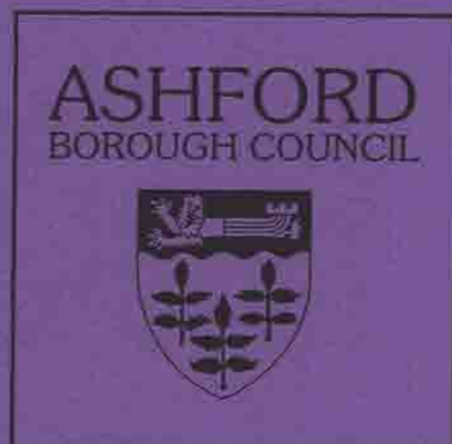


Contaminated Land Strategy



**Ashford Borough
Council**

**JUNE 2001
(version 1)**

FORWARD

Part IIA of the Environmental Protection Act 1990 creates a new framework for the identification and remediation of contaminated land in circumstances where there has not been any identifiable breach of a pollution prevention regime. Although Part IIA is new, it largely replaces existing statutory powers and duties.

Borough and District Councils have long standing duties to identify particular environmental problems, including those arising from land contamination, and to require their abatement. The origin of these powers is to be found in the mid 19th century legislation that created the concept of “statutory nuisance”. This was codified in the Public Health Act 1936 and has remained a part of the pollution control legislation ever since for example, a statutory nuisance regime is now contained in Part III of the Environmental Pollution Act 1990.

A fundamental objective of Part IIA is to involve all relevant stakeholders in the process of identifying and securing the remediation contaminated land. This inspection strategy has therefore evolved to reflect the public consultation exercise that has been undertaken during its preparation. It will continue to be reviewed on a regular basis to ensure that the Council responds to the reasonable concerns and aspirations of the community that it serves.

Land contamination is an emotive issue and the Council will need to ensure that any decisions taken about the condition of such land is open and transparent. The communication of “risk” and its perception by the public is therefore an essential part of the inspection strategy.

EXECUTIVE SUMMARY AND KEY ACTIONS

On 1 April 2000 Part IIA of the Environmental Protection Act 1990 was enacted and introduced a new regime for the regulation of contaminated land in England. The main purpose of Part IIA is to provide an improved system for the identification of land that is posing unacceptable risks to health or the environment and to secure remediation when these risks cannot be controlled by other means. Local Authorities are the primary regulators for Part IIA since they are responsible for the identification of contaminated land and regulation of all land that is not a Special Site.

The identification of contaminated land has at its core the concept of risk assessment and significant pollutant linkages (SPLs). These linkages, which must be documented, are direct relationships between a **source** of contamination, a **pathway** through which the contaminants may migrate and a **receptor** who may ingest or come into contact with the contamination and be harmed by it.

The first task to be undertaken by the Council, within a period of fifteen months (i.e. by 1 July 2001), is the preparation and publication of a written strategy for the inspection of its area. The strategy is not a list of contaminated sites. It is intended to explain how, and over what timescale the Council will carry out its inspection duties. The timescale and tasks to be completed are summarised below. In recognition of the fact that conditions change over time, the strategy will be reviewed and may be revised as progress is made.

The strategy has been prepared using a "Project Team" approach since it is widely acknowledged that issues arising from implementing the new regime will require input from a broad range of professional disciplines. It has also drawn upon guidance issued by the Department of Transport, Environment and the Regions (DETR) in particular, the "Statutory Guidance" and a Draft Technical Advice Note prepared by the DETR and Environment Agency (EA).

Summary of Timescale and Specific Tasks

It is the Council's intention to implement all the specific tasks outlined below. However it should be noted that these tasks will need to be undertaken in conjunction with other core duties and priorities identified in the Environmental Health Service Delivery Plan. Some of the actions also rely upon adequate funding for example, intrusive site investigations. A periodic review of the inspection strategy will therefore provide an opportunity to assess progress and incorporate changing priorities to reflect the Council's Corporate Strategy.

By July 2003

- Identification of Part IIA receptors (paragraphs 3.2 and 5.3.2)
- Identification of sources of potential contamination (paragraphs 3.2 and 5.3.3)
- Identification of key geographical areas i.e. those areas where receptors and potential sources of contamination coincide (paragraph 5.4.4)

By July 2005

- Within key geographical areas, the determination of plausible pathways between a source and receptor to identify those individual sites where further inspection is necessary (paragraphs 3.2 and 5.4.5.)
- Input information into the CLARE database and carry out risk prioritisation of sites

By July 2006

- Review list of prioritised sites and refine list by using external consultant (Bureau Veritas Consulting) to look at top 100 risk scored sites. Review all information available on top 100 sites and review potential pathways and produce revised risk scores based on this information.
- Engage external consultant to carry out desk studies, the aim being to look at the top 10 risk scored sites initially, depending on the availability of finance for this work.
- Aim to have costings for any intrusive investigation required for those sites having had desk studies completed.

Beyond 2006

- Progression with intrusive investigation of the top risk scored sites will depend on availability of finance.

REVIEW OF THE CONSULTATION PROCESS

The Council is committed to the process of public consultation and this section provides a brief overview of the three-month consultation period leading to the formal adoption of this inspection strategy.

Initial Consultation

A number of statutory and non-statutory organisations were consulted during the preparation of this inspection strategy and several meetings were held with relevant stakeholders. The draft was assembled using data and information from a variety of sources in particular, the Area Contaminated Land Officer of the Environment Agency provided a “baseline package of information” and historical mapping was purchased from Landmark Information Group Limited. All comments received have been considered and where appropriate, incorporated into the text.

Full Public Consultation

A further draft was then sent to a wide range of potential stakeholders in an effort to stimulate discussion and debate about the issue of contaminated land. Again all comments received have been considered and where appropriate, incorporated into the text.

A total of 26 responses were received from this consultation.

CONTENTS

	<u>PAGE</u>
1.0 INTRODUCTION	
1.1 General policy of Ashford Borough Council	1
1.2 Regulatory context under Part IIA	3
1.3 Development of the strategy	6
1.4 Objectives of the strategy	8
2.0 CHARACTERISTICS OF THE ASHFORD BOROUGH COUNCIL AREA	
2.1 Location, geographical area and population	8
2.2 Current land use characteristics	8
2.3 Details of Council ownership of land	8
2.4 Location of protected organisms/ecosystems	9
2.5 Historic/protected buildings	9
2.6 Key water resource/protection issues	9
2.7 Known information on contamination	9
2.8 Industrial history	10
2.9 Broad geology and hydrogeological characteristics	11
2.10 Specific local features	12
2.11 Redevelopment of sites affected by contamination	12
3.0 THE ASHFORD BOROUGH COUNCIL INSPECTION STRATEGY OVERALL AIMS	
3.1 Aims of the strategy	13
3.2 Objectives and milestones	14
3.3 Budgetary implications	15
4.0 PRIORITY ACTIONS AND TIMESCALES	
4.1 Priorities	15
4.2 Timescales	16
5.0 PROCEDURES	
5.1 Internal management arrangements for identification and inspection of sites	16
5.2 Identifying, inspecting, assessing former LA owned/leased land	16
5.3 Information collection	16
5.4 Information evaluation	19
6.0 GENERAL LIAISON AND RISK COMMUNICATION STRATEGY	22
7.0 PROGRAMME FOR INSPECTION	
7.1 General issues for inspection	24
7.2 Arrangements for carrying out a detailed inspection	25

8.0	REVIEW MECHANISMS	
8.1	Review of assumptions and information (“triggers for inspection”)	28
8.2	Review of strategy document	29
8.3	Audit of inspection procedures	29
9.0	INFORMATION MANAGEMENT	
9.1	General principles and storage systems	29
9.2	Use by other local authority departments	30
9.3	Arrangements for giving access to information	30
9.4	Confidentiality of information	30
9.5	Content of register information	30
9.6	Provision of information to the Environment Agency	31
9.7	Dealing with requests for information	31
9.8	Dealing with information or complaints received by the Council	32
10.0	OTHER SUPPORTING INFORMATION	
10.1	Maps and appendices	32
10.2	Information sources and references	33
10.3	Glossary	34

1.0 INTRODUCTION

1.1 General Policy of Ashford Borough Council

1.1.1 Environmental Issues

The Ashford Borough Council policy on land-use and transportation reflects the key principles of sustainable development. Significant new developments should be located in the most accessible locations where public transport services are sufficient to provide a realistic alternative to the private car. This follows the aim of encouraging the use of more sustainable means of transport as part of a strategy to control traffic growth in the context of the rapid expansion of Ashford.

The Council's LA21 strategy seeks to promote public awareness and involvement in environmental issues, to reduce energy consumption and waste pollution, to reduce the consumption of materials and "green-field" development and to increase local accessibility to facilities without the need for the use of a car.

The Council seeks to take all appropriate measures to conserve wildlife and geology in line with its statutory responsibilities for nature conservation, and supports the principle of no net loss of biodiversity.

1.1.2 Enforcement

The Better Regulation Guide and Regulatory Impact Assessment published in August 1998 sets out principles of good enforcement and provides guidance to ensure that regulatory control is necessary, effective in securing the desired benefits and that costs are justified. The guide is in two parts:

- Part 1 describes "good practice" at all stages of regulating
- Part 2 provides general guidance on how to prepare a Regulatory Impact Assessment

The guide highlights the importance of communication in ensuring that regulation is in accordance with the Better Regulation Task Force's 5 key principles of good regulation:

- Transparent, open, simple and user friendly
- Accountable, to users and the public
- Targeted, focussed on the particular problem
- Consistent, to ensure that people know where they stand
- Proportionate, the remedy should fit the task and there should only be regulation when it is needed

The Council is committed to this approach and will endeavour to apply Part IIA in accordance with the guide, in particular:

- a) Advice from an officer will be put clearly and simply. It will be confirmed in writing, explain why any remedial action is necessary and allow a reasonable period for compliance.

- b) Before any enforcement action is taken an officer will provide an opportunity for the person(s) responsible to discuss the circumstances of the case and if possible resolve the matter informally.
- c) Enforcement action, including the service of a Remediation Notice will only be instigated when it has not proved possible to resolve the matter informally.
- d) In the event that a Remediation Notice is not complied with, firm action (including prosecution where appropriate) will be taken against the person(s) who ignores the law or acts irresponsibly.
- e) In principle the Council will seek to recover the reasonable costs of works required by a Remediation Notice from the appropriate person(s). There may be a need to consider “hardship” before cost recovery.

1.1.3 Land Contamination

The Council’s policy in relation to contaminated land is to move towards achieving sustainable development. The first priority is to prevent new contamination and there are a number of regimes aimed at achieving this for example, Integrated Pollution Control (IPC), Pollution Prevention and Control (PPC) and Waste Management Licensing. However, the Council is also required to deal with a legacy of land that may already be contaminated by past activities. The existence of land contamination also presents its own threats to sustainable development.

The Council’s objectives with respect to contaminated land are to:

- a) Identify and remove unacceptable risks to human health and the environment
- b) Return contaminated land to a beneficial use and
- c) Ensure that the cost burden faced by individuals, companies and society as a whole are proportionate, manageable and economically sustainable.

These objectives underpin the “suitable for use” approach advocated by Central Government and reflect the Council’s strategy with regard to the economic development of its area.

1.1.4 Public Access to Information

The relevant details of land that has been “determined” as contaminated land will be maintained on a public register in accordance with paragraph 9.5 of this strategy. This information will be available for inspection by the public at all reasonable times. Subject to the payment of a reasonable charge, the public may obtain a copy of an entry in the register.

Information collected during an investigation of land that is found not to be contaminated land after determination will be available to every person(s) who requests it in accordance with the Environmental Information Regulations 1992 (as amended). Before responding to such requests the Council will consider whether the

information requested is confidential and the procedure outlined in paragraph 9.7 of this strategy will be applied, in particular item (b).

Information held by the Council that is still in the course of preparation, validation or is otherwise incomplete will not be available until the Council is satisfied that it is accurate and can be relied upon by the person(s) requesting it.

1.1.5 Consultation and Involvement of Community Groups and Businesses

One of the main aims of the Council's new Corporate Strategy is to encourage community participation and to provide an opportunity for the community to influence the work, services and culture of the Council. There is a positive commitment to effective communication and consultation with outside groups and organisations. The Council is also keen to promote effective working in partnership with others. This will ensure that important issues involving a number of agencies are given a focus and are dealt with for the benefit of the community as a whole.

The Council also recognises that engaging with the community demands an open and transparent consultation process. By providing quality services that meet public expectations, building new partnerships and reporting back on its successes and failures, the Council will improve its relationship with the community that it serves.

Implementation of the Part IIA provisions will require officers and members to demonstrate a commitment to these principles and a readiness to respond to public concerns and anxieties about contaminated land. There will also be a need to maintain confidentiality when investigating potentially contaminated land to minimise the effects of "blight" or "stigma".

The Council will need to exercise a balance between the release of certain details about the condition of a site whilst at the same time maintaining control over commercially sensitive information.

1.2 Regulatory Context under Part IIA

1.2.1 Regulatory Role of Local Authorities

The primary regulatory role under Part IIA rests with local authorities and this role is briefly outlined below:

- a) Prepare and publish an inspection strategy
- b) Consult the Environment Agency when there is "pollution of controlled waters"
- c) Determine whether any particular land is "contaminated land"
- d) Act as enforcing authority for all contaminated land which is not designated as a "special site"
- e) Facilitate the transfer of special sites to the Environment Agency
- f) Secure the remediation of contaminated land
- g) Maintain a public register of action taken in accordance with Part IIA

For all land that is determined as "contaminated land" the Council will need to establish who is responsible for remediation and decide what type of works are required. As part of this process the Council will consult Statutory Bodies and the

“appropriate person(s)”, ensure that works are undertaken voluntarily or by serving a Remediation Notice, apportion the cost of these works and maintain details of the action taken on the public register.

