CONTAMINATED LAND STRATEGY

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EXECUTIVE SUMMARY

Under the new contaminated land provisions contained in Part IIA of the Environmental Protection Act, 1990; each Local Authority has to "cause its area to be inspected from time to time for the purpose of identifying contaminated land". A Strategy must be submitted to the Department of the Environment, Transport and the Regions by July 2001 detailing how the Authority will take a rational, ordered and efficient approach to this inspection. Suffolk Coastal District Council is the lead regulator on Contaminated Land but the Council will work in partnership with other organisations like the Environment Agency.

A program of inspection based on population density is proposed, with the largest Parishes/towns inspected first followed by the smaller towns and villages. Priority will be given to inspecting land owned by the Council and land scheduled for development in the Council's Local Plan. Controlled waters and Protected areas of the environment will also be examined and a final prioritisation exercise undertaken to establish the order in which problem sites should be cleaned up.

It is recognised that some sites may be identified outside the general approach to inspection that will require urgent action. These sites will be dealt with as they arise. The Council will support parties wishing to undertake voluntary remediation and will encourage re-use of brownfield sites for development.

The Regulations set clear criteria that must be met before land can formally be designated as Contaminated Land. The Council must also maintain a public register containing details of Contaminated Land in the District. Where a change in land use is planned e.g. where redevelopment is planned, any necessary remedial action would be carried out under Planning and Development Control rather than under the Part IIA of EPA, 1990.

The Council recognises that this strategy for the identification of Contaminated land is in essence a probabilistic approach. Although the ultimate aim is to identify all Contaminated Land, in practice the identification process is governed by the principle of "diminishing returns". Thus, the aim is not to prove the status of every piece of land within the district but rather to adopt a logical, robust and defensible approach in which effort is proportional to risk and priorities set appropriately.

CHAPTER ONE

1.0 INTRODUCTION.

1.1 PURPOSE OF THIS STRATEGY.

This strategy sets out how Suffolk Coastal District Council (SCDC) proposes to identify contaminated land within the District as required by Part IIA of the Environmental Protection Act, 1990 which came into force on April 1,2000. This is the initial stage in a process to ensure that any associated risks to human health or to the wider environment are addressed in an appropriate and cost effective manner.

Contaminated land is not a new issue for SCDC. It is already being taken into account under planning control. For example, if former industrial land is to be redeveloped for housing, the developer needs to satisfy SCDC as the planning authority, that any contamination has been properly defined and will be dealt with appropriately (making the land suitable for the proposed use and addressing any wider environmental risks).

The new regime complements the planning system. It represents a more pro-active and strategic approach to identifying contaminated land and a risk-based approach to securing any remedial action that may be needed. The first stage however is to identify contaminated land. This draft consultation sets out how SCDC proposes to carry this out.

1.2 CONSULTATION ON THIS STRATEGY

In preparing this strategy, the following were consulted:

- Internal departments within SCDC, namely within Environmental Services (Pollution Control, Food & Safety, Housing). Planning and Leisure (Building Control, Planning, Leisure Services and Engineering). Chief executive (Property services) and Contract Services.
- All Town and Parish Councils within SCDC
- Neighbouring District Councils and the County Council
- The Environment Agency, English Nature and English Heritage (Archaeological Services).
- The Food Standards Agency

1.3 SUMMARY OF LOCAL AUTHORITIES DUTIES.

1.3.1 REGULATORY CONTEXT AND OVERVIEW OF DUTIES.

Part IIA of the Environmental Protection Act, 1990 (inserted by Section 57 of the Environment Act, 1995) provides a regulatory regime for the identification and remediation of contaminated land. This regime came into force in April 1, 2000 together with the Contaminated Land (England) Regulations 2000 made under the

1990 Act. The regime initially excluded contaminated land by virtue of harm or water pollution attributable to radioactivity possessed by a substance. But in August 2006, it was extended by new a regulation to include land that is contaminated by virtue of radioactivity. Statutory Guidance form an essential part of the new regime and is contained in the DEFRA circular 1/2006.

Local Authorities have been given the lead role in the identification of contaminated land and, for most sites, for establishing the appropriate person or persons to bear responsibility for any remediation required, deciding the nature of that remediation and recording regulatory actions. Box 1 below summarises these responsibilities. For certain classes of sites identified by the local authority as "special sites", the regulatory role is to be transferred to the Environment Agency following identification. There are also requirements for the local authority to liase with other bodies such as the Environment Agency (especially where controlled waters may be at risk of pollution or where a site is a candidate special site) English Nature and English Heritage.

Box 1:

Key Statutory Duties on Local Authorities under Part IIA (EPA 1990)

- Prepare a strategy to identify contaminated land by July 2001
- Implement the strategy
- Consult various other parties e.g. the Environment Agency, English Nature
- Identify special sites (for regulation by the Environment Agency).
- Prepare and serve notification of contaminated land on the appropriate person (which effectively starts the consultation process on the type of remediation necessary).
- Serve remediation notices where appropriate (remediation by voluntary action preferred).
- Determine exclusion from, and apportionment of, liability for remediation and address cost recovery.
- Compile and maintain a public register.

1.4 DUTY TO IDENTIFY CONTAMINATED LAND.

The duty to identify contaminated land is established in Section 78B (and as modified) of EPA 1990 as follows:

78B (1) Every local authority shall cause its area to be inspected from time to time for the purpose:
(a) Of identifying contaminated land; and
(b) Of enabling the authority to decide whether any such land is land which is required to be designated as a special site.

78B (as modified): The Trigger for a local authority to cause a land to be inspected for the purpose identifying radioactively contaminated land is where it has knowledge of relevant information relating to: -

a) a former historical land use, past practice past work activity or radiological emergency, capable of causing lasting exposure giving rise to doses of radiation

b) levels of contamination present on the land arising from a past practice, past work activity or radiological emergency, capable of causing lasting exposure giving rise to doses of radiation

1.5 DEFINING CONTAMINATED LAND

A statutory definition of contaminated land is given in Section 78A(2) based on the likelihood of significant harm or the pollution of controlled waters as follows.

78A(2) "Contaminated land" is any land, which appears to the local authority in whose area it is situated to be in such a condition by reason of substances in, on or under the land that: -
(a) significant harm is being caused or there is a significant possibility of such harm being caused; or
(b) Pollution of controlled waters is being, or likely to be caused.

