

BABERGH DISTRICT COUNCIL

Contaminated Land Strategy

Strategy Document EP/CL/IIA – 001/v3 Adopted April 2009

Prepared in association with: Symonds Group Suite 28-32 Concourse House 432 Dewsbury Road Leeds LS11 7DF

© Symonds Group

1	INT	RODUCTION	1
	1.1	General Policy of Babergh District Council	1
	1.2	Regulatory Context	2
	1.3	Regulatory roles of the Local Authority and the Environment Agency	4
	1.4	Enforcement Policy	5
	1.5	Development of the Strategy	5
	1.6	Objectives of the Strategy Document	5
	1.7	Public access to information and consultation	6
2	CH	ARACTERISTICS OF THE BABERGH DISTRICT	7
	2.1	Characteristics of the Area	7
	2.2	Redevelopment History and Controls	7
	2.3	Current and Past Industrial History	9
	2.4	Current Land Use Characteristics	. 11
	2.5	Details of Babergh District Council Ownership of Land	. 11
	2.6	Protected Locations	. 12
	2.7	Broad Geological/Hydrogeological Characteristics	. 14
	2.8	Key Water Resources/Protection Issues	. 15
	2.9	Known Information on Contamination	. 16
	2.10	Action already taken to deal with Land Contamination	. 17
	2.11	Conclusions	. 17
3	AIN	IS, OBJECTIVES AND WORK PROGRAMME	.18
	3.1	Aims	. 18
	3.2	Objectives	. 18
	3.3	Priorities and Work Programme	. 19
	3.4	Timetable for inspection of particular areas of land	. 20
4	PRO	OCEDURES	.24
	4.1	Internal management arrangements for inspection and identification	. 24
	4.2	Land owned by Babergh District Council	. 24
	4.3	Information collection	. 24
	4.4	Information and complaints	. 25
	4.5	Information evaluation	. 26
	4.6	Process for the identification of contaminated land	. 28
	4.7	Recording of determinations and formal notifications	. 29
	4.8	"Appropriate Persons" - Liability and enforcement	. 29

5	G	ENERAL LIAISON AND COMMUNICATION STRATEGIES	
	5.1	Contacting us / viewing the Public Register	
	5.2	Liaison with the Environment Agency	
	5.3	Liaison with other statutory bodies	
	5.4	Owners, occupiers and other interested parties	
	5.5	The wider community	
	5.6	Risk communication plan	
6	PI	ROGRAMME FOR INSPECTION	
	6.1	Ensuring compliance with good practice	
	6.2	Ensuring compliance with statutory guidance	
	6.3	Arrangements for dealing with Special Sites	
	6.4	Methods of inspection	
	6.5	Format of information	
	6.6	Frequency of inspection	
	6.7	Health and Safety Procedures	
	6.8	Powers of Entry	
	6.9	Arrangements for appointing external consultants	
7	R	EVIEW MECHANISMS	41
	7.1	Reviewing inspections	41
	7.2	Review of the Inspection Strategy	
	7.3	Auditing Procedures	
8	IN	FORMATION MANAGEMENT	
	8.1	Information Storage	
	8.2	Public Register Information	
	8.3	Inspection information	
	8.4	Responsibility for data management	
	8.5	Arrangements for internal access	
	8.6	Updating and maintaining information	
9	R	EFERENCES AND GLOSSARY	
	9.1	References	
	9.2	Glossary	

APPENDICES

- 1 Third Party Contact Details
- 2 Confidentiality of Information
- 3 Prioritisation Procedure
- 4 Contents of the Public Register
- 5 Definition of Special Sites Extract from the Contaminated Land (England) Regulations 2006

1 INTRODUCTION

Babergh District Council (from herein termed Babergh DC) has responsibility for regulating contaminated land legislation in the Babergh District, introduced in April 2000. The duty is to ensure that people, property and the environment are not harmed by contaminants in the ground, and that any existing damage is remedied.

The Council will inspect the whole of the Babergh District for contaminated land, and take action to prevent harm from occurring. It is Government policy to ensure that the polluter pays, and Babergh DC has powers to require polluters to clean-up contaminated land that may cause significant harm or water pollution.

Contaminated land, and the law controlling it, are complicated issues. Identifying contaminated land is a technically demanding process, and a great deal of information will be generated. One of Babergh DC's responsibilities is to ensure that the contaminated land inspection process is carried out in a rational and efficient manner. It is also necessary to show that resources will be allocated to tackling the most serious contaminated land problems first.

This strategy explains how we will go about inspecting the Babergh District for contaminated land, and how we will manage the information that we generate.

1.1 General Policy of Babergh District Council

This Contaminated Land Strategy is written in the context of Babergh DC's ten year Strategic Plan (2008-2018) which sets out a long term ambition for Babergh, the central issues facing Babergh:

Ambition
A great environment in which to live, work and visit, where people have the opportunity to develop their potential and feel they belong to strong and vibrant communities.
Issues facing Babergh
'A greener and cleaner Babergh'
'A safer and healthier Babergh'
'Quality homes local people can afford'
'Vibrant places and communities'
'A strong sustainable Babergh economy'

In particular, it is envisaged that this strategy will assist us in meeting our priorities for achieving "A greener and cleaner Babergh" and "A safer and healthier Babergh". For each of the central issues, the Strategic Plan sets out a number of key outcomes Babergh DC is aiming for by 2018. The Strategic Plan may be viewed on the Council's website.

This strategy has also been prepared having regard to our shared priorities with Central Government of:

- sustainable communities and transport;
- safer and stronger communities; and
- healthier communities.

In working towards these priorities we will also endeavour to deliver continuous improvement in the services covered by this strategy in accordance with Central Government's Comprehensive Performance Assessment (Comprehensive Area Assessment from April 2009) framework, whilst ensuring value for money and having regard to opportunities to deliver efficiency gains.

1.2 Regulatory Context

The law on contaminated land is made under Part IIA of the Environmental Protection Act 1990 [1]. The provisions of Part IIA came into force on 1 April 2000. Each local authority in England is required to prepare and publish a strategy for inspection of contaminated land. This strategy fulfils that requirement.

Please note that this section provides a summary and explanation of the main provisions of the contaminated land legislation. It is not a definitive or exhaustive guide, and it has no legal force. Please refer to DEFRA Circular 01/2006 [2], (hereinafter referred to as "the Statutory Guidance") and the Contaminated Land (England) Regulations 2006 [3] for a full description.

The Council's duties under the Act can be summarised as:

- the inspection of the district of Babergh from time to time for land that may be contaminated;
- the inspection of individual sites to determine whether they are contaminated land; and
- to ensure that appropriate action is taken to remediate (clean-up) contaminated land.

In carrying out its duties, the Council must comply with Statutory Guidance, contained in DEFRA Circular 01/2006.

Central Government policy on contaminated land is to ensure that all land is "suitable for use". This recognises that England's industrial history has resulted in a legacy of contamination, and that in order to encourage safe and beneficial use of such land it is necessary to consider and address any risks that contamination may pose. Risks are dependent on many factors – for example the nature of the contamination, the geology of the site, and the activities that are being carried out on the site.

The contaminated land regulatory regime is based on the principle of "suitable for use". The local authority is required to use risk assessment on a site-by-site basis to identify areas that may be causing significant harm or water pollution. If the land is found to meet the statutory definition of contaminated land, we have a duty to ensure that appropriate action is taken.

The definition of contaminated land from the Environmental Protection Act 1990, Part IIA, Section 78A (2) is:

"any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that -

(a) significant harm is being caused or there is a significant possibility of such harm being caused; or

(b) pollution of controlled waters is being, or is likely to be, caused."

For land to meet the statutory definition of contaminated land, there must be a "significant pollutant linkage" and "Significant Possibility of Significant Harm" to end users and the environment. To determine whether there is a significant pollutant linkage, Babergh DC will look for:

<u>A Source</u>: the physical presence of a contaminant in, on or under the ground, in quantities large enough to be a potential hazard.

<u>A Pathway</u>: a means by which the source can come into contact with something or someone that could be harmed

<u>A Receptor</u>: something or someone that could be harmed by the contamination – for example a person using the land, a stream close to the land, or a building built on the land.

Where source, pathway and receptor are all present, we will assess the risk of significant harm or water pollution. If the definition given above appears to be met, then the land will be classified as contaminated land. An addition in the 2006 Statutory Guidance was the inclusion of contamination arising from radioactivity. With radioactive contamination only human receptors are assessed owing to the fact that there is no impact on controlled waters or ecosystems by radiation, in all other respects contamination arising from radioactive materials is treated in the same legal manner as other contaminants.

Risk assessment is a structured method for making decisions in circumstances where there is uncertainty. In risk assessment we distinguish between the concepts of hazard and risk:

Hazard is an attribute or situation that in particular circumstances could lead to harm.

Risk is a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence (i.e. how likely is the hazard, and how bad would it be if it happened).

The source-pathway-receptor analysis described above is used to identify the hazard (the pollutant linkage). The risk assessment considers how likely the pollutant linkage is to exist, and how severe the consequences would be if it did exist. This could involve, for example, considering how much contaminant might be able to contact the receptor, over what time period, and how sensitive the receptor might be to the contaminant. At the end of the process, the assessor will be able to determine whether the pollutant linkage is a significant pollutant linkage, and therefore whether the site is contaminated land.

When contaminated land is identified, Babergh DC will decide what "remediation action" is necessary. The term "remediation action" refers to any action that is necessary to further evaluate, monitor, or treat a significant pollutant linkage. It does not necessarily always mean the removal of the contamination from the land – the aim is to carry out the most appropriate

action to make the land suitable for use, and to prevent significant harm or water pollution. Examples of remediation actions include:

- taking further samples and carrying out testing to gain a better understanding of the problem;
- carrying out long term monitoring of gas levels or groundwater quality to find out whether contamination is migrating;
- preventing contamination from contacting receptors (e.g. people) by fencing a site or capping it with clay or concrete; and
- removing contamination by excavation or by carrying out biological, chemical or physical treatment.

1.3 Regulatory roles of the Local Authority and the Environment Agency

Babergh DC is the main regulator for contaminated land in Babergh. There are some circumstances where the Environment Agency also has a regulatory role, and these are explained below.

Babergh DC's principal functions as regulator for contaminated land are:

- to ensure that the Babergh District is periodically inspected to identify contaminated land;
- to determine whether any particular site is contaminated land; and
- to act as enforcing authority to ensure that contaminated land is remediated appropriately (except where the site is a special site, in which case the Environment Agency acts as enforcing authority).

The enforcement role applies only to sites that are identified as contaminated land (i.e. sites that meet the statutory definition of contaminated land). When such a site is identified, the authority will:

- establish who is responsible for the contamination;
- decide what action is required;
- ensure that the appropriate action is carried out either through agreement with the person responsible for the contamination, or by serving a remediation notice;
- determine who should bear what proportion of the costs of the remediation; and
- record information about the regulatory action on a public register.

The Environment Agency has four important functions in regulating contaminated land:

- to assist local authorities in investigating contaminated land;
- to provide site specific guidance to local authorities on contaminated land, particularly where water pollution is involved;

- to act as enforcing authority when a site is designated as a Special Site¹; and
- to publish periodic reports on contaminated land.

1.4 Enforcement Policy

Babergh DC has a General Enforcement Policy, which will apply to enforcement action taken under Part IIA of the Environmental Protection Act 1990 [1]. It is our policy to ensure that enforcement of statutory requirements is undertaken in accordance with enforcement techniques which are:

- a) Consistent with current statutory and professional guidance, including the Enforcement Concordat, the Police and Criminal Evidence Act, the Criminal Procedures and Investigations Act, the Regulation of Investigatory Powers Act, the Race Relations Act and the Human Rights Act
- b) Fair
- c) Open
- d) Sensitive
- e) In accordance with the principles of common sense
- f) Related to the risks posed by non-compliance
- g) Consistent both within the area of the Council and adjoining authorities

1.5 Development of the Strategy

Babergh DC's contaminated land strategy has been developed by the Council's Natural and Built Environment Division. Babergh DC is a member of the Suffolk Environmental Protection Group, a group comprising environmental protection staff from all the district and borough councils in Suffolk. This group set up a contaminated land subgroup to discuss approaches to regulating contaminated land, and to promote consistency across the county.

1.6 Objectives of the Strategy Document

- 1. To fulfil the statutory requirement to publish and update a Contaminated Land Strategy.
- 2. To set out a strategy that meets the statutory requirements. These are:
 - (a) be rational, ordered and efficient;
 - (b) be proportionate to the seriousness of any actual or potential risk;
 - (c) seek to ensure that the most pressing and serious problems are identified first;
 - (d) ensure that resources are concentrated on investigating in areas where the authority is most likely to identify contaminated land; and

¹ A Special Site is a site that meets one of the statutory definitions for Special Sites. In general, Special Sites have had uses where the Environment Agency is likely to already have a regulatory responsibility, for example sites subject to Environmental Permitting. Special Sites are not necessarily more contaminated than other kinds of site. Examples of Special Sites are nuclear sites, current MOD sites, oil refineries, and sites that may be causing pollution of drinking water resources. The full definition of the term "Special Site" is given in the Contaminated Land (England) Regulations 2006, an extract of which is also reproduced in Appendix 5.

- (e) ensure that the local authority efficiently identifies requirements for the detailed inspection of particular areas of land.
- 3. To explain how Babergh DC plans to carry out its duties under Part IIA.
- 4. To provide an accessible source of reference on contaminated land issues in Babergh, and to inform stakeholders of Babergh DC's intentions.
- 5. To explain how Babergh DC will communicate with the Environment Agency, and provide the Agency with the information that is required by Part IIA.

1.7 Public access to information and consultation

In preparing the original 2001- strategy, a number of statutory bodies and other organisations that may be interested in contaminated land were consulted. A list of the consultees is given in Appendix 1. All consultation responses were carefully considered in the preparation of this strategy.