1.2.2 Regulatory Role of the Environment Agency

The Environment Agency has five principal roles with respect to contaminated land. These are briefly outlined below:

- a) Assist local authorities with the identification of contaminated land, particularly when there is “pollution of controlled waters”
- b) Provide site-specific guidance to local authorities on the remediation of contaminated land
- c) Act as the enforcing authority for any land designated as a “special site”
- d) Prepare and publish a periodic national report on the state of contaminated land
- e) Maintain a public register of action taken on special sites

For land that is designated as a special site the Environment Agency will need to establish who is responsible for remediation and decide what type of works are required. As part of this process the EA will consult the “appropriate person(s)”, ensure that works are undertaken voluntarily or by serving a Remediation Notice, apportion the cost of these works and maintain details of the action taken on the public register.

The Environment Agency has provided the Council with a “baseline package of information” to assist with the development of an inspection strategy.

1.2.3 Definition of Contaminated Land

“Contaminated Land” is defined under 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) Pollution of controlled waters is being, or is likely to be caused

This definition introduces a number of terms that are specifically referred to in the Statutory Guidance issued by the DETR. It is important to appreciate that the interpretation of these terms will influence a decision about whether or not land is contaminated land.

A glossary of terms is contained in paragraph 10.3.

1.2.4 Principles of Pollutant Linkages

Before the local authority can make a determination that land is contaminated land, it must identify a “significant pollutant linkage”. The local authority must satisfy itself

that a “contaminant”, a “pathway” (or pathways), and a “receptor” have been identified with respect to that land. The local authority must also satisfy itself that:

- (i) Significant harm is being caused to the receptor; or
- (ii) There is a significant possibility of significant harm being caused to that receptor;
- (iii) Pollution of controlled waters is being caused; or
- (iv) Pollution of controlled waters is likely to be caused.

The land should not be identified as contaminated land unless all three elements of a pollutant linkage have been established. There may be more than one pollutant linkage on any given piece of land.

1.2.5 Principles of Risk Assessment

The definition of contaminated land is also based upon the principles of risk assessment. In order to determine whether a particular possibility is “significant”, the “risk” needs to be assessed and this is defined as a combination of:

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

Risk assessment is therefore a scientific process designed to address the informal question “how risky is it?” or “what is the chance of a bad outcome?”

There are established procedures for undertaking a risk assessment and a number of commercial software packages available to assist this process for example, Risc-Human. Each package is based upon the fundamental concept of a contaminant, pathway and receptor forming a pollutant linkage. The output from a risk assessment may be quantitative, semi-quantitative or qualitative. In each case there is a risk evaluation stage. This will address “uncertainty” associated with the data used and assumptions made about the exposure to soil and/or groundwater contaminants on the site.

The following factors also need to be taken into account:

- a) The nature and degree of harm
- b) The susceptibility of the receptors to which harm might be caused and
- c) The timescale within which the harm might occur

It is likely that a quantitative risk assessment will be required to justify enforcement decisions, where risks are considered to be significant or the cost of reducing them is large. Since a risk assessment is a prerequisite to the determination of contaminated land, the Council will ensure that a “robust” risk assessment has been undertaken before proceeding with any enforcement action.

1.2.6 Requirement for a Strategic Approach

The Council is required to adopt a strategic approach to the inspection of its area and this document is intended to provide a framework for undertaking this duty in accordance with Part IIA and the Statutory Guidance.

By adopting a strategic approach, the Council will identify in a rational, ordered and efficient manner, the land that merits detailed individual inspection, identify the most pressing and serious problems first and concentrate resources on the areas where contaminated land is most likely to be found.

1.3 Development of the Strategy

1.3.1 Overall Approach

The Council's overall approach to identifying contaminated land and securing its remediation is intended to ensure that the requirements of Part IIA and the Statutory Guidance are fulfilled. When assessing the reasonableness or practicality of any remediation, adverse environmental impacts will be taken into account. In particular this strategy will be:

- Rational, ordered and efficient
- 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 Council is most likely to identify contaminated land
- Ensure that the Council efficiently identifies requirements for the detailed inspection of particular areas of land

The success of this approach will be measured in terms of the efficient use of staff resources and the number of sites that are returned to a beneficial use.

1.3.2 Internal Team

An internal project team has been responsible for preparing this strategy. Vanessa Nourse (Senior Environmental Health Officer) has co-ordinated this work by acting as "Project Manager" and Richard Woodcock (Divisional Environmental Health Officer) has provided specialist advice as and when necessary. The Environmental Health Manager (Evan Stirzaker) will be responsible for ensuring that Part IIA is given appropriate priority within the Environmental Health Service Delivery Plan and provided with adequate resources to ensure that the targets identified in this strategy are achieved.

1.3.3 Internal Liaison

A working group of officers has been established which utilises the Council's expertise across a broad range of professional disciplines. This is considered to be essential to ensure that any issues arising from implementing the contaminated land regime are adequately addressed.

In addition to the two Environmental Health Officers identified above, the working group also includes the following members:

- Peter Spiller (Development Implementation Manager)
- Martin Vink (Principal Planning Officer)
- Geoff Cole (Principal Building Control Surveyor)
- Simon Cole (Senior Planning Assistant)
- Alan Mann (GIS Consultant)
- Graham Harris (Principal Civil Engineer) and
- Michael Hayley (Principal Assistant Solicitor)

This working group may evolve as experience is gained from the implementation of this strategy and the members of the group may change to reflect the current situation. Refer to Figure 1 for details of the Council structure.

1.3.4 Consultation with the Environment Agency and other External Organisations

The Environment Agency (EA)

Formal contact was established with the EA at the start of the contaminated land regime. An Area Contaminated Land Officer has been identified to act as the key point of contact for this Council. Arrangements for liaison and co-operation have been established in accordance with the Memorandum of Understanding (MoU) agreed between the EA and the Local Government Association (LGA). In addition to consultation during the development of this draft strategy, a copy has also been forwarded to the EA for comment. The draft strategy has been amended in response to the comments received.

Other External Organisations

Formal contact has been established with those statutory organisations that have a particular regulatory interest or expertise in relation to contaminated land. These organisations may hold relevant information and can provide advice that will assist the Council to operate efficiently under Part IIA. The following organisations have been contacted:

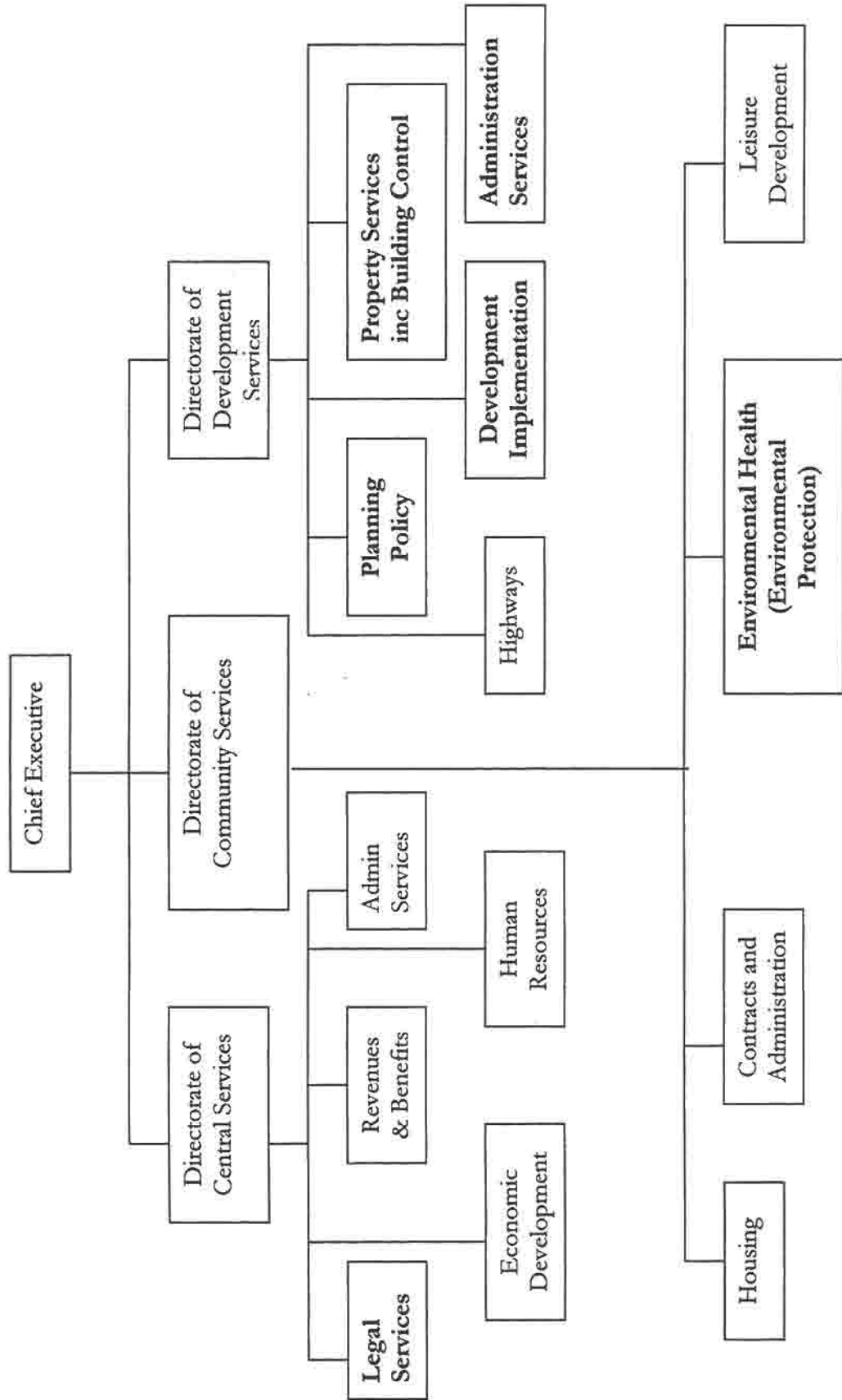
- Kent County Council (KCC)
- Health and Safety Executive (HSE)
- Ministry of Agriculture Fisheries and Food (MAFF)
- Food Standards Agency
- English Nature (EN) and
- English Heritage (EH)

Liaison has also occurred with neighbouring local authorities in particular Canterbury City Council, Maidstone Borough Council, Tunbridge Wells Borough Council, Rother District Council and Shepway District Council. A copy of the draft strategy has been provided to all these organisations for comment.

1.3.5 Consultation with the Local Community

Consultation with the local community has been discussed in paragraph 1.1.5. A copy of the draft strategy has been provided to specific local community and business groups, including Parish Councils, Housing Associations, Chamber of

Figure 1 : Council Service Structure



Commerce, Estate Agents, Major Landowners, Developers and the National Farmers Union. All comments received have been acknowledged and where appropriate incorporated into this Strategy.

1.4 Objectives of the Strategy

The key objectives of this strategy are to:

- Demonstrate how the Council intends to satisfy the criteria contained in paragraph B9, B10 and B15 of the Statutory Guidance (refer to Appendix 1)
- Establish a framework for undertaking this work in a manner that is regarded by all stakeholders as fair and impartial
- Provide robust information to the Environment Agency for its report on contaminated land

These key objectives are regarded as fundamental to the success of this strategy.

2.0 CHARACTERISTICS OF THE ASHFORD BOROUGH COUNCIL AREA

2.1 Location, Geographical Area and Population

The Borough of Ashford is located in southeast Kent (Map 1). It occupies a geographical area of 58 100 hectares and extends from Chilham in the northeast to the county boundary with East Sussex in the southwest. It is the largest local authority area in Kent.

The main urban centre is the town of Ashford, with a population of approximately 56 000. The historic market town of Tenterden in the southwest part of the Borough is the next largest settlement with a population of approximately 7 000. The total population of the area is approximately 102 000.