Section 78A(2)(as modified) Where harm is attributed to radioactivity, contaminated land is defined as: any land which appears to the local authority in whose area it is situated to be in such as a condition by reason of substances in or under the land that
(a) Harm is being caused, or
(b) There is a significant possibility of such a harm being caused

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

1.6 APPROACH TO IDENTIFYING CONTAMINATED LAND.

1.6.1 POLLUTANT LINKAGE AND RISK ASSESSMENT.

The mere presence of contamination is not a sufficient condition for land to be determined as contaminated. For a site to meet the definition of "Contaminated land", a pollutant linkage must be established. A pollutant linkage is defined as the relationship between a contaminant, a pathway and a receptor. These terms have explicit definitions as given in Box 2 below. Without the identification of all the three elements of a pollutant linkage, land will not be identified as "Contaminated land".

Box 2. Definition of Contaminant, Pathway and Receptor. (Source: DEFRA circular 1/2006)

A **contaminant** is a substance which is in, on or under the land and which has the potential to cause harm or cause pollution of controlled waters.

A **receptor** is either:

(a) a living organism, a group of living organisms, an ecological system or a piece of property which:

(i) is one of the type listed in **Appendix A** and

(ii) is being or could be harmed by a contaminant; or

(b) Controlled waters, which are being, or could be, polluted by a contaminant.

A **pathway** is one or more routes or means by, or through, which a receptor:

(a) is being exposed to, or affected by a contaminant, or

(b) Could be so exposed or affected.

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

1.7 DEVELOPMENT OF THE STRATEGY.

All Local Authorities are required to take a strategic approach to inspecting land in its area for contamination. The statutory guidance requires that the approach adopted should:

- Be rational, ordered and efficient
- Be proportionate to the seriousness of any actual harm or potential risk

- Seek to ensure the most pressing and serious problems are located first
- Ensure that resources are concentrated on investigating areas where the authority is most likely to identify contaminated land
- Ensure that the local authority efficiently identifies requirements for the detailed inspection of particular areas of land.

Local authorities are also required to reflect local circumstances and local factors of the type given in Box3 below in inspecting land.

Box 3 Local factors to be considered in the strategy

- The distribution of specified receptors across the district (e.g. housing, ecological receptors) and the extent of to which receptors are likely to be exposed to a potential pollutant
- The history, scale and nature of industrial activities
- The nature and timing of past developments
- Current information on land contamination
- Existing evidence of significant harm and pollution of controlled waters
- Previous remediation carried out and any remediation that is expected to be carried out in the context of pending development
- Related studies carried out by other authorities.

This strategy has been developed to meet these requirements. Particular reference has been made to "Contaminated Land Inspection Strategies – Technical Advice for Local Authorities" issued by DEFRA.

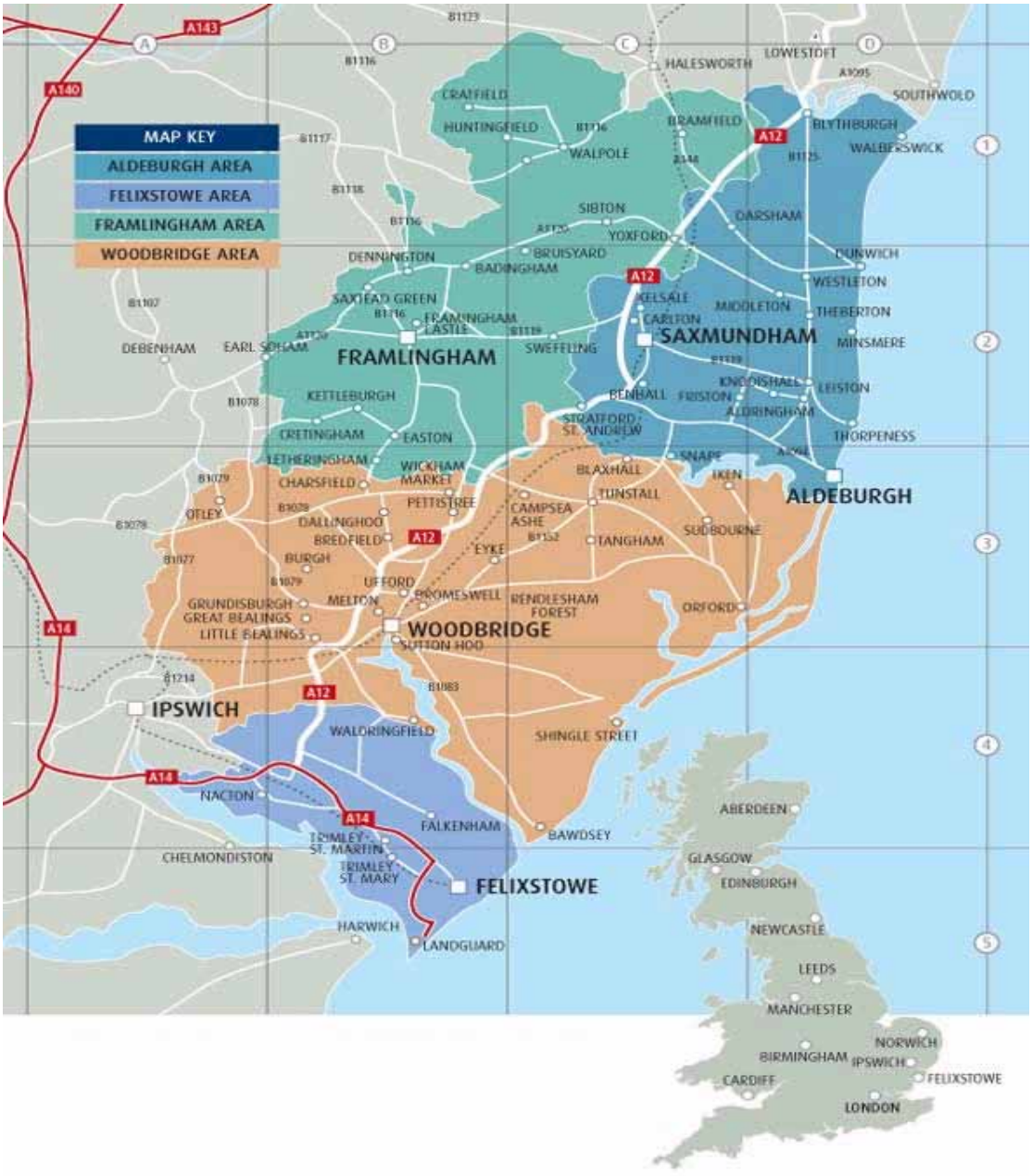
CHAPTER TWO

2.0 CHARACTERISTICS OF SUFFOLK COASTAL DISTRICT COUNCIL.

2.1 GEOGRAPHICAL LOCATION.

Suffolk Coastal District Council is located in Suffolk on the East Coast of Britain, to the northeast of Ipswich, the County town and covers an area of 88,938 hectares. Its principal towns, Felixstowe and Woodbridge are both situated in the south of the district while to the north lies countryside bisected by a series of river valleys which broaden into estuaries as they near the coast.

