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#### **EXECUTIVE SUMMARY**

Under the Contaminated land provisions contained in Part IIA of the Environmental Protection Act 1990; every 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 produced detailing how the Authority will take a rational, ordered and efficient approach to this inspection. Where contaminated land is identified, the council is required to ensure that any associated risks to human health or to the wider environment are addressed in an appropriate and cost effective manner.

The Regulation sets clear criteria that must be met before land can formally be designated as Contaminated Land and also provides for the maintenance of 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.

This strategy sets out how Suffolk Coastal District Council (SCDC) intends to go about its duties as required by the legislation. It replaces the maiden strategy published in 2001 (updated in 2004, 2007 & 2009). The document describes the key principles of the contaminated land legislation and outlines the steps taken by the council in identifying potential contaminated sites in the district and how the sites are categorized for detailed inspection. It also contains the various steps that can be used in determining Contaminated Land and establishing liability for remediation. The Council recognises that this strategy for the identification of contaminated land is in essence a probabilistic approach. Whilst it is not the aim of this exercise to prove the status of every piece of land in the district, it is rather to identify all contaminated land in the district in a logical, robust and defensible approach in which effort is proportional to risk and priorities set appropriately.

#### **CHAPTER ONE**

#### **1.0 INTRODUCTION.**

Land contamination is primarily a legacy of our industrial heritage. Contamination occurred through accidental or deliberate disposal of chemicals, household or industrial waste and by historical adherence to standards and/or practices that are no longer believed to be sufficient to protect the environment and human health. Although there is now a greater understanding of the environmental impact of pollution, land is still being contaminated as a result of anthropogenic activities. Therefore, it is important to acknowledge that this represents an ongoing threat to human health and the environment rather than just a legacy.

Part IIA of the Environmental Protection Act (EPA), 1990 (inserted by Section 57 of the Environment Act, 1995) which came into force in April 1, 2000 together with the Contaminated Land (England) Regulations 2000 made under the 1990 Act provides a regulatory framework for the identification, determination and remediation of contaminated land. This regulatory framework which is essentially based on sustainable development (development we undertake in order to meet our needs without compromising the ability of future generations to meet their needs) has two main objectives. First, to prevent future contamination from taking place and second, to deal with the legacy of past contamination.

#### 1.1 DEFINITION OF CONTAMINATED LAND

Contaminated Land can be defined as land which by virtue of substances in, on or under it, is likely to cause harm directly or indirectly to man, the environment or on occasions to other targets. A statutory definition of contaminated land is given in Section 78A(2), Part IIA of the EPA1990 based on the likelihood of significant harm or the pollution of controlled waters as follows:

Sec 78A(2): Any land, which appears to the local authority in whose area it is situated to be in such a condition by reason of substances in, on or under the land that:

- (a) significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being 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 when determining:

(a) what harm or pollution of controlled water is to be regarded as "significant", and(b) whether the possibility of significant harm or of significant pollution of controlled waters being caused is "significant".

In relation to Radioactivity contaminated land, section 78A(5) *as modified* requires the regulatory authority to act in accordance with the guidance issued by the Secretary of State when determining:

(a) Whether harm is being caused, and

(b) Whether the possibility of harm being caused is "significant".

#### **1.2 AIMS AND OBJECTIVES**

The aim of this strategy is to set out how Suffolk Coastal District Council (SCDC) intends to implement its responsibilities under Part IIA of the EPA 1990 in accordance with statutory guidance. The statutory guidance requires all Local Authorities to take a strategic approach in inspecting land in its area for contamination. 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.

The main objectives of the inspection strategy are:

- to meet the statutory obligation placed on the Council to produce a written strategy under Part IIA
- to provide a strategic framework which the Council will use to identify; inspect and determine contaminated land, and describe the measures that may be taken to remediate such land.
- to describe how the council will prioritise and categorise sites
- to inform the public, and improve communication with stakeholders of the Council's intentions in relation to contaminated land.
- to ensure that the council's corporate priorities and ambitions are achieved by adopting this strategy, in particular valuing our environment and revitalising our communities, by removing unacceptable risks to human health and the environment.

This strategy has been developed in line with these objectives with particular reference to the Contaminated Land Inspection Strategies – Technical Advice for Local Authorities" issued by the Department for Environment, Food and Rural Affairs (DEFRA). Also it has been developed to reflect local circumstances. Local factors considered in the strategy include:

- The distribution of specified receptors across the district (e.g. housing, ecological receptors) and the extent 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.

#### 1.3 **CONSULTATION ON THIS STRATEGY**

In preparing the maiden strategy in 2000/01, the following were consulted:

- Internal departments within SCDC, namely within Environmental Services (Pollution Control, Food & Safety, property services, and contract services).
- Planning and Leisure (Building Control, Planning, Leisure Services and Engineering).
- 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

The following non-statutory technical guidance relevant to Part IIA has been considered as part of this strategy:

 Contaminated Land Report 11 – Model Procedures for the Management of Land Contamination (Environment Agency/DEFRA, September 2004)

- Local Authority Guide to the Application of Part 2A of the Environmental Protection Act 1990 (DEFRA/Chartered Institute of Environmental Health, 2007)
- Guidance on the Legal Definition of Contaminated Land (DEFRA, July 2008)
- Guiding Principles for Land Contamination (Environment Agency, March 2010)
- BS 10175:2011 Investigation of potentially contaminated sites Code of Practice (British Standards Institute, 2011)
- National Planning Policy Framework (Department for Communities and Local Government, March 2012)

Further technical guidance is available on the Environment Agency and DEFRA websites.

#### **1.4 REVIEW OF THE STRATEGY.**

Following the introduction of the contaminated land legislation (Part IIA of the EPA 1990) in April 2000, Suffolk Coastal District Council published its original strategy in June 2001. The 2001 strategy was reviewed and updated in 2002; 2004; 2007 and 2009 in order to report on the progress of site inspections and the development of the contaminated land geographical information system (GIS), as well as to incorporate the release of the Contaminated Land Exposure Assessment (CLEA) tool by the Government in 2002. Also the introduction of the Contaminated Land (England) Regulations 2006, which brought radioactive contaminated land under the Part IIA legislation, resulted in the review of the strategy in 2007.

This strategy which replaces the 2009 version has been issued to reflect the revised statutory guidance on contaminated land published by DEFRA in April 2012, as well as other key changes in the legislation. The strategy will continue to be reviewed at least once every five years, as recommended by Government, and there will be a constant review of data held on the GIS which will be updated accordingly. The review process may lead to amendments to the inspection plan in line with existing woakload, available budget and staffing issues.

#### **CHAPTER TWO**

### 2.0 CHARACTERISTICS OF SUFFOLK COASTAL DISTRICT COUNCIL.

#### 2.1 GEOGRAPHICAL LOCATION.

Suffolk Coastal District Council is located in the county of 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.

#### 2.2 POPULATION DISTRIBUTION.

The population of SCDC according to the 2011 census is 124,700. The distribution in parishes is as shown in Box 1. The area boundaries are shown in figure 1.