2.2 Current Land Use Characteristics

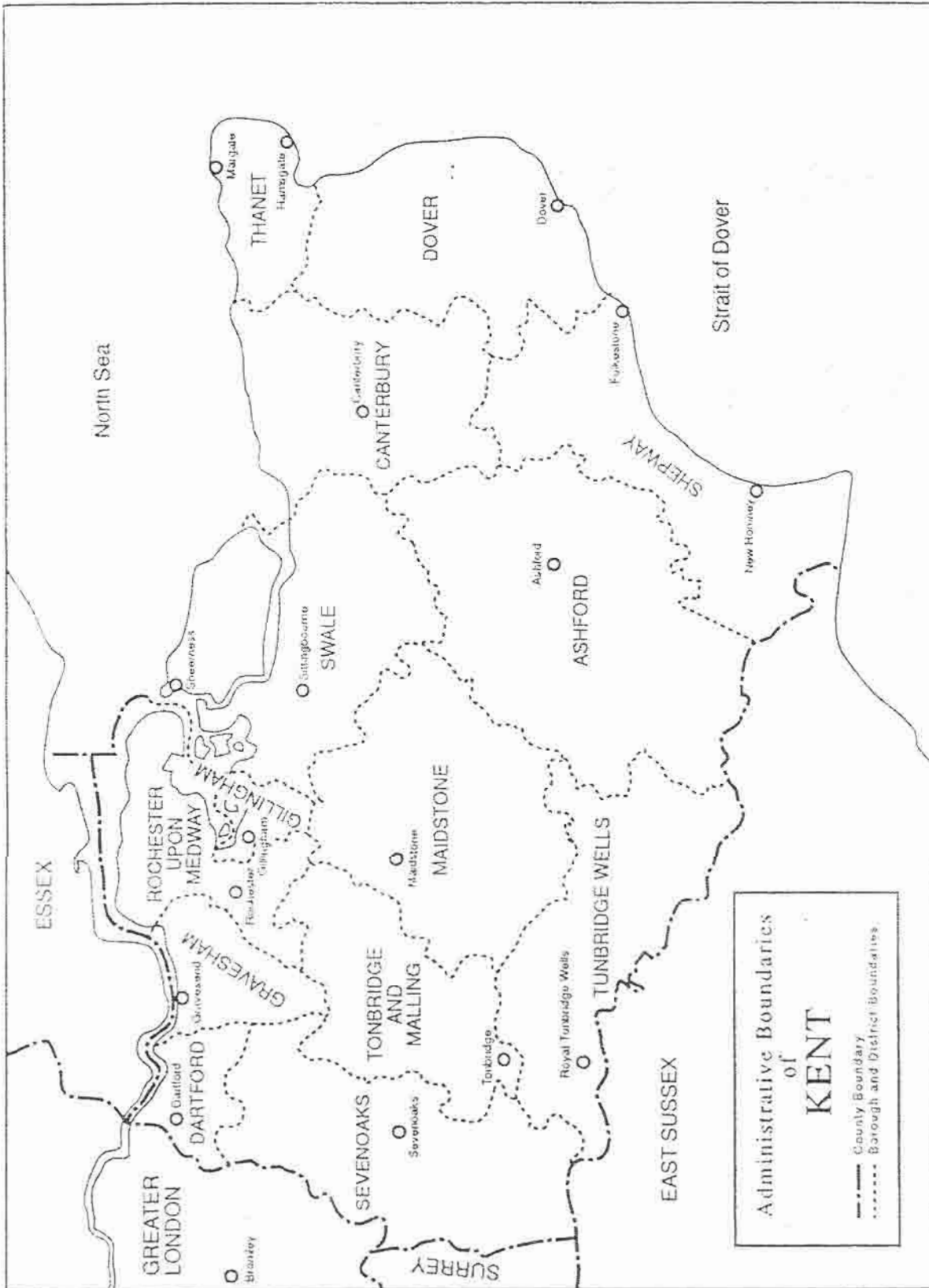
There are approximately 42 000 dwellings in the Borough, with the majority located *in the urban part of Ashford. Industrial and commercial development is also centred* on Ashford. The uses are predominantly office, light industrial, warehouse and distribution with little major heavy or potentially polluting industries present. A considerable amount of new development is anticipated for both Ashford and the surrounding area. Major residential development is also in progress and the town is expected to expand significantly over the next 20 years.

Beyond Ashford, the Borough is predominantly rural in character, with agriculture the dominant land use.

2.3 Details of Council Ownership of Land

Details of all land owned or leased by the Council are held on the Land Terrier System maintained by the Legal Services Manager. The Council owns approximately 14.3% of residential property within the Borough and a significant proportion

Map 1 Location of Ashford



(approximately 7.4 acres) of industrial and commercial development for example, Ellingham Industrial Estate, Ashford.

The Council is also responsible for a number of parks, open spaces and allotments.

2.4 Location of Protected Ecological Systems

The Borough contains 13 Sites of Special Scientific Interest (SSSI), 2 National Nature Reserves (NNR), 1 Local Nature Reserve (LNR) and 68 Sites of Nature Conservation Interest (SNCI). Each site is a potential receptor for the purposes of the contaminated land regime.

Appendix 2 contains details of the location of these sites and a description of the SSSIs.

2.5 Historic/Protected Buildings

The Borough contains 43 Conservation Areas, over 3 000 Listed Buildings and 30 Scheduled Ancient Monuments. Each building is a potential receptor for the purposes of the contaminated land regime.

Appendix 3 contains details of the location of the Scheduled Ancient Monuments. It should be noted that the number and type of scheduled sites is constantly changing and increasing through new designations. The total known archaeological resource is much larger than the sites protected through scheduling and it cannot be assumed that all nationally important archaeological sites will have been protected.

2.6 Key Water Resource/Protection Issues

The vulnerability of the water resources in Kent has been highlighted by recent droughts. Since 1989, the majority of drought episodes have been characterised by periods of severely depleted stream flows and an unpredicted decline in groundwater levels. As a consequence the EA has exercised increasingly stringent controls over the abstraction of water.

Since 1993, the EA has operated a Groundwater Management Policy incorporating a general presumption against any further authorisation of increased water abstraction from the area's principal aquifers. There is also a commitment to ensure that future development of any new sources of water supply is controlled by reference to clear guidelines for the protection and enhancement of the water environment.

The EA has also developed a Groundwater Protection Policy. Its aims and objectives include ensuring that potential contamination from point and diffuse sources do not impact vulnerable aquifers. A classification of groundwater vulnerability has been established and source protection zones are defined by the catchment areas and travel time of potential pollutants.

2.7 Known Information on Contamination

In 1990 Kent County Council co-ordinated the collection of historical information about closed landfill sites and produced the first version of the "Kent Landfill Atlas".

This has proved to be a valuable dataset enabling the District Councils to identify the location of all closed landfill sites and consider the implications of landfill gas upon the built environment. The information includes a grid reference, the category of waste deposited, site operator, geology, type of cover material and local environment. The Environmental Health Manager maintains the Atlas and provides advice to any enquiries received from potential developers and the general public. The location of each closed landfill site has been entered onto the Council's geographical information system (GIS).

It is important to emphasise that the category of waste deposited will influence the potential for landfill gas generation. The existence of a closed landfill site does not imply that the land is "contaminated land" for the purposes of Part IIA, since a pathway and receptor must also be identified.

Site investigation reports have been procured for a number of Council owned sites. The Property Services Manager is responsible for maintaining an original copy of each report. The reports contain information about ground conditions, usually in the form of borehole or trial pit logs. Some reports also include a reference to potential site contamination.

In some cases site investigation reports are also provided to the Council as part of a Planning or Building Regulation application.

2.8 Industrial History

Ashford was originally sited on a low terrace with the Great Stour flood plain to the south and east and a tributary valley to the north. Ashford's position between the High Weald and the North Downs (close to the Stour "gap") has contributed to its important role as an agricultural market centre. Growth was favoured as highways were improved and wheeled transport became easier.

The arrival of the railway in 1842 was a key event in the further development of Ashford. The town became a railway node on the main line between London and the Channel Ports of Dover and Folkestone with branch lines to Maidstone, Hastings, Canterbury and Ramsgate. In 1846 the South Eastern Railway Company (SERC) opened a steam locomotive manufacturing works creating a strong local demand for labour.

Ashford's population began to rise rapidly with an influx of workers. SERC planned and built a new housing area designed by Samuel Beazley that became known as "Newtown". It was designed around a village green with its own distinctive architecture.

Other industries were attracted by and benefited from the railway junction at Ashford including the Royal Ordnance Depot, Gasworks, Flour Mill and Bicycle Factory. As growth continued so the former outlying areas of Willesborough and Kennington were incorporated into the Ashford urban area.

In 1959 the former Ashford Urban District Council signed an agreement with the London County Council to provide housing for 15 000 "over-spill" London residents. Although many of these residents moved to Ashford the original plan to

integrate population growth with industrial expansion and housing development was less successful. However approximately 30 new industries, including engineering, printing and food processing were established on four new industrial estates.

Most of the housing development was located in South Ashford including Brookfield and Stanhope. The urban design features were typical of the “New Towns” with individual dwellings arranged to facilitate access to a local neighbourhood centre. The centre was intended to provide an active focus for community life with shops, car parks and pedestrian areas segregated from traffic by perimeter roads and underpasses. Open spaces were landscaped to provide amenity areas.

Ashford has remained a focal point for growth. The growth has accelerated following completion of the “missing” section of the M20 motorway and construction of the Channel Tunnel between the United Kingdom and France. The Ashford International Station was recently completed and this provides a catalyst for the regeneration of East Kent. The construction of Section 1 of the high-speed rail link (CTRL) is scheduled for completion during 2003 and this will provide an enhanced passenger service between London, Ashford, Paris and Brussels.

Appendix 4 contains some examples of past and present industrial uses in Ashford. The list of uses should not be regarded as an indication that the land is contaminated land.

2.9 Broad Geological and Hydrogeological Characteristics

The geology of the Kent area is dominated by a succession of Cretaceous and Tertiary rocks forming the core and flanks of an eroded, elongated dome referred to as the “Wealden Anticline”. This geological structure forms the basis for the topography of the Ashford and surrounding area.

The North Downs is a major topographic feature that dominates the landscape to the north of Ashford. Overall, the geology comprises mainly soft white limestone with the higher (younger) sequences being distinguished by the presence of numerous bands of nodular and tabular flint.

The chalk is a “Major Aquifer” and is the most important water-bearing formation in southeast England. The abstraction of groundwater for public and private use has depleted the numerous springs that emerge at many levels throughout the chalk outcrop. These springs provide the “base-flow” for the major rivers of East Kent including the River Stour. This river rises as two main tributaries on the Weald Clay and Lower Greensand. It exhibits a high degree of natural regulation and is characterised by a relatively small winter/summer flow ratio.

The Great Stour rises at Lenham to the west of Ashford and the East Stour rises near Folkestone. Each river flows through the centre of Ashford and after combining at a point near the former H S Pledge & Sons Flour Mill continues in a north easterly direction towards the North Downs. Each river system displays a pattern of seasonal flow variations that reflects the geological, topographic and land-use characteristics of its catchment area.

To the south and west is the High Weald. This comprises (in sequence from southwest to northeast) the Hastings Beds, Wadhurst Clay overlain in places by Tunbridge Wells Sand, Weald Clay, Lower Greensand and Gault Clay. The Hastings Beds are a “Minor Aquifer” and the Lower Greensand is a “Major Aquifer”.

The area’s hydrology is controlled by a complex drainage system with the River Stour representing a source of fresh water in the summer and a high level drain in the winter. The total average rainfall is 714 mm per year and its distribution decreases across the area from west to east and north to south. The effective rainfall is approximately 400 mm.

Map 2 indicates the Geology and Groundwater characteristics of the Borough.

2.10 Specific Local Features

Two areas of the Borough are designated as Areas of Outstanding Natural Beauty (AONB). The North Downs AONB is a chalk escarpment that occupies the northern part of the Borough and the High Weald AONB occupies the southwest part of the Borough. Large areas of the Borough are also designated as Special Landscape Areas (SLA).

Ashford lies within the valley of the River Stour and is relatively low-lying. Minor flooding has been recorded but the recurrence and severity of such incidents has been significantly reduced by flood alleviation schemes located at Aldington and Hothfield. However localised flooding remains a problem on some other watercourses in the Borough for example, the River Beult to the west of Ashford.

The majority of the Borough’s potable water supply is obtained from underground aquifers and there are several Aquifer Protection Areas (APA) and Source Protection Zones (SPZ) mainly located in the North Downs area.

2.11 Redevelopment of Sites affected by Contamination

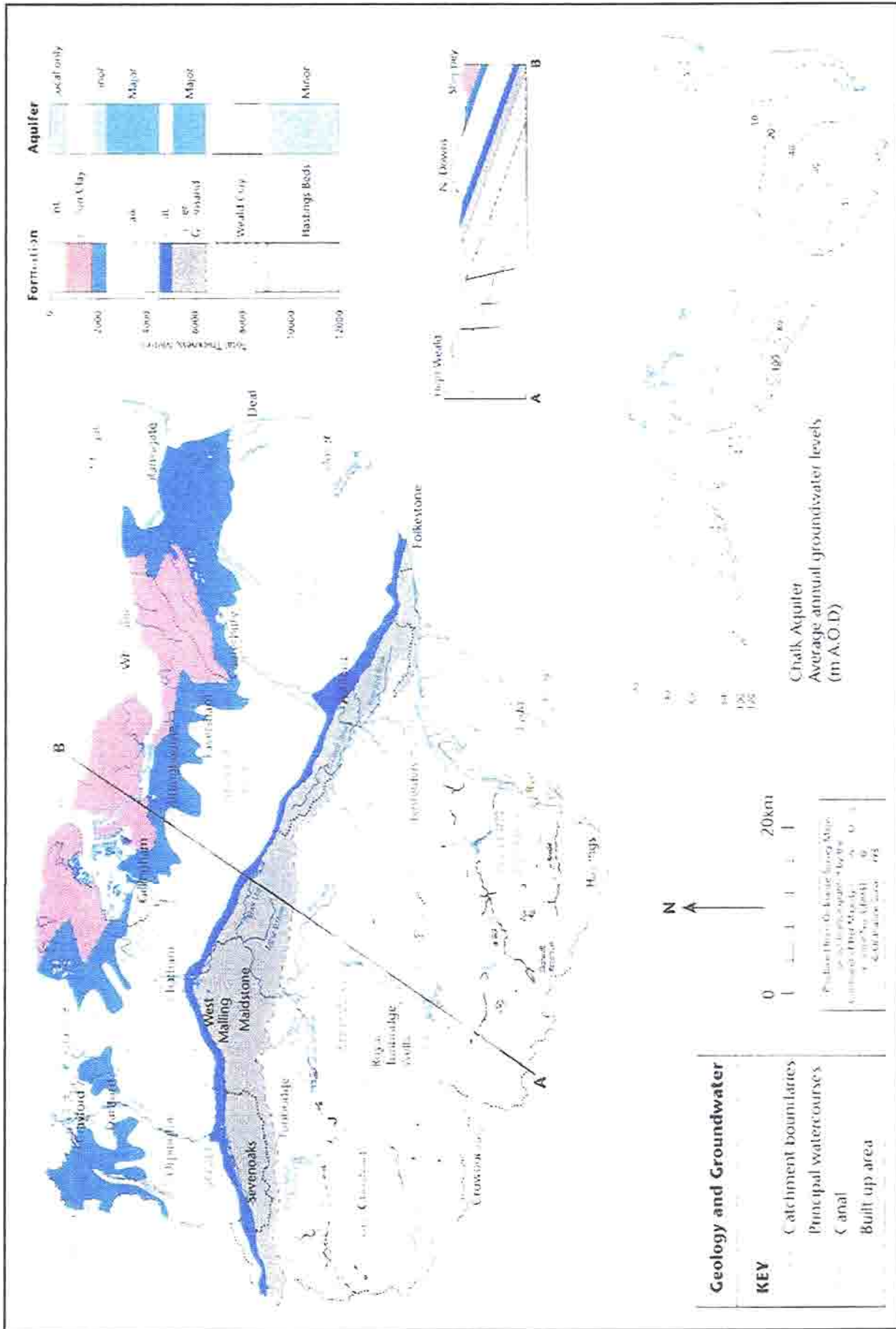
The Ashford Borough Local Plan (June 2000) sets out the Council’s policies to guide development and contains proposals for specific sites. The Local Plan covers the whole area of the Borough for a period until 2006 and it has been prepared within a wider framework established by the Kent Structure Plan.