Figure 1. Map of Suffolk Coastal.



2.2 POPULATION DISTRIBUTION.

The population estimate of SCDC as of 2001 is 121,200. The distribution in parishes is as shown in Box 4. The area boundaries are shown in figure 2 (Appendix B).

Box 4 Population Distribution in Parishes.

Parish	Population
1) Felixstowe district (Trimley St.Mary/Martin etc)	32,500
2) Southwest district (Kesgrave, Rushmere St.Andrew etc)	26,910
3) Woodbridge district (Wickham market etc)	14,430
4) Orford district (Hollesley, Sutton etc)	9,920
5) Framlingham district (Dennington etc)	6,800
6) Aldeburgh district (Leiston, Saxmundham etc)	12,190
7) The North district (Wenhaston, Yoxford etc)	6,300

2.3 CURRENT LAND USE CHARACTER.

SCDC is predominantly rural and land use other than for residential use is predominantly for agriculture/horticulture.

Current industrial activities include manufacturing, engineering, power generation (Sizewell Nuclear Power station in Leiston), and shipping (import and export) in Felixstowe, Britain's largest container port.

2.4 PROTECTED LOCATIONS

The biodiversity of the district is one of its major natural assets. Also, large sectors of the District have been recognised nationally for their landscape quality.

Suffolk Coastal enjoys the following designations:

- About one third of the district has been designated by the Countryside Commission as an Area of Outstanding Natural Beauty (AONB).

- Three National Nature Reserves (NNR), namely Walberswick NNR, Westleton NNR and Orfordness to Havergate NNR, declared by the Nature Conservancy Council under the Wildlife and Countryside Act, 1981.

- Four Special Protection Area (SPAs) and one potential SPA, under the Birds Directive, for breeding and migrating birds: Stour- Orwell Estuaries SPA, Deben Estuary SPA, Alde-Ore Estuary SPA, Minsmere-Walberswick SPA and Sandlings pSPA.

- Four sites under the RAMSAR Convention on Wetlands of International Importance: Stour-Orwell Estuary, Deben Estuary, Alde-Ore Estuary SPA, Minsmere-Walberswick.

- Four Special Areas of Conservation (SAC), under the Habitat Directive: Alde-Ore and Butley SAC, Minsmere-Walberswick SAC, Orford-Shingle Street SAC and Dews Pond potential SAC.

- At least 56 Sites of Special Scientific Interest (SSSI) designated under the provision of the Wildlife and Countryside Act, 1981 by English Nature for their flora, fauna, geological and physiographical features.

- About 120 archaeological sites of national importance designated by English Heritage as a Scheduled Ancient Monument (SAM) under the Ancient Monuments and Archaeological Areas Act, 1979.

In addition to the sites which have statutory protection (SSSI, SAC, NNR) there are other Local Nature Reserves (LNR) which are non-statutory. These sites include the Landguard Peninsula (Felixstowe), and the Haven (Aldeburgh).

2.5 KEY PROPERTY TYPES

As well as its rich natural environment, the District also has important historic built environment with about 4,114 listed building and ancient monuments designated under the Ancient Monuments and Archaeological Areas Act, 1979.

2.6 KEY WATER RESOURCE/PROTECTION ISSUES.

Anglian Water and Essex and Suffolk Water Companies supply the majority of the District's drinking water and there are a number of Public water supply boreholes in the district. Also, there are also about 538 private water supplies in the area covered by the Private Water Supplies Regulation, 1991.

2.7 KNOWN INFORMATION ON CONTAMINATION.

SCDC holds some information on contamination in the District primarily submitted as part of the development control process. If development is proposed on an area of land where past use may have resulted in contamination, the Council will usually request a site investigation as part of a planning condition. If development proceeds on these sites, remedial work will often have to be carried out to improve the site

condition. Planning records will therefore form a valuable resource during the investigation process.

2.8 PAST INDUSTRIAL HISTORY

Apart from agricultural activities, past industrial activities included Gas works, Shipping, Ship repair and maintenance, Foundry and Engineering works, which supported the rail and farming industry.

2.9 HYDROGEOLOGICAL CHARACTERISTICS

Suffolk Coastal lies on the northern edge of the London Plateau of the Late Palaeozoic and is underlain by chalk of Cretaceous Period. The chalk is overlain by Tertiary and Quaternary deposits including London Clay and Crag. Boulder Clay with glacial sand and gravel in the river valley predominantly overlies the Solid geology. The strata that appear in the district are of the Jurassic System i.e. a series of clays and limestone, and are inclined at an angle towards the Southeast.

The Cretaceous chalk forms the main aquifer in the area. It comprises of pure, fine - grained, high porosity limestone with the presence of fissures giving high secondary porosity. Beneath the chalk, groundwater is also present in the lower Greensand of the lower Cretaceous, comprising highly permeable loosely cemented sandstone with local Clay beds. The Crag sands and unconsolidated chalky clay, sand silt deposits overlying the chalk are generally considered to be in hydraulic continuity with the chalk. These can act as local sources of water supply though they are prone to drop in yield during drought. Since they are in continuity with the chalk, they act as a means of surface water to percolate deep in the chalk.

Groundwater in the district is of a high quality and constitutes the majority of the water used for public and private supplies. The National Rivers Authority Groundwater Vulnerability Map provides information on the water beneath the land in the district. This indicates that there is a major aquifer of high vulnerability running through the district from the Northwest (Dennington, Framlingham) through to the Southwest (Grundisburgh, Tuddenham). The remainder of the district is classified as having a minor aquifer but with high vulnerability. Protection of this high quality groundwater from contamination is therefore a major objective of this strategy.

CHAPTER THREE

3.0 THE SCDC STRATEGY: OVERALL AIM.

A detailed breakdown of how the Council will meet its objectives is given in this Section.

3.1 PRIORITIES

A lot of complex issues normally come to light when dealing with contaminated land especially where limited amount of information is available. For each site, the importance of these issues must be balanced in order to move forward in dealing with the problem. A prioritised list of the Council's aim has therefore been devised to aid in decision making and is as given in Box 5 below.

Box 5: The Council's Priority in Dealing with Contaminated Land are:

1) To protect human health
2) To protect controlled waters (e.g. public & private water supplies)
3) To protect designated ecosystem
4) To prevent damage to property
5) To prevent any further contamination of land
6) To encourage re-use of brown field land.

This list is presented in priority order and in all cases will have regard to significance and likelihood as required by the regulation.