It is our intention to continue to take contributions from consultees who have not yet made a response and from any other individual or organisation that would like to comment on this strategy. We propose to consider these responses as part of our regular reviews of the strategy. Details of how to submit comments on the strategy are given in Section 5.1.

2 CHARACTERISTICS OF THE BABERGH DISTRICT

2.1 Characteristics of the Area

The district of Babergh lies within the southern part of Suffolk, covering approximately 240 square miles. The district is wedge shaped, narrowing from the west towards the Shotley peninsula, which is formed by the River Stour and the River Orwell and defines the easternmost extent of the district. The wedge extends inland for about 35 miles, widening with distance to the west, including the Stour valley, and valleys of the River Box, River Brett and River Glem.

The district includes the towns of Sudbury, Hadleigh and the southwestern outskirts of Ipswich within its area. The 2005 mid census estimates show Babergh's population as 86,100. Approximately 30% of Babergh's population reside in the towns and villages of Sudbury, Great Cornard, Hadleigh, Long Melford and Capel St Mary. The remainder of the population is distributed across the rest of the district, mostly in outlying villages.

Beyond the main towns, the character of the district is predominantly rural comprising almost all of the area known as 'Constable Country' and dominated by a diverse range of agricultural activities. The rural area is dotted with picturesque villages and hamlets, many of which have well preserved historic buildings.

2.2 Redevelopment History and Controls

There has been a decline in agricultural and rural based employment over recent years in the district. As a result, there have been a wide range of initiatives to stimulate the rural economy by providing suitable sites and premises for business, town centre improvements and provision of new housing in existing settlements, particularly as infill developments in accordance with Planning Policy Statement 3 (PPS3) (Housing) [5] published in 2006. Success of these initiatives in attracting investment has used up most of the available land, creating shortages within the district of suitable land for future employment and housing uses. Further development of land for housing and employment uses is therefore expected as a result of continued demand.

Some new building has occurred on previously used land within the district. Babergh DC is responsible for controlling such development under the planning system, and has considered the potential for contamination in cases where the risk was apparent based on known information. It is recognised however, that standards for contaminated land remediation (clean up) have changed substantially in recent years with increased knowledge of the risk of contamination. It is therefore possible that developments have been permitted in the past without the stringent risk control measures now required.

Babergh DC has worked with other local authorities in Suffolk in developing and implementing development control procedures in line with legislation to ensure that all new development considers the issue of contamination adequately (see Figure 1). Where contamination of land is known or suspected Babergh DC will require the developer to carry out a site-specific risk assessment prior to registration of the Planning Application, should a risk be identified a full intrusive ground investigation may be deemed necessary. Planning permission would not normally be granted unless a suitable remediation scheme is submitted to and approved by Babergh DC.

For all new developments (regardless of previous land use) with particularly sensitive end uses (e.g. new dwellings with gardens, schools, allotments etc.) Babergh District Council will

require a desk study, suite of 4-5 photographs and a cover letter (stating current land use, presence of services etc.) to be submitted along with the planning application. This is in accordance with Planning Policy Statement 23.



Figure 1 Flow Chart outlining Planning Procedures adopted by Babergh DC

2.3 Current and Past Industrial History

Introduction

Contamination of the land can arise from a wide variety of processes and activities associated with industry and its development and growth. The industrial history of an area can therefore provide an unparalleled insight into the areas that might contain and be affected by contaminated land.

Early history

The district has had a long and varied history, evident from the many historical buildings and monuments which remain today. The activities carried out early in the district's history are primarily agricultural, and as a result the district's industrial roots lie in the activities which processed produce from the land, such as wool and grain. The industries initially able to grow and prosper in the district included the cloth/textile and brewing industries.

Although the majority of Ipswich lies outside the district, the town has had a strong influence on the prosperity and development of the district due to the port. The port at Ipswich has assisted trade within the town and over the Babergh district since the 16th century. Initially, this made Ipswich an important centre for the grain trade, and became home to industries such as maltings, oil and cake mills, manure works, tanneries, clothing manufacture and steam mills. The port at Ipswich encouraged the development of the road and transport system in Babergh, increasing the potential for trade.

The histories of Lavenham, Long Melford, Hadleigh and Sudbury are characteristic of the early development of the district. These settlements prospered during the 15th and 16th Centuries due to the wool and cloth manufacturing industry. Hadleigh, once a prominent Viking town, developed as one of Babergh's principal market towns being a centre of cloth manufacture. However, changes in the manufacturing techniques moved production to Colchester and Norwich and by the 19th Century the cloth industry was in serious decline. Many communities including Sudbury developed a silk weaving industry when the woollen industry was diminishing. Other areas such as Lavenham and Long Melford turned their factories to the manufacture of textiles such as horsehair and coconut matting.

The cloth, wool and textile industries may have left localised legacies of contamination owing to the use, storage and disposal of substances used in the processes employed. For instance the wool industry requires that fleeces be cleaned and greases removed. This will have required the use of detergents and later may have involved the use of solvents. Dyeing and printing is a closely related activity to the cloth and textile industry. Early dyes were produced from natural sources such as plants, animals and minerals, however later the colour came from synthetic dyes and was derived from substances such as coal tar hydrocarbons and other chemical compounds. Many of the yarns and fabrics may have been treated with chemicals to improve their workability or to prevent fungal or mould growth. Tanneries may also have developed in neighbouring areas to the textile factories to process animal skins, using chemicals to clean, degrease and cure the hides.

Many of the substances used in and associated with the textile industry were used in liquid form such as washing and rinsing water, dyes and treatment baths. These liquids would have been easily spilled or may have leaked from containers, and wastes may have been disposed of on site, leading to contamination of the land.

19th and 20th Centuries

By the 19th Century the prosperity of the cloth and textile industry was beginning to decline, and by the end of the century was no longer a thriving industry. However, many of the district's towns and villages continued to develop with the coming of the railway, and those such as Bentley, Hadleigh, Lavenham, Long Melford and Sudbury were connected to the railway system and had become home to railway stations by the mid 19th Century.

Construction of the railways would have required a large amount of raw materials for the construction of rail foundations and embankments. It is possible that a lack of raw materials from local sources may have necessitated the use of waste materials such as clinker, slag and ash from nearby industries. Furthermore, railway depots and goods sheds may have been used to store miscellaneous substances including stocks and supplies of oils, greases, ores, coal, timber, steel and bricks that may have caused local contamination.

Sudbury in the 19th Century had a flourishing brick and lime works, and was also home to a brewery and maltings. The Stour Navigation canal had become another important means of transportation of raw materials and goods to and from Sudbury, and by the early 19th Century, warehouses had been erected to take advantage of opportunities the Stour Navigation canal provided. Silk works replaced the wool industry and silk is still woven in Sudbury today.

Glemsford in the 19th and 20th Centuries was home to a horsehair manufactory, the premises of Arnold and Gould being the last surviving processors of horsehair in this country. Silk weaving was also a common occupation in Glemsford in the 19th Century.

By the 19th and 20th Centuries, the industrial activities carried out in many settlements had diversified. In Long Melford, industries included an iron and brass foundry (Adrian Works), a laundry (Lavender Laundry), tramshed and electricity works, and food processing. By the 1840's, Hadleigh is also recorded as supporting others activities such as shoemakers, farmers and carpenters.

By the 19th Century Ipswich had developed as a centre for agricultural engineering and heavy engineering. By the 1860's, Gasworks including gasholders were erected in Hadleigh, Sudbury and Lavenham. In the early-mid 20th Century airfields developed and expanded with the onset of World War II, at Chilton, Great Waldingfield, Raydon, Wattisham, Lavenham and Brettenham.

Industries such as these used and produced a wide variety of substances with the potential to contaminate the land. The production of iron and brass generates large quantities of waste slag, slurries and dusts, each containing contaminants such as arsenic and lead. Laundries, particularly if offering dry cleaning services (available from the 1860's), will have stored and used potentially contaminating chemicals, with contamination of the land most likely resulting from spillages, leaks and disposal of the dry-cleaning solvents and wastes.

During the 20th Century there was an expansion in light industrial activity in the district with numerous companies relocating to the area following the Second World War. Industries that grew in the area during the post war period include vehicle component manufacture, sugar beet refining, pet food production as well as numerous small light industrial activities.

21st Century

Currently the district is home to numerous diverse businesses and industries, from traditional retailing in market towns to information driven businesses. Sudbury, Hadleigh, Brantham and the western margin of Ipswich contain active industrial areas. Agriculture also remains an

important activity in the district, particularly crops for food production and grain for maltings and livestock use. The district's history and countryside also form the basis for a thriving tourist industry.

2.4 Current Land Use Characteristics

Babergh is primarily a rural district with much of the land used for agricultural activities. The rolling countryside contains grassed and wooded river valleys to give the district a rich landscape and wildlife heritage, and a significant proportion of the district is occupied by nature reserves, special protection and conservation areas and Ancient Monuments.

Beyond Ipswich and the towns of Sudbury, Hadleigh and Long Melford, the rural land is interspersed with small towns and villages, and as a result there are dwellings in nearly all areas so that Babergh has no large tracts of very sparsely populated land.

Industrial activities are centred in the areas of Sudbury, Brantham, Hadleigh and the outskirts of Ipswich. In general, industrial premises are present around the edges of the towns because the centres pre-date large scale industrialisation. Much of the residential land is also around the outskirts of the towns as a result of expansion.

2.5 Details of Babergh District Council Ownership of Land

Some land in the district is in the Council's ownership. As part of the inspection of the district for contaminated land, Babergh DC will consider its own land, and land that it has previously owned.

The highest concentrations of land in Babergh DC ownership are located in Sudbury and Hadleigh, with smaller landholdings in numerous smaller villages and settlements across the district. The land owned by the Council has a variety of uses including housing, public open spaces, recreation facilities, land used for shops, offices and factories and some land that is vacant and awaiting redevelopment. There are also the premises where the Council conducts its own business, such as council offices and depots. Some of the land owned by the Council is leased (e.g. the shops and other premises) mostly in Hadleigh and Sudbury, with a small number of leased sites across the remainder of the district.

Babergh DC is also aware of land that has been in the Council's ownership that has been sold on to new owners. Again, the highest concentrations of these are located in Sudbury and Hadleigh, but with numerous small landholdings distributed throughout the district, mostly associated with villages and other settlements.

Babergh DC considers that it is possible that there is some land where Council activities may have caused contamination. Examples of such activities are vehicle maintenance and refuelling, waste management activities and storage and use of hazardous chemicals such as herbicides and pesticides.

2.6 Protected Locations

Ecological sites

The Contaminated Land regime enables local authorities to take action to prevent significant harm to sites of ecological importance. The Contaminated Land regime as defined in Part IIA of the Environmental Protection Act 1990 [1] only recognises protected locations as receptors if they are designated as such by the legislation quoted in Table A of Annex 3 to the DEFRA Circular 01/2006 [2]. Such statutory protected sites include:

- Sites of Special Scientific Interest (Wildlife and Countryside Act 1981 Section 28)
- National Nature Reserves (Wildlife and Countryside Act 1981 Section 35)
- Marine Nature Reserves (Wildlife and Countryside Act 1981 Section 36)
- Areas of Special Protection for Birds (Wildlife and Countryside Act 1981 Section 3)
- European Sites Special Areas of Conservation and Special Protection Areas, and candidate sites for these designations (Conservation (Natural Habitats etc) Regulations 1994 Regulation 10)
- Any habitat or site afforded policy protection under paragraph 6 of Planning Policy Statement Note (PPS 9) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and Listed Ramsar sites)
- Nature Reserves established under section 21 of the National Parks and Access to the Countryside Act 1949

Currently within Babergh District there are 50 Sites of Special Scientific Interest (SSSI) the majority of which are located in the western part of the district. There are also 28 designated conservation areas, including areas of Sudbury, Hadleigh, and the estuary at Shotley, which forms part of the Suffolk coast Ramsar site.

Historic Buildings and Ancient Monuments

Buildings, property, ancient monuments and important archaeological sites are all considered receptors that should be protected under the contaminated land legislation.

Babergh District contains in excess of 1000 known archaeological sites, however only 27 of these are scheduled ancient monuments.

Nearly 4,000 buildings are listed by the Department for Environment, Food and Rural Affairs (DEFRA) as being of Special Architectural or Historic Interest, many of which are located in the historic towns of Hadleigh and Sudbury.

2.7 Broad Geological/Hydrogeological Characteristics

Introduction

Knowledge of the Geology is essential for understanding the nature and history of an area. The underlying rocks determine the physical features, scenery and appearance of the land. Geological deposits can form materials of economic importance such as gravel, clay, lime and iron, and influence the local industries and their development. The geology also controls the presence, quantity and movement of groundwater. In the context of contaminated land, geological formations can contribute to pollutant linkages by acting as contaminant sources, pathways or receptors.

The 'solid' rocks that underlie the district of Babergh are sedimentary rocks of Tertiary and Cretaceous age, laid down somewhere between 2 and 135 million years ago. Above these lie Drift deposits (superficial deposits), which were laid down within the last 2 million years up to the present day, but have not yet become solid rock.

A simplified representation of the order in which the rock layers were deposited is presented below, with the youngest at the top and oldest at the bottom:

Drift Deposits	including:	Peat, Alluvium, Head, Glacial Silt, River Terrace Deposits, Lacustrine Deposits, Glacial Till (Boulder Clay), Glacial Sand and Gravel
Tertiary Rocks	including:	Crag London Clay Lambeth Group (Woolwich and Reading Beds)
Cretaceous Rocks	including:	Chalk

Drift Deposits

The Drift deposits consist generally of clays, silts, sands and gravels. These deposits, which overlie the solid rock formations, vary greatly in thickness and are not present over the whole of the district.