A guiding principle of the Local Plan is to make the best use of land within the urban area of Ashford. By implication, the redevelopment of “brown-field” land is regarded as the preferred option. Where “green-field” land is required the proposed development should be located on the least environmentally constrained sites.

Chapter 4 of the Local Plan refers to development sites for:

- Ashford Town Centre
- Ashford (Other Areas)
- Tenterden
- Rural Areas

Map 2 Geology and Groundwater of Kent



Reproduced from the Local Environment Agency Plan. Environment Agency 1998

If a site is “known or suspected” to be contaminated the detailed policy refers to a requirement to demonstrate that the redevelopment proposals will adequately address that contamination. The Council has secured the remediation of contaminated land by using conditions attached to planning consents. In each case the developer was responsible for engaging a contractor to undertake the remedial works. The developer was also responsible for providing a “validation report” describing the actual works undertaken.

To appreciate this important issue the following example is provided:

Example

Land at the former Rowcroft and Templar Barracks is a key “brown-field” site both in terms of its size (62 hectares) and proximity to Ashford Town Centre. It is likely to accommodate a mix of residential and commercial development. Although part of the site is affected by the construction of the high-speed rail link (CTRL), the Council is keen to ensure that the remainder of the site is developed concurrently with these works. However there was evidence of soil contamination on parts of the site and therefore detailed proposals will be required to address this prior to the development proceeding.

The CTRL construction works are currently in progress. The alignment of this major project has been designed to interface with both the existing railway infrastructure and the Ashford International Station. As a consequence it is likely to encounter a variety of potentially contaminated sites. The original Environmental Statement (ES) included an assessment of land contamination in the context of the impacts arising from construction and operation of the CTRL.

Sites were initially identified from historic and current land use information. These sites were then prioritised according to their potential to be affected by the CTRL, the likely nature of the contaminants and the proximity/sensitivity of receptors. A further study involved a review of detailed maps, geological, hydrogeological and waste disposal information. Site “walkover” surveys were undertaken to verify some of this information and a very limited amount of site investigation data was also obtained.

Rail Link Engineering (RLE) and the main contractor responsible for the individual construction packages have continued this initial work. It is anticipated that upon completion of the project a number of previously contaminated sites will have been addressed either in whole or part.

3.0 THE ASHFORD BOROUGH COUNCIL INSPECTION STRATEGY **OVERALL AIMS**

3.1 Aims of the Strategy

The overall aim of this inspection strategy is to search for and identify pollutant linkage(s) that include Part IIA receptors. This will involve an initial evaluation of information about the distribution of potential contamination based upon the historical use of land. If there is a Part IIA receptor at the same location as the potential contamination, the Council will

target its resources in this area and investigate whether or not there is a significant pollutant linkage.

It is possible that more than one type of Part IIA receptor may be affected by potential contamination and therefore the Council will need to assign a relative priority between receptors to ensure that any further action taken is proportionate to the receptor at risk. The Council will proceed on the following basis.

The scenarios described in paragraph 4.1 will be assigned a **high** priority. Thereafter the receptor at risk will be considered in the following order of priority,

- (i) When there is actual harm to human health or pollution of controlled waters
- (ii) When there is potential for significant harm to human health
- (iii) When there is potential for pollution of controlled waters
- (iv) When there is potential for significant harm to other Part IIA receptors, including protected ecological systems, crops and produce, livestock and domestic animals, wild animals and buildings

3.2 Objectives and Milestones

To achieve the overall aims outlined in paragraph 3.1 various objectives and milestones have been identified. These are outlined in Box 1 and Appendix 5. However if the Council became aware of land causing actual harm to human health or pollution of controlled waters appropriate action would be taken without reference to the objectives and milestones.

Box 1 Objectives and Milestones

- Identify the nature and location of all Part IIA receptors to determine which areas of the Borough may be a priority on the grounds that the relevant receptors are present. By 1st July 2003.
- Identify those sites where industrial and other activities have taken place in the past or are currently taking place (to include information on the history, scale and nature of such activities) to determine which areas of the Borough may be a priority on the grounds that contaminants may be present. By 1st July 2003.
- Based on the information collated from the first two objectives, identify pathways to determine the extent to which the receptors may be exposed to contamination. By 1st July 2005.
- Collate and review evidence of actual significant harm or pollution of controlled waters to define priority areas for further investigation. Ongoing.
- Identify land for which the Council may be the "appropriate person" to ensure that it is addressed in accordance with paragraph 3.1 and 4.1. By 1st July 2006.
- Identify the nature and timing of past redevelopment to determine whether and to what extent contamination may have been addressed already through past redevelopment activity. By 1st July 2006.
- Review the extent to which remedial action has already been taken (or is planned to be taken during redevelopment) to address contamination and determine whether Part IIA or the planning regime is likely to be the most appropriate legislation in relation to different areas of the Borough. By 1st July 2006.
- Communicate and exchange information with relevant stakeholders. (Ongoing)
- Inspect particular areas based upon the priorities identified in paragraph 3.1 and 4.1. (A milestone cannot be specified at this stage as it is dependant upon the information arising from the above objectives)
- Review assumptions and inspection priorities at appropriate intervals, to include any new information received on possible sources of contamination. (At least annually). Refer also to paragraph 8.0.

- Ensure the effective output and recording of information. (Ongoing)

3.3 Budgetary Implications

The priority actions and timescales outlined in the next paragraph of this strategy will have significant implications for the allocation of budget. To appreciate this important issue the following example is provided:

Example

An historical search may reveal one or more potentially contaminated sites that have been redeveloped for residential purposes. Since this is a high priority scenario it may be necessary to undertake an intrusive site investigation (involving the collection of soil, gas and/or groundwater samples) to confirm that there is a potential health risk to the occupier. It may also be necessary to appoint an independent consultant and specialist contractor at short notice. The Council's budget will therefore need to include a contingency to ensure that the investigation can proceed without delay. It may also be necessary to undertake remedial works to remove any immediate health risk.

4.0 PRIORITY ACTIONS AND TIMESCALES

4.1 Priorities

The Council will focus upon a number of sensitive exposure scenarios. These are described in Box 2 and will be assigned a high priority. As part of this process the Council will also use a robust method to prioritise key geographical areas for detailed inspection. The method may be based upon the approach described in CLR Report No.6 (1995).

Box 2

<u>Receptor</u>	<u>Scenario</u>
All	Land occupied by or relevant to Part IIA receptors where there is already evidence of significant harm or pollution of controlled waters.
Humans	Land developed for residential or other sensitive uses (including allotments and public open spaces) prior to 1985 (before any systematic consideration of potential land contamination was likely). Land developed for residential or other sensitive uses since 1985 where there is concern about the standard of site investigation and/or remedial works.
Controlled Waters	Land close to particularly sensitive receptors (e.g. land within a source protection zone for a major potable water supply). Land associated with a large number of sensitive receptors (e.g. water abstraction points).

When the areas of land described in Box 2 have been investigated the remaining land will be considered in terms of the receptor at risk in accordance with paragraph 3.1.

4.2 Timescales

When information is available to indicate that a high priority scenario may exist, the Council will endeavour to ensure that a detailed investigation begins within 3 months. When all these areas of land have been investigated the remaining land will be prioritised and a further appropriate investigation will begin within 12 months.

5.0 PROCEDURES

5.1 Internal Management Arrangements for Identification and Inspection of Sites

The Environmental Health Manager will undertake the following tasks using delegated powers:

- Prepare an inspection strategy
- Identify potentially contaminated land
- Determine land as contaminated land in accordance with the Statutory Guidance
- Communicate with the EA and seek advice from the Area Contaminated Land Officer with particular reference to “pollution of controlled waters” and “special sites”
- Carry out appropriate site investigations including intrusive works
- Appoint independent consultants and specialist contractors
- Prepare schedules of work for the remediation of contaminated land
- Ensure appropriate remediation is undertaken and validated
- Maintain the public register of information

If it becomes necessary to issue a Remediation Notice on an “appropriate person” the Environmental Health Manager will prepare a report and recommendation to the Health and Housing Sub-Committee. This will provide an opportunity to consider and debate any comments/views received from all the stakeholders.

5.2 Identifying, Inspecting and Assessing Local Authority Owned/Leased Land (including former LA land and other areas where the LA may be regarded as the “appropriate person”)

When a contaminant and Part IIA receptor is identified on land owned or formerly owned by the Council, the records will be checked and an investigation undertaken to establish whether the Council caused or permitted the contaminants to be in, on or under the land. When the Council is satisfied that it is the “appropriate person” because it is the owner and no class A person (refer to paragraph 10.3) can be found, the land will be prioritised in accordance with paragraphs 3.0 and 4.0. The inspection procedures described in paragraph 7.0 will be observed.

5.3 Information Collection

5.3.1 Information relevant to “Potential Harm” or “Pollution of Controlled Waters”

The Council will attempt to collect the information outlined below from the relevant organisation identified in brackets. In some cases the information may already be available to the Council from its archives:

- River catchment plans indicating the location of watercourses and settlements. (EA)
- Location of flood defence works, sewage treatment plants and landfill sites including licensed and unlicensed. (EA and Council archive records)
- Surface and groundwater quality data including failure of surface water quality objectives (SWQA) and river ecosystem (RE) classifications thought to be due to contaminated land. (EA)
- Groundwater vulnerability maps. (British Geological Survey)
- Location of water abstraction points. (EA)
- Information on compliance with river quality objectives. (EA)
- Location of discharge consents. (EA)
- Location of sites with waste management licences. (EA)
- Location of sites with IPC authorisations. (EA)
- Location of nuclear installations and sites where radioactive substances are regulated by the Environment Agency. (EA)
- Location of source protection zones. (EA)
- Records of pollution incidents, spills, accidents and fires. (EA, HSE and Council archive records)
- Location of past industrial activities and their impact upon controlled waters. (Council archive records and historical maps)

5.3.2 Information on Receptors

The Council will attempt to collect the information outlined in Box 3 from the relevant source of that information.

Box 3

<u>Information</u>	<u>Source</u>
Human beings occupying or using:	
• Residential land (with gardens)	Development control records
• Residential land (without gardens)	
• Allotments	
• Schools and nurseries	
• Recreational land (parks, playing fields and open spaces)	
• Commercial/industrial premises	
• Hotel/leisure facilities	
Protected ecological areas:	
• Sites of Nature Conservation Interest (SNCI)	Kent Wildlife Trust
• Sites of Special Scientific Interest (SSSIs)	English Nature
• National Nature Reserves (NNRs)	
• Candidate Special Areas of Conservation (SACs)	

<ul style="list-style-type: none"> Local Nature Reserves 	
Property in the form of buildings:	
<ul style="list-style-type: none"> Scheduled Ancient Monuments Sites of archaeological significance Other buildings (e.g. buildings that may be at risk from landfill gas migration) 	English Heritage Council records and local knowledge KCC (Sites and Monument Records)
Other forms of property:	
<ul style="list-style-type: none"> Crops (including timber) Produce grown for human consumption (domestic or on allotments) Livestock Other owned or domesticated animals Wild animals (subject to shooting or fishing rights) 	MAFF Food Standards Agency (FSA)
Controlled waters:	
<ul style="list-style-type: none"> Surface waters (e.g. rivers, streams, lakes, ponds and estuarine waters) Ground waters (including vulnerability) Water abstractions (including major public and smaller private sources) Source Protection Zones Surface and groundwater quality data 	Environment Agency British Geological Survey Council records on private water supplies

5.3.3 Information on the Possible Presence of Contaminants

The Council will attempt to collect the information outlined in Box 4 from the relevant source of that information.