Box 1: Population Distribution in Parishes.					
<u>Parish</u>	<b>Population</b>				
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				

#### Figure 1: Map of Suffolk Coastal District Council.



#### 2.3 CURRENT LAND USE CHARACTER.

SCDC is predominantly rural and land use other than for residential use is predominantly for agriculture and 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 Natural England as 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.
- About 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 3,000 listed buildings and ancient monuments designated under the Ancient Monuments and Archaeological Areas Act, 1979.

#### 2.6 KEY WATER RESOURCE/PROTECTION ISSUES.

Anglian Water and Essex & 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. There are also about 538 private water supplies in the area covered by the Private Water Supplies (England) Regulations 2009.

#### 2.7 KNOWN INFORMATION ON CONTAMINATION.

SCDC holds some information on contamination in the district primarily submitted as part of the planning and 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 repairs and maintenance; foundry and engineering works (which supported the rail and farming industries) and aviation.

#### 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 Environment Agency 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.

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#### **CHAPTER THREE**

#### **3.0 CONTAMINATED LAND: THE LEGAL FRAMEWORK.**

A number of existing Acts and Regulations, as well as common law give rise to legal remedies in respect to land contamination. However, Part IIA of the Environmental Protection Act, 1990 (inserted by Section 57 of the Environment Act, 1995) which came into force in April 1, 2000 together with the Contaminated Land (England) Regulations 2000 made under the 1990 Act provides a regulatory framework for the identification, determination and remediation of contaminated land. Although this piece of legislation initially excluded land that may be contaminated by radioactive materials, it was expanded in August 2006 through the Contaminated Land (England) Regulations 2006 and accompanying statutory guidance to include land that may contain radioactive substances.

In April 2012, the 2006 Regulations and the accompanying statutory guidance were amended by the Contaminated Land (England) (Amendment) Regulations 2012. Section 86 of the Water Act 2003, which was introduced in February 2012 by way of a commencement order, amended the definition of contaminated land in relation to pollution of controlled waters. The Contaminated Land Statutory Guidance which was published by DEFRA in April 2012 replaced the previous guidance set out in DEFRA circular 01/2006. Updated statutory guidance on radioactive contaminated land was published in April 2012 by the Department of Energy and Climate Change (DECC), which also replaced the previous Guidance set out in DEFRA circular 01/2006.

#### 3.1 DUTY TO IDENTIFY CONTAMINATED LAND.

Part IIA of the EPA 1990 gave local authorities the lead role in the identification of contaminated land and for most sites establishing the appropriate person or persons to bear responsibility for any remediation required; deciding the nature of that remediation and recording regulatory actions. The duty to identify contaminated land is established in Section 78B(1) (and as modified) Part IIA 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(1) (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.

The 2012 statutory guidance sets out the Government's policy and provides guidance to local authorities which must be followed when implementing Part IIA. Box 2 below summarises these responsibilities. For certain classes of sites that may be 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 liaise 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).

#### **Box 2: SUMMARY OF LOCAL AUTHORITIES DUTIES.**

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

- Prepare a strategy to identify contaminated land.
- 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.

#### **3.2** PRINCIPLES OF THE CONTAMINTED LAND LEGISLATION.

#### **3.2.1 POLLUTANT LINKAGES.**

The mere presence of contaminants on, in or under any land is not a sufficient condition for that land to be determined as Contaminated Land. The concept of "significant harm" or the "significant possibility" of such harm being realised is however at the centre of the definition of Contaminated Land. For a site to meet the definition of "Contaminated Land", pollutant linkage(s) 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 3 below. Without the identification of all the three elements of a pollutant linkage, land will not be identified as "Contaminated Land".

## Box 3: Definition of Contaminant, Pathway and Receptor (Source: DEFRA circular 1/2006)

A <u>contaminant</u> 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 **<u>pathway</u>** 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.
- A **<u>receptor</u>** 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 <u>Appendix A</u> 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.

However, if the three components of the pollutant linkage exist, a risk assessment will be undertaken to determine if significant harm is being caused or that there is a significant possibility of such harm being caused to a receptor. If the potential receptor is controlled waters, the risk assessment will determine if significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused. An area of land can only be designated contaminated land if a significant risk has been proven.

For some sites where there may be naturally occurring contaminants, or levels of contamination which might be considered 'normal' in a particular area, there is usually no reason to consider this land as Contaminated Land. The statutory guidance makes it clear therefore that where land is at or close to 'normal' levels of contamination, it should usually not be considered further under Part IIA, unless there is a particular reason to do so. In such cases the council would need to carefully explain the reasons for taking that decision based on robust scientific evidence. The British Geological Survey (BGS) has developed technical guidance on behalf of DEFRA, to help clarify what constitutes normal background concentrations (NBC's) for certain contaminants in soil, in accordance with the statutory guidance.

#### 3.2.2 RISK ASSESSMENT

Risk assessment involves understanding the risks from contamination, and the associated uncertainties. Under Part IIA, risks should be considered only in relation to the current use of the land, or any likely future use which would not require new planning approval, and this should be demonstrated in the conceptual site model. When identifying significant pollutant linkages, the Council will carry out an appropriate technical assessment, following the Model Procedures for the Management of Land Contamination (CLR11), produced by the Environment Agency and DEFRA, as well as the statutory guidance. CLR11 is a technical framework for structured decision-making, and reflects the Government's policy on how risks from land contamination should be managed. The basic approach to risk assessment involves identifying the hazards (i.e. contaminant sources), assessing these in terms of pollutant linkages and the likely consequences, and then estimating the risk (i.e. predicting the magnitude and probability of those possible consequences). The phased approach to the risk assessment process is:

- Preliminary risk assessment (desk study, site history, conceptual site model, qualitative risk assessment)
- 2. Generic quantitative risk assessment (intrusive investigation, compare site data to generic assessment criteria, refine risk assessment).
- 3. Detailed quantitative risk assessment (derive site specific assessment criteria for key pollutant linkages, refine risk assessment further to determine remedial measures)

#### **3.2.3 SUITABLE FOR USE**

The "suitable for use" concept is at the centre of the government's approach to the assessment and management of risks from contaminated land. The objectives of this approach are:

- To ensure that, in terms of risk to human health, land is suitable for its current use
- To ensure that land is made suitable for any proposed new use.

• To limit the remediation works necessary to prevent unacceptable risks to human health or the environment.

The 'current use' is any use which is currently being made or likely to be made of the land, including likely informal use such as children playing on the land, and any use which has planning permission or is otherwise lawful under the planning regime. The 'suitable for use' approach balances the various environmental, social, and economic factors in relation to contaminated land.

#### **3.2.4 GENERIC ASSESSMENT CRITERIA**

The Environment Agency has developed a Government supported methodology for estimating long-term risks to people from contaminants in soil, known as the Contaminated Land Exposure Assessment tool (CLEA). This software has been used to derive soil guideline values (SGV's), which can be used as minimal risk screening values to compare with concentrations of contaminants in soil. They can be used to indicate when land is very unlikely to pose a significant possibility of significant harm to human health. They are accompanied by a number of technical guidance documents, which form part of the CLEA package. Other generic assessment criteria (GAC), derived by reputable organisations and competent practitioners in the land contamination sector, are available for most of the commonly occurring contaminants in soil. As with any generic assessment tool, the limitations and assumptions must be clearly understood before they are used in the risk assessment process.