Isolated deposits of Peat, Alluvium, Head, Glacial Silt, River Terrace Deposits and Lacustrine Deposits are present throughout the district. These deposits are mainly accumulated as river sediments and are comprised of a mixture of clay, silt, sand, gravel and peat. Consequently the majority of these deposits are associated with the rivers Stour and Orwell, their tributaries, and the estuary at Shotley.

The predominant Glacial deposits present over the district are generally categorised as Glacial Till (also known as Boulder Clay) or as Glacial Sand and Gravel. Glacial Till is a highly variable clay with differing amounts of chalk, flint, silt and sand, whereas Glacial Sand and Gravel is a more heterogeneous mixture of sands and gravels. The materials within these deposits are typically derived from erosion of the Cretaceous Chalk and other deposits by ice and meltwaters during the ice age. The Glacial Till deposits generally overlie the Glacial Sands and Gravel deposits in the district. However, the Glacial Sand and Gravel is typically

exposed within river valleys and in the south east of the district, where overlying Glacial Till is absent.

'Solid' Geological Strata

Below the Drift deposits lie the solid deposits. The solid geology within the district generally comprises of Crag and London Clay underlain by Lower London Tertiary Deposits (including Woolwich and Reading Beds, and Thanet Beds).

Below these geological formations lies the Cretaceous Chalk. The Chalk typically consists of an alternating sequence of chalky limestones and marls (clays), and often contains flint nodules. The Chalk is a porous and permeable deposit, which can store and transmit large quantities of water – see Water Resources section.

This sequence is unlikely to be complete over the whole of the district. Where deposits are absent this will either be because over a particular area the material was not deposited, or at some stage after deposition it was subsequently eroded, perhaps by the sea, river or glacial activity, however the order of the deposits will remain the same.

Naturally Enriched Soils and Rocks

Potentially harmful substances occur naturally within the environment, often within naturally enriched sources such as soils and rocks, including mineral deposits. These occurrences may exceed national average background concentrations and be sufficiently high to be harmful to receptors. The likelihood of a harmful effect occurring to a receptor is however dependant upon a number of environmental factors relating to the nature of a substance and the exposure pathway. The presence of a naturally enriched source does not therefore mean that a harmful effect will necessarily occur [6].

The legal definition of Contaminated Land does not distinguish between substances that are natural or artificially derived. Consequently, naturally occurring substances could under certain environmental circumstances cause a site to be assessed under the Contaminated Land regulatory regime.

A study has been carried out by the British Geological Survey that provides a general indication of areas with concentrations of five substances considered to be the most potentially harmful to human health and the aquatic environment (arsenic, cadmium, copper, lead and zinc). This information indicates isolated areas to exist in the district where these substances may exceed national average background concentrations for natural sources such as soils and rocks. For example, much of the district is underlain by London Clay, which can have a high arsenic content.

In many circumstances, the natural occurrence of such substances does not present a problem. However, where disturbance of natural soil and rock sources has been caused, e.g. by quarrying activity, substances may have been released to the environment and caused contamination.

Radon

Radon is a naturally occurring radioactive gas. Some rock types emit it, and its occurrence is thus determined by geology. In open spaces, when radon mixes with air, it is quickly diluted into the atmosphere. However, if allowed to accumulate inside buildings, exposure to radon can increase the risk of cancer. Problems are particularly acute in areas of a dwelling with limited ventilation (e.g. cellars and basements).

Guidance from DEFRA has shown that Babergh District contains an area which is underlain by geological deposits that potentially exceed the action levels for radon protection. Within these areas a geological assessment is required to determine the level of protection required for new dwellings. The National Radiological Protection Board has carried out radon surveys to identify existing homes which are at risk.

2.8 Key Water Resources/Protection Issues

Introduction

Water is stored in two main forms, either it is present as groundwater and stored in the rocks below the district, or it forms surface water features such as rivers, reservoirs and lakes.

The act of obtaining water from a source be it the groundwater or a surface water body, is termed 'abstraction'. This may be obtained for a variety of purposes, e.g. groundwater and surface water may be abstracted for public and for private water supplies. The main water resource in the district is the groundwater located in the chalk aquifer, which provides a potable drinking water supply and may therefore be classified as a contaminant receptor.

Contaminated land may have the potential to release pollutants into the water environment, especially where contaminants are present directly above a water bearing deposit or adjacent to a surface watercourse. For this reason Babergh DC will seek to inspect Contaminated Land in proximity to a vulnerable water source as a priority, to ensure that water supplies are protected from pollution originating from such land.

Hydrogeology/Groundwater

The district is underlain by several different geological deposits (see geology section 2.7) capable of storing and yielding water. These deposits include Drift Sands and Gravels, the Tertiary Crag and Woolwich/Reading Beds, and most importantly the Cretaceous Chalk. Permeable rocks able to transmit and store exploitable quantities of groundwater such as these are termed aquifers, and the Environment Agency classify rocks either as a 'non-aquifer', 'minor aquifer' or 'major aquifer'. Major aquifers may be used to support large abstractions for public supply. Minor aquifers will seldom produce large enough quantities of water for public abstraction, but are important for both local supply such as private water supplies and supplying rivers. The deposits under Babergh form minor aquifers in the south and southeast and major aquifers (Cretaceous Chalk) in the north and west of the district. Relatively small areas towards the central area of the district are underlain by non-aquifers.

Vulnerability of the groundwater to pollution is dependent on the geological materials that surround and cover the water bearing deposits. These materials may act as a pollutant pathway by allowing the movement of pollution towards an aquifer (if they are permeable, for example sands and gravels). They may also form a barrier (if they are of low permeability like clay) between the aquifer and the potential pollutants, and hence provide some protection.

The groundwater is most vulnerable where no protective deposits such as clay exist above the aquifer in which it is contained. Where these unprotected areas coincide with contaminated land the groundwater is likely to be most at risk.

The Environment Agency has further sub-divided the classification of major aquifer types to include an indication of its vulnerability to pollution from the ground surface. Within Babergh, the major aquifer in the north and west of the district is primarily indicated to be of 'intermediate' vulnerability with smaller areas indicated to be of 'low' vulnerability. It is therefore likely that the groundwater in this major aquifer is only moderately protected, and may be at risk of pollution arising from any contaminated land located above.

Groundwater is abstracted from several locations within and on the southern margin of the district, including abstractions at Nayland, Sudbury, East Bergholt, Great Wenham, Layham, Higham and Chelsworth. To protect the water supplies from pollution, the Environment Agency has designated Groundwater Source Protection Zones around many of these abstraction points. The zones restrict the type of activities and development permitted within their boundaries to protect the groundwater reserves.

Hydrology/Surface Waters

The district is crossed by numerous surface watercourses, which range in size from rivers, such as the River Stour and River Orwell, to small streams and brooks. These watercourses are fed by precipitation as it drains from the land (the drained area for a particular watercourse is termed its 'catchment' area).

Water supplies may be obtained from these water bodies for use in public water supplies and for agriculture and industry uses – significant abstractions are licenced by the Environment Agency under its Catchment Abstraction Management System (CAMS). In certain areas the surface waters may be able to replenish the groundwater reserves, and many surface water bodies form the natural habitats for sensitive ecosystems and wildlife.

For these reasons the quality of the surface waters over the district is important. The Environment Agency monitors the quality of the rivers and streams, and classifies them from "Very Good – Grade A" through to "Bad – Grade F".

The majority of the rivers and brooks tested within the district have been classified as being of fairly good quality. Less frequently they have been found to be of good and fair quality, and occasionally very good and poor. Fairly good quality watercourses include the River Stour and Belstead Brook. The waters of the River Brett are considered to be of fairly good, through fair to poor quality. The Stour estuary is classed as 'Estuary Quality C' near the Shotley peninsula. The River Gipping on the eastern limit of the district has a history of poor water quality but has steadily improved since the mid 1990s.

The quality of a surface water body is potentially sensitive to any contaminated land within its catchment area. The quality of the water will be most at risk of deterioration where it flows through, or is directly adjacent to contaminated land. The areas most likely to contain sources of pollution are the industrialised areas of the district.

2.9 Known Information on Contamination

A desk-based survey of Babergh District has been carried out to determine the extent to which we might expect to identify contaminated land. This involves looking for Sources, Pathways and Receptors in the district, and identifying places where we might expect them to be near each other.

The survey makes use of information already held by Babergh DC gathered under other regimes (e.g. Planning and Development Control) and other lists/registers prepared internally

or by Suffolk County Council and the Environment Agency of sites that have had potentially contaminative uses. These include lists of closed landfill sites, registered petrol storage sites and a "brownfield sites" register. Babergh DC is also aware of some potentially contaminated sites that are in close proximity to, or form part of statutory protected sites.

Babergh DC has commissioned the British Geological Survey (BGS) to provide a Geographical Information System (GIS) containing various maps and other spatial data, and this will be used to identify and prioritise potentially contaminated sites. More details on the GIS and the procedures for identifying and prioritising sites are given in Section 4.

2.10 Action already taken to deal with Land Contamination

Action has been taken by the Council to deal with contamination in the district. The majority of this action has taken place through redevelopment controls within the planning and development regime. In accordance with sustainable use principles, the recycling of land to new and beneficial use has therefore been a continuous process. Babergh DC has been involved in this process as the regulator (Planning and Environmental Health) and also as the landowner where the Council's own land has been remediated. Details of this work exist in the planning archives and elsewhere in the Council's records.

Following on from the above, a desk study carried out of the Babergh District area and a GIS commissioned from the BGS are to be used for identification and prioritisation of potentially contaminated sites. This is further described in Section 4.

The issue of contaminated land has altered significantly in recent years, particularly with respect to advances in assessment procedures and remediation technologies. It is therefore possible that previously remediated land may not meet modern standards, although it is considered quite unlikely that remediated sites will be statutory contaminated land.

2.11 Conclusions

Review of the Babergh District area characteristics has identified important potential sources and receptors within the district. These require further assessment to determine whether the potential sources identified are actually present and whether significant pathways exist linking these to the receptors also identified. This determination will be made as part of the assessment procedure described in Section 4.

3 AIMS, OBJECTIVES AND WORK PROGRAMME

3.1 Aims

In carrying out our statutory duties of inspection of the Babergh District for contaminated land, and ensuring appropriate remediation action is taken, Babergh DC has the following overall aims:

- to ensure the protection of human health, water resources, property and the environment from harm or pollution resulting from contaminated land;
- to apply the principles of "suitable for use" and "polluter pays" in dealing with contaminated land in the District;
- to carry out the inspection of the District in a rational, ordered and efficient manner;
- to ensure that resources are concentrated on addressing the most serious problems first;
- to secure voluntary remediation action by the polluter wherever possible;
- to ensure that cases where Babergh DC may be the polluter are dealt with promptly and responsibly;
- to encourage the safe and beneficial use of previously developed land; and
- to communicate with stakeholders and interested parties in a transparent and responsive manner.

3.2 Objectives

Our objectives are to:

- maintain and routinely update a Geographical Information System to store, manage and retrieve information about contaminated land in Babergh (the GIS has been created and will be amended as necessary in the future);
- to continually review the comprehensive survey of potentially contaminated sites in Babergh to identify additional sites should new information become available to the Council);
- use risk assessment to prioritise potentially contaminated sites for further investigation (a list of sites has been prioritised for inspection, although this may require amendment in the future in the light of new information, revised priorities or complaint);
- carry out detailed inspections on potentially contaminated sites on the basis of risk to receptors;
- monitor our activities and prepare regular reports on progress; and
- review our strategy on a 3-year basis.

3.3 **Priorities and Work Programme**

Following the 2009-review of the strategy our priority activities are to:

- review information on actual harm and pollution of controlled waters to identify sites that may require urgent action and respond proactively to new information;
- continually develop Environmental Protection staff familiarity and competence with the GIS system and its links to Cadcorp (the corporate GIS package);
- periodically review the Council's written procedures for site inspections in light of experience, new guidance and best practice;
- progress the detailed inspection of potentially contaminated sites in accordance with the Council's prioritised schedule; and
- continue to identify stakeholders and interested parties and develop effective means of communicating and liaising on contaminated land issues.

This strategy defines the Council's role in regulating contaminated land under Part IIA of the Environmental Protection Act 1990 [1]. However, the same staff resources are used to assist the Planning Control section in regulating the remediation of land contamination during redevelopment of previously used sites. This work is important since redevelopment will often introduce pathways and receptors for contaminants to present a risk to human health and provides a mechanism for voluntary remediation prior to redevelopment. It also achieves the same ends as Part IIA i.e. to make land "suitable for use". Hence, it is also our priority to:

- assist the Planning Control section in the implementation of Planning Policy Statement 23 (PPS23) [4] to ensure that land contamination is addressed as a material concern within the planning process; and
- assist the Planning Control section in regulating the remediation of contaminated sites during the Development and Building Control processes.

The 2005-strategy set a 4-year programme for implementing the initial stages of the strategy. Progress on these activities and on our priority actions is summarised in the following table.

Task	Progress	Target Date
Publish Strategy	Completed on schedule	-
Develop Environmental Protection officers familiarity and competence with the GIS system	Initial requirements met Ongoing training requirement as functionality of GIS developed	Ongoing
Review written procedures for detailed site inspection	Completed Procedures under review	Review in 2010
Develop and review internal quality assurance procedures	Procedures implemented on schedule Review in progress following completion of site prioritisation work	Ongoing
Continue to identify stakeholders and interested parties and develop effective means of communicating and liaising about contaminated land	Detailed information pack about Part IIA produced and placed on Council internet site Ongoing liaison with stakeholders during detailed inspections	Ongoing
Set up and maintain Public Register	Completed	Ongoing
Review information on actual harm and pollution of controlled waters to identify sites that may require urgent action	Initial review completed Ongoing review of urgent sites or where new knowledge comes to light	As cases arise
Commence action on urgent cases	As cases arise	Continuing
Commence detailed inspections as soon as the prioritised schedule of sites is complete	Ongoing inspection programme	Programme presented at Paragraph 3.4
Review strategy and procedures	Internal interim review in 2002 Full review in 2009, strategy republished	Further full review in 2012

3.4 Timetable for inspection of particular areas of land

In the period since the inception of this strategy the Council has made considerable progress in identifying <u>potentially</u> contaminated sites and prioritising them for future detailed inspection. A Geographical Information System (GIS) has been installed for use by the Council in carrying out this process, as described in Section 4.3. The GIS has been used to carry out a "desk-top" survey of the entire district. A proprietary software package was then used to perform a preliminary risk assessment on each site using a source-pathway-receptor analysis to determine the risk it poses to human health, controlled waters, ecological systems and property. Further details of the preliminary risk assessment procedure are given in Section 4.5 and Appendix 3. The software places each site in one of five priority categories A - E and the Council has defined the categories as follows.