3.2 WORK PROGRAMME.

The inspection process has been broken down into a series of stages, which are described in the work programme and as illustrated in figure 3 (Appendix D)

STAGE 1 ORDNANCE SURVEY MAPS.

To begin the process of investigation, the Council has obtained sets of historic Ordnance Survey Maps for different time periods. Also obtained from the County Records Office are sets of historic land use maps of the district drawn up in 1975 after a general survey of the District.

The historic Land Use Maps and the Ordnance Survey Maps by interpretation allow for the identification of potentially contaminated land in accordance with government guidance.

It should be emphasised that only a small proportion of potentially contaminated land will meet the strict definition of Contaminated land. Due to the past use of the land, many of these sites will contain substances in, on, or under the ground, which have the potential to cause harm. However, in order to be designated as a Contaminated land, these sites must have both a pathway by which significant harm may be caused and a receptor on which significant harm can be afflicted. If either the pathway or the receptor is missing from the pollutant linkage, the site may be land in a contaminative state but cannot be designated as contaminated land.

STAGE 2 CONSULTATION

The historical maps available to us may not identify all potentially contaminated sites. It is possible that an area of land might be used for a high-risk contaminative activity (e.g. waste disposal) without ever being recorded on a map. Local consultation therefore will play a major role in identifying the gaps in these maps.

To this end, all parish councils as well as statutory consultees were consulted during the consultation exercise. All were invited to comment on the strategy and valuable comments taken into account in this final copy.

The draft consultation document was also published on the Council's website to enable interested members of the public to comment on the report and also come forward with information on past land use as we progress in the identification process.

STAGE 3 PUBLISH FINAL INSPECTION STRATEGY

Following the smooth running of the consultation exercise, the strategy was finalised in May 2001 and submitted to the Housing and Environment Committee for approval after which it was submitted to the DETR (now DEFRA) through the Environment Agency.

STAGE 4 DEALING WITH URGENT SITES

If during the town-by-town investigation there are any verifiable reports of sites causing significant harm, the general approach to inspection will be secondary to dealing with such sites. If there is a critical need, investigative work may need to begin before completion of the identification process. This stage may include declaring some “Special Sites” and passing the lead regulatory role to the Environment Agency.

STAGE 5 GENERAL APPROACH TO INSPECTION

The Council’s two main priorities in dealing with contaminated land are to protect human health, and public/ private water supplies as clearly stated in section 3.1 (Box 5). Land within the District therefore will be inspected in order of population density

and location of public and private water supplies. This is because, the largest Parishes and areas with water supply locations will have the highest number of receptors (humans and water respectively) and therefore at the highest risk of having all three elements of a pollutant linkage (source, pathway, receptor) of an area of Contaminated land.

Box 4 (Section 2.2) gives the population distribution of the district in parishes. This will be relied on during the inspection, implying that the three largest areas - Felixstowe district (The Trimleys etc), Southwest district (Kesgrave, Rushmere St. Andrew etc) and Woodbridge district (Wickham Mkt. etc) will be inspected first followed by the districts many other Parishes and smaller settlements prioritised on the basis of population and location of private water supplies. Priority will also be given to known contaminated sites.

STAGE 6 COUNCIL OWNED LAND

The District Council has limited land holding in the district. There are other areas of land within the District that the Council or its predecessor has owned at some stage in the past where potentially contaminative activities (e.g. waste disposal) may have occurred. Based on the population and private/public water supply location approach to investigation, it is appropriate that these types of sites are subjected to investigation (and if necessary, remediation) as a priority. This is in line with the Council's general approach to "putting its own house in order" before expecting others to follow suit.

STAGE 7 LOCAL PLAN

As the planning authority of the area, the Council must draw up a Local Plan specifying which areas of land should be used for which type of development. It is logical to undertake investigation of any proposed Local Plan allocations as a priority within the general population based approach to Contaminated land investigation. This land will therefore be specifically considered as each town is investigated.

STAGE 8 THREAT TO CONTROLLED WATERS, PROTECTED AREAS OF THE ENVIRONMENT AND BUILDINGS

It is anticipated that the investigation of Parishes and towns will bring to light information that would reveal any imminent threat to controlled waters or protected area of the environment by contaminated land. If the evidence demonstrates a need for urgent action, this will be taken as soon as practicable alongside the program of town- by- town inspection. If however the evidence is not conclusive, then these areas will be included in a specific investigation of such threats, to be taken once the investigation of the parishes and towns is complete.

STAGE 9 FINAL PRIORITISATION

The Regulations require the remediation of Contaminated sites to be prioritised. This prioritisation can only take place once all sites have been identified and this will therefore occur at the end of the investigation stage. A detailed risk assessment will aid the prioritisation exercise and may involve the use of risk assessment packages such as CLEA, SNIFFER and other appropriate packages that may be identified.

CHAPTER FOUR

4.0 PROCEDURE

A detailed procedure of how Contaminated land issues will be handled within the Council is described in this section and as illustrated in figure 4 (Appendix E). It also contains details of the level of services the business community and members of the public can expect from the Council in dealing with these issues.

4.1 ARRANGEMENT FOR INSPECTION AND IDENTIFICATION.

Within SCDC, the Environmental Protection Division has responsibility for the implementation of Part IIA of EPA, 1990. As part of this division, the Environment Officer (Contaminated Land) is the lead officer on Contaminated land.

The Environment Officer will deal with the day-to-day implementation of the strategy. The Environment Officer will also be responsible for serving remediation notices, subject to consultation with the Council's Solicitor. Elected members will be informed at the earliest opportunity of any plans to designate an area of Council owned land, or land where the Council is the "appropriate" person and may be liable for remediation cost.

4.2 INFORMATION COLLECTION

A lot of information will be required to identify potential sources of contamination and potential receptors. The information will be gathered from different sources, some of which are detailed in Appendix F. The Environment Agency may also be able to provide information to the Local Authority on "Specific Sites" to assist in the determination of whether or not the land is Contaminated Land.

4.3 INFORMATION MANAGEMENT

The Council's Geographic Information System (GIS) will be the primary tool used to manage contaminated land information. This system will be used to correlate information and determine the proximity of potential receptors (residents, controlled waters) to sources of contamination. The GIS will be linked to an Access database, which will allow statistical information to be drawn together for reporting and comparison.

4.4 RISK ASSESSMENT

All information on substances in, on or under the ground that may cause significant harm or pollution will be evaluated in accordance with current government guidelines. The Contaminated Land Exposure Assessment (CLEA) model gives Soil Guideline values (SGV) for a range of contaminants and will be used as a key reference

document. Risk Assessments may also be required for substances not covered by the CLEA model. In this case, reference may be made other relevant documents such as the Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) framework (2000) or any other risk assessment tool.