#### **3.2.5 THE POLLUTER PAYS PRINCIPLE**

An important task of the enforcing authority under the Part IIA regime is to establish who should bear responsibility for remediating a site where there are unacceptable risks from land contamination. In general, this will follow the 'polluter pays' principle, where the person who caused or knowingly permitted the contamination will be the appropriate person to cover the cost of remediation. However, if it is not possible to find such a person, it will fall to the owner or occupier of the land. The council will then decide what remediation is necessary, either through voluntary agreement or by serving a remediation notice. In most cases, contaminated land will be voluntarily remediated through the planning process by developers and landowners looking to bring a contaminated site back to beneficial use.

#### **3.2.6 POLLUTION OF CONTROLLED WATERS**

Pollution of controlled waters is defined in Section 78A(9) as, 'the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter". "Controlled waters" is defined in Part III of the Water Resources Act 1991, and include coastal waters, inland freshwaters, and ground waters. Ground water does not include waters contained in the underground strata but above the saturation zone.

In relation to controlled waters, Section 86 of the Water Act 2003 which came into force on 6th April 2012 amended the definition of contaminated land, so that significant pollution of controlled waters needs to be occurring or there is a significant possibility of such pollution occurring in order for any land to meet the definition of contaminated land under Part IIA. When investigating whether there is significant pollution of controlled waters, the Council will therefore focus on water pollution which:

- may be harmful to human health or the quality of the aquatic ecosystem; or terrestrial ecosystem directly
- which may result in damage to material property; or
- which may impair or interfere with amenities or other legitimate uses of the environment.

Land would not be designated as contaminated land on grounds that significant pollution of controlled waters is being caused where: (a) the relevant substance(s) are already present in controlled waters (b) entry into controlled waters of the substance(s) from land has ceased, and(c) it is not likely that further entry will take place.

#### 3.2.7 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 Environment Agency have advised that there is no evidence of a widespread risk to protected ecosystem or pollution from past activities impacting on animals or crops and the government 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 1996, 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 policies exist.
- It does not apply to radioactive contamination where the 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.

If land is determined to be radioactive contaminated land, it will qualify as a "special site" under the Contaminated land (England) Regulations 2012, for which the Environment Agency would be the enforcing authority. Where the council considers there are reasonable grounds for believing that land may be contaminated by virtue of radioactivity, it will consult the Environment Agency for detailed advice and guidance. In some cases the council may ask the Environment Agency to carry out the intrusive inspection on its behalf, subject to their advice and agreement. The Council

has the sole responsibility for determining whether any land appears to be radioactive contaminated land. As with non-radioactive contaminated land, a significant contaminant linkage must be identified to consider determining the land under Part IIA. At all times, the council will act in accordance with the statutory guidance on radioactive contaminated land, produced by the Department of Energy and Climate Change (DECC).

#### **3.2.8 MINISTRY OF DEFENCE SITES**

The Environment Agency will deal with any contaminated land at Ministry of Defence (MOD) estates. 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.

#### **3.3 INTERACTION WITH OTHER LEGISLATION.**

There are a number of existing Acts and Regulations that can be used to address contaminated land issues. Of these, the Town and Country Planning Act 1990, the Water Resources Act 1991, and the Environmental Permitting Regulations 2010 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.

#### 3.3.1 PLANNING AND DEVELOPMENT CONTROL

The Town and Country Planning Act 1990 is the main legislation that controls development and a vast majority of contaminated land issues are currently being addressed through this legislation where contamination is a material consideration. Whilst the introduction of Part IIA has resulted in 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 and any remediation agreed as a planning condition will be dealt with under planning control and not under Part IIA. The strong emphasis on urban regeneration and 'brownfield' redevelopment means this process will inevitably deal with much of the historical legacy of contaminated land.

As the local planning authority, SCDC is responsible for regulating development and land use in the public interest. It has extensive powers to halt or reverse development carried out in the absence of relevant permissions or in contravention of planning conditions. When considering development proposals, the Council is obliged to ensure that all material planning considerations, including pollution control and land contamination are satisfactorily addressed. The Council has the power to require developers to provide such further information as is needed to determine an application for planning permission, which may include environmental assessment reports and method statements for the remediation of contamination land.

The Council's Environmental Protection Team currently work closely with the Planning; Development and Building Control Teams on all issues relating to pollution and the current arrangement for intersectional consultation is believed to be sufficiently robust to address contaminated land issues. Details of the intersectional consultations and how contaminated land will be addressed through planning is further discussed in section 4.5.

The National Planning Guidance which has recently undergone a review to make it shorter and simpler has resulted in the publication of the National Planning Policy Framework (NPPF) in March 2012. The NPPF sets out the central Government planning policies for England and how these should be applied. It replaces the previous planning policy statements (PPS) and planning policy guidance (PPG). The NPPF places emphasis on local decision making and community engagement, including drawing up local and neighbourhood plans, which are central themes of the Localism Act 2011. The NPPF also sets out central government's objectives for achieving sustainable development through the planning must play. Although each local authority's development plan will be the starting point for decision making, the Government expects there to be an overall presumption in favour of sustainable development, and for decisions to be made more quickly and easily. With regard to land contamination, the NPPF makes it clear that developers and landowners are responsible for ensuring that land is suitable for its proposed use. Adequate site investigation by a competent person is required to show that the effects of pollution on health, the natural environment and the general amenity have been taken into account. As a minimum, land should not be capable of being determined as contaminated land under Part IIA, after it has been remediated through the planning process. The Building Regulations 2000 'Approved Document C – site preparation and resistance to contaminants and moisture', provides practical guidance for ensuring that new buildings are protected from contaminants, for example by providing adequate protection from ground gas, including radon.

#### 3.3.2 STRATEGIC PLANNING

The Localism Act 2011 has resulted in the abolition of Regional Spatial Strategies and reinforced the idea of neighbourhood planning, giving local communities greater power to shape development. The Suffolk Coastal District Local Plan core strategy (adopted in July 2013) together with saved policies from the Suffolk Coastal Local Plan (incorporating 1st and 2<sup>nd</sup> alterations) comprise the development plan and guides the management of development to 2017. The Development Plan sets out policies and proposals for the development and use of land within the district. This includes guiding and informing day to day decisions as to whether or not planning permission should be granted for a specific proposal. In order to ensure that these decisions are rational and consistent, they must be considered against the Development Plan, after public consultation, and having proper regard to other material factors. The core

strategy and the NPPF provide the framework for the preparation of site specific allocation documents including Area Action Plans & Neighbourhood Plans.