- **Category A** Contaminants certainly or probably present. One or more pathways to identified receptors are likely to exist. There is a high risk of an unacceptable impact on identified receptors. The current use of the site may not be suitable. High priority, with action to inspect the site being required in the short term.
- **Category B** The presence of contaminants is likely. One or more pathways to identified receptors are likely to exist. There is a high-medium risk of an unacceptable impact on identified receptors. The current use of the site may not be suitable. High to medium priority, with action to inspect the site being required in the short to medium term.

- **Category C** Contaminants may be present. One or more pathways to identified receptors are likely to exist. There is a medium-low risk of an unacceptable impact on identified receptors. Medium to low priority, with action to inspect the site being required in the medium to long term.
- **Category D** Contaminants may be present. There is a medium-low risk of the existence of pathway(s) to identified receptors. It is unlikely that the contaminants will have a significant effect on identified receptors. Low priority, with action to inspect the site being required in the long term.
- **Category E** Contaminants may be present. There is a low risk of the existence of pathway(s) to identified receptors. It is highly unlikely that the contaminants will have a significant effect on identified receptors. Low priority, with action unlikely to be needed whilst site remains in present use or otherwise remains undisturbed.

The initial site prioritisation work identified 1135 potentially contaminated sites in the district, in the following risk categories:

Category A	6	potential sites
Category B	286	potential sites
Category C	101	potential sites
Category D	566	potential sites
Category E	176	potential sites

Detailed inspection of sites

A priority of previous versions of this strategy was to commence detailed inspections as soon as the prioritised schedule of sites was complete. The 2005-review identified the need to amend the strategy timetable, as a result of the large number of potentially contaminated sites that have been identified within the district and the subsequent time taken to complete the prioritisation process. A significant amount of regulatory work has nevertheless been undertaken by the Environmental Protection section in parallel with this site-prioritisation process. Work has already commenced on inspecting a number of Category A and B sites. A significant number of sites have, or are in the process of being dealt with through the Development Control process - in these cases, the costs of site investigation are borne by the developer, and the Council monitors and determines whether planning conditions have been complied with. In addition, a number of sites have come to our attention via other routes and have been prioritised and acted on as a matter of urgency-these include contamination of drinking water supplies and fuel leaks from domestic properties.

Inspection Programme - Anticipated Timetable and Costs

Sites will be inspected in order of priority. However, the risk rating assigned to a particular site may be amended and other sites may be added to the inspection programme, if new information comes to light during the course of our work. This might include for example, a change of use of surrounding land (introduction of new receptors) or the potential for pollutant linkages to become significant as a result of unplanned events such as flooding, subsidence or a pollution spillage.

Where contaminated land is identified, it will be determined in accordance with the statutory requirements. The sites which are in a contaminative state, but which do not constitute

contaminated land under the legislation, will only be inspected further if the status of the land changes e.g. if a new receptor is introduced through the Development Control process.

The inspection and regulatory work carried out to-date has been informative for the purposes of setting a timetable for future inspection work. It has confirmed that the detailed inspection and regulation of individual "higher-risk" sites can be extremely time-consuming and costly, particularly where contamination is subsequently found and remediation is required.

At present, 1.0 Full Time Equivalent staff in the Environmental Protection section are dedicated to the regulation of Part IIA and to assisting the Planning Control section in the safe redevelopment of contaminated sites. A budget has been set by the Council for the detailed inspection of sites under Part IIA e.g. for soil or groundwater sampling, gas testing, risk assessment modelling etc. Based on the current level of resources, a 10-year programme for the inspection of the Category A, B and C sites is therefore proposed, as detailed below:



This inspection programme will be reviewed every 3 years during the review of the strategy.

The Council will propose a timetable for inspecting the Category D and E sites on completion of the above programme, although the Category E sites will only require action if the current use of the site changes or if the site is otherwise disturbed.

Details of the inspection process are given in Section 4.5.

It should be noted that the achievement of the timetable for the Category A, B and C sites will be heavily dependent on two factors.

Firstly, Central Government has set a target that 60% of new housing should be provided on previously developed land or through conversion of existing buildings. The redevelopment of previously used sites in the district will necessitate significant input from the Environmental Protection section into the regulation of planning conditions imposed to secure the remediation of land contamination – this is one of our priorities, given that redevelopment often introduces new pathways and receptors for contaminants to present an "immediate risk" to human health. The rate of redevelopment will therefore affect the Environmental Protection section's staff resources that can be dedicated to Part IIA inspection work. The remediation of contaminated brownfield sites during redevelopment may, of course, obviate the need for inspection and regulation under Part IIA. However, the priority given to assisting the Planning Control section may result in sites being dealt with ahead of our prioritised schedule under Part IIA. It should be noted that the level of remediation undertaken through the planning process reflects the state of the housing market, in periods of economic downturn the emphasis will be automatically transferred to Part IIA investigations.

Secondly, the timetable will be affected by the expenditure incurred on inspecting individual sites. It is impossible to accurately estimate what the detailed inspection of sites will reveal and how much further work it will necessitate. Consequently, it is not possible to quantify the likely expenditure on a particular site until it is actually inspected and assessed in detail. The inspection of certain sites may require appointment of a consultant to obtain samples by excavating trial pits and boreholes, which could incur significant expenditure, whilst other sites may be inspected using in-house resources only. In practice, the detailed inspection of

sites will be a continuum, balancing the systematic approach outlined above with the availability of resources.

We will endeavour to apply for DEFRA support to local authority capital projects in the field of contaminated land, under the Contaminated Land Capital Projects Programme (CLCPP). This delivers supported capital expenditure (revenue) to local authorities via Revenue Support Grant allocations based on a named amount of expenditure. The programme supports capital expenditure financed by borrowing for the intrusive investigation and remediation of contaminated land. However, we can only bid for support if it is "likely" rather than only "reasonably possible" that a contaminant is actually present and that, given the current use of the land, a receptor is present, or is likely to be present. For this to occur it will always be necessary for Babergh DC to carry out preliminary investigations to obtain such evidence before we can apply to DEFRA for support – we will endeavour to submit bids for DEFRA funding in each financial year to investigate high priority sites.

Potentially significant sums may be required if enforcement action is necessary to secure remediation of sites. In such circumstances, it would be anticipated that an application under the CLCPP would be made specifically relating to that site.

It should be noted that these arrangements relate specifically to the Council's enforcement role and not that as landowner. Should land in the Council's possession be identified as contaminated land then funding of remediation will be considered on a case-by-case basis. In the event of significant costs being involved it is likely that an application under the CLCPP would be made.

4 **PROCEDURES**

4.1 Internal management arrangements for inspection and identification

Responsibility for carrying out the inspection duty is held by the Natural and Built Environment Division. Overall responsibility for the management of the contaminated land duties is held by the Environmental Protection Manager (The Principal Environmental Protection Officer will be responsible for organising inspections of individual sites.

When site investigation, appointment of external consultants or other significant expenditure of Council resources is required as part of a detailed inspection, the proposal and justification in terms of Part IIA statutory requirements will be approved by the Head of Natural and Built Environment.

When a determination that land should be designated statutory contaminated land is made, a completed standard form containing the information required by the Statutory Guidance, paragraph B52 shall be approved by the Head of Natural and Built Environment.

4.2 Land owned by Babergh District Council

It is Babergh's policy as regulator for contaminated land to deal with Council owned land, and land where the Council may be responsible for contamination, within the same system as all other land. The main principle will be to deal with the most serious cases first, regardless of ownership – our main priority is to protect human health.

As a landowner, Babergh DC wishes to ensure that all its own land is suitable for use. We also undertake to carry out any remediation that we discover is necessary promptly and efficiently.

Babergh DC keeps records of all land that is, or has been, owned or leased by the Council. We propose to inspect those sites that appear on our prioritised list of potentially contaminated land.

We have limited resources with which to carry out this inspection, and we do not propose to divert resources from progressing action on potentially serious problems to deal with less pressing, but Council–owned problems.

4.3 Information collection

In order to carry out its inspection duties, Babergh DC requires information on potential sources, pathways and receptors in the District. Most of this information has been provided under contract by the British Geological Survey (BGS), who have obtained digital data from various sources and entered it into a Geographical Information System (GIS) designed specifically for the purpose of carrying out the contaminated land inspection task. The GIS layers are routinely updated and added to by Babergh DC.

The GIS contains the information detailed in the following table.

Digital Data	Used to identify		
Current Ordnance Survey (OS) topographic map	Sources, pathways and		
	receptors		
Historic County Series OS maps (1:10,560) between c1880 and	Sources (potentially		
c1940	contaminative land uses)		
Historic National Grid OS maps (1:10,000) between c1940 and	Sources (potentially		
present day	contaminative land uses)		
Groundwater vulnerability maps	Pathways, receptors		
	(water resources)		
Groundwater Source Protection Zones	Pathways, receptors		
	(drinking water supplies)		
BGS borehole records	Pathways		
BGS geological maps	Pathways, receptors		
BGS maps of made ground	Sources, pathways		
Ecological sites with statutory protection	Receptors		
Agricultural and forestry land	Receptors, sources		
Surface waters – rivers, tributaries and River Quality	Receptors, pathways		
Objectives			
Locations of Private Water Supplies	Receptors		
Allotments and residential areas	Receptors		
Schools and nurseries	Receptors		
Recreational areas, parks, playing fields and public open space	Receptors		
Ancient monuments and archaeological sites	Receptors		
Locations subject to Environmental Permitting (England and	Sources		
Wales) Regulations 2007			
EA Historic Landfills (pre-1974)	Sources		

4.4 Information and complaints

Following the initial information gathering exercise carried out on behalf of the Council by the BGS, Babergh DC will continue to gather relevant information as it becomes available. The Natural and Built Environment Division will be responsible for receipt of information and for entering it into the GIS system or filing it as appropriate.

During the detailed inspection of individual sites, Babergh DC will proactively seek further information on the site concerned, which may include examination of the following sources:

- trade and street directories;
- local archives, museums, libraries and County Record Office;
- records of the location of sites for the burial of diseased livestock and agricultural spreading of industrial/commercial sewage waste;
- Health and Safety Executive records on potentially hazardous sites;
- site reports and other site specific information held by Babergh DC and Suffolk County Council;
- Rating Records;
- Babergh District Local Plan;
- Babergh District Planning and Building Control records of approved applications;
- Babergh's brownfield sites register; and
- Ministry of Defence records (where accessible).

Further details of the inspection process are given in Section 6.

Further information may also be gained via the planning process e.g. changes in land use, or it may be volunteered by statutory bodies e.g. notification of new Sites of Special Scientific Interest (SSSI) by Natural England. Periodically, Babergh DC will also review the information it holds and update it.

The receipt of new information will often trigger a review of site inspections. Further details are given in Section 7.

Confidential Information

Under the Environmental Information Regulations 2004, information that Babergh DC receives in respect of contaminated land will generally be in the public domain unless there are good reasons that it is confidential. There are specific criteria for confidentiality, both generally for environmental information, and specifically relating to the Public Register of contaminated land. Details are given in Appendix 2.

If information which is considered to be confidential is offered to Babergh DC by a third party, or requested from a third party by Babergh DC, a written explanation of the reasons the information is confidential should be provided to Babergh DC along with the information itself.

Provision of information by the public and interested parties

All members of the public, businesses, voluntary organisations and any other interested parties should contact Babergh DC using the contact details given in Section 5.1, whether the purpose is to offer information, to make an enquiry or to make a complaint (either about the condition of land, or about our service with respect to land contamination).

When Babergh DC is offered information by any person or organisation, we will acknowledge receipt within 3 working days. Where appropriate, we will also explain what action we intend to take and/or what we will do with the information. We will generally seek to verify information.

If information is offered anonymously, we will accept it and treat it just like any other information, and take action as appropriate.

Further details on our provisions for liaison with the public and interested parties are given in Section 5.

4.5 Information evaluation

Actual Harm or Pollution

Babergh DC is already aware of several sites in the District that may well be contaminated, however at this stage we do not have information that any of these are causing significant harm or pollution of controlled waters.

We will identify such sites – likely to be the most pressing and serious cases – through the mechanism described below. This mechanism is designed to ensure that these sites will be in the highest priority category.

If in future information that indicates the possible presence of a site causing actual harm or pollution of controlled waters becomes available, we will divert resources from less serious sites to deal with it.

Effectiveness of previous action

Babergh DC is also aware of a number of sites that have been remediated prior to redevelopment. We become aware of these through the planning process, and have ensured that appropriate clean up was carried out by means of planning conditions. We will continue to do this.

We do recognise that the standards for "suitable for use" have become increasingly strict in recent years, and also that the mechanism for determining whether a site is suitable for use has changed considerably.

It is therefore our intention to adopt a precautionary approach, and to include remediated sites in our database of potentially contaminated sites. We will inspect these in order of priority along with all other sites; taking the fact that remediation has been carried out into account in our risk assessment. It is likely therefore that we will ask owners of some remediated sites to provide us with details of the remediation work.