If Controlled Waters are the receptor in a particular pollutant linkage, the advice of the Environment Agency will be sought on Risk Assessment. It is anticipated that risk assessment and remediation will be carried out in accordance with the Environment Agency guidelines as laid down in "Methodology for the Derivation of Remedial Targets for soil and Groundwater to Protect water Resources" (EA R&D Publication 20,1999).

4.5 INTERACTION WITH OTHER REGULATORY REGIMES.

A number of existing Acts and Regulations, as well as common law, give rise to legal remedies in respect of Contaminated land. Of these, the Town and Country Planning Act, the Water Resources Act, and the Integrated Pollution Prevention and Control (IPPC) legislation are considered the most important and are addressed here. Any issue of land contamination that may have been dealt with previously under the Statutory Nuisance regime will now be dealt with under Part IIA regime.

4.5.1 PLANNING

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

The Council's Pollution Control team currently works closely with the Development and Building Control section on all issues relating to pollution and the current arrangement for intersectional consultation is believed sufficiently robust to encompass Contaminated land issues.

4.5.2 WATER POLLUTION

The Environment Agency has powers under the Water Resources Act, 1991 to deal with harm to controlled waters being caused by Contaminated Land. While Part IIA does not revoke these powers, the DETR have indicated that such problems should now be dealt with under the new Contaminated Land regime. In line with this therefore, the Council will consult with the Environment Agency before designating any Contaminated land as a result of risk to controlled waters and will take into account any comments made with respect to remediation. If the EA identifies a risk to controlled waters from land contamination, the Council will be notified to enable designation of the land and remedial action will be taken under Part IIA. It may be

worth noting that the Water Resources Act powers are still useful where there is historic pollution of groundwater, but where Part IIA does not apply.

4.5.3 INTEGRATED POLLUTION PREVENTION AND CONTROL (IPPC).

Under the legislation to regulate pollution from industrial processes, site operators are required to undertake a site condition survey prior to receiving a licence to operate. If the site condition is such that areas of land meet the definition of Contaminated land, the submission of a site survey may trigger action under Part IIA. Existing processes will be brought under this legislation in stages over the next seven years, although it will apply to new processes or any substantial change to an existing process. Where an IPPC site is designated as Contaminated Land, the site would become a "Special Site" for which the EA would be the enforcing authority.

4.6 RADIOACTIVITY

Section 78YC of the 1990 Act extended Part IIA to include radioactive contaminated sites. The objective is to provide a system for the identification and remediation of land where contamination is causing lasting exposure of radiation to human beings and where “intervention” is liable to be “justified”. This includes the “polluter pays” principle and the “suitable for use” approach. The extension of Part IIA to include radioactivity only applies to harm to human health, and not in respect to other receptors or pollution of controlled waters. The EA have advised that there is no evidence of a widespread risk to protected ecosystem or of pollution from past activities impacting on animals or crops and the govt does not consider that there is a need for regulation to address other receptors. Water will only be treated as a pathway and not a receptor. The scope of the extension of part IIA regime is largely determined by Title IX of the Basic Safety Standards (BSS) Directive 96/29/Euratom, which is concerned with intervention.

That is to say that:

- It provides for the identification and remediation of radioactive contaminated land, which is causing lasting exposure of radiation to human beings.

- It applies only to radioactivity arising from the after-effects of a radiological emergency and substances, which has been processed as part of a past practice or past work activity. This includes substances containing artificial radionuclides or processed natural radionuclides. It is applicable to current practices but natural background radiation is excluded.

- It doses not apply to Radon gas and its short lived decay products which are only a matter of concern to buildings for which other health policy exist.

- It does not apply to radioactive contamination where operator of a nuclear installation is liable under the Nuclear Installation Act 1965

- It will, however, apply to Ministry of Defence sites if they are not nuclear licensed sites. Non-radioactive contamination on nuclear licensed sites may be covered by the general contaminated land regime.

4.7 MINISTRY OF DEFENCE SITES

The Environment Agency will deal with any contaminated land at Ministry of Defence (MOD) estate. These include, any contaminated land at current military, naval and airforce bases and other properties, including those of visiting forces and the Atomic Weapons Establishments. However, excluded from the Agency control are off-base housing or off- base NAAFI premises and property disposed of to civil ownership or occupation. Regulation 2(1) (g) describes land formerly used for the manufacture, production or disposal of chemical and biological weapons and related materials, regardless of current ownership. In all these cases, the Environment Agency will deal with contamination arising from such sites in liaison with the Ministry of Defence and the armed forces.

CHAPTER FIVE

5.0 LIAISON AND COMMUNICATION

5.1 STATUTORY AND NON - STATUTORY CONSULTEES

Much of the work proposed in this strategy will be collaborative and will require effective liaison with other bodies. Contacts have already been established with officers of all statutory consultees (see Appendix E) and each organisation was invited to comment on the consultation draft of this strategy.

There is great scope for members of the public, businesses and voluntary organisations to play an important role in dealing with Contaminated land in the district. The consultation exercise undertaken with Parish Councils has already been described in Chapter 3. Efforts will be made to encourage participation in the process of identifying and investigating Contaminated land, in recognition of the valuable contribution of these sectors.

5.2 LIAISON WITH OWNERS AND OCCUPIERS OF LAND

The approach to identifying Contaminated land means that the Council will need to visit and carry out detailed inspection for only a small proportion of the land within the district. This is land where the earlier stages of study suggest the possibility of contamination. Further investigation will be prioritised as already stated and may include collation and assessment of documentary information, a visit to the particular area and sampling of the land.

The reasons why the council may need to liase with owners and occupiers of land are as follows:

- To carry out a walkover Survey: This will allow a check of current receptors and, in some cases, may be sufficient for the Council to decide that land should not be identified as Contaminated land (and in some circumstances may be sufficient to decide that land should be identified as Contaminated land). In some cases the survey might include limited sampling e.g. surface deposits

- To request information that the owner or occupier may have relevant to the council's further assessment. This could be historical information or previous studies (e.g. desk studies or ground investigations) and its availability may avoid the need for the Council to undertake independent ground investigation. Alternatively, the owner may offer to provide information on the condition of the land within a reasonable and specified time scale;

- To agree access and timing for the Council or its agent to carry out a ground investigation or take samples where necessary. In some circumstances an authorised person can ask other persons questions which they are obliged to answer and make copies of written or electronic records

- To respond to enquiries from interested parties.