#### **3.3.3 ENVIRONMENTAL PERMITTING REGULATIONS (EPR).**

The Environmental Permitting Regulations 2010 (as amended) is designed to minimise the impact from potentially polluting activities. It combines the previous pollution prevention and control and waste management licensing regimes and has been widened to cover impacts from water discharges; groundwater activities; radioactive substances and other areas such as mining waste. Many industrial installations and landfill sites fall under the environmental permitting regime. The regulation of this permitting regime is split between the Environment Agency and local authorities. Whilst the Environment Agency regulate A(1) sites, local authorities regulate A(2) sites. Permits are issued to operators to control potentially harmful processes on their sites, and therefore reduce their environmental impact. Operators must comply with legally binding conditions set within the permit and this includes controlling possible emissions to land and controlled waters, as well as to the atmosphere. Failure to adhere to the conditions within the permit can lead to enforcement action.

#### 3.3.4 WASTE MANAGEMENT

Historically, waste treatment and disposal activities were often unlicensed and unregulated and as a result, had the potential to cause widespread pollution. Some of these sites may therefore be classified as contaminated land under Part IIA. Between 1972 and 1974 a national survey of landfill sites was carried out by the British Geological Survey on behalf of the former Department of the Environment. Data were recorded for each site including a brief history of the site, a site map, the local geology, the types of waste deposited and a brief risk assessment of the site's potential to pollute surface water and groundwater resources. The survey identified about 68 landfill sites within Suffolk Coastal District.

The Control of Pollution Act 1974 required that all active landfill sites be licensed by the waste regulation authority. This requirement was strengthened by the Environmental Protection Act 1990 which introduced waste management licenses and this function was transferred to the Environment Agency by the Environment Act 1995. The Environment Agency holds license details of all landfill sites within the district. In addition to these recorded landfill sites, there are also many pits, quarries and other features in the district which may have been filled or raised with waste materials and have the potential to be contaminated.

Since the mid 1980s when the dangers of landfill gas and leachates were more fully recognised, new landfill sites have been required to be constructed so as to prevent migration of contaminants to adjoining land. However, for sites constructed before then, the movement of contaminants beyond the site boundary is to be expected. The Environment Agency still has direct regulatory authority for current waste management activities under the Environmental Permitting Regulations. It issues and maintains registers of waste management licenses and certificates of exemption, as well as enforcing conditions of licenses and determining when a licence can be surrendered. Other activities which potentially fall within the scope of the waste

management licensing regime include the redevelopment and reclamation of certain 'brownfield' sites which may involve the treatment or removal of contaminated soils and groundwater. The European Landfill Directive places stricter controls on what wastes can be land filled and there is now more emphasis on treating and recycling certain wastes, including certain hazardous wastes in order to reduce the overall volume of land filled waste and minimise the long-term impact of these activities on the environment.

#### **3.3.5 WATER RESOURCES**

The Environment Agency is the regulatory authority for controlled waters. Duties include; implementation of a range of measures for preventing or remedying water pollution to improve overall water quality; regulating abstractions and discharges to water courses and groundwater management. The main pieces of legislation which aim to protect water resources are the Water Resources Act 1991, the Water Act 2003, the Water Framework Directive, and the Environmental Permitting Regulations 2010. The Environment Agency has also produced technical guidance on protecting water resources (GP3 - Groundwater Protection: Policy and Practice; and GPLC - Guiding Principles for Land Contamination). These technical guidance notes aim to promote good practice and sets out what the Environment Agency expects from people who are managing land contamination risks.

Whilst the Environment Agency has powers under the Water Resources Act, 1991 to deal with harm to controlled waters being caused by contaminated land, Part IIA does not revoke these powers and DEFRA have indicated that such problems should now be dealt with under the contaminated land regime. The Council will therefore consult 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. Although the Water Resources Act is still useful where there is historic pollution of groundwater, it can only apply where Part IIA does not apply.

# 3.3.6 THE ENVIRONMENTAL DAMAGE (PREVENTION AND REMEDIATION) REGULATIONS 2009.

The Environmental Liabilities Directive is implemented in the UK by the Environmental Damage (Prevention and Remediation) Regulations 2009 (EDR). They are intended to deal with the most serious cases of environmental damage caused by economic activities and like Part IIA, they are based on the 'polluter pays' principle. However, the emphasis is on preventing and remedying environmental damage, and not enforcement. They only apply to damage caused after the regulations came into force in March 2009. Environmental damage as defined by the regulations includes contamination of land that results in a significant risk of adverse effects on human health, as well as damage to species and habitats and damage to water. Local authorities are the enforcing authority for damage to land.

In accordance with statutory requirements and Government policy, the order in which these regimes should be considered when dealing with land contamination is:

1. The Environmental Damage Regulations (where applicable)

- 2. Remediation under the planning system (where appropriate)
- 3. Remediation under Part IIA (where there is no alternative)

#### **CHAPTER FOUR**

# 4.0 PROCEDURE FOR THE IDENTIFICATION OF CONTAMINATED LAND

A detailed procedure of how the Council will meet its obligation under Part 11A and how contaminated land issues will be handled is described in this chapter and as illustrated in figure 2 (Appendix C). 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 Team has responsibility for the implementation of Part IIA of EPA, 1990. As part of this team, an Environment Protection Officer is the lead officer on contaminated land. The Environment Protection Officer will deal with the day-to-day implementation of the strategy. The Environment Protection Officer will also be responsible for determining Contaminated Land and 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 GENERAL APPROACH TO INSPECTION

The Council's priorities in dealing with contaminated land are as listed in Box 4 below and these include protection of human health and drinking water sources e.g. public/ private water supplies. As part of the original strategy, land within the district was 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. The Council's Priorities 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 ecosystems
- 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.

Box 1 (Section 2.2) gives the population distribution of the district in parishes. This was 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) were inspected first followed by the other Parishes and smaller settlements prioritised on the basis of population and location of private water supplies. Priority was also given to known contaminated sites.

In order to identify potential contaminated land, it is first necessary to identify those land uses, past and present, which have the potential to give rise to contamination. It is also necessary to identify relevant receptors, so that pollutant linkages can be assessed in light of the current use of a particular site. As part of the original inspection strategy, a great deal of effort was devoted to building up a database of this information, and this process of identification is ongoing as new information and understanding about different sites becomes available. So far, over 600 sites have been identified where there is the potential for contamination to exist, based on current and/or historical land-use. Over half of these sites are in-filled areas of land, such as closed landfill sites; former pits; ponds and ditches which no longer appear on present day maps. There were also sites with more than one potentially contaminative use within the same property boundary. These were identified as individual records, but investigated as one site.

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# 4.3 INFORMATION ON THE POSSIBLE PRESENCE OF CONTAMINANTS.

#### 4.3.1 ORDNANCE SURVEY MAPS.

To begin the process of investigation, the Council obtained sets of historic Ordnance Survey Maps from Landmark Information System 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. Detailed sources of information used to identify contaminated land are as in Appendix D.