Prioritisation of sites for detailed inspection

Babergh DC has used the GIS to identify sites where a source, a pathway, and a receptor (a pollutant linkage) are potentially present. Overlaying the many different map layers and identifying locations where sources and receptors are both present achieve this. For example, if an old factory site (identified from historical maps) is built on top of a sensitive aquifer (identified from the groundwater vulnerability maps), we would identify the site as potentially having a pollutant linkage.

Babergh DC commissioned the BGS to systematically search the GIS to identify such sites, and to digitise their locations – the result of this is that we are able to view all the sites that may be contaminated, and to perform automatic searches to find them, for example by grid reference or by postcode.

We have carried out a preliminary risk assessment for each of the identified sites and placed them in priority categories for detailed inspection. The risk assessment method is based on guidance published in 1995 by the Department of the Environment [7], [8], and it depends on the proximity of the receptor to the source. We will therefore treat sites as the highest priority where the source and receptor are very close together, and lower priority where they are far apart.

Using the GIS, the preliminary risk assessment was carried out by an automated scoring system based on a prioritisation tool developed by the Canadian Council of Ministers for the Environment (CCME) published in 1992 [9]. This tool has been adapted for use in the Babergh District and allows scoring of the different sources, pathways and receptors for a site and its environs.

There is also an element of expert judgement and experience in the risk assessment process – for example, some kinds of potential contamination are more likely to be harmful than others, and some contaminants are only harmful to particular receptors.

Details of the preliminary risk assessment are generated by a reporting feature of the GIS, listing the sources, receptors and pathways identified for each site, along with the scoring. This allows the GIS to prioritise the sites into categories and enables us to generate a list of the sites to be inspected in each priority category. We have included further details of the preliminary risk assessment procedure to be used in Appendix 3.

Detailed inspection

We will commence detailed inspection of sites in order of priority. Detailed inspection is done on a site-by-site basis, and the purpose is to gain sufficient information to determine whether or not there is a significant pollutant linkage, and therefore whether the site is, or is not statutory contaminated land. Detailed inspection will be carried out solely by Environmental Protection staff after appropriate training, although in some instances we may need to appoint external consultants.

Typically, detailed inspection may include the following activities:

- consultation with the Environment Agency and any other appropriate statutory bodies;
- identification and consultation with the landowner, occupier, and any potential Appropriate Persons;
- search for further site specific information for example previous site investigation reports;
- a site visit and walkover survey; and
- taking soil, water and gas samples from the site for analysis if necessary.

It may become apparent at the detailed inspection stage that the site is, or may be a Special Site (see Glossary for definition). In this case, the Environment Agency may take over the detailed inspection and become the regulator for the site (See Section 6.3).

4.6 Process for the identification of contaminated land

Once the detailed inspection is complete, Babergh DC will be in a position to determine whether or not the site is statutory contaminated land. The Statutory Guidance sets out how we must do this. There are four grounds for determining that a site is contaminated land:

- a) significant harm is being caused;
- b) there is a significant possibility that significant harm is being caused;
- c) pollution of controlled waters is being caused; and
- d) pollution of controlled waters is likely to be caused.

The Statutory Guidance gives details of the receptors that can be considered, and explains what constitutes "significant harm". The term "pollution of controlled waters" also has a specific legal meaning. These statutory terms and definitions are explained further in the Glossary.

The Government has indicated its intention of reviewing the wording of the legislation on the "pollution of controlled waters" so that Part IIA will only apply where "significant" pollution of controlled waters is being caused, or there is a "significant" possibility of such pollution

being caused. This will ensure that only "significant" water pollution will trigger the regime, thus avoiding land being formally identified as "contaminated land" on the basis of very small amounts of matter entering controlled waters. Statutory guidance should also be issued for the determination of what is "significant" pollution in this context. However, until such time as the legislation is actually amended, the existing definition of contaminated land remains in effect.

In making our determination, we must carry out an appropriate technical assessment to identify specific significant pollutant linkages. One significant pollutant linkage is enough to make a site statutory contaminated land, but there will frequently be many. When the pollutant linkage concerns a receptor where another statutory body has a regulatory role, we will ensure that the relevant body has been consulted, and that our approach reflects their advice. For example, if the receptor were a protected ecological area, the consultee would be Natural England. The most common instance of such consultation is likely to be with the Environment Agency on the issue of pollution of controlled waters.

Consultation with the Environment Agency will also be required where a site is potentially a Special Site. This is considered further in Section 6.3.

4.7 Recording of determinations and formal notifications

The Statutory Guidance requires us to prepare a written record of any determination that particular land is contaminated land. The record must include information summarised below (by reference to other documentation if necessary):

- a description of the particular significant pollutant linkage, identifying all three components of source, pathway and receptor;
- a summary of the evidence upon which the determination is based;
- a summary of the relevant assessment of this evidence; and
- a summary of the way in which we consider that the requirements of the Statutory Guidance have been satisfied.

We are also required to notify the Environment Agency when we make a determination that land is contaminated land. The Agency has prepared a standard form for this purpose, and we will forward this to the Agency's designated Area Contaminated Land Officer each time we make a designation.

4.8 "Appropriate Persons" - Liability and enforcement

The term "Appropriate Person" is used by Part IIA to refer to any organisation or individual who will bear responsibility for carrying out any action required by Babergh DC (or the Environment Agency). The definition is given in section 78A (9) as:

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

When contaminated land is identified, it will be determined by means of identifying one or more significant pollutant linkages. We will seek to discover the organisation or individual that caused the contamination. This person is a "Class A Appropriate Person". There may be more than one Class A Appropriate Person, and in this case they will be held liable for the costs of remediation in proportion to the amount or severity of contamination that they have caused.

In a circumstance when no Class A Appropriate Person can be identified, liability for remedying a significant pollutant linkage will fall to the landowner or occupier. These people are referred to as "Class B Appropriate Persons".

There are circumstances where a significant pollution linkage may exist but no Appropriate Person can be found. These circumstances are defined in the Statutory Guidance DEFRA Circular 01/2006 as arising where:

- "(a) the significant pollution linkage relates solely to the pollution of controlled waters (and not to significant harm) and no Class A person can be found;
- (b) no Class A or B persons can be found; or
- (c) those who would otherwise be liable are exempted by one of the relevant statutory provisions (i.e. sections 78J(3), 78K or 78X(3))."

In such circumstances, the significant pollution linkage becomes an "Orphan Linkage". Where an orphan linkage is the only significant pollutant linkage identified, the enforcing authority (normally Babergh DC or the Environment Agency) will bear the cost of any remediation required.

In more complicated cases where there are two or more significant pollution linkages, of which some are orphan linkages, we will consider each of these separately. There are circumstances where all or part of the remediation costs for orphan linkages are recoverable from Appropriate Persons identified for other significant pollutant linkages. These circumstances generally apply where the remediation required for the orphan linkages are also required for some or all of the other significant pollution linkages for which Appropriate Persons have been identified.

Babergh DC will seek to identify and consult with people who may be Appropriate Persons as soon as possible during the detailed inspection process. It is our intention to agree voluntary remediation for contaminated land sites wherever possible. Remediation notices will only be served where voluntary action is not forthcoming within a reasonable time frame. We recommend that anyone who believes that they may be an Appropriate Person should in the first instance refer to the Environmental Protection Act 1990 Part IIA [1] and the Statutory Guidance DEFRA Circular 01/2006 [2].

Recovery of costs

It is the intention of the legislation that Appropriate Persons will pay the costs of remediation, either by volunteering to do so or by compulsion following service of a Remediation Notice. There are a number of exemptions where Appropriate Persons may not have to pay for the works.

In making its decision, the Council must have regard to any hardship which may be caused to the person in question as detailed in paragraphs 10.8 to 10.10 and Chapter 3 of the Statutory Guidance, along with any additional guidance or case law subsequently published.

In view of the wide variation in situations which are likely to arise, including the history and ownership of land, and liability for its remediation, the Council will need to have regard to the particular circumstances of each individual case and the following general principles:

- The Council will aim for an overall result which is as fair and equitable as possible to all who may have to meet the costs of remediation, including national and local taxpayers.
- The "polluter pays" principle, by virtue of which the costs of remediating contamination are to be borne by the polluter. The Council will consider the degree and nature of responsibility of the Appropriate Person for the creation, or continued existence, of the circumstances that lead to the land in question being identified as contaminated land.

In general, this will mean that the Council will seek to recover in full its reasonable costs. However, the Council will consider waiving or reducing the recovery of costs to the extent that it considers this appropriate and reasonable, either:

- to avoid any hardship which the recovery may cause to the Appropriate Person. The term "hardship" is not defined in Part IIA, and therefore carries its ordinary meaning hardness of fate or circumstance, severe suffering or privation; or
- to reflect one or more of the specific considerations set out in the Statutory Guidance in Part 4 (considerations applying both to Class A & Class B persons), Part 5 (specific considerations applying to Class A persons) and Part 6 (specific considerations applying to Class B persons).

Part 6 of the Statutory Guidance includes guidance in respect of owner-occupied dwellings, to which the Council will have regard. Where a Class B person owns and occupies a dwelling on contaminated land, the Council will consider waiving or reducing its costs recovery, where that person satisfies the Council that, at the time the person purchased the dwelling, he did not know, and could not reasonably have been expected to have known, that the land was adversely affected by the presence of a pollutant. If the Council grants such a waiver or reduction it will be to the extent needed to ensure that the Class B person in question bears no more of the cost of remediation than it appears reasonable to impose, having regard to his income, capital and outgoings. Where the Appropriate Person has inherited the dwelling, this approach will be applied with respect to the time at which he received the property.

In certain circumstances, the Council may consider deferring recovery of its costs and securing them by a charge on the land in question. Such deferral may lead to payment from the Appropriate Person either in instalments or when the land is next sold.

The Council will inform the Appropriate Person of any cost recovery decisions taken, explaining the reasons for those decisions.

5 GENERAL LIAISON AND COMMUNICATION STRATEGIES

5.1 Contacting us / viewing the Public Register

Babergh DC's contaminated land strategy and procedures will be subject to a full review once every 3 years. We welcome feedback from members of the public and interested organisations, so please contact us at the address below if you have any comments that you would like us to take into account.

There is a Public Register detailing regulatory activity on contaminated land, which you may view free of charge during normal office hours by visiting the Council Offices in Hadleigh and enquiring at reception for Natural and Built Environment. You may also make enquiries about contaminated land by telephone, e-mail, or in writing. There may be a charge to cover our costs in answering some kinds of query; we will always tell you in advance if there will be a charge. Some information is confidential. Details of when information will be treated as confidential are given in Appendix 2.

Enquiries should be directed to:

Contaminated Land Officer Natural and Built Environment Babergh District Council Corks Lane Hadleigh Ipswich IP7 6SJ

Tel 01473 822801 Fax 01473 825738 E-mail <u>contaminated.land@babergh.gov.uk</u>

You should also use the above contact if you want to give us information about contaminated land, ask us to look at a particular piece of land, or if you have a complaint about any aspect of our contaminated land service.

5.2 Liaison with the Environment Agency

Babergh falls with the Environment Agency's Anglian Region. The Environment Agency (EA) has appointed contaminated land officers to liaise with the local authorities and to regulate Special Sites. All contact will be made via the Area Contaminated Land Officer. Contact details are given in Appendix 1

Contact with the Environment Agency will take place on the following occasions:

- to seek site specific guidance at the detailed inspection stage;
- when a site is, or may be, a Special Site;
- when a site is designated "contaminated land"; or
- to provide summary information on contaminated land (see below).

Babergh DC will work with the EA according to the agreed Protocol for Land Contamination between the EA and the Local Government Association (LGA), dated 14 April 2003 [10].

From time to time, the EA has to prepare and publish a report on the state of contaminated land in England. The purpose of this report is to assess the scale and significance of the problem and the effectiveness of measures put in place to address it. To allow the EA to do this, Babergh DC has to supply data to it from the body of information obtained under this inspection strategy.

The EA has prepared 3 standard forms for submission of information to it from Local Authorities. These forms are:

- SOCOL/LA/FORM1 Information about a site when the Local Authority determines it as contaminated land (to be submitted with the written notice of determination);
- SOCOL/LA/FORM2– Information about the remediation process, when a remediation notice, statement or declaration notice is published; and
- SOCOL/LA/FORM3– Information about the level of regulatory activity.

The Environment Agency has already provided a considerable amount of digital data to assist in the preparation of this strategy. This includes, for example, information on the location of sites regulated under Environmental Permitting (England and Wales) Regulations 2007 at its predecessors. Babergh DC will ask the Environment Agency to provide updates to this information.

5.3 Liaison with other statutory bodies

The Statutory Guidance DEFRA Circular 01/2006 requires that other statutory bodies be consulted with respect to the identification of contaminated land. Contact with other statutory bodies will generally take place under four circumstances:

- when Babergh DC asks for generic information about potential sources, pathways or receptors in the District (or requests that information already provided is updated);
- when Babergh DC consults on a site-specific basis;
- when the statutory body makes an enquiry about a particular area of land; or
- when Babergh DC considers that a statutory body might be responsible for contaminated land (i.e. an Appropriate Person).

The statutory bodies to be consulted with respect to the above are:

- Environment Agency
- Suffolk County Council
- English Heritage
- Natural England
- East of England Development Agency (EEDA)
- Department for Environment, Food and Rural Affairs (DEFRA)
- The Health and Safety Executive (HSE)
- The Food Standards Agency (FSA)
- Anglian Water

The majority of these statutory bodies with whom contact will take place have been consulted in the preparation of this strategy. Many of these have nominated a particular contact to deal with contaminated land. Their contact details are given in Appendix 1.