Box 4

<u>Information</u>	<u>Source</u>
Historical maps for information on past industrial and waste management activities	Council archives, local studies centres, OS Maps and British Map Library
Development control records and site investigation reports	Council archives
Part A (IPC) prescribed processes	EA Part A Register
Location of consents to discharge	EA Consent Register
Part B (LAPC) prescribed processes Landfill and other sites subject to waste management licensing	Council Part B Register EA Register (for operational sites) and Council archives
Records of incidents, spills, accidents and fires	Council archives (for nuisance, pollution incidents and complaints) HSE (accidents), Local Knowledge EA (water related pollution incidents)

Location of "industrial cases" and "defence cases" as defined by the Contaminated Land (England) Regulations 2000	Council archives
Hazardous installations (i.e. chemical storage and manufacturing sites)	HSE, Planning (Hazardous Substances) Register
Industrial premises (past and present)	Trade Directories, Council archives
Information relating to natural contamination	Cranfield University

5.4 Information Evaluation

5.4.1 Evaluation of Information on "Actual Harm"

The Council will evaluate information on "actual harm" using the criteria outlined below which is contained within the Draft Local Authority Guide to the Application of Part IIA of the Environmental Protection Act 1990. (Environment Agency 2000). In each case the Council will need to determine whether or not:

- It has evidence that all 3 elements of the pollutant linkage are present, taking account of the current use and setting of the land.
- The evidence has been collected using reliable and scientifically defensible techniques and methods.
- Observed effect(s) fall within one or more of the definitions of "significant harm" listed in Table A of Chapter A of the Statutory Guidance.
- Existing scientific knowledge indicates that the observed effect is one that can be expected given the harmful properties of the contaminant, the characteristics of the pathway, and the nature and behaviour of the receptor.
- The assessment has taken into account the requirements set out in paragraphs A24 to A26 of Chapter A of the Statutory Guidance.

When the Council is satisfied that it has adequately evaluated the information on actual harm it will maintain a proper record of its decision in a site-specific case file. In reaching its decision the Council will consult the appropriate person.

5.4.2 Evaluation of Information on "Pollution of Controlled Waters"

The Council will evaluate information on "pollution of controlled waters" using the criteria outlined below. In each case the Council will need to determine whether or not:

- It has evidence that all 3 elements of the pollutant linkage are present, taking into account the current use and setting of the land.
- The evidence has been collected using reliable and scientifically defensible techniques and methods.
- The characteristics of the contaminant are such that it constitutes poisonous, noxious or polluting matter or solid waste matter.
- There is evidence that the contaminant is entering controlled waters.
- The assessment has taken into account the requirements set out in paragraph A37 and A38 of Chapter A of the Statutory Guidance.

The Council will also consult the Environment Agency and when it is satisfied that it has adequately evaluated the information on pollution of controlled waters it will maintain a proper record of its decision in a site-specific case file.

5.4.3 Effectiveness of Previous Actions or other Regimes in Preventing or Dealing with Land Contamination

Within the key geographical areas identified in accordance with paragraph 5.4.4, the Council will consider what remedial action has already been taken to address land contamination. The remedial action may have been taken by an existing/former landowner or proactively by the Council or by a third party.

The nature and timing of past redevelopments will be relevant since it will influence the extent to which contamination was understood and addressed. This in turn will enable an appropriate degree of confidence to be assigned to the remedial works that were undertaken. Reference will also be made to the current Planning Policy Guidance Note (PPG23) on contaminated land, as some sites would have been assessed in the light of this guidance. Having considered all this information the Council will be in a position to determine the extent to which appropriate precautions were taken during an earlier redevelopment scheme.

Enquiries will also be made to determine whether or not any of the following regimes have applied to sites within the key geographical areas:

- Part A (IPC) provisions.
- Waste Management Licensing.
- Part B (LAPC) provisions.
- Water Resources Act 1991 in relation to the prevention of pollution and the remediation of controlled waters.
- Health and Safety Legislation.

The nature and timing of actions taken will again be relevant since it will influence the extent to which contamination was understood and addressed.

5.4.4 Identification of Key Geographical Areas

The Council will identify key geographical areas during an initial review of the information referred to in Box 3 and 4. These areas will include land containing potential contamination and Part IIA receptors. The geographical coincidence of these two elements of a potential pollutant linkage will therefore enable the Council to focus upon establishing whether or not there is a pathway.

To assist this process the Council has purchased historical mapping for use with a geographical information system (GIS) described in paragraph 9.1.

5.4.5 Identification of Specific Potential Pollutant Linkages

Having identified the land where potential contamination and Part IIA receptors coincide, the Council will then determine whether there is a pathway by considering

the nature of the contaminant and the characteristics of the land. To assist this process the following characteristics will be considered:

- Geology, to determine the potential for sub-surface migration of liquids, gases and vapours.
- Hydrogeology, to determine the potential for sub-surface migration of liquids, gases, vapours, and the distribution of contaminated material by other transport mechanisms such as flooding or rising groundwater.
- Topography, to determine the direction of above ground flow and possible direction of sub-surface flow.
- Current land use including children/play areas, gardens, hard surfacing and growing vegetables
- Zone of influence beyond the site boundary ie airborne pathways

5.4.6 Identification of Individual Sites

Individual sites will normally be identified after the key geographical areas have been established and when all 3 elements of the pollutant linkage are known to be present. The Council will confirm the boundaries of individual sites after considering the following factors:

- The spatial distribution of the contaminants that form part of a linkage relevant to a particular area of the site.
- The nature and extent of the remedial works that may be required.
- The likely identity of the individuals who may be responsible for the remedial works.

5.4.7 Identification of Gaps in Information (and how these are to be addressed)

The Council will gradually assemble information about the condition of land and this will need to be reviewed if further information becomes available from a third party. The initial evaluation process may highlight gaps in the information held. For example, a lack of details about the previous use(s) of land may influence the way in which the Council will consider whether or not that land may be contaminated. The Council will therefore attempt to address these information gaps by contacting the previous owner(s) of such land.

The management of information collected during this process will be in accordance with the procedures outlined in paragraph 9.7.

The Pollution Prevention and Control (England and Wales) Regulations 2000 will also require an applicant seeking to operate a Part A1 installation to prepare a site report as part of the permit application. The purpose of the report is to confirm the "baseline" conditions at the site including any soil, gas and/or groundwater contamination present prior to operation of the installation. This will establish an effective reference point to compare site conditions at the cessation of operations.

The Environment Agency will supply the site report along with the rest of the permit application when consulting the Council. It will therefore be possible to use this information when carrying out other statutory duties in particular Part IIA. It may

also provide an opportunity to improve the database and address any previous shortcomings.

The original source of any information obtained during this process will be acknowledged and fed into the procedures that are described throughout this strategy.

6.0 GENERAL LIASON AND RISK COMMUNICATION STRATEGY

The general liaison and risk communication strategy will be designed to ensure that all stakeholders are aware of the implications of potentially contaminated land from the outset. The draft strategy was circulated amongst those organisations that have a particular interest in this issue. For the purposes of “spreading the general message about contaminated land”, all stakeholders will be considered in the broadest possible context and may include those with professional expertise and financial interests, alongside those with local knowledge or community status.

Paragraph 1.3.5 includes examples of specific local community and business groups.

With respect to key geographical areas and individual sites, risk communication will begin at the earliest possible stage. When potential contamination and a Part IIA receptor has been identified the Council will identify which stakeholders should be involved by asking the following questions:

- Who will potentially be affected by the risk and the consequences of any management decision?
- Which parties or individuals have knowledge and expertise which may be useful to inform any discussion or decision?
- Which parties or individuals have expressed an interest in this particular, or a similar type of, risk management problem?
- Which stakeholders will be prepared to listen, respect diverse viewpoints and be prepared to negotiate?

The process of identifying stakeholders will depend upon:

- Technical factors such as scale, degree and nature of the land contamination.
- Socio-economic factors for example, issues of local “blight” or “stigma”.
- Historical interest/use of the site by stakeholders.

Having identified the stakeholders, the Council’s next objective will be to share an understanding of the risk assessment process through participation. This will enable the stakeholders to raise concerns and hopefully “buy” into the process. To achieve this objective the Council accepts that it is a two way process and the views of stakeholders will need to be carefully assessed. The Council will therefore consider the social dimension and will be sensitive to a broad concept of risk, encompassing not only quantitative information, but also other dimensions such as individual attitudes, and issues of trust and credibility.

When an individual site is being considered, it will be essential to establish a majority view supporting the scientific evaluation underlying the risk assessment. If necessary

the Council will arrange an independent review by a body acceptable to all the stakeholders involved.

Throughout the participation process the following criteria will apply:

- The Council will make explicit the extent to which they are prepared to respond to stakeholder involvement.
- The aims of stakeholder participation will be clearly stated and stakeholders will be involved as early in the process as possible. If a decision is non-negotiable, stakeholders will be advised accordingly.
- The nature and extent of stakeholder involvement will reflect the scope and impact of the risk management decision.
- Participation will aim to confront the key issues of a risk management problem rather than confronting individuals or stakeholder groups.

In some cases the stakeholders may require confidentiality to be maintained throughout the initial site investigation. In these cases the Council will maintain confidentiality until the point when there is sufficient information to make a determination as to whether or not the site (in whole or in part) is contaminated land. Once this determination has been made the information will be maintained on a public register in accordance with paragraph 1.1.4 of this document. It will also be necessary to address “uncertainty” that is inherent to all risk assessments. Uncertainties will be grouped according to those that can be realistically addressed (and explained) and those that cannot be resolved.

In summary, the Council will endeavour to ensure that, through its risk communication strategy, all stakeholders understand and support the risk assessment process, the results obtained and how they will affect decisions about any remedial works required.

A range of different communication techniques will be used depending upon whether the Council is:

- Gathering information and views from interested parties
- Considering informal ways of sharing information or
- Looking for a more formal means of generating public participation

The form of risk communication will also depend upon resource and budget implications. The following methods will be considered: focus groups, mailed questionnaires, telephone surveys, media, briefings and public information material.

Finally the risk communication strategy will be:

- A two way process
- Transparent and accessible to create trust in the Council’s role
- Open, to enhance the legitimacy of the overall process to the individual stakeholders

Refer to Appendix 6 for a list of contact points.

7.0 PROGRAMME FOR INSPECTION

7.1 General Issues for Inspection

7.1.1 Local Issues

Paragraph 2.2 referred to major residential development being undertaken within the Borough and indicated that Ashford is expected to expand significantly over the next 20 years. When potentially contaminated land is identified within an area zoned for development, it will be the responsibility of the developer to carry out an appropriate site investigation and risk assessment. In most of these cases the remedial works will be secured using conditions attached to a planning consent rather than by a Remediation Notice issued under Part IIA.

For the remaining areas of potentially contaminated land the Council will operate within the framework described in paragraph 5.0.

7.1.2 Criteria for Selecting Areas and Individual Sites

The criteria for identifying key geographical areas and individual sites are detailed in paragraphs 5.4.4 and 5.4.6. As part of this process the aims and priorities detailed in Section 3.1 and 4.1 of this strategy will be considered. The selection of sub-areas and individual sites within these areas may be carried out in accordance with the procedures contained in CLR Report No.6 (DOE 1995).

7.1.3 Activities

A detailed inspection may involve a range of activities including further analysis of documentary records on the land and its setting; a review of any existing information on ground conditions (e.g. information from the EA, landowner or occupier), a visual inspection of the land and intrusive works. The stages at which these individual activities are carried out are identified in paragraph 7.2.

7.1.4 Timetable

A timetable is described in paragraphs 3.2 and 4.2. The Council will review the timetable as further information becomes available during the implementation of this strategy.

7.2 Arrangements for Carrying Out a Detailed Inspection

7.2.1 General Procedure

The arrangements for carrying out a detailed inspection are outlined below and encompass the requirements of paragraphs B19 to B25 of the Statutory Guidance. The detailed inspection of any site will include a thorough survey and evaluation of the nature conservation interest at the earliest stages of investigation and as appropriate during and after any remediation works, irrespective of the types of pollutant linkage considered.

The approach taken will follow the published guidance contained in “British Standard 10175:2001 Investigation of Potentially Contaminated Sites – Code of Practice” (formerly DD 175:1988) and will involve the following stages:

a) A desk study to collect information about:

- Site history (location, surroundings and topography)
- Site use and potential contamination (including adjacent areas)
- Geology, hydrogeology and hydrology
- Ecology and archaeology

At this point the Council will check whether there is any detailed information on the condition of the land that may avoid the necessity to carry out an intrusive site investigation. This will include carrying out site specific liaison as described in paragraph 7.2.3 of this strategy. If at this point the Council becomes aware that a person is prepared to provide this information, that person will be offered the opportunity to provide it and the detailed site investigation will **not** proceed.

b) A site “walkover” to undertake:

- A detailed visual inspection to include flora and fauna
- Interviews with existing occupiers
- Limited “ad hoc” sampling (if appropriate)

c) Interpretation of initial data and the development of a **Conceptual Site Model (CSM)** that will include the potential pollutant linkages.

d) The **design** of a detailed site investigation to confirm whether or not the potential pollutant linkages are present.

e) A phased **site investigation** involving one or more of the following techniques:

- Non-intrusive geophysical investigation
- Dynamic probes and on site screening
- Trial pits, augers and boreholes

When the site investigation has been designed to identify whether or not there is a pollutant linkage, the intrusive works will continue until this has been confirmed. If during the course of the investigation it is clear that the pollutant linkage does not exist the work will cease as soon as this stage is reached.

In a case where there may be more than one pollutant linkage, the investigation will continue until the existence (or non-existence) of each pollutant linkage has been established.

f) The collection and analysis of soil, gas, crops, plants, animal products and/or groundwater samples.

- g) Interpretation of the data collected, and a review of the CSM (as necessary).
- h) Confirmation of the pollutant linkage(s).
- i) Confirmation of whether the site (in whole or part) should be determined as contaminated land. Such land may also fall within the definition of a “special site”.