Although historic land use maps and Ordnance Survey Maps by interpretation allow for the identification of potentially contaminated land in accordance with government guidance, the historical maps available to us may not identify all potentially contaminated sites. It is possible that an area of land may have been used for a highrisk contaminative activity (e.g. waste disposal) without it ever being recorded on a map. Local consultation therefore played a major role in identifying the gaps in these maps. To this end, all Parish Councils as well as statutory consultees were engaged during the consultation exercise before the publication of the maiden strategy in 2001. 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. 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 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. Receptors which may be affected by contaminants for the purposes of Part IIA are as listed in Appendix A.

#### 4.3.2 PLANNING RECORDS

The Council holds information submitted as part of planning and building control processes. If development is proposed on areas of land where past use may have resulted in contamination, the Council may have requested a site investigation report as part of planning condition. If development has proceeded on such sites, remedial works may have been carried out to improve the site condition. Planning records therefore formed a valuable resource during the identification and detailed inspection of sites.

#### 4.3.3 COUNCIL-OWNED PROPERTY

The Council has some land holding in the district. These include parks, playing fields, farmland, depots, offices and civic amenity sites. Also there may be other areas of land within the district that the Council or its predecessor may have owned at some stage in the past where potential contaminative activities (e.g. waste disposal)

may have occurred. Any potential contaminated land currently or formerly owned or occupied by the Council will be identified and prioritised in accordance with this inspection strategy and the council's environmental policy of "putting its own house in order" before expecting others to follow suit. The Environmental Protection Team will liaise with other teams and relevant service areas to help identify such land, and ensure it is "suitable for use".

Where redevelopment or change of use of Council owned land is proposed, potential land contamination will be considered as part of the planning process and consultation advice sought. The investigation of Council owned land will follow the same phased approach as with any other land. Appropriate assessment of potential pollutant linkages will be carried out, including whether the council is liable for contamination. Where Council owned land is designated Contaminated Land, appropriate steps will be taken to remediate the land but where remediation is not possible or feasible; a remediation statement will be produced in accordance with the legislation and the statutory guidance. When considering Council owned land that may be Contaminated Land, the Environmental Protection Team will work closely with the relevant service areas and maintain good communication with stakeholders.

#### 4.3.4 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 as already mentioned in section 3.3.1.

#### 4.4 DEVIATING FROM THE INSPECTION PLAN

If during the process of inspection and prioritisation 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, intrusive investigative work may need to begin before completion of the entire inspection process. This may include declaring some "Special Sites" and passing the lead regulatory role to the Environment Agency. Also there may be occasion where sites may also be referred to the council by the Environment Agency for detailed inspection. In such cases these sites may take priority.

From time to time the Council may receive a complaint regarding potentially contaminated land from a member of the public, business or community group. Interested residents may also voluntarily supply information relating to land contamination that is not directly affecting themselves, their families or their property. A complaint regarding contaminated land will be dealt with in the same manner as with nuisance or any other complaint. Upon receipt, the complaint will be logged and recorded. The complainant will receive a response within 5 working days and will be kept informed of progress towards the resolution of the complaint. Any anecdotal evidence provided to the council relating to contaminated land will be recorded, and every effort will be made to resolve the complaints quickly and efficiently. However, intrusive investigations will not normally be undertaken

without corroborative evidence and no designation of Contaminated Land will occur without robust scientific reasoning. Inspection and determination will be carried out in accordance with this strategy and the statutory guidance.

#### 4.5 CHANGES IN LAND-USE

As already stated in section 3.3.1, land contamination is a material consideration in planning and development control and the Council's planning & building control sections will increasingly have to deal with planning applications for development on or adjacent to contaminated and potentially contaminated land. It is therefore necessary to address contaminated land issues at the development stage irrespective of the planned inspection programme. Where a proposal is received to redevelop land which has been identified as potentially contaminated but not yet subjected to any risk assessment or investigation under Part IIA, the environmental protection team will act as a consultee at the planning application process and will ensure that a suitable risk assessment is carried out, and that any remediation proposals will ensure that the site cannot be determined as contaminated land at a later stage, based on the proposed future use. Once remediation work is complete, the Council will usually require a validation report confirming that the agreed works have been carried out.

Where it is known or strongly suspected that a site is contaminated, detailed site investigation report and remediation scheme (Phase 2 & 3 report) will normally be required from the developer before the planning application is determined. Any subsequent grant of planning permission will be conditional upon the remedial measures being carried out. Where there is only a suspicion that the site might be

contaminated or where evidence suggests that there may be only slight contamination, planning permission may be granted on the condition that a site investigation and assessment is carried out prior to development and any necessary remedial works are incorporated into the development scheme. Pre-planning discussions will establish at what stage in the planning process the investigation will need to be carried out.

For large developments, a contaminated land assessment report (Phase 1) report shall, as a minimum, be submitted with any planning application where development is for sensitive end-use (e.g. residential; school buildings, children's play-areas, etc) regardless of the previous use of the site. The investigations and risk assessment should normally be carried out by a suitably qualified environmental consultant. It is recommended that a tiered approach to site investigation and risk assessment is followed as set out in the Model Procedures for the Management of Land Contamination (CLR11) document (EA and DEFRA 2004). However, were development is for small developments e.g. extension of existing dwelling or construction of 1-2 dwellings on existing residential site with no history of contamination; the Council's contaminated land questionnaire can be completed and signed as a true record by the developer.

#### 4.6 INFORMATION MANAGEMENT

The Council uses a computer based geographic information system (GIS) to store and manage data on contaminated land and to assist in the identification of the following:

• The likelihood of any receptors being found in the vicinity of potentially contaminated land.

• The likelihood that any of these receptors is exposed to a contaminant, e.g. as a result of the use of the land or of the geological and hydrogeological features of the area.

The GIS is a powerful tool for managing and visualising spatially related data and is used by Local Authorities, the Environment Agency, industry and consultants as a mechanism for decision making with respect to Part IIA.

#### 4.6.1 GENERAL PRINCIPLES OF THE GIS

A GIS is a highly suitable way of managing land use and ground information in order to identify pollutant linkages, assess risks, make decisions and communicate outcomes. A GIS is a digital system for the storage, manipulation, analysis and visualisation of spatial data. At the heart of the GIS is a database that allows spatial data, such as maps to be linked to attributed data to produce a powerful tool for analysing different factors of the environment. Datasets containing both spatial and attributed data can be drawn together and overlaid. For land contamination investigations, different layers indicate sources, pathways or receptors. Any one of the layers can be selected and displayed within the GIS either individually or in combination with other layers. The Council maintains a service level agreement with the Ordnance Survey which provides base mapping as the primary layer for the GIS. While the information needs of the Council's teams or sections are different, there is often a need to share data. Data management by means of GIS will increase intersectional communication making it easier to evaluate ground conditions and facilitate the transmission of information to other bodies such as the Environment Agency. The GIS used by the council is the GGP systems although there are plans to migrate to the UNIFORM system.