Under certain circumstances, it may also be necessary for Babergh DC to undertake consultation with neighbouring local authorities. As is recognised in the legislation [1] and the Statutory Guidance [2], this may be required where:

- contaminated land lies across local authority boundaries;
- where contaminated land outside the district (but adjoining or adjacent to it) causes significant harm or has the potential to cause significant harm within the district; or
- where contaminated land outside the district (but adjoining or adjacent to it) is causing or is likely to be causing pollution of controlled waters within the district.

Where consultation is necessary with neighbouring local authorities concerning sites outside the district, Babergh DC will liaise with the relevant neighbouring authority and the Environment Agency (in the case of controlled waters). This liaison will be carried out to determine which is the most appropriate enforcing authority and an appropriate course of action.

5.4 Owners, occupiers and other interested parties

We will seek to identify owners, occupiers and other interested parties on a site-specific basis as part of our detailed inspection process. We will normally contact site owners and occupiers at an early stage in detailed inspection, to arrange a site visit and to enquire whether any information on ground conditions is available.

To contact us, please use the contact in Section 5.1 above.

5.5 The wider community

As part of our general policy to ensure that the community is kept well informed about our activities, and is able to access information, we have made this strategy available on our website and to provide contact details for contaminated land enquiries there. The strategy will also be available from the Council Offices. We are also keen to identify any community groups with an interest in contaminated land. If you represent such a group, please make contact as described in Section 5.1 above.

5.6 Risk communication plan

Babergh DC aims to make defensible and transparent decisions about contaminated land. Decisions about contaminated land are not made on a purely technical basis, but involve regulatory, commercial, financial, legal and social factors.

We will use a risk assessment procedure to evaluate the risks from contaminated land. Risk assessment is not a solely numerical process, but involves value judgements and assumptions. We recognise that this introduces an element of subjectivity and potential for different people to disagree about the findings of the risk assessment.

It is important to us that people in Babergh feel confident that risks from contaminated land are being properly managed. It is therefore our intention to communicate what we are doing, and listen to peoples' concerns about contaminated land. This strategy forms part of that communication.

Communication with stakeholders about particular sites will be our main focus for risk communication. We plan to identify stakeholders during the detailed inspection process. Who the stakeholders are, and the nature of their interest will be very dependent on site-specific factors. It is predictable that they will nearly always include the owner and occupier of the land, and people who may be Appropriate Persons. In some cases there may also be people who are identified as possible receptors, and these people would also be stakeholders.

We will contact stakeholders as soon as it becomes apparent to us that there is something important to communicate. For example, we would consult local residents if we planned to carry out a site investigation on, or very close to a public park. In general, "something important" will constitute any circumstance where people could be concerned by what is happening on a site, or when we become aware that there may be a significant pollutant linkage which affects somebody's interests.

It is our intention that communication about contaminated land will be a two way process, in which stakeholders are able to meaningfully contribute to decision-making. How we will organise communication will depend on the number of people concerned and on the nature of the risks to be assessed. Published guidance on best practice will be used by our officers in deciding the most appropriate format [12].

We also have responsibilities to achieve Best Value in our use of resources, and to avoid raising concerns unnecessarily. We therefore need to strike a balance, so that we neither spend too much money giving people information they do not want, nor spend too little and leave people without information that they do want. We recognise that extensive public consultation costs the Council money and uses officers' time, and will therefore seek to carry out only the consultation that is necessary. We are also aware that concerns over contamination on land can affect market value and saleability of property, and we do not wish to publicise non-existent problems.

6 PROGRAMME FOR INSPECTION

6.1 Ensuring compliance with good practice

There is a well-established body of published guidance on good practice for carrying out the various stages of the inspection process (see 6.4 below for a description). Babergh DC will use appropriate guidance documents to define the standard and scope of work required. In particular, we will refer to the "Model Procedures for the Management of Land Contamination" which has been published by Central Government and the Environment Agency, and provides the technical framework for applying a risk management process when dealing with land affected by contamination [12].

6.2 Ensuring compliance with statutory guidance

The Statutory Guidance requires that we comply with some specific rules when carrying out detailed inspections (set out below). Many of them are designed to ensure that we focus explicitly on the issue of identifying significant pollutant linkages, and only expend resources to seek further information when this is necessary.

These objectives are in accordance with Babergh DC's general approach, and with our obligations under Central Government's Comprehensive Performance Assessment framework (Comprehensive Area Assessment from April 2009), to deliver continuous improvement in our services, whilst ensuring value for money and having regard to opportunities to deliver efficiency gains.

We will implement the following procedures to ensure that the Statutory Guidance and Best Value principles are complied with:

- Between the stages listed below, we will explicitly consider:
 - a) whether we have enough information to determine that the site is contaminated land
 - b) whether there is still a reasonable possibility of a significant pollutant linkage.
- We will always ask landowners and occupiers whether there is any available information on contamination from previous site investigation work.
- If we can identify someone who may be an Appropriate Person, we will ask them if they will carry out the site investigation for us. We will always seek voluntary remediation rather than enforcement action as a first measure.
- When we commission a site investigation, the scope will be limited to that required to determine whether a significant pollutant exists.
- When we commission a site investigation we will carry out an environmental assessment to ensure that damage is minimised as far as possible in the process of obtaining samples.

Statutory Guidance on detailed inspection

- i) The detailed inspection should provide sufficient information or evidence to indicate the actual presence of a pollutant.
- ii) The detailed inspection may include the following actions:
 - a) collation and assessment of documentary information, or other information from other bodies (see Section 4);
 - b) a site visit to carry out a visual inspection and in some cases, limited surface sampling; and
 - c) an intrusive investigation of the land (e.g. trial pits, boreholes).
- iii) Babergh DC has the statutory power to enter a site/area in order to carry out inspection and take samples.
- iv) Before exercising its powers of entry to a site, Babergh DC should be satisfied on the basis of information already obtained that:
 - a) there is a reasonable possibility of the presence of a contaminant, a receptor and a linkage; and
 - b) where intrusive investigation is deemed necessary, that it is likely that the contaminant is actually present and given the current use of the land that the receptor is actually or likely to be present.
- v) Babergh DC should not use its power of entry to carry out any intrusive investigation if:
 - a) detailed information* on the condition of the land has been provided by the Environment Agency, or some other person; or
 - b) a person offers to provide such information* within a reasonable and specified time and subsequently provides the information within the agreed time period.

*provided that the information is reliable and adequate

- vi) Babergh DC should ensure that any intrusive investigations are carried out in accordance with the appropriate technical standards.
- vii) Babergh DC should ensure that it takes all reasonable precautions to avoid harm, water pollution or damage to natural resources, or features of historical or archaeological interest, whilst carrying out an intrusive investigation.
- viii) Babergh DC shall consult Natural England on any action that would require the consent of Natural England, prior to carrying out intrusive investigations on any area notified as a Site of Special Scientific Interest.
- ix) Babergh DC should not carry out any further detailed inspection if, on the basis of information supplied from an inspection, there is no longer a reasonable possibility of a pollutant linkage.

6.3 Arrangements for dealing with Special Sites

At any point in the detailed inspection process, it may become apparent that the site is a Special Site (see glossary for definition). When we identify a potential Special Site we will consult with the Environment Agency. The Environment Agency may also identify Special Sites through their regulatory activities, and when this occurs they will consult us.

Provided that the Environment Agency agrees that the site is or may be a Special Site, the Environment Agency will then assist with the detailed inspection and the decision as to whether the site is statutory contaminated land.

It is Babergh DC's responsibility to make the determination that the site is statutory contaminated land, and to decide whether or not the site is a Special Site. We will have regard to the Environment Agency's advice in the matter. When we designate a site as a Special Site, we must notify the Environment Agency, the site owner and occupiers, and any parties that we have identified as Appropriate Persons. The regulatory responsibility for the site will then pass to the Environment Agency.

In the event of a disagreement between Babergh DC and the Environment Agency over whether a site is a Special Site, the Secretary of State makes the decision.

6.4 Methods of inspection

The process of detailed inspection of potentially contaminated land is technically complex, and potentially time consuming and expensive. It is also similar to the process of assessing contaminated land for redevelopment purposes. Good practice procedures for the latter purpose are well established, and there are many published technical guidance documents.

Briefly, good practice in contaminated land assessment follows a series of well-defined stages. It is not always necessary to proceed to the final stage. If at any point there is sufficient information available to be able to make an informed and reliable decision about what action is required then the assessment process is complete. The stages are always carried out in the order below.

- 1. "Desk study" the collection of available published information on potential sources, pathways and receptors at the site. Our GIS will contain most of the required information for this stage, although we will seek additional information (for example, existing site investigation reports) at the detailed inspection stage.
- 2. "Walkover survey" a visit to the site and its surroundings to check the actual site uses and confirm the presence of receptors. It is also often possible to see visible evidence of contamination.
- 3. "Preliminary risk assessment" our site prioritisation method will already have produced an estimate of the likely severity of risks at each site. At the detailed inspection stage we will refine this to obtain a more reliable assessment of risks. At this point we will consider whether further investigation is necessary.
- 4. "Site investigation" the above three stages enable design of a targeted sampling and analysis programme. The site investigation may require appointment of a consultant and contractor to obtain samples by excavating trial pits and boreholes. This can be expensive, so proper definition of the objectives of the study is essential.

- 5. "Screening" Once data on the actual presence of contaminants is available, the site's soil quality can be compared with revised Soil Guideline Values (SGVs) published by DEFRA and the Environment Agency. The SGVs represent "intervention values", indicators to an assessor that soil concentrations above this level might present an unacceptable risk to the health of site-users and that further investigation and/or remediation is required. At the present time, DEFRA has published SGVs for only 10 contaminants. Where there is no published UK SGV, Babergh DC will follow the procedure in "The Contaminated Land Exposure Assessment Model (CLEA): Technical basis and algorithms" [13] to derive assessment criteria by appropriate qualitative or quantitative risk assessment processes.
- 6. "Qualitative risk assessment" where contaminant concentrations exceed guideline levels, or where there are no guideline levels, a simple risk assessment process is used to consider the likelihood of significant harm or water pollution to the identified receptors. In many cases this is sufficient. Expert judgement is required to carry out the assessment.
- 7. "Quantitative risk assessment" if it is not possible to achieve adequate certainty with a qualitative risk assessment, there are a variety of quantitative methods to estimate risks. In a quantitative assessment we seek to calculate how much of any given contaminant may be able to contact the receptor over various time periods. This often requires a computer model. We compare the result of our quantitative assessment with a measure of acceptable contaminant loading for example a World Health Organisation Tolerable Daily Intake for human exposure to a toxic substance, or a statutory Environmental Quality Standard for the concentration of a polluting substance in surface water.

We will not always have enough data from the site investigation to complete a quantitative assessment, and it may be necessary to carry out further stages of site investigation prior to the quantitative assessment.

Several of the quantitative assessment methodologies are in themselves staged, requiring progressively more data and more complex analysis. We will choose appropriate models from the range available, and follow the published procedures for their use. Where models are approved by the UK Environment Agency, we will use these in preference to other models, provided that they are relevant to the situation.

6.5 Format of information

To ensure that the process of detailed inspection is consistent, we use a standard form which records the stages of the assessment, and prompts for the decisions and procedures required to ensure that the Statutory Guidance is complied with. This form is part of our database, and will be stored electronically.

Because each site is different, the information we obtain and the assessments we make will not be identical in each case. We will also generate an amount of correspondence. We will often acquire bulky reports, and other information such as photographs. Where possible, we will store additional information electronically. Information that is not readily stored electronically will be kept in paper files.

6.6 Frequency of inspection

We propose to carry out detailed inspection on each site once only, unless a review is triggered by a change in circumstances. Changes that will trigger a review of a detailed inspection are listed in Section 7.1.

6.7 Health and Safety Procedures

Babergh DC will discharge its obligations under the Health & Safety at Work etc Act (1974) in all the work carried out under Part IIA, as it does for all other Council activities.

We recognise that work involving potentially contaminated land may carry specific risks – this is true of many of the activities undertaken by the Environmental Protection section. We will carry out a health and safety risk assessment in respect of all work activities. Any necessary safety precautions identified will be implemented.

6.8 **Powers of Entry**

Under Section 108 of the Environment Act 1995, Babergh DC has the power to authorise a person to enter land in order to inspect it, or to take samples. This person could be a member of the Council staff, or it could be a consultant or contractor employed by us.

The powers enable the person authorised by us to enter land, along with any equipment that is necessary to perform the investigation required. This could be, for example, a JCB and drilling rig.

Normally, we will enter land by agreement with the landowner and occupier. Statutory powers of entry will only be used if we are denied entry to a potentially contaminated site.

6.9 Arrangements for appointing external consultants

From time to time, Babergh DC may appoint external consultants to assist with inspections, or other aspects of the contaminated land duties. Consultant appointments will be made in accordance with our normal procedures for procuring services that we require.

7 REVIEW MECHANISMS

In this section, we tell you how we will review the work we are carrying out for this strategy including the factors that will influence when such review takes place.

7.1 Reviewing inspections

The process for identifying potentially contaminated land is an ongoing activity. Further information may come to light at any stage in the procedure, and we will take into account information obtained from or volunteered by the public, site owners, businesses and voluntary organisations. New and updated information will also often be provided as a result of regular exchanges of information between departments (particularly between Environmental Protection and Planning) and with the Environment Agency and other statutory bodies.

Section 4 explains how Babergh DC will identify potentially contaminated land and carry out inspections to determine which sites are contaminated land. We make decisions about contaminated land on the basis of information available at the time. The decision relates to 'current use' which means any use, which is currently being made, or is likely to be made and which is consistent with any existing planning permission. 'Current use' is defined by the Statutory Guidance and includes:

- temporary uses permitted under planning legislation;
- future uses or developments which do not require a new or amended grant of planning permission; and
- likely informal recreational use of land (authorised and unauthorised) e.g. children playing on the land.

When considering a future use, which qualifies as a 'current use', we will assume that this proceeds in accordance with any existing planning permission, including any conditions relating to cleaning up or preventing contamination.

