production Manufacturing activities involving carbon disulphide or ammonia Storage of chemicals in bulk
Waste Management Industry	Disposal of waste by incineration Disposal of waste by landfill Production of fuel from waste Disposal of waste other than by incineration or landfill Recovery of waste
Paper Industry	Activities associated with making paper, paper pulp or board from wood, grass, straw and similar materials
Textiles, Printing & Dyeing Industry	Applying or removing a coating material Treating or dyeing fibres and textiles Manufacture of dyestuffs, printing ink & coating materials
Timber Processing Industry	Curing or chemically treating timber or wood Manufacturing products made wholly or mainly of wood
Food & Animal Processing	Tanning of hides & skins

Industry	Slaughtering of animals Processing, storing & drying animal or vegetable matter Treating & processing materials for production of food
Other	Agriculture Forestry Construction Transport Wholesale & retail distribution Rubber processing Carbon production Tar & bitumen production & processing

Guildford Borough - Source Protection Zones (Appendix E)



Ward Boundaries

Source Protection Zones

- 3
- 2
- 1

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Not To Scale



Appendix F - Potentially Sensitive Receptors

Human beings	
Ecological systems or living organisms	<p><i>Sites of Special Scientific Interest (SSSI's)</i></p> <p><i>National Nature Reserves</i></p> <p><i>Marine Nature Reserves</i></p> <p><i>Nature Reserves</i></p> <p><i>Special Areas of Conservation (SAC's)</i></p> <p><i>Special Protection Areas (SPA's)</i></p> <p><i>Candidate SAC's / SPA's</i></p> <p><i>RAMSAR Sites</i></p>
Property	<p><i>Buildings (including below ground)</i></p> <p><i>Ancient Monuments</i></p> <p><i>Crops</i></p> <p><i>Livestock</i></p> <p><i>Home-grown produce</i></p> <p><i>Owned or domesticated animals</i></p> <p><i>Wild animals subject to shooting or fishing rights</i></p>
Controlled Waters	<p><i>Surface Waters (e.g. rivers, lakes, streams)</i></p> <p><i>Drinking water abstractions</i></p> <p><i>Source Protection Zones</i></p> <p><i>Groundwater – Private abstractions</i></p> <p><i>Groundwater – Major aquifers</i></p>

Appendix G - Special Sites

Part IIA creates a particular category of Contaminated Land called 'special sites'. The types of land which are required to be designated as a 'special site' are as follows:

- Pollution of controlled waters as defined by the regulations:
 - drinking water abstractions.
 - certain substances e.g. mercury, cadmium.
 - certain strata e.g. upper cretaceous chalk.
- Waste Acid Tar lagoons.
- Refining of petroleum.
- Manufacture of explosives.
- Carrying out of IPC processes.
- Nuclear sites.
- Land owned by or occupied for the purposes of MOD/ Military.
- Atomic Weapons Establishment.
- Manufacture, production or disposal of chemical and/or biological weapons.
- Land to which s.30, Armed Forces Act 1996 applies.
- Land adjoining any of the above sites that is affected by the escape of contaminants.

The actual designation of a 'special site' cannot take place until the land in question has been formally identified as contaminated land by the local authority. When they have been designated, the Environment Agency rather than the local authority is the enforcing authority.