7.2.2 Appointment of Contractors

If a detailed site investigation is required a contractor will be appointed from a list of “preferred” contractors. The Council may apply selection criteria before a contractor is invited to tender for example, the Association of Geo-technical and Geo-environmental Specialists (AGS) promotes Guidelines for Good Practice in Site Investigations. A contractor may be requested to demonstrate a commitment to these guidelines to reduce risk and add value to the project.

The Council’s Financial Regulations will determine how many contractors will be invited to tender for the work. As part of the tendering exercise the Council will have regard to “best value” and appoint on the basis of value for money, the technical capability of the contractor and quality of work. The Council may elect to accept a tender that is not necessarily the lowest.

The tender document will include (as appropriate) the information contained in Box 5.

Box 5

- Brief background information on the site
- Objectives of the investigation
- A rationale for and a description of the proposed site investigation and related activities (including a scale plan indicating the proposed sampling strategy)
- The proposed measures for protecting staff engaged in the site works
- A description of the proposed environmental protection measures to minimise off site impacts
- A rationale for and a description of the proposed laboratory analysis of soil and/or groundwater samples
- The intended form and content of the factual and interpretative report of the site investigation
- A timetable for carrying out the works and submitting the report
- The terms and conditions under which the contract will be undertaken
- The basis for quoting including a schedule of hourly rates for professional staff engaged in the site investigation

The Council will not instruct a contractor to proceed with a site investigation until it is satisfied that the criteria outlined in Box 6 are satisfied.

Box 6

- Written confirmation has been received from the owner(s) and occupier(s) of the site allowing the contractor to enter the land for the purposes of the site investigation (or alternatively when Section 108 requirements have been met)
- All necessary planning consents and environmental licences have been obtained

- Full details of the existing site services have been received and considered in the design of the sampling strategy
- All potential locations for exploratory boreholes and other intrusive works have been identified
- The Council's financial and project management procedures* have been met
- The health and safety procedures identified in the BSCoP for Investigation of Potentially Contaminated Sites will be implemented by the contractor
- Appropriate arrangements have been made for environmental protection

*Note that the Human Resources Manager has prepared a Project Management Toolkit based upon a methodology known as PRINCE 2 (an acronym for **Projects in Controlled Environment**). Any future projects will be managed in accordance with this toolkit.

7.2.3 Special Sites

A desk study is likely to be the earliest stage at which the Council will become aware of a potential special site. At this stage advice will be obtained from the EA on the best way to proceed.

There are two potential scenarios:

- a) The Council notifies the EA of a potential special site
- b) The EA becomes aware of a potential special site and notifies the Council

In both cases the EA may undertake a further investigation on behalf of the Council to advise the Council whether or not the site should be designated as a special site in accordance with the Contaminated Land (England) Regulations 2000. If the site is a special site the Council will no longer have a role in its remediation (other than as the Local Planning Authority). If the site is not a special site and is contaminated land then the Council will be responsible for dealing with it under Part IIA.

7.2.4 Site Specific Liaison

For each site the Council will contact the following (where appropriate):

- The owner of the land for information about its condition and to obtain permission to enter the site
- Any person who appears to be the occupier of all or part of the land for information about its condition and to obtain permission to enter the site
- Each person who appears to be an "appropriate person" for information about the condition of the land
- The EA for advice about the effect upon controlled waters and potential special site status
- English Nature for effects upon ecological systems and when an intrusive investigation is to be undertaken within a Site of Special Scientific Interest (SSSI)
- English Heritage, when sensitive archaeological remains or buildings are likely to be present

The Council may also contact the owner/occupier of adjacent land.

7.2.5 Health and Safety Procedures

The Council will endeavour to ensure that the contractor undertaking the site investigation is aware of the health and safety procedures contained within the British Standard Code of Practice on Investigation of Potentially Contaminated Sites and also the Construction (Design and Management) Regulations 1994. The contractor will also have regard to the HSE document on protecting workers and the general public during the redevelopment of contaminated land.

7.2.6 Format of Information Resulting from Inspection

The information gathered during an inspection of the land will generally be in the following format:

- A summary of the desk study, walkover survey and site assessment
- Analytical results of soil, gas, ground and surface water samples (as appropriate)
- A risk assessment (qualitative/semi-quantitative or quantitative)
- Identification of the pollutant linkage(s)
- Confirmation of a significant pollutant linkage
- An indication of how the significant pollutant linkage(s) may be addressed

8.0 REVIEW MECHANISMS

The Council will undertake a periodic review of this inspection strategy to ensure that any assumptions used during the assessment of individual sites are robust and reflect current "best practice". Information received from a third party about the condition of land will also be examined carefully before reliance is placed upon its accuracy and a decision is made about whether or not to apply Part IIA.

8.1 Review of Assumptions and Information ("triggers" for inspection)

A review of assumptions made and information held about the condition of land will normally be undertaken at least annually. However an immediate review will be undertaken when one or more of the circumstances identified in Box 7 below are likely to occur:

Box 7

- Proposed changes to the surrounding land
- Unplanned changes to the use of the land (for example, persistent, unauthorised use of land by children)
- Unplanned events for example, localised flooding, landslides, accidents, fires, spillages and the consequences cannot be addressed using other relevant environmental protection legislation
- Reports of localised "health effects" which appear to relate to a particular area of land
- Verifiable reports of unusual or abnormal site conditions received from business, members of the public or voluntary organisations
- Any change in guidance or knowledge relating to best practice techniques for inspection/remediation

An earlier review may also take place in response to information received from:

- Statutory bodies (for example EA, HSE, FSA and MAFF)
- Owners or occupiers of land and other relevant stakeholders

If the information received falls within the circumstances identified in Box 7 then an immediate review will take place. The nature of any other information will be considered on an individual basis to determine if and when an earlier review is required.

The triggers for inspection are identified in paragraphs 4.1 and 4.2.

8.2 Review of Strategy Document

The milestones for the objectives are identified in paragraph 3.2 (Box 1). To ensure that these are met a periodic review will be undertaken by the Environmental Health Manager. Where it has not been possible to specify a milestone for example, area based inspection this will be noted and within four weeks of the relevant information becoming available an appropriate milestone will be specified.

8.3 Audit of Inspection Procedures

The Council will appoint an independent person who is experienced in the assessment of contaminated land to audit a representative sample of site investigations. This will provide an opportunity to confirm that the inspection procedures are being applied. If there are any shortcomings identified during the audit the Council will review this part of the Strategy.

9.0 INFORMATION MANAGEMENT

9.1 General Principles and Storage Systems

All information will be held in a structured way to enable the Council to carry out its duties in an efficient and effective manner. The management of information will be assisted by the use of a geographical information system (GIS), specifically the ESRI "Arcview" software package. At this stage a specification is being prepared to develop a system that will manage the information arising from an initial review of "sources" and "receptors". This will assist with the subsequent identification of key geographical areas as detailed in paragraphs 5.3 and 5.4.

For individual sites the GIS will initially record the information described in Box 8. As further information becomes available and the system progresses it is anticipated that a land quality dataset will be established for the Council's area. Refer to Appendix 7.

Box 8

A unique reference number
Name and address of the site
Grid reference
Date site identified

Current land use
Historical land use(s)
Details of any previous investigation(s), remedial action or any other action for example, development control
Likely contaminant(s)
Pathway(s)
Part IIA receptor(s)
Geology and hydrogeology of the site
Hydrology of the site
Risk Category in accordance with CLR 6
Proposed action

When developing the GIS regard will be had to the advice contained within CLR Report No.5 (1994) and BGS Technical Report WE/99/14 (2000).

9.2 Use by other Local Authority Departments

A GIS is already established within the Council and is available to designated users. The information outlined in paragraph 9.1 will therefore become accessible to GIS users as described in paragraph 9.3.

9.3 Arrangements for giving Access to Information

There will be restricted access to the GIS land contamination information. Different groups of users will be identified and access to particular types of information will be provided. Within these groups some users will have the ability to modify the information whilst others will be restricted to viewing and/or copying information.

9.4 Confidentiality of Information

All data will be assessed in terms of its commercial confidentiality using the tests contained in Part IIA of EPA1990 and/or the Environmental Information Regulations 1992 (as amended). The Regulations contain provisions related to confidentiality, national defence and public security. Where information collection and assessment is underway but incomplete, the Council will take account of its own legal advice. Where appropriate, data will be excluded from the public domain whilst still permitting its internal use by the Council.

9.5 Content of Register Information

The Council is required to maintain a public register in accordance with Regulation 15 and Schedule 3 of the Contaminated Land (England) Regulations 2000 and provide access for inspection by the public at its principal office. The public register will therefore be held within the Environmental Protection Division of the Directorate of Community Services at the Civic Centre, Tannery Lane, Ashford Kent TN23 1PL.

The Council will not include any information on its public register that in the opinion of the Secretary of State would be against the interests of national security. Information will also be excluded on grounds of commercial confidentiality. Box 9 describes the information that will be held.

Box 9

Information about Remediation

There are specific requirements relating to:

- Remediation notices
- Appeals against remediation notices under Section 78L(1)
- Remediation declarations under Section 78H(6)
- Remediation statements under Section 78H(7) or 78H(9)
- Any notification given to the LA under Section 78R(1), (h) or (j) of “claimed remediation”

Other Information

There are specific requirements relating to:

- Appeals against charging notices under Section 78P(8)
- Other environmental controls that by virtue of Section 78YB(4) preclude action (e.g. remediation cannot be taken because it would interfere with a discharge into controlled waters for which consent has been given under Chapter II of Part III of the Water Resources Act 1991)
- Designation of special sites
- Guidance issued by the EA under Section 78V(1)
- Convictions for offences under Section 78M

9.6 Provision of Information to the Environment Agency

The Environment Agency (EA) is required to prepare and publish a report on the state of contaminated land in England. The aim of the report is to compile information on the nature, extent and distribution of contaminated land, the level of remediation undertaken and regulatory activity under Part IIA. It will enable an assessment to be made of the scale and significance of contaminated land and provide a mechanism to monitor the effectiveness of the measures put in place to address it.

To achieve these objectives the EA will need to collate the information it holds and will also require access to information held by the Council. The Area Contaminated Land Officer of the EA has provided the Council with standard forms to facilitate the collection of this information.

9.7 Dealing with Requests for Information

From time to time the Council will receive requests to view the information held on a particular site that may not be included in the register referred to in paragraph 9.5. This may include documents provided by a third party and/or produced by the Council during the course of internal and external consultation. Each request will be considered on its merits taking account of the following issues:

- a) The relationship between the enquirer and the information that they are requesting to view for example,
 - An enquiry may be received from the original supplier of the information and relate to action taken by the Council since it was received

- An enquiry may be received from the owner/occupier of the land in question seeking to review information provided by a third party that may directly affect its value
 - An enquiry may be received from a solicitor acting on behalf of a prospective purchaser of the land
- b) Whether or not the information requested, or any part thereof, is protected by commercial interests or national security as a result of the tests contained in Part IIA and/or the Environmental Information Regulations 1992 (as amended) and as referred to in paragraph 9.4 of this strategy.
- c) Whether or not the permission of a third party must be obtained before it is released.

All requests for information on land contamination should preferably be made in writing to the Council. The Environmental Health Manager will acknowledge a request within 2 days of receipt and where possible the relevant information will be provided within 14 days. If it becomes necessary to carry out further research to provide a full response the enquirer will be advised accordingly and a time-scale for supplying the information will be agreed. In any event a response will be provided within 2 months.

9.8 Dealing with information or complaints received by the Council

Appropriate procedures have also been established to respond to information or complaints received from members of the public, businesses and voluntary organisations. These procedures are outlined below:

- A record of the information or complaint will be entered onto the Environmental Health Complaints System (PPWiz) maintained by the Environmental Health Manager
- The information or complaint will be referred to an appropriate officer and a record of this action will be entered onto PPWiz. The officer may include one or more of the officers identified in paragraph 1.3.3
- The officer will be responsible for undertaking any research necessary to respond to the information or complaint and a record of the content of any response will be maintained
- Depending upon the nature of the information or complaint it may be necessary to maintain a site specific case file

In some cases the information or complaint received may result in a requirement to undertake a further investigation of land in accordance with the procedures outlined in paragraph 7.0.

10.0 OTHER SUPPORTING INFORMATION

10.1 Maps and Appendices

Map 1: The Geographical Area of Ashford Borough Council

Map 2: The Geology and Groundwater Characteristics of Kent

Appendix 1: Paragraphs B9, B10 and B15 of the Statutory Guidance

Appendix 2: Schedule of Protected Sites

Appendix 3: Schedule of Ancient Monuments

Appendix 4: Examples of Past and Present Industrial Uses in Ashford

Appendix 5: Programme for Inspection

Appendix 6: List of Local Authority Contact Points

Appendix 7: GIS Land Quality Dataset

10.2 Information sources and References

Ashford Borough Council (ABC). 2000. *Towards a Better Community. Listening. Learning. Leading.*

Ashford Borough Council (ABC). 2000. *Ashford Borough Local Plan. Written Statement.*

British Geological Survey (BGS) & Environment Agency (EA). 2000. *Some guidance on the use of digital environmental data. BGS Technical Report WE/99/14 (2000).*

British Standards Institute (BSI). 1999. *Investigation of potentially contaminated sites – Code of Practice.*

Department of the Environment (DoE). 1994. *Information Systems for Land Contamination. CLR Report no 5.*

Department of the Environment (DoE). 1995. *Prioritisation and Categorisation Procedure for Sites which may be Contaminated. CLR Report no 6.* (prepared by M.J. Carter Associates) London.