For agricultural uses, 'current agricultural use' does not extend beyond growing or rearing of crops or animals, which are habitually grown or reared on the land.

When further information is obtained for a site, we will search the GIS database to determine whether the site concerned has already been assessed. If so, the site priority will be reviewed in the light of the new information. If the site has not previously been identified, we will follow the procedure outlined in Section 4, including the new information, to determine its priority category.

If the site has already been subject to detailed inspection, we will review the inspection and the decisions made in the light of the new information.

Examples of information that may result in reviews of site prioritisation and inspection decisions are as follows:

- proposed changes in the use of surrounding/adjacent land (planning applications and Development Structure Plan reviews);
- planning applications;

- unplanned changes in the land use e.g. persistent unauthorised use of land by children, travellers, fly-tipping;
- unplanned events where consequences cannot be addressed through other relevant environmental legislation e.g. localised flooding, landslides, accidents, fires, spillages;
- reports from statutory bodies of localised health effects that appear to relate to a particular area of land;
- reports from statutory bodies of adverse ecological effects that appear to relate to a particular area of land;
- reports from statutory bodies of adverse water quality effects that appear to relate to a particular area of land;
- verifiable reports of unusual or abnormal site conditions received from members of the public, business, voluntary organisations e.g. wildlife trusts, conservation groups, environmental pressure groups, etc;
- updates of information provided by the Environment Agency e.g. changes to receptors such as Groundwater Source Protection Zones, abstraction licence applications; and
- updates of information provided by Natural England e.g. new SSSI's or other designated protected areas.

7.2 Review of the Inspection Strategy

Babergh DC will routinely review its inspection strategy to ensure that it continues to represent an efficient use of resources and remains effective in meeting the requirements of the legislation.

We will review the strategy once every 3 years. As we complete the bulk of the inspection task and gain experience with the legislation, we anticipate that less frequent reviews, for example every 4-5 years may become more appropriate.

In some circumstances we might need to review the strategy before the scheduled date. Examples of changes that might trigger an unscheduled review are:

- amendments or changes to the law on contaminated land, or changes in legislation that is closely related (e.g. water pollution or Environmental Permitting legislation);
- changes to the structure or area of responsibility of the principal regulators (i.e. Babergh DC or the Environment Agency);
- large scale environmental emergency affecting the Babergh District (e.g. catastrophic water pollution incident, Foot and Mouth disease);
- significant changes in the budget allowance for contaminated land duties; and
- establishment of precedents in Court cases which lead to alterations in interpretation of contaminated land law.

7.3 Auditing Procedures

Babergh DC wishes to demonstrate that it is fulfilling its obligations with respect to contaminated land inspection, maintenance of a register and reporting under Part IIA.

To ensure that the system is operating efficiently and properly, an auditor will be appointed to periodically audit the procedures and data systems. The auditing will be undertaken by either an internal auditor, a member of another Local Authority, or by an external consultant.

8 INFORMATION MANAGEMENT

In the course of preparing this strategy and subsequent inspection work, Babergh DC expects to obtain large amounts of information from a variety of sources that will need to be managed efficiently. Statutory Guidance states that we must tell you how we will do this. In this section of the strategy we therefore set out how we will manage the information we obtain.

It is our intention to have an inspection strategy that is as transparent as possible so that reasons for the decisions made concerning contaminated land can be readily understood. We will therefore manage information as set out below to achieve this aim and to comply with requirements of the DEFRA guidance.

8.1 Information Storage

The information we generate will be stored on a GIS digital map system with cross-linked databases of information. This system will comprise a digital map of the District, linked to a database containing all the information held by Babergh DC. The GIS contains most of the information on land use and environmental sensitivity (see Section 4, above), and is used to identify the boundaries of potentially contaminated sites. The GIS system is able to store a large amount of data, however it does not readily store and display long text passages or information such as postal addresses. This kind of information is stored on an Access database and linked to the GIS by means of a unique reference number.

Both GIS and the database software provide a searchable database of sites, and can be used to identify sites by postcode, grid reference or other feature such as type of historical use. These software packages are the principal means by which Babergh DC manages the information that it generates.

Some information will be obtained in paper form and require a paper filing system. This will be cross-referenced using the unique reference number that links sites in the GIS and the associated database.

For each data layer created within the GIS system the following list of criteria will be available describing the dataset:

- (a) date created;
- (b) source of the data;
- (c) how it was collected;
- (d) how it was processed;
- (e) quality control procedures used for calibration, validation and verification, quoting relevant standards and procedures or sources as appropriate;
- (f) data dictionary defining each of the attributes, quoting relevant schemes or standards as appropriate;
- (g) accuracy, precision, error information and missing data;
- (h) description of the dataset including spatial and temporal coverage;
- (i) ownership, copyright and intellectual property rights of the dataset;
- (j) access and user rights;
- (k) technical details on how the dataset should be used; and
- (l) scale.

8.2 Public Register Information

The Public Register is a record of regulatory action taken on contaminated land. Only sites where a Remediation Notice has been served will appear on the Public Register. The contents of the Public Register are prescribed by the Contaminated Land (England) Regulations 2006. Full details are given in Appendix 4. In summary, the Public Register contains:

- details of the remediation notice:
 - 1. who Babergh DC has served a notice on;
 - 2. where the contaminated land the notice refers to is;
 - 3. why the land is contaminated land, what the contamination is and where it came from (if not from the land in question);
 - 4. what the contaminated land is currently used for;
 - 5. details of what remediation each appropriate person has to do and when this has to be done by; and
 - 6. the date of the notice.
- details of any appeals and the resulting decisions;
- remediation declarations (published by the enforcing authority);
- remediation statements (detailing the remediation that has been done);
- appeals against charging notices;
- designation of Special Sites;
- notifications of claimed remediation;
- convictions in relation to remediation notices; and
- guidance issued by the Environment Agency.

It is our intention to store this information electronically as far as possible, as part of the GIS and linked database. A summary of Public Register entries is available on our website: <u>www.babergh.gov.uk</u>. Enquirers may obtain printed copies of information held on the Public Register from the Council Offices in Hadleigh. We currently make a charge for this service details of which are stored on the website above.

Babergh DC will undertake to add new information to the register as soon as it is reasonably possible after it has been generated. The contents of the register will therefore change over time as the information in it is added to or updated.

8.3 Inspection information

The inspection process described in Section 4 will generate a great deal of information that is not on the Public Register. The bulk of the inspection information will be stored electronically using a standard format within the database. To facilitate our response to site-specific enquiries and Land Charges searches we have set up a standard report in the GIS that will generate information on the contamination status of any particular site. As above, this will be viewable on-screen or can be generated as a print out. As above, we may make a reasonable charge for printouts.

It is unlikely to be practical to store all the inspection information electronically – for example we do not intend to scan in bulky site investigation reports. Information that is more sensibly stored in paper form will be filed by site identification number.

8.4 Responsibility for data management

The GIS, databases and paper files relating to contaminated land inspection are the responsibility of Babergh DC's Environmental Protection section. External consultants provide technical support.

8.5 Arrangements for internal access

The GIS, databases and paper files have been specifically set up for the contaminated land function. It is not intended to network the full GIS system across the Council to allow access to other departments. A basic polygon based layer of contaminated land has been added to the Corporate GIS system for the purposes of assisting planning in implementing Planning Policy Statement 23 (PPS23) but contains no data other than shapefiles.

It is predictable that development control, planning and land charges will all need to refer to the full GIS. This shall be done by direct request to the Environmental Protection section to carry out a search on their behalf, in exactly the same way as internal consultation presently operates.

8.6 Updating and maintaining information

The GIS system will be capable of being updated and added to by Environmental Protection staff. Training will be provided to selected Babergh DC staff in the use and manipulation of the GIS system for data storage and presentation. This training will include the ability to interrogate datasets, add new information, layers and linked databases, perform risk assessments and site characterisation/prioritisation and generate reports.

Many of the layers within the GIS will become out of date within a few years. Good examples of databases which require regular updating are sites with environmental permits, known pollution incidents and locations of private water abstractions.

Where Babergh DC is the primary producer of new data – for example private water abstraction locations – we will update the database as the new information becomes available. Our data quality control system will enable us to track updates, and to know when the data was last updated. Where data is produced by another organisation – for example the Environment Agency keeps the register of sites with Environmental Permits – we will request updates at a time-scale appropriate to the data.

Some data, for example, historical maps, do not go out of date. Other kinds of maps, e.g. geological and topographical maps are occasionally updated by the organisations that publish them. Babergh DC will purchase new issues of such maps as they become available.

9 REFERENCES AND GLOSSARY

9.1 References

[1] *Environmental Protection Act 1990, Part IIA*: inserted by Environment Act 1995, Section 57. See Environment Act 1995 for text of Part IIA.

[2] *Environmental Protection Act 1990, Part IIA. Contaminated Land*, DEFRA 01/2006, Department for Environment, Food and Rural Affairs.

[3] *The Contaminated Land (England) Regulations 2006.* Statutory Instrument (SI) DEFRA 2006, No.1380.

[4] Planning Policy Statement 3 – Housing, Communities and Local Government 2006.

[5] Planning Policy Statement 23 – Planning and Pollution Control, Office of the Deputy Prime Minister, 2004.

[6] British Geological Survey (1995) Potentially harmful elements from natural sources and mining areas: characteristics, extent and relevance to planning in Great Britain, BGS Technical Report WP/95/3.

[7] Department of the Environment (1995) A Guide to Risk Assessment and Risk Management for Environmental Protection, HMSO, London.

[8] M.J. Carter Associates (1995) *Prioritisation and Categorisation Procedure for Sites which may be Contaminated* CLR Report No. 6, Department of the Environment.

[9] CCME (1992) *National Classification System for Contaminated Sites* Publication ref. PN1005, Canadian Council of Ministers for the Environment.

[10] Working Better Together Protocol Series, Land Contamination Protocol No. 5 (2003) Environment Agency and Local Government Association.

[11] SNIFFER (1999) *Communicating understanding of contaminated land risks* Scotland and Northern Ireland Forum for Environmental Research, SEPA, Stirling.

[12] Department for Environment, Food and Rural Affairs and Environment Agency (2004) *Model Procedures for the Management of Land Contamination* CLR Report No. 11, Environment Agency.

[13] Department for Environment, Food and Rural Affairs and Environment Agency (2002) *The Contaminated Land Exposure Assessment Model (CLEA): Technical basis and algorithms* CLR Report No. 10, Environment Agency.

[14] The Environmental Information Regulations 2004. Statutory Instrument (SI) 3391.

[15] The Data Protection Act 1998.

[16] Freedom of Information Act 2000.

[17] Department of the Environment (1995) Potential Contaminants for the Assessment of Land, Consultants in Environmental Science Ltd (CES), Draft Final Report.

9.2 Glossary

This glossary has been prepared to assist understanding of technical and legal terms used in this contaminated land strategy. Definitions should therefore be taken in the context of contaminated land; they are not necessarily full and all encompassing definitions appropriate to any purpose. Explanations of terms with legal meaning have been simplified and/or further explained for clarity and should not be assumed to comprise full legal definitions. These are given by the Statutory Guidance [2].

ABSTRACTION

The pumping or collection of water for drinking or other use from a well, spring, river or other water source.

ALLUVIUM

Deposits formed from the sediments laid down by rivers and streams (ancient and existing), composed of clay to coarse gravel sized material, but usually consisting of sand and gravel.

APPROPRIATE PERSON

Any person who is found to be liable to pay for remediation under the terms of the Environmental Protection Act 1990 Part IIA. This is firstly the polluter. If no polluter can be identified, then the landowner may be the appropriate person. Where a significant pollution linkage exists but no Appropriate Person can be found, this linkage is referred to as an Orphan linkage.

AQUIFER

A body of rock or sediment that is sufficiently permeable to store and transmit water under the ground, in quantities that permit use of the water.

CHARGING NOTICE

A notice placing legal charge on land by an enforcing authority enabling the authority to recover reasonable remediation costs from the appropriate person (s).

CONTAMINATED LAND

The definition of contaminated land from the Environmental Protection Act 1990, Part IIA, Section 78A (2) is:

"any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that -

(a) significant harm is being caused or there is a significant possibility of such harm being caused; or

(b) pollution of controlled waters is being, or is likely to be, caused."

CONTROLLED WATERS

"Controlled waters" are all natural inland and near coastal waters, including groundwater, as defined in Section 78A(9) of the Environment Act [1] by reference to Part III (section 104) of the Water Resources Act 1991. Therefore, all lakes, rivers, streams, estuaries and coastlines are controlled waters. Pollution of controlled waters means the addition of any "poisonous, noxious or polluting matter or any solid waste matter".

DISCHARGE CONSENT

A consent, issued by the Environment Agency, allowing the discharge of waste water (e.g. run-off, or treated effluent from a factory) to a controlled water. The consent specifies the quantity and quality of wastewater that may be discharged at the consented location.

ENVIRONMENTAL PERMITTING

A system for regulating industrial sites in the UK, made under the Environmental Permitting Act 2007. It requires industrial sites operating particular processes to obtain permits to operate from the Environment Agency or Local Authority. In general, processes regulated under EP Regulations are likely to be more polluting than those not regulated; however this covers all forms of pollution and does not necessarily mean that EP sites are likely to cause contamination of the ground.

GEOGRAPHICAL INFORMATION SYSTEM (GIS)

A computer program that enables map-related data to be stored, viewed and processed.

GROUNDWATER

Water which flows through a soil or rock, beneath the water table.

GROUNDWATER SOURCE PROTECTION ZONE

An area around a major groundwater abstraction (drinking water source) where ground contamination may result in the contamination of the water source. Groundwater Source Protection Zones are defined by the Environment Agency and there are restrictions on development of some kinds (e.g. landfill sites) within them.

MAJOR AQUIFER

An aquifer that provides significant drinking water resource in the UK.