#### 4.6.2 BENEFITS OF THE GIS

The general benefits of using a GIS are:

- it is a highly efficient way of storing large amounts of data;
- different layers of information can be superimposed simultaneously for a given area
- data can be translated easily into information such as multi-layered maps or reports;
- provides an easily updateable knowledge store;
- can be interactive with other IT packages such as public register software
- offers an accessible system for answering customer enquiries
- makes it easier to export and import information to or from other bodies; and
- facilitates the identification of pollutant linkages.

#### 4.7 **PRIORITISATION**

The information gathered in creating the contaminated land database has enabled the Council to identify potential contaminated land within its area. Detailed inspection has been carried out on all the sites in order to establish the presence, or otherwise, of a pollutant linkage. Following the statutory guidance, the Council took a strategic approach to this task which was rational, ordered and efficient, and proportionate to the seriousness of any actual or potential risk and was able to deal with urgent sites first. The initial prioritisation of the sites as part of the original inspection strategy was carried out using the Contaminated Land Assessment Risk Analyst model (CLARA). Although more advance tools like ConSEPT (Contaminated Site Evaluation Prioritisation Tool) are now available, the Council may in future consider the use of this tool to review and where necessary re-assess any sites where initial assessment or investigation has already been undertaken in order to determine if any further work is necessary at those sites. This will be done in line with the current statutory guidance and up to date assessment criteria.

#### 4.8 **PROGRESS WITH THE STRATEGY**

In implementing the strategy, about 600 were identified as potential contaminated land with detailed inspection carried out on all the sites. Intrusive investigation had been carried out on three sites as a result of pollution of controlled waters and significant possibility of significant harm to humans. Whilst two of the sites were determined as Contaminated Land in 2006 and 2011 respectively, the third site did not meet the definition of contaminated land. However, groundwater and methane gas monitoring is being carried out and the risk assessment continually reviewed in light of the monitoring results. Of the two sites that were determined Contaminated land, one was designed a "special site" on the basis of pollution of controlled waters and handed over to the Environment Agency as the regulatory authority for controlled waters.

The two Contaminated Land sites have been entered in our Contaminated Land Register as required by section 78R, Part IIA of the EPA 1990. Although remediation

was not feasible on the two contaminated sites, Remediation Statements has been issued for each of the sites as required by section 78(H)7 of the Act.

#### **CHAPTER FIVE**

# 5.0 DETERMINATION AND REMEDIATION OF CONTAMINATED LAND

This chapter describes the procedure for the determination of contaminated land where the council is satisfied after detailed site investigation and risk assessment that a pollutant linkage exists on any particular site and as a result:

- significant harm is being caused to a receptor; or
- there is a significant possibility of significant harm being caused to that receptor; or
- significant pollution of controlled waters is being caused; or
- there is a significant possibility of significant pollution of controlled waters,

In deciding whether or not significant possibility of significant harm to human health or a non-human receptor exists, the council will first decide if there is a possibility of significant harm within the bounds of the current use of the land. Although it will remain a regulatory decision as to whether the possibility of significant harm is significant, the council will have regard to the statutory guidance on this matter. In determining whether there is significant pollution of controlled waters, or a significant possibility of significant pollution of controlled waters, the Council will have strong regard to the Environment Agency's advice, and the issues outlined in section 3.3.5.

Having convinced itself that a piece of land meets the definition of Contaminated Land as contained in section 78A(2), the Council will inform (a) the owner or

occupier of the land; (b) any person(s) appearing to the Council to be liable to pay for remediation, informing them of the intention to determine the site as contaminated land. The aim is to give them the opportunity to make representations e.g. to seek clarification of the grounds for the determination, or to propose a solution that might avoid the need for a formal determination. The Environment Agency will also be informed.

Where a determination of Contaminated Land is made, the Council will, in accordance with section 73B (3) of Part IIA give written notice to:

- The Environment Agency.
- The owner occupier
- Any person who appears to be in occupation of the whole land or part of it
- Any person who appear to be the 'appropriate person'.

A record of the determination which shall explain the reasons for the determination; the exact location, boundaries and the area of land in question as well as the risk summary shall be sent to the afore mentioned people and the Environment Agency.

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 into account of statutory guidance on liability apportionment and cost recovery issues.

#### 5.1 DESIGNATION OF SPECIAL SITES

Certain classes of contaminated land prescribed by Regulation 2 of the Contaminated Land (England) Regulations 2006 are required to be designated as 'special sites'. If it appears to the Council that land which has been determined as contaminated land is required to be designated a 'special site' it will give written notice of that decision to the people listed in section 5.0 above. Where such a notice is given, the Environment Agency is required to respond within 21 days indicating whether or not it agrees with the council's decision. In cases where the Environment Agency and the Council disagree, the matter will be referred to the Secretary of State who may confirm or reverse the Council's decision with respect to all or part of the land. The Council will, in all cases, consult with the Environment Agency prior to giving formal notice.

# 5.2 CATEGORISATION OF CONTAMINATED LAND (HUMAN HEALTH)

To help the Council decide whether or not land is contaminated land on the grounds of significant possibility of significant harm to human health, it will use the system of categorisation set out in the statutory guidance. This describes 4 Categories of land, with Categories 1 and 2 being land which is capable of being determined as contaminated land, and Categories 3 and 4 being land which is not capable of being determined as contaminated land. A similar system can be used to help determine whether or not a significant possibility of significant pollution exists for controlled waters, and is described in detail in the statutory guidance. It is felt that the majority of sites that the Council have prioritised for detailed inspection will be based on the human health receptor, and has therefore been focused on here.

- **Category 1**: Land which is clearly contaminated land. These are the worst case sites, where there is a very strong argument that significant harm would occur if no action is taken to stop it, for example, due to similar land or situations having caused such harm before, or because significant harm has already been caused due to exposure to contaminants, and is likely to continue to do so. Any decision will still need to be supported by robust evidence, but the council will seek to avoid any unreasonable delay, cost or stress caused by having to demonstrate this.
- **Category 2**: This would include land where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but the council still feels that there is a strong case for taking action under Part IIA on a precautionary basis, having regard to the statutory guidance.
- **Category 3**: This would include land where there may still be risks posed by contaminants, but a strong case described above does not exist, and so the positive legal test cannot be met. In such cases, regulatory intervention would be unjustified. In deciding whether land falls into category 2 or category 3, the council will first consider its risk assessment, including the estimated likelihood and impact of such harm and the timescale over which it might occur. If the council still cannot make a decision whether or not there is a strong case based on this assessment alone, then the statutory guidance expects

other factors to be taken into account, such as the likely direct and indirect health benefits and impacts of regulatory action, including the stress caused by disruption, and the potential for mobilising contaminants during any remediation work. If the health benefits of remediation do not outweigh the health impacts the land should be placed in category 3. The council will also have to consider whether the benefits would outweigh the financial and economic costs.

• **Category 4**: Land which is clearly not contaminated land. This would include land where no relevant contaminant linkage has been established; or where there are only normal levels of contaminants in soil; or where contaminant levels do not exceed relevant generic assessment criteria (GACs), or other relevant technical tools; or land where levels of exposure to contaminants in soil only form a small proportion of what a receptor might be exposed to from other sources.