In each case, the purpose in liasing with owners and occupiers will be to assist the Council in obtaining sufficient information to make a determination on whether land appears to the Council to be Contaminated (as defined).

Where a formal designation of Contaminated land is required following detailed investigation and assessment, the following actions will be taken.

The Council will:

- Write to the owner or the occupier of the land at least 5 working days prior to designation, explaining in summary the reason for designation

- Write to the owner or the occupier explaining that the land has been designated as Contaminated Land and seeking appropriate remediation without service of a notice

- If requested, despatch a copy of the written risk assessment to the owner or occupier of the land within 5 working days of receipt of a request

- Write to the owner or occupier of neighbouring properties and or the complainant within 5 working days of designation.

Where the owner or occupier is identified as the "appropriate person", the Council's general approach will be to seek to reach voluntary agreement for remediation. However, where negotiations are not successful and warning letters have not resulted in agreement, the Council will issue a Remediation Notice in accordance with its statutory duty, taking account of statutory guidance on the liability apportionment and cost recovery issues.

5.3 RISK COMMUNICATION

Due to the complex nature of Contaminated land, it may not be easily understood by a layperson. Development of effective risk communication methods is therefore essential. The Council will treat any concern raised by a member of the public seriously and with respect, recognising the importance of the issue to the individual. In all instances, the Council will recognise and try to overcome the critical barriers to effective risk communication.

5.4 THE PUBLIC REGISTER

The Council has a duty under Section 78R of the Act to maintain a register of Contaminated land. The Environmental Protection section at the Council's office in Woodbridge will hold this register which is open to the public. The register will contain:

- Details of remediation notices
- Location and extent of Contaminated land to which the notice relates
- Details of sites reports obtained by the authority relating to remediation notices
- Remediation declarations, remediation statements and notifications of claimed remediation
- Designation of sites as “special sites”
- Any appeals lodged against remediation and charging notices
- Convictions under Section 78M

The public register will not include details of historic land use and other historic records used in the investigation of potentially contaminated land. These are research documents and as such will not be made available to the public.

5.5 PROVISION OF INFORMATION TO THE ENVIRONMENT AGENCY

As required by the Regulation, Local Authorities are required to provide information to the EA to enable it prepare an annual report for the Secretary of State on the state of contaminated land in England and Wales. The EA report is expected to contain a summary of local authority inspection strategies, the amount of Contaminated land, the nature of contamination, and measures taken to remediate land.

Although local authorities are the lead regulators on Contaminated land, the EA also regulates some categories of sites relying on information provided by the Local Authorities. To facilitate information exchange, a memorandum of understanding (MOU) has been drawn up between the EA and the Local Government Association that describes how information will be exchanged between the Local Authority and the Environment Agency. As required by the MOU local Authorities are to inform the EA whenever a site is designated as Contaminated land, a remediation is agreed and, or Notice is served. SCDC is committed to this requirement and will ensure that adequate information is provided to the Environment Agency.

CHAPTER SIX

6.0 REVIEW AND UPDATE PROCEDURES

This Strategy will be reviewed periodically to ensure that it remains efficient and effective in the application of resources to the identification and remediation of Contaminated land. Review of the Strategy will seek to ensure that the approach taken remains consistent with current best practice. The timing of the review may be influenced by any revision of the legislation and or Statutory Guidance issued under Part IIA of EPA, 1990.

6.1 TRIGGER FOR UNDERTAKING INSPECTION

As already stated in Chapter 3, there may be occasions where inspections may have to be carried out outside the general inspection framework. This include:

- Change in the land use (the introduction of new receptors) e.g. if housing is to be built on a potentially contaminated site, designation of a new protected ecosystem, persistent trespass on an industrial site by young people or because of reported health effects apparently associated with the land

- Unplanned events e.g. if an incident such as a spill has occurred or in response to information from other statutory bodies, owners, occupiers and other interested parties.

6.2 TRIGGER FOR REVIEWING INSPECTION DECISIONS

Review of the assumptions made at some stage of the assessment process may be necessary under the following circumstances:

- When there has been a significant change in the understanding of the behaviour of potential pollutants

- When there is a significant change in legislation

- Establishment of significant case law and other precedent

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

As already stated, this strategy will be constantly reviewed and periodically updated for reason of efficiency. Where any new information is expected to have potential implications for human health, this will be “fast-tracked” and the implications examined as a priority.

REFERENCES

1. Contaminated Land Inspection Strategies, Technical Advice for Local Authorities, DETR April 2000.

2. Communicating Understanding of Contaminated Land Risks. SNIFFER 2000.

3. Chatwin C.P (1961): British Regional Geology, East Anglia and Adjoining Areas. HMSO 1961.

4. Department of Environment, Transport and the Regions Circular 02/2000, Environmental Protection Act 1990: Part IIA Contaminated Land, HMSO 2000.

5. Department of Environment, Food and Rural Affairs 01/2006: Environmental Protection Act 1990: Part IIA Contaminated Land, HMSO 2006.

6. Environment Act 1995, HMSO 1995

6. Environmental Protection, England. The Contaminated Land (England) Regulation 2000 (SI 2000/227), HMSO 2000.

7. Interdepartmental Committee on the Redevelopment of Contaminated Land. ICRCL Guidance Note 59/83 HMSO 1987.

8. National Rivers Authority: Groundwater Vulnerability 1:100,000 Map series Sheet 33 (East Suffolk).

9. Nathaniel C.P (1999). Introduction to Contaminated Land Management. Monitor Press 1999.

10. Suffolk Coastal Local Plan 1994-2001.

APPENDICES

APPENDIX A TYPES OF RECEPTORS

1) Human beings.

2) Ecological systems or living organisms forming part of a system within a certain protected location, including:

- Sites of Special Scientific Interest (SSSI)
- National Nature Reserve
- Special Areas of Conservation (SACs)
- Special Protected Areas (SPAs)
- Candidate Special Area of Conservation (SACs)
- Areas of special protection for birds.