Department of the Environment Transport and the Regions (DETR). 2000. *DETR Circular 02/2000.* The Stationery Office.

Department of the Environment, Transport and the Regions (DETR) and Environment Agency (EA). 2000. *Contaminated Land Inspection Strategies. Draft Technical Advice for Local Authorities.*

Environment Agency (EA). 1998. *Local Environment Agency Plan. Kent Area. Environmental Overview.*

Environment Agency (EA). 2000. *Draft Local Authority Guide to the Application of Part IIA of the Environmental Protection Act 1990.*

Environment Agency (EA). 2000. *EA Policy Number EA5/2703/1/1/Final. Part IIA Overall Framework.*

Local Authority Waste & Environment (LAWE). 2000. *Volume 8 Issue 9.* Faversham House Group Ltd.

Scotland & Northern Ireland Forum for Environmental Research (SNIFFER). 1999. *Communicating Understanding of Contaminated Land Risks.*

10.3 Glossary

Abstraction

The removal of water from any source, either permanently or temporarily.

Abstraction Licence

The authorisation granted by the EA to allow the removal of water from a source.

Anticline

A geological ridge or fold created by movement of the earth's crust.

Aquifer

A permeable geological stratum or formation, that is capable of both storing and transmitting water in significant amounts.

Authorisation

A statutory document issued by an approved body and necessary to allow activities to be undertaken. In the context of this strategy, all licences, consents and permits are examples of authorisations issued by a regulator.

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.

Conceptual Site Model (CSM)

A conceptual site model is a description of the soil and groundwater system based upon all the available physical, hydraulic and chemical data. It can be in pictorial form and/or text and attempts to identify sources, pathways and receptors drawing upon local knowledge of the site and surrounding area.

Controlled Waters

Section 104 of the Water Resources Act 1991 defines controlled waters as rivers, canals, lakes, groundwater, estuaries and coastal waters within 3 nautical miles of the shore.

Groundwater

Groundwater is generally considered to be that water below the zone of saturation and contained within a porous soil or rock stratum (aquifer).

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 man, include harm to his/her property.

Hydrogeology

Studying the quality, storage and movement of water in rock and its interaction with geology.

Hydrology

Studying water on and below the earth's surface.

Risk Assessment (Quantitative, Semi-quantitative and Qualitative)

A quantitative risk assessment provides a numerical estimate of risk. This can be expressed as the number of deaths from exposure to a hazard over a specified time period. A semi-quantitative risk assessment is based upon professional judgement and usually involves a ranking scheme rather than an estimate of risk. A qualitative risk assessment describes risk in terms of high, medium and low.

River Quality Objective (RQO)

An agreed strategic target expressed in terms of River Ecosystem standards that is used as the planning base for all activities affecting the water quality of a length of watercourse.

Special Area of Conservation (SAC)

An area classified under the EC Habitats Directive and agreed by the EC to contribute to biodiversity by maintaining and restoring habitats and species.

Special Site

Any contaminated land designated due to the presence of : waste acid tar lagoons, oil refining, explosives, Integrated pollution control sites, nuclear sites.

Site of Special Scientific Interest (SSSI)

A geographical area designated by English Nature or the Countryside Council for Wales because of its nature conservation value.

Significant harm

Any harm that is determined to be significant in line with the Statutory Guidance.

Source Protection Zone (SPZ)

Three groundwater source protection zones are recognised (Zone I, II and III). The hydrogeological characteristics of the strata and the direction of groundwater flow determine the orientation, shape and size of each zone. The area is defined by the “travel time” for biological contaminants to decay from any point below the water table to the source.

Surface Water

Any river, stream, lake, pond, estuary or other watercourse containing, in whole or part, water derived from precipitation.

Surface Water Catchment

The land that drains by natural or artificial means to any point in a specified stream or river.

Sustainable Development

Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs (definition from the World Commission on Environment and Development 1987 “Our Common Future” The Bruntland Report).

Appendix 1

Paragraph B9 of Statutory Guidance

In carrying out its inspection duty under section 78B(1), the local authority should take a strategic approach to the identification of land which merits detailed individual inspection. The approach should:

- a) be rational, ordered and efficient;
- b) be proportionate to the seriousness of any actual or potential risk;
- c) seek to ensure that the most pressing and serious problems are located first;
- d) ensure that resources are concentrated on investigating in areas where the authority is most likely to identify contaminated land; and
- e) ensure that the local authority efficiently identifies requirements for the detailed inspection of particular areas of land.

Paragraph B10 of Statutory Guidance

In developing this strategic approach the local authority should reflect local circumstances. In particular it should consider:

- a) any available evidence that significant harm or pollution of controlled waters is actually being caused;
- b) the extent to which any receptor is likely to be found in any of the different parts of the authority's area;
- c) the extent to which any of those receptors is likely to be exposed to a contaminant;
- d) the extent to which information on land contamination is already available;
- e) the history, scale and nature of industrial or other activities which may have contaminated the land in different parts of its area;
- f) the nature and timing of past redevelopment in different parts of its area;
- g) the extent to which remedial action has already been taken by the authority or others to deal with land contamination problems or is likely to be taken as part of an impending redevelopment; and
- h) the extent to which other regulatory authorities are likely to be considering the possibility of harm being caused to particular receptors or the likelihood of any pollution of controlled waters being caused in particular parts of the local authority's area.

Paragraph B15 of Statutory Guidance

The local authority should include in its strategy:

- a) a description of the particular characteristics of its area and how that influences its approach;
- b) the authority's particular aims, objectives and priorities;
- c) appropriate timescales for the inspection of different parts of its area; and
- d) arrangements and procedures for:
 - i) considering land for which it may itself have responsibility by virtue of its current or former ownership or occupation,
 - ii) obtaining and evaluating information on actual harm, or pollution of controlled waters,
 - iii) identifying receptors, and assessing the possibility or likelihood that they are being, or could be, exposed to or affected by a contaminant,

- iv) obtaining and evaluating existing information on the possible presence of contaminants and their effects,
- v) liaison with, and responding to information from, other statutory bodies, including in particular, the EA, EN and MAFF,
- vi) liaison with, and responding to information from, the owners or occupiers of land, and other relevant interested parties,
- vii) responding to information or complaints from members of the public, businesses and voluntary organisations,
- viii) planning and reviewing a programme for inspecting particular areas of land,
- ix) carrying out the detailed inspection of particular areas of land,
- x) reviewing and updating assumptions and information previously used to assess the need for detailed inspection of different areas, and managing new information, and
- xi) managing information obtained and held in the course of carrying out its inspection duties.

Appendix 2

SCHEDULE OF PROTECTED SITES

Sites of Special Scientific Interest (SSSI)

The English Nature (Kent Team) provided the following information:

<i>Site</i>	<i>Grid Reference</i>	<i>Area (hectares)</i>
Alex Farm Pastures	TQ 968 369	4.53

This site consists of two adjoining pastures separated by a small pond and shallow stream. The pastures represent one of the best surviving examples of neutral grassland in Kent. It is a nationally rare habitat containing a range of plant species characteristic of slightly acid Weald Clay.

River Beult	TQ 865 425 – TQ 693 502	24.8 kilometres
-------------	-------------------------	-----------------

This river flows for most of its length over Weald Clay and retains a characteristic flora and fauna, despite enrichment by phosphate/nitrate from sewage effluent discharges and agricultural run-off. Two nationally scarce invertebrates have been recorded. The exposed clay banks provide nesting sites for kingfishers.

Charing Beech Hangers	TQ 979 484	53.1
-----------------------	------------	------

The majority of this site lies on a steep south westerly facing escarpment. It is dominated by mature oak, ash, beech and hazel coppice on Middle and Upper Chalk. A diverse ground flora is present, characteristic of thin chalk soils, including a number of scarce species.

Down Bank	TR 083 522	6.05
-----------	------------	------

This site lies on a steep south easterly facing slope. It includes chalk grassland with some areas of scrub and the edge of an ancient, broadleaved woodland. These habitats support a diverse flora and fauna including a nationally scarce species of butterfly and moth.

Ham Street Woods	TQ 996 352	172.2
------------------	------------	-------

Part of this site is a National Nature Reserve. It lies on the edge of a plateau of sands and clays. It includes a series of broadleaved woodlands and supports an outstanding bird and invertebrate community. The complex structure of the woodland provides a wealth of microhabitats associated with wet areas within shallow pools, shaded streams and decomposing vegetation.

Hart Hill	TQ 943 506	1.46
-----------	------------	------

This site is a former chalk pit. The exposed Lenham Beds contain sands and flints derived from the underlying chalk and ironstone deposits. These deposits are poorly represented in other parts of the UK.

Hatch Park	TR 063 410	71.8
------------	------------	------

This site is of special interest for its acidic grassland and ancient pollard oak/hornbeam woodlands. It supports the richest lichen community in Kent.

Hoads Wood	TQ 953 426	78.2
------------	------------	------

This site is a good example of mixed oak, hornbeam, hazel and sweet chestnut woodland on Weald Clay. It supports a diverse bird community and two nationally rare species of butterfly and moth. Some coppicing has been undertaken. This has created open areas that are occupied by a ground flora of bracken and heather.

Hothfield Common	TQ 969 458	56.4
------------------	------------	------

This site is a Local Nature Reserve managed by the Kent Trust for Nature Conservation (KTNC). It contains the best example in Kent of a valley bog with associated heath land. Natural springs emerge at the sandy Folkestone Beds and impermeable Sandgate Beds. This has created an acidic bog community that supports over 1 000 species of insects and a well established bird population.

Orlestone Forest	TQ 982 350	337.7
------------------	------------	-------

This site includes two areas managed by the KTNC. It contains a large area of ancient woodland comprising oak and hornbeam, although some parts have been replanted with conifers. Traditional woodland management has created grassy rides. There are a number of marshy areas and shallow pools. These varied habitats support 39 nationally rare species and 134 nationally scarce species.

Park Wood, Chilham	TR 043 526	31.2
--------------------	------------	------

This site lies on a south easterly facing slope bisected by a dry valley. It contains an area of mature woodland on chalk soils, comprising hazel and hornbeam coppice under oak standards. There is an outstanding invertebrate community including a rare species of wasp and a large bird population.

Walland Marsh	TQ 950 290	1946.5
---------------	------------	--------

Part of this site lies within Rother and Shepway D.C. It includes the majority of the remaining areas of unimproved and permanent grassland on the reclaimed silt and peat soils of Walland Marsh and The Dowels. There is an extensive dyke system containing nutrient rich "brackish" waters that supports a diverse invertebrate fauna and bird community.

Wye and Crundale Downs	TR 080 470	348.5
------------------------	------------	-------

Part of this site is a National Nature Reserve and a candidate for designation as a Special Area of Conservation. It contains a mosaic of different habitats including species rich neutral grassland, fen meadow communities and scrub/woodland. A wet, alder woodland has also been created by a calcareous stream flow beneath the North Downs. The "Devil's Kneading Trough" is important for its fossil remains and geomorphology. There is an outstanding invertebrate community including many local and rare species.

Sites of Nature Conservation Interest

- 1 Hemsted Forest
- 2 Sandpit Wood etc, Clapper Hill
- 3 Woods Meadows and Ponds, High Halden
- 4 Knock wood etc, Tenterden
- 5 Ashenden Gill etc, Tenterden
- 6 Heronden Woods and Pasture, Tenterden
- 7 Friezingham Dykes and Newmill Channel etc, Tenterden
- 8 Rother Levels and adjacent Woods, Wittersham
- 9 Halden Place Orchard, Nr Rolvenden
- 10 Stone Cliff, Isle of Oxney
- 11 Comb Wood etc, Wittersham
- 12 Spuckles Wood etc, Stalisfield Green
- 13 Hunts Wood etc, Kenardington
- 14 Harlakenden Woods, Shadoxhurst
- 15 Valley west of Tong Green
- 16 Bilsington Woods and Pasture
- 17 Blean Woods, South
- 18 Aldington Sandpit
- 19 South Willesborough Dykes
- 20 Park Wood etc, Nr Kenardington
- 21 Shadoxhurst Woods and Pasture
- 22 Aldington Woods
- 23 River great Stour etc, Godinton
- 24 Hothfield Lake etc
- 25 Ashford Warren etc
- 26 Royal Military Canal
- 27 Great Stour etc, Ashford to Fordwich
- 28 Little Chart Mill Ponds, Woods, etc
- 29 Woods and Pasture, extra to Hoads Wood SSSI
- 30 March Wood etc, Hothfield
- 31 Weald Cottage Meadow etc, Bethersden
- 32 Dering Wood etc, Pluckley
- 33 The Pasture and Orchard, Pluckley
- 34 Ponds and Pasture around Smarden
- 35 Tylden Strict Baptist Chapel Yard
- 36 River Sherway adj Ponds and Pasture, Headcorn
- 37 Foxden Woods etc, Egerton
- 38 Pasture, Pemble Cross
- 39 Charing Hill Chalk Pit etc
- 40 Longbeech Wood, Charing
- 41 Challock Forest, Kings Wood
- 42 Denge Wood complex
- 43 Woods and Pasture, Mill Pond, near St Michael
- 44 Willesborough Lees and Flowergarden Wood etc
- 45 Naccolt Pit
- 46 Woods etc, Brabourne
- 47 Pasture etc, Bulltown Corner, extra to SSSI
- 48 Kingsmill Down Pasture, Hastingleigh
- 49 Huntstreet Woods and Pasture