NATIONAL AVERAGE BACKGROUND

The normal range of concentrations of a substance, or substances occurring in an area (excluding mineralised or 'contaminated' samples). Determined by statistical analysis of stream sediment geochemical data for Great Britain [6].

ORPHAN LINKAGE

A significant pollutant linkage for which no Appropriate Person can be found, or where those who would otherwise be liable are exempted by one of the relevant statutory provisions.

Where an orphan linkage is the only significant pollutant linkage identified, the enforcing authority (normally Babergh DC or the Environment Agency) will bear the cost of any remediation required.

In more complicated cases where there are two or more significant pollution linkages, of which some are orphan linkages, Babergh DC will consider each of these separately. There are circumstances where all or part of the remediation costs for orphan linkages are recoverable from Appropriate Persons identified for other significant pollutant linkages. These circumstances generally apply where the remediation required for the orphan linkages are also required for some or all of the other significant pollution linkages for which Appropriate Persons have been identified.

PATHWAY

A mechanism for a receptor to be exposed to a contaminant that may harm the receptor.

POLLUTANT LINKAGE

A circumstance where it is possible that a contaminant (source) may contact a receptor (via a particular pathway).

POTENTIALLY CONTAMINATIVE USE

A development that exists, or has previously existed, on a site where the nature of the development is such that it is possible that contamination of the ground may have occurred.

PUBLIC REGISTER

The register maintained by the enforcing authority containing details of land that is contaminated land.

RAMSAR SITE

A designated wetland of international importance from the 1971 Convention of Wetlands in Ramsar, Iran.

RECEPTOR

(a) A living organism (including humans) or group of organisms, and ecological system or piece of property that is being, or could be harmed by a contaminant.

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

REMEDIATION

Remediation is an action carried out to reduce the risk of significant harm or water pollution. It entails breaking or removing significant pollutant linkages, by treating the source (contaminant); blocking the pathway or protecting or removing the receptor.

REMEDIATION DECLARATION

A document prepared and published by the enforcing authority, detailing remediation actions that it would have specified for a given site, but is prevented from so doing by Section 78E (4) and (5). This says that the authority must only specify remediation that is reasonable,

given the seriousness of the harm or water pollution, and the cost of the works that would have to be carried out.

REMEDIATION NOTICE

A notice specifying what an appropriate person has to do by way of remediation and when he is to do each of the specified actions by. Note that the actions specified do not always consist of "remediation". "Assessment actions" and "monitoring actions" can also be specified in remediation notices.

REMEDIATION STATEMENT

A statement prepared and published by the responsible person detailing the remediation actions that have been carried out (or are planned).

RESPONSIBLE PERSON

The person responsible for carrying out the remediation. Not necessarily the same as the appropriate person.

RUN-OFF

Surface water that flows across an area and into rivers, streams etc. or drains during rainfall (i.e. all the water that does not soak into the ground).

SIGNIFICANT HARM

Significant harm includes:

Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions in humans

Irreversible adverse change or threat to endangered species, affecting an ecosystem in a protected area (e.g. Site of Special Scientific Interest)

Death, serious disease or serious physical damage to pets, livestock, game animals or fish

A substantial loss (20%) in yield or value of crops, timber or produce

Structural failure, substantial damage or substantial interference with right of occupation to any building

Further information on significant harm is given in Chapter A, Table A of Circular 01/2006 (the Statutory Guidance) [2].

SIGNIFICANT POLLUTANT LINKAGE

A pollutant linkage where the amount of contaminant (source) that may be able to contact the receptor is likely to be sufficient to result in significant harm or pollution of controlled waters.

SIGNIFICANT POSSIBILITY OF SIGNIFICANT HARM

In determining whether there is a significant possibility of significant harm, the local authority will use a risk assessment approach, considering both the severity and the likelihood of the possible harmful effect. This will involve establishing:

the nature and degree of harm predicted;

the susceptibility of the receptors to which harm might be caused; and

the time-scale within which the harm might occur.

SITE WITH STATUTORY PROTECTION

Ecological and Conservation Protected Areas to which Part IIA applies, i.e.

- Sites of Special Scientific Interest (Wildlife and Countryside Act 1981 Section 28).
- National Nature Reserves (Wildlife and Countryside Act 1981 Section 35).
- Marine Nature Reserves (Wildlife and Countryside Act 1981 Section 36).
- Areas of Special Protection for Birds (Wildlife and Countryside Act 1981 Section 3.
- European Sites Special Areas of Conservation and Special Protection Areas, and candidate sites for these designations (Conservation (Natural Habitats etc) Regulations 1994 Regulation 10.
- Any habitat or site afforded policy protection under paragraph 13 of Planning Policy Statement Note PPS 9 on Biodiversity and Geological Conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and Listed Ramsar sites.
- Nature Reserves established under section 21 of the National Parks and Access to the Countryside Act 1949.

SOURCE

A substance capable of causing harm, that is present in, on, or under the ground.

SPECIAL SITE

A Special Site is a contaminated land site that is regulated by the Environment Agency instead of the Local Authority. The full definition of a Special Site is given in the Contaminated Land (England) Regulations (2006), an extract of which is also reproduced in Appendix 5.

Examples of Special Sites are:

- sites that could be contaminating drinking water resources;
- industrial sites likely to have difficult contamination problems, such as waste acid tar lagoons, oil refining, explosives and sites regulated under Integrated Pollution Prevention & Control;
- nuclear sites; and
- current Ministry of Defence land (with some exceptions, like off-base housing).

STATUTORY GUIDANCE

Guidance that must be complied with by the enforcing authority. The Statutory Guidance for English local authorities is given in DEFRA Circular 01/2006 [2].

SUPERFICIAL DEPOSITS

Deposits which are present above the solid rock geology, have not yet become solid rock, and are typically less than 2 million years old.

TOPOGRAPHY

The topography describes the relief of the ground over an area or region, and is generally expressed as contours on a map.

TRIBUTARY

A small river or stream that flows into a larger river or stream. Usually, a number of smaller tributaries merge to form a river.

WALKOVER SURVEY

A preliminary survey of a site carried out by visual inspection. Normally the survey is guided by a checklist of areas or features to be inspected.

APPENDIX 1

THIRD PARTY CONTACT DETAILS

Г

Contaminants Division Food Standards Agency Room 707c, Aviation House 125 Kingsway London WC2B 6NH	Environment and Transport Department Suffolk County Council Endevour House, 8 Russell Road Ipswich IP1 2BX
Tel 020 7276 8726	Tel 01473 583000
Duty VO Department for Environment, Food & Rural Affairs 100 Southgate Street Bury St Edmunds IP33 2BD Tel 01284 778150	English Heritage Inspector of Ancient Monuments East of England Region Brooklands 24 Brooklands Avenue Cambridge CB2 2BU Tel 01223 582700
Groundwater Manager Anglian Water Services Ltd Endurance House Chivers Way Histon Cambridgeshire CB4 4ZY Tel 01223 547590	Natural England Government Buildings, 100 Southgate Street, Bury St Edmunds, Suffolk, IP33 2FE Tel 01284 762218
Area Contaminated Land Officer Environment Agency Cobham Road Ipswich Suffolk IP3 9JE Tel 08708 506506	Head of Support Services East of England Development Agency Business Centre Station Road Histon CB4 9LQ Tel 01223 713900
The Health and Safety Executive (HSE) HSE Inspector Wren House Hedgerows Business Park Colchester Road Chelmsford Essex CM2 5PF	

-

APPENDIX 2

CONFIDENTIALITY OF INFORMATION

The majority of the information generated by, or supplied to Babergh DC about the condition of land will be in the public domain. This will be true whether or not the site appears on the Public Register.

Under certain circumstances Babergh DC may not be able to place information on the Public Register (or release it in response to other requests). Circumstances where information is withheld are:

- where this is in the interests of national security;
- where this is commercially confidential; and
- where the information relates to the affairs of any individual or business.

Where information has been excluded from the Public Register for reasons of commercial confidentiality, Babergh DC will place a statement on the Register to indicate this. Any person who wishes to have information excluded from the Public Register on the grounds of commercial confidentiality must follow certain procedures – these are set out below.

Supply of any other environmental information held by Babergh DC is also subject to 12 specified exceptions (determined by the Environmental Information Regulations 2004 [14]), although non-disclosure of information may be subject to a public interest test – see below. These include:

- where this is in the interests of national security;
- where the information is an issue in any legal proceedings or enquiry;
- where the information is still being completed, or is an internal communication of a relevant person;
- where this would affect the confidentiality of the deliberations of a relevant person; and
- where this is commercially confidential.

The confidentiality of any information supplied to Babergh DC by third parties is determined when the information is received. Where a third party states that information it supplies to Babergh DC is commercially confidential, or cannot be released for any of the other reasons given above, then Babergh DC asks for a justification to be provided giving the reasons for this. Information that is confirmed as confidential on the basis of a justification cannot be released to other parties. Where Babergh DC is unable to supply information it will give the reason for this.

Excluding commercially confidential information from the Public Register

Under Part IIA, information cannot be excluded from the Public Register on the grounds of commercially confidentiality solely because its release might affect the value of the land.

Any business, organisation or individual that believes an item should be excluded from the Public Register on the grounds of commercial confidentiality may contact Babergh DC. If

Babergh DC considers that a Public Register entry may be commercially confidential, we will contact the person concerned to allow them an opportunity to request that the information should be excluded. In order for information to be excluded, the affected person must:

- request in writing that particular information should be excluded from the Public Register; and
- provide a written explanation of why the information is commercially confidential (note that this may not consist solely of a potential effect on land value).

Babergh DC will then decide whether the information should be excluded from the Public Register. When exclusions are made, a statement will appear on the Public Register explaining that information has been excluded because it is considered commercially confidential.

If Babergh DC considers that the information is not commercially confidential, then the person concerned will be notified in writing. That person then has 21 days to appeal to the Secretary of State, during which time the information will not appear on the Public Register. If no appeal is made, the information will be placed on the Public Register.

If an appeal is made, the information will not appear on the Public Register whilst the appeal is pending.

Exclusions from the Public Register will generally lapse after a period of 4 years. Where a person considers that the information is still commercially confidential, a further application to have the information excluded can be made, using the same procedures as outlined above.

The Data Protection Act 1998

The Data Protection Act 1998 [15] applies to all data that is processed automatically. For the purposes of the Act, almost all data held on computers is considered as being "processed automatically". In addition, paper records are also now covered by the Act. The Data Protection Act seeks to provide some protection to persons (known as data subjects) with regard to 3 potential dangers:

- the use of personal information that is inaccurate, incomplete or irrelevant;
- the possibly of access to personal information by unauthorised persons; and
- the use of personal information in a context or for a purpose other than that for which the information is collected.

Personal data is defined as data consisting of information, which relates to a data subject who can be identified from the information, or from that and other information in the possession of the data user (Babergh DC).

Babergh DC acknowledges and supports the principles of the Data Protection Act 1998. The authority aims to protect the rights of data subjects and seeks to manage personal information in accordance with the legislation.

The Council will consider the implications of holding a GIS based database of information relating to its statutory duty for contaminated land. Appropriate action will be taken to ensure that the Council complies with the requirements of the Data Protection Act with respect to any personal data that it holds in relation to this duty.

The Freedom of Information Act 2000

If a request for information is neither environmental nor personal it may be accessed and dealt with under the Freedom of Information Act 2000 [14].

Whilst the Freedom of Information Act creates a right to request specific information held by public bodies, it also creates a number of exemptions from that right. These have the effect of permitting public authorities to withhold some or all of the information requested, where that information fits the terms of one or more of the exemptions.

Many of the exemptions will only apply where pressing public interest arguments can be made for withholding the information. In other words, information which falls under a particular exception category, will nevertheless have to be disclosed unless it can be successfully argued that the public interest in withholding is greater than the public interest in releasing it. These exemptions are known as 'qualified' exemptions.

A few exemptions (known as 'absolute' exemptions) do not contain the above requirement. Where information falls within the terms of an absolute exemption, the Council may withhold the information without considering any public interest arguments.

What is the public interest test?

If a public authority believes that the information is covered by a qualified exemption or exception it must apply the public interest test. The public interest test favours disclosure where a qualified exemption or an exception applies. In such cases, the information may be withheld only if the Council considers that the public interest in withholding the information is greater than the public interest in disclosing it.

APPENDIX 3

PRIORITISATION PROCEDURE

The British Geological Survey (BGS) has developed an integrated GIS tool to rank potentially contaminated land, thus allowing the prioritisation of follow-up investigation. This scheme is intended to assist Local Authorities in complying with the requirements of the recently introduced Part IIA legislation. The benefit of using an integrated GIS system lies in the automation of the process, particularly the spatial linkage, which paper or spreadsheet products require to be manually entered.

The GIS tool generates a report document for each site as required, listing the sources, receptors and pathways identified for each site, along with the scoring. The scores thus obtained can also be mapped for an area of interest, to establish where high priority sites occur within an area of responsibility.

This methodology uses the principles documented in the Part IIA legislation, that is the "pollutant linkage" concept. Part IIA states that a source, pathway and receptor must exist, in order for a source to have the potential to cause harm to a receptor. The system has been developed to allow scoring of the different sources, pathways and receptors for a site and its environs. The simple scoring system of the CCME, which is the Canadian paper based prioritisation tool [8], has been used to allow qualitative ranking of potentially contaminated sites.

The sources, receptors and pathway data resources are those available to Local Authorities or prescribed by the legislation. The likely contaminants arising from various previous land uses are taken from the Department of the Environment publication listing the "Potential Contaminants for the Assessment of Land" [17]. These are augmented where references from the scientific or technical literature can provide supplementary information. These are always listed and referenced. Thus, whilst the lists cannot be any more than generic for industry types, they are fully referenced and traceable, allowing an audit trail of decisions taken. Pathways are represented by proximity to potential receptors, such as controlled waters