3) Property in the form of buildings, including

- Ancient monuments

4) Property in the form of

- Crops
- Livestock
- Home grown produce
- Owned or domesticated animals
- Wild animals which are subject of shooting or fishing rights

5) Controlled waters

- Surface waters, e.g. rivers, lakes, streams
- Drinking water abstractions
- Source protection zones
- Groundwater – private abstractions
- Groundwater – major aquifers

APPENDIX C

GLOSSARY OF TERMS

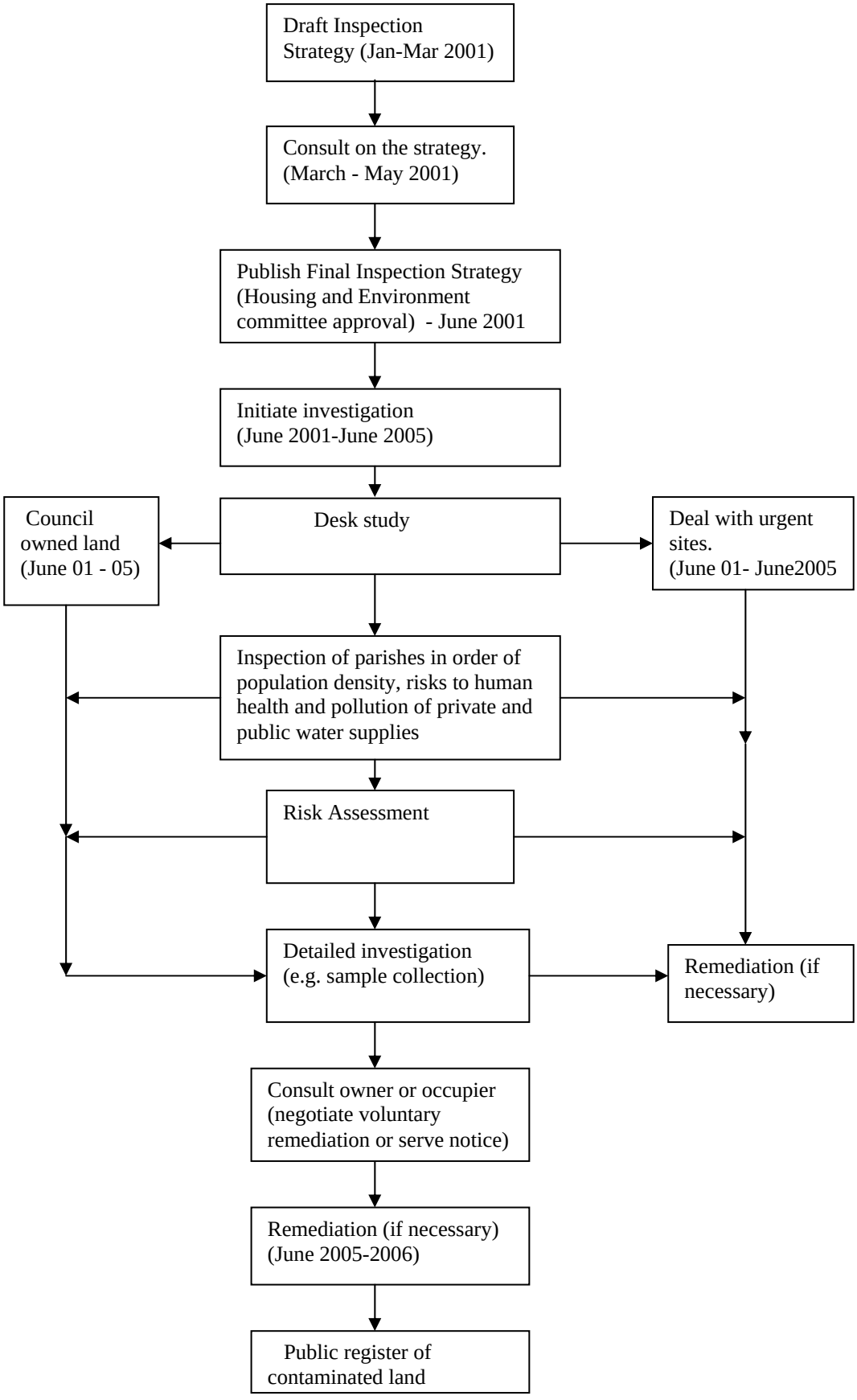
This Strategy contain a number of terms which are defined in Part 11A of the 1990 Act, other Acts or in the statutory guidance. The meanings of the most important terms are set out below.

AONB.	Area of outstanding Natural Beauty.
Appropriate person	Any person who is an appropriate person determined to bear responsibility for any thing, which is to be done by way of remediation in any particular case.
Brownfield site	A site that has been generally abandoned or underused where redevelopment is complicated by actual or perceived environmental contamination. Only a small proportion of brownfield sites will meet the definition of contaminated land
"Class A" person	A person who is an appropriate person because he has caused or knowing permitted a pollutant to be in, on or under the land.
"Class B" Person	A person who is an appropriate person because he is the owner or occupier of the land in circumstances where no class A person can be found with respect to a particular remediation action.
CLEA.	Contaminated Land Exposure Assessment, a methodology for carrying out a risk assessment.
Contaminated Land	Land that contains substances which when present in sufficient quantities or concentrations, are likely to cause harm, directly or indirectly, to man, to the environment, or on occasion to other targets.
Controlled Waters	These include