The Government is currently developing category 4 screening levels (C4SLs), which will help decide when land is suitable for use and definitely not contaminated land. Current soil guideline values and other GACs represent minimal risk and are well within category 4. The proposed C4SLs will be set towards the top-end of category 4, and although they would still be precautionary, they will hopefully speed up the decision making process for regulators. They may also act as a suitable remediation standard for development of brownfield land.

#### 5.3 DECIDING THAT LAND IS NOT CONTAMINATED LAND

As stated in the statutory guidance, under Part IIA the starting point should be that land is not contaminated land unless there is reason to consider otherwise. Where it is clear following an inspection that land does not meet the legal definition of contaminated land, the Council will issue a written statement to that effect to the owners of the property and other interested parties. The statement will be qualified, for example that the risk assessment is only relevant to the current use of the land. A copy of this statement will be kept on file, along with the reasons for making the decision. The Council will not formally publish the information, but will keep a record of it in the event of receiving future enquiries or requests for information.

#### 5.4 **RISK SUMMARIES**

For sites which are likely to be determined following a thorough risk assessment, the council will produce a risk summary, in a simple and easy to understand format, which will form part of the record of determination. This will include:

- A summary of our understanding of the risks, including the identified contaminant linkages, and potential impacts.
- A description of the uncertainties behind the risk assessment
- A description of the local or national context of the risk assessment findings, in a way that is understandable to the layperson.
- Initial thoughts on possible remediation options and what impact this is likely to have.

• Any other factors which may be relevant and support the council's decision making process.

#### 5.5 **REVIEW OF INSPECTION DECISION**

Occasions may arise where the criteria on which a decision is made to determine or not to determine land as contaminated, or to designate, or not to designate, land as a 'special site', may subsequently change. Examples of such occasions include:

- New information about the land coming to light;
- Significant changes in legislation;
- Establishment of significant case law or precedent;
- Revision of guideline values for contaminants.

In such cases, the council may choose to revoke or vary its determination. The Council will record its reasons for doing so alongside the original determination. The Council will also issue a written statement if remediation action has been taken which stops the land being contaminated land, and a copy of this will be kept with the public register.

The Council may decide to postpone determination if the land owner or some other person proposes to take their own action to deal with the problem, and the council is satisfied with the measures proposed. The Council may also decide to keep the status of any land under review, in the event that a change of circumstances in the future may cause the land to be determined as contaminated land.

#### 5.6 DETERMINING LIABILITY FOR REMEDIATION

For any land determined as contaminated land, the Council will need to establish all owners and occupiers of that land, and who appears to be the appropriate person to bear responsibility for any remediation action necessary. It is the intention of Part IIA that the appropriate person, ideally the 'polluter' pays for the cost of remediation as a result of voluntary or formal action.

As part of the process of determining that land is contaminated land, the council would have identified at least one significant pollutant linkage resulting from the presence of at least one significant pollutant. In cases where there is a single pollutant linkage the process of determining liability will normally consist of identifying an individual or a corporation who has caused or knowingly permitted the pollutant to be present. The succession of different occupiers or industries may have contributed to the contamination of the site, either contributing to a single pollutant linkage or resulting in multiple pollutant linkages being identified. In such cases the council will, in accordance with statutory guidance approach the apportionment of liabilities as follows:

The Council will make reasonable enquiries in order to identify all of the appropriate persons to pay for any remediation action with respect to each pollutant linkage. These persons constitute the liability group for that linkage. Thus for each pollutant linkage, there may be identified either a Class A liability group comprising persons who caused or knowingly permitted the pollutant to be present, or a Class B liability group comprising persons who are the current owners or occupiers of the land. If the council are unable to identify any Class A or Class B persons in respect of a pollutant linkage, the site will be treated as an 'orphan site' and the remediation cost borne by the council.

#### 5.7 LIABILITY FOR ADJACENT LAND

Cases may arise where substances migrate from one area of land to adjacent areas of land causing them to be contaminated land. In such cases the person who originally caused or knowingly permitted the first area of land to be contaminated (the Class A person) will also be liable for the remediation of the adjacent land.

Where no Class A person can be identified, the owners or occupiers of the adjacent areas of land will be separately liable for the remediation of their own land. Subsequent owners or occupiers of land from which substances have migrated (the Class B persons) will not be liable for the remediation of adjacent land.

In assessing whether adjacent land is contaminated land, the Council will only consider the current use of the site. A person will not be liable for the remediation of adjacent land which would only become contaminated land as the result of a change of use for which planning permission is required.

#### 5.8 **REMEDIATION**

Once the relevant people have been notified that land has been identified as contaminated land, this begins the process of consultation on what remediation is required. In most cases it is the intention that a scheme of voluntary remediation by the appropriate persons will be agreed with the enforcing authority (i.e. the council or the Environment Agency), without the need for formal action. In such cases, the persons responsible for carrying out the remediation will usually be required to prepare a method statement.

The broad aim of remediation should be to:

(a) remove identified significant contaminant linkages, or permanently disrupt them, to reduce risks below an unacceptable level; and/or

(b) to take reasonable steps to remedy harm or pollution caused by a significant contaminant linkage.

This can involve a range of treatment, assessment and monitoring actions, and may be carried out in phases. The Council will only require actions in a remediation notice which are reasonable with regard to the cost and the seriousness of the pollution or harm. In deciding what is reasonable, the council will have regard to the practicability, effectiveness and durability of remediation; the health and environmental impacts of the chosen remedial options; the financial cost which is likely to be involved; and the benefits with regards to the seriousness of the harm or pollution of controlled waters in question.

In some cases the Council may carry out remediation itself, for example where urgent action is required due to an imminent danger of serious harm, or if there is no appropriate person to bear responsibility (i.e. an 'orphan site'). After reasonable consultation, if appropriate remediation cannot be secured by informal agreement, the council has powers to serve a remediation notice on appropriate persons. The notice will state what measures need to be carried out to remediate the contaminated land, and the timescale for the work to be done. For multiple appropriate persons, the notice shall state what proportion of costs each one is to bear. A remediation notice cannot be served within 3 months of that person being notified that the land in questions is contaminated land. In carrying out these functions the council will also adhere to its own enforcement policy and decision framework.

It is an offence under Part IIA not to comply with a remediation notice without reasonable excuse. If the council decides to carry out the remediation actions itself, it can recover its reasonable costs from the appropriate person (this does not include costs of inspecting the land to determine whether it is contaminated land). Any person who receives a remediation notice has twenty one days to appeal against the notice. The grounds for such an appeal are set out in the contaminated land regulations.

#### 5.9 COST RECOVERY

There are a number of situations where an appropriate person is exempt from paying the full costs of remediation, for example when 'hardship' would be caused by meeting these costs. The Council may decide in such cases to waive or reduce the recovery of its costs. There is also provision to place a charge on the land, to secure payment at a later date or in instalments. Some specific considerations may include when the costs of remediation are greater than the value of the remediated land. In such cases the council will consider waiving or reducing its costs recovery from a Class B person. Also, where the appropriate person is a small or medium-sized business, and the costs of remediation would force closure, the council will need to consider the impact that would have on the local economy, and whether this would be greater than the costs of remediation.