50	Bybrook Nature Reserve
51	Orlestone Forest
52	Lord's Wood etc, Stone in Oxney
53	Meadow near Maltman's Hill, Smarden
54	Wanden Meadows etc, Egerton Forstal
55	Woods and Meadows near Shadoxhurst
56	Jarvis Farm Meadows and Pond, near Woodchurch
57	tile Lodge Wood etc, near Eastwell
58	Winchcombe Down (south), extra to SSSI
59	Challock Churchyard, near Challock Manor
60	Woods, Pasture and Ponds, Bromley Green
61	Burnt Mill Pond etc, Charing Heath, extra to SSSI
62	Orlestone Pastures and Woods
63	Dering Meadows, Maltmans Hill
64	Rolvenden Churchyard
65	Lenham Heath and Chilston Park
66	Hothfield Common Field
67	Hurst Wood Charing Heath
68	Cork Farm Apple Orchard, Old Wives Lees

Appendix 3

SCHEDULED ANCIENT MONUMENTS

<i>Site</i>	<i>Grid Ref</i>
Aldington Knoll Roman barrow & later beacon	TR 070 352
Romano-British Building south of Burch's bridge, Aldington	TR 086 361
Horne's Place Chapel, Appledore	TQ 958 308
Long barrow south of Jacket's Field, Boughton Aluph	TR 033 496
Medieval moated site at Court Lodge Farm, Brook	TR 066 441
The Archbishop's Palace, Charing	TQ 954 494
Dispersed Medieval settlement remains in Chapel Wood	TQ 972 509
Ruined chapel at Pett, Charing	TQ 962 490
Julliberrie's Grave long barrow, Chilham	TR 077 532
Tower keep castle at Chilham	TR 066 534
Bowl barrow, in Eggringe Wood, Crundale	TR 096 497
Saucer barrow in Warren Wood, Crundale	TR 074 485
The Lake House, Eastwell	TR 011 474
Eastwell Church, Eastwell	TR 009 474
Bowl barrow 350m SE of Egerton Church	TQ 911 473
Bowl barrow in King's Wood, Wye	TR 040 506
Medieval moated site, The Moat, Great Chart with Singleton	TQ 974 413
Remains of St Mary's Church, Little Chart	TQ 935 466
Medieval moated site, Quarrington Manor, Mersham	TR 059 411
Castle Toll Saxon burgh & medieval fort, Newenden	TQ 852 283
Newenden Bridge, Newenden	TQ 835 270
Medieval moated site, Silver Wood, Pivington, Pluckley	TQ 921 465
Medieval moated site & adj hythe, Lowden Farm, Rolvenden	TQ 854 294
Moated site & assoc garden earthworks, Boys Hall, Sevington	TR 029 407
Medieval moated site, Palstre Court, Wittersham	TQ 882 283
Bowl barrow 300m ES of the Firs, Broad Downs, Wye	TR 080 452
Medieval undercroft, Bridge St, Wye	TR 053 466
Medieval college of St Gregory & St Martin at Wye	TR 054 468
Hlaew in Juniper Wood, Wye	TR 069 470
Royal Military Canal (parts A to F)	TR 070 342
	TQ 940 252

Appendix 4

EXAMPLES OF PAST AND PRESENT INDUSTRIAL USES IN ASHFORD

The following sites were researched at the County Archives in Maidstone:

- Ashford Cattle Market Co Ltd. Formed on 8 January 1856.
- Ashford Corn Exchange. Operated from the late 18th Century for over 100 years.
- Onward Cycle Works. Operated by Hayward and Norman. Closed in the early 1960s.
- Headley's Printers. Business started in 1881 by two brothers H.D. & B.H. Headley. Moved to Lower Queens Rd in 1907 and still operating.
- British Wheel Works. Operated by P.I. Headley and became the largest wheelwrights in the country. Closed 1965.
- Lee & Son House Furnishers. Established in 1870 by F. Lee and consisted of a cabinet and upholstery works.
- Lewis & Hyland Drapery. Established in 1834 by G. Lewis who developed a large wholesale trade throughout Kent, Sussex and Surrey. Closed in 1980.
- Ashford Wheels, Wagons & Carts. Operated by W & T Humphrey, J. Hook, E. Manser, J.D. Skinner and F. Heathfield & Son.
- Crofords. Continued the tradition of wheel making in Ashford.
- Geerings. Established by W. Geering in 1903, initially as a printers. It became one of the country's largest office equipment and business machine retailers.
- Ashford Wool Growers. *Established by Messrs Legge & Sons. Kent Ram Breeders* formed a co-operative after WW1 and in 1920 occupied the former Ashford Brewery. Subsequently moved to the former Tannery.
- Ashford Tannery. Oak bark tanning process included 70 tanning pits each containing 800 gallons of liquor. River Stour supplied the water required from a section known as "Lords Cut".
- Mather & Smith Iron Foundry. The two original ironmongers were Messrs J Dungery & Co and Messrs Russell & Bugler. Mr G Mather was a foreman at Buglers. His son Mr D Mather joined with Mr Smith to form "Mather & Smith".
- The Great Locomotive Works. Occupied 185 acres of former farmland and by 1900 had 2500 employees. The buildings extended over 53 acres and expansion continued. During WW1 munitions was manufactured by R Maunsell. During WW2

engines, bomb trolleys, armour plating, tank fittings and breakdown trains were manufactured. By 1970 British Rail Engineering Ltd had formed.

- H.S. Pledge & Sons. Established by H.S. Pledge and his two sons. Original Flour Mill occupied land at the Golden Ball Public House and moved to Victoria Road circa 1890. Became the largest Flour Mill in Kent. Also occupied Provender Mill at East Hill.
- J. Broad. Candle maker from 1862. Tallow derived from local slaughterhouse. Ashford Wax Candles were produced from a factory in Park Street.

Appendix 5

INSPECTION TIMETABLE

	2000	2001	2002	2003	2004	2005	2006
Draft Strategy	█						
Strategy Consultation		█					
Publish Final Strategy							
Identify Receptors		█	█	█	█	█	█
Identify areas where contaminants may be present		█	█	█	█	█	█
Where contaminants and receptors coincide identify pathways		█	█	█	█	█	█
Identify actual significant harm or pollution of controlled waters		█	█	█	█	█	█
Identify land for which Council may be appropriate person							
Identify nature and timing of past redevelopment							
Review previous remediation							
Communicate with relevant stake holders							
Designate sites as contaminated land							
Deal with urgent sites							
Strategy Review							

Appendix 6

Contact Points for Consultation

Ashford Borough Council

Mr Richard Woodcock
Divisional EHO
Environmental Health
Civic Centre
Tannery Lane
Ashford
Kent TN23 1PL
Tel: 01233 330225
Fax: 01233 330469
Email: richard.woodcock@ashford.gov.uk

Ms Vanessa Nourse
Senior EHO
Environmental Health
Civic Centre
Tannery Lane
Ashford
Kent TN23 1PL
Tel 01233 330234
Fax 01233 330469
vanessa.nourse@ashford.gov.uk

Environment Agency

Julie Mossom
Area Contaminated Land Officer
Environment Agency
Orchard House
Endeavour Park
Addington, West Malling,
Kent ME19 5SH

Jonathan Atkinson
Environment Agency
Orchard House
Endeavour House
Addington, West Malling
Kent ME19 5SH

English Nature

Mrs S Toy
English Nature (Kent Team)
The Countryside Management Centre
Coldharbour Farm,
Wye, Ashford, Kent TN25 5DB

English Heritage

Land Use Planner
EH South East Region
Berkley House, London Square
Cross Lanes, Guildford
GU1 1XL

Kent County Council

Strategic Planning Department
Invicta House, County Hall,
Maidstone, Kent ME14 1XX

MAFF

Ms F Reynolds
MAFF, Room 141
Nobel House, 17 Smith Sq,
London SW1P 3JR

MECHANISM FOR BUILDING A LAND QUALITY GIS

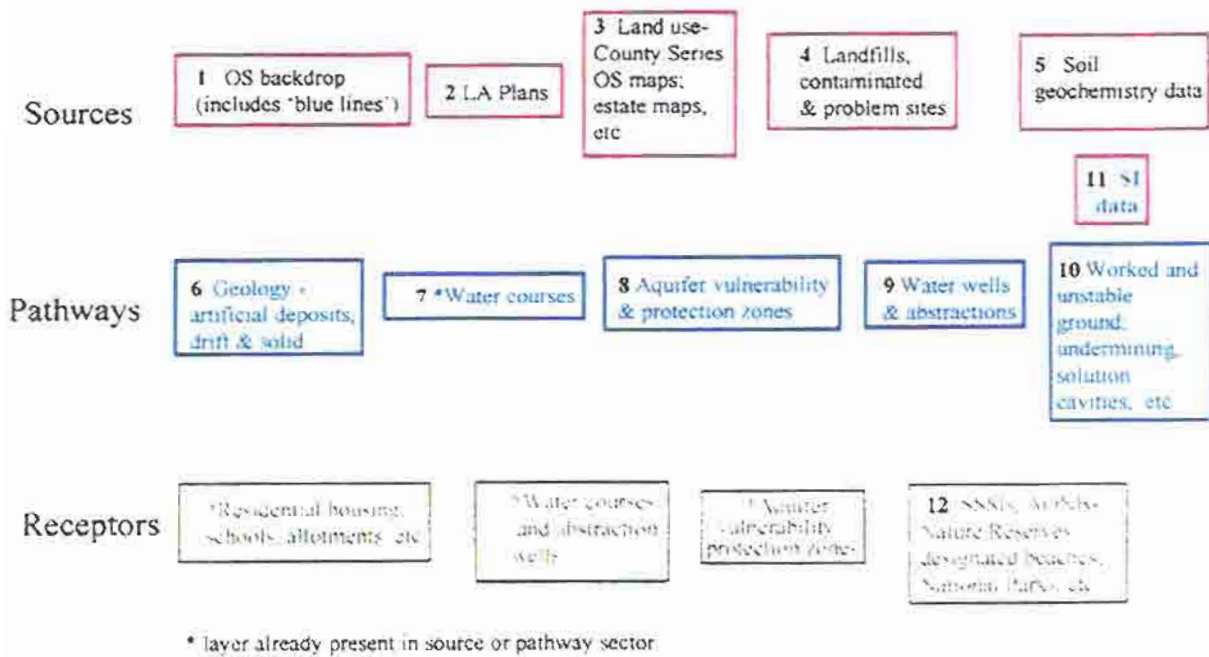


Figure A. Idealised steps to build a Land Quality GIS

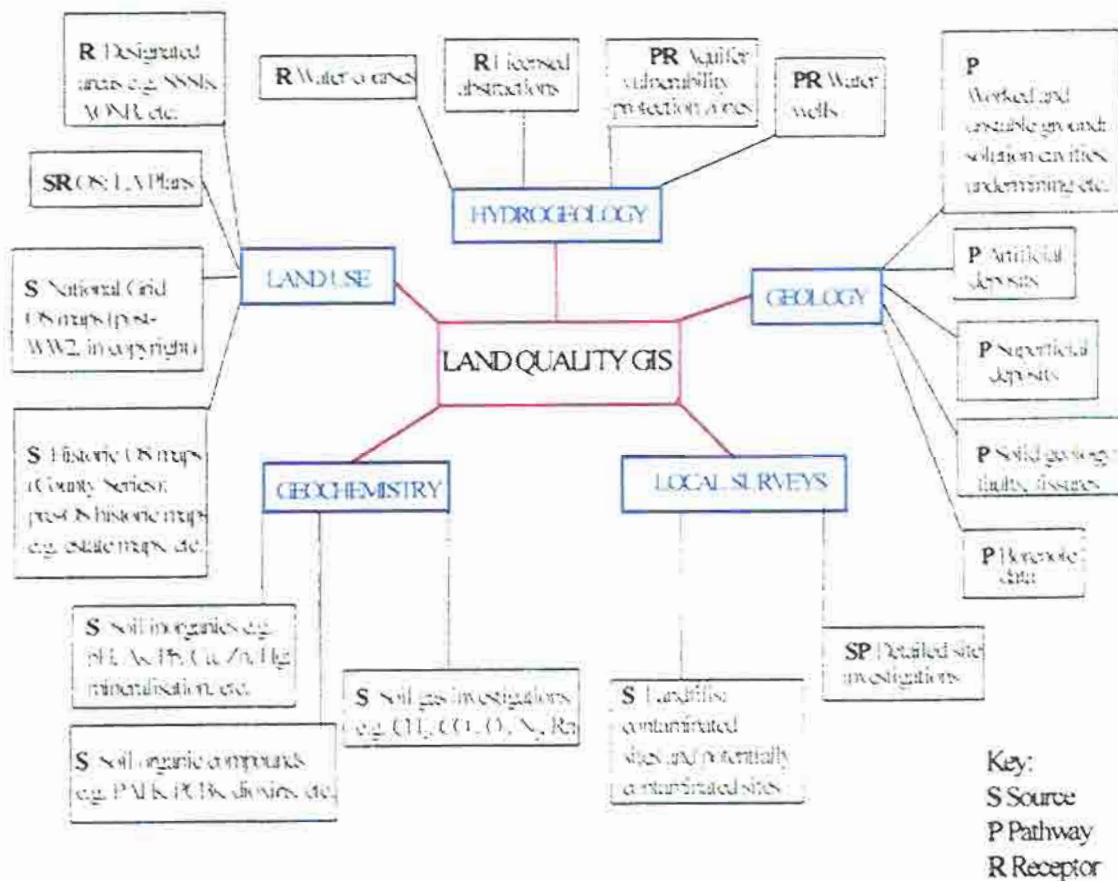


Figure B. Layers of a Land Quality GIS