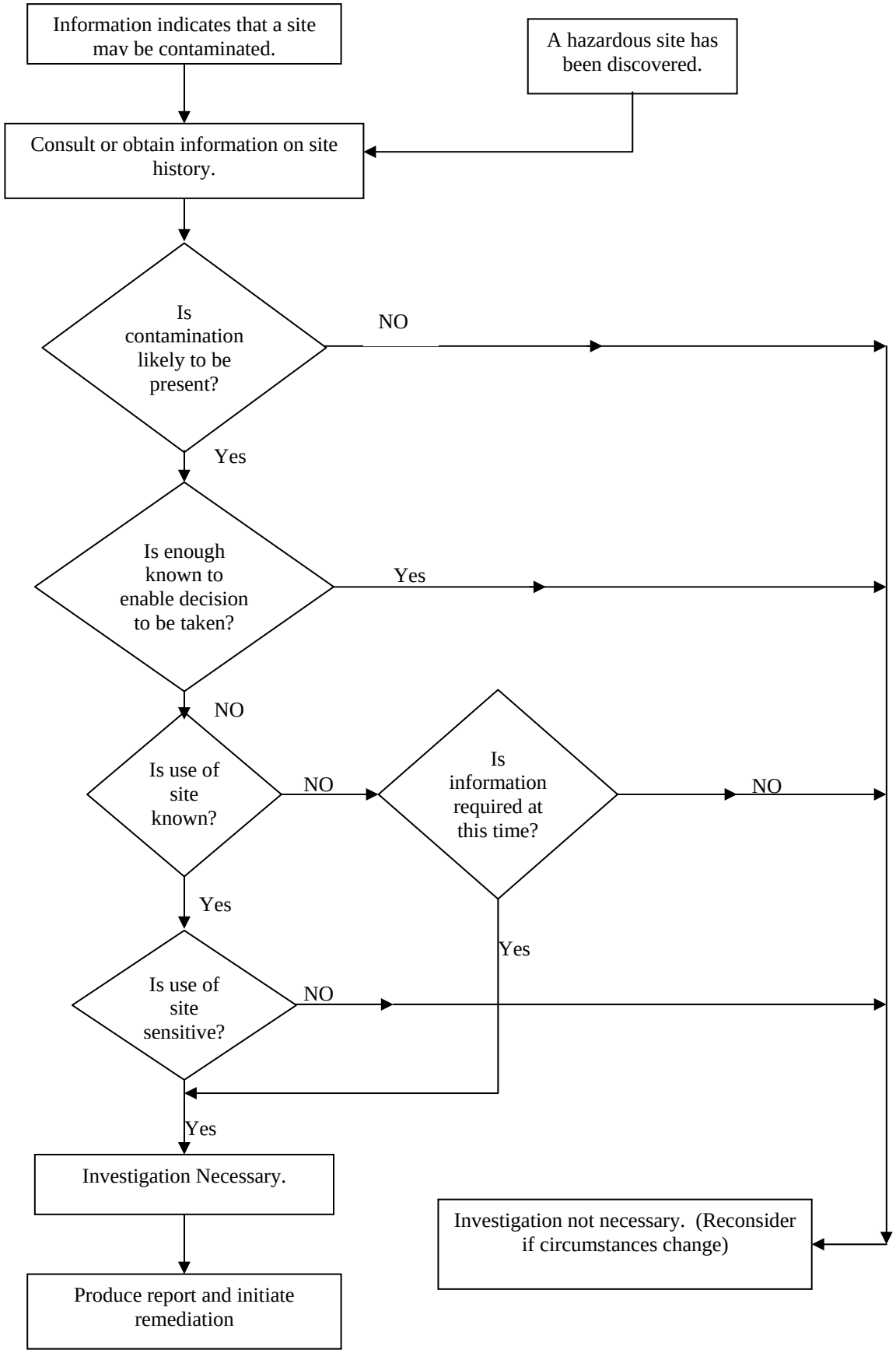
	a) inland waters (rivers, streams, underground streams, canals, lakes and reservoirs b) groundwaters (any water contained in underground strata, wells or bore holes) c) territorial waters (the sea within three miles of a baseline d) coastal waters (the sea within the base line up to the line of highest tide, any tidal waters up to the fresh water limit
DETR.	Department of Environment Transport and the Regions.
DEFRA	Department of Environment, Food and Rural Affairs
EA.	Environment Agency
Ecosystem	A biological system of interacting organisms
GIS	Geographical information system
Groundwater	Any water contained in underground strata and borehole
ICRCL.	Interdepartmental Committee on Redevelopment of Contaminated Land.
MAFF	Ministry of Agriculture, fisheries and food.
NNR.	National Nature Reserve.
Pathway.	One or more route by which a receptor can be exposed to a contaminant.
Pollutant linkage	The relationship between a contaminant, a pathway and a receptor
Ramsar site	A site protected under the international convention on the protection of wetlands of international importance, especially as habitats for waterfowl, named after the city in Iran where the agreement was signed.

Receptor.	Sometimes referred to as a "target" – the health of a person, water, ecosystem or property type that could be affected by contamination.
Remediation	Generally accepted as being the carrying out of works to prevent or minimise the effects of contamination. In the case of this regulation the term also encompasses assessment of the condition of land, and subsequent monitoring of the land.
Risk assessment	The study of: a) the probability, or frequency, of a hazard occurring and b) the magnitude of the consequences
SAC	Special Area of Conservation
Sources	A substance in, on or under the ground with the ability to cause harm.
Source Protection zone	Protection zones around certain sources of groundwater used for public water supply. Within these zones, certain activities and processes are prohibited or restricted.
SPA	Special Protection Area for birds.
Special Sites	Any contaminated land designated due to the presence of: • Waste acid tar lagoon • Oil refining • Explosives • Integrated pollution control sites • Nuclear sites
SSSI	Sites of Special Scientific Interest

FIGURE 3 APPENDIX D WORK PROGRAMME



APPENDIX E FIGURE 4 WORK PROCEDURE



APPENDIX F SOURCES OF INFORMATION

RESOURCE	DISTRICT SPECIFIC	USE
Historic map	Maps purchased from Ordnance survey.	To identify sources
Historic Land use Maps.	Identifying potentially contaminative land use.	To identify sources.
Hydrogeological Maps.	1:50 000 solid and drift geological maps will be purchased from the British Geological society.	To characterise sources and pathway.
Soil Maps	The Groundwater Vulnerability map (sheet number 33) produced by the National Rivers Authority and the Soil and Land Research Centre in 1993 will be used to assess the potential for contamination of groundwater.	To identity receptors (controlled waters)
Soil Maps	A soil map of the South East will be purchased from the Soil Survey and Land Research Centre	To characterise sources and pathway
Pollution Control Records	The District Council maintains records of complaints and investigations	To identify known information on contamination
Planning Records	The District council holds detailed planning records of development in the area, including information on ground condition presented in survey	To identify known information on contamination
District Local Plan	The Council has rolled forward its Local Plan for up to 2006 and is a valuable source of up to date information on land use	To identify receptors(particularly historic monuments and protected areas of the environment)
Integrated Pollution Control	The Council has a register of authorised industrial processes in the District.	To identify sources of contamination

Waste Management Licences	The Environment Agency maintain a public register of sites licensed for waste management activities and have provided relevant information relating to sites in the district. Note that any contamination resulting from an existing Waste Management Licence would normally be dealt with as a breach in this licence rather than under Part IIA.	To identify sources of contamination
Register of Closed Landfill Sites	The Environment Agency has provided a list of closed landfill sites in the district.	To identify sources of contamination

APPENDIX G.

DETAILS OF STAUTORY CONSULTATION CONTACTS.

AREA CONTAMINATED LAND OFFICER
ENVIRONMENT AGENCY
COBHAM ROAD, IPSWICH
IP3 9JE.

SITES AND MONUMENTS RECORD OFFICER
(ARCHEOLOGICAL SERVICES)
SUFFOLK COUNTY COUNCIL
SHIRE HILL
BURY St. EDMUNDS SUFFOLK
IP33 2AR

THE CONSERVATION OFFICER
ENGLISH NATURE
SUFFOLK TEAM
REGENT HOUSE
110 NORTHGATE STREET
BURY ST EDMUNDS, SUFFOLK
IP 33 1HP

THE DIVISIONAL VETERINARY MANAGER
MAFF
100 SOUTHGATE STREET
BURY ST EDMUND
SFFOLK IP33 2BD

CONTAMINANT DIVISION
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125 KINGSWAY
LONDON WC2B 6NH