Where a Class B person owns and occupies a dwelling on the contaminated land, the council will also consider waiving or reducing its costs recovery if it is satisfied that, at the time the person purchased the dwelling, they did not know, and could not reasonably have been expected to have known that the land was adversely affected by contamination. In such cases the council will consider whether the person took reasonable steps prior to purchasing the property, to establish the potential for contamination to be present, for example by undertaking an environmental search. Further details of cost recovery considerations are provided in the statutory guidance.

#### CHAPTER SIX

#### 6.0 ACCESS TO INFORMATION AND CONFIDENTIALITY

#### 6.1 THE PUBLIC REGISTER

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

- Location and extent of land determined as Contaminated Land including the state the determination is made
- Details of Remediation Notices
- 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.

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

Although Local Authorities are the lead regulator on Contaminated Land, the Environment Agency also regulates some categories of sites relying on information provided by Local Authorities. To facilitate information exchange, a memorandum of understanding (MOU) has been drawn up between the Environment Agency and the Local Government Association which describe 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 Contaminated Land; a remediation strategy is agreed and a Notice is served. The Council is committed to this requirement and will ensure that adequate information is provided to the Environment Agency.

#### 6.3 REQUESTS FOR INFORMATION

The majority of information held by the Council in relation to its duties under Part IIA is in the public domain. Requests for information will be dealt with in accordance with the Environmental Information Regulations (EIR) 2004, which implement the

EC Directive on Public Access to Information (2003/4/EC). The information that public bodies should make accessible is subject to certain exceptions. Unlike the Freedom of Information Act, requests do not need to be in writing. The council has 21 working days to respond to a request. The EIR allows data holders, such as the Council, to charge a reasonable fee for the provision of environmental information to clients. This fee includes things like officer time, materials, research time, data conversion time and it also makes provisions for the data holder to include within the charge a reflection of how much time and effort was spent collating the information. Where the payment of a charge is required the time limit of 21 working days is suspended until such time that the person(s) requesting the information accepts responsibility for payment. The Council does not normally require advance payment, only something in writing that the charge is acceptable and will be paid upon receipt of an invoice.

There are some exceptions where the Council does not have to release environmental information and these are set out in the EIR. In cases where an exception is applied the Council will provide a written response to the applicant within 21 working days explaining the reasons for the refusal. However, all the exceptions other than those for personal data are subject to the public interest test. This means that the Council must explain to the applicant why, in all the circumstances of the case, the public interest in maintaining the exception outweighs the public interest in disclosing the information. There is also a general presumption in favour of disclosure. If the information requested by the applicant is held by another public body, the Council will provide the name and contact details of that Authority. It will then be the choice of the applicant

whether the Council transfers the request to the appropriate public body or the applicant makes a fresh request direct to them.

#### 6.4 CONFIDENTIALITY

The Data Protection Act 1998 seeks to control the way in which personal information is handled. It is likely that the Council will hold information with respect to contaminated land which is personal information to which the provisions of this Act apply. For example, information will be collated and stored regarding current and past ownership and use of sites. The Council will, therefore, ensure that data is stored and handled in accordance with the requirements of the above Act. When dealing with a request for information under the EIR, the Council has grounds to refuse a request if it would contravene the Data Protection Act, for example if it includes personal data. The Council will not include any information on the public register which it considers to be commercially confidential unless directed to do so by the Secretary of State. If a third party states that information it has provided to the Council is commercially confidential, the Council will determine its confidentiality upon receipt. If the Council determines that information is not commercially confidential, it will notify the person concerned in writing. The person concerned may appeal to the Secretary of State within 21 days of being notified and the information will be excluded from the public register until the appeal is determined. The Secretary of State may give directions to the Council regarding information which should not be included in the public register on grounds of national security.

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## 6.5 **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.

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#### **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 B**

### **GLOSSARY OF TERMS**

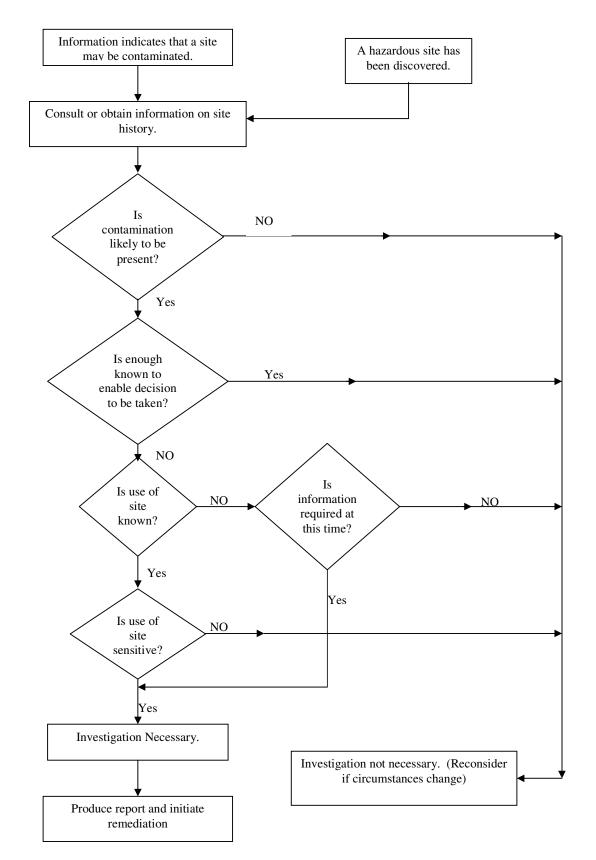
This Strategy contain a number of terms which are defined in Part 11A of the 1990 Act, other Acts or in the statutory guidance. The meanings of the most important terms are set out below.

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	<ul><li>These include</li><li>a) inland waters (rivers, streams, underground streams, canals, lakes and reservoirs</li></ul>	

	<ul> <li>b) groundwaters (any water contained in underground strata, wells or bore holes)</li> <li>c) territorial waters (the sea within three miles of a baseline</li> <li>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</li> </ul>
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	<ul><li>The study of:</li><li>a) the probability, or frequency, of a hazard occurring and</li><li>b) the magnitude of the consequences</li></ul>	
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	<ul> <li>Any contaminated land designated due to the presence of:</li> <li>Waste acid tar lagoon</li> <li>Oil refining</li> <li>Explosives</li> <li>Integrated pollution control sites</li> <li>Nuclear sites</li> </ul>	
SSSI	Sites of Special Scientific Interest	

### FIGURE 2 WORK PROCEDURE APPENDIX C



APPENDIX D

<b>RESOURCE</b>	DISTRICT SPECIFIC	<u>USE</u>
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 F.**

#### STATUTORY CONSULTEE'S CONTACT DEATAILS.

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 FOOD STANDARDS AGENCY ROOM 707C, AVIATION HOUSE 125 KINGSWAY LONDON WC2B 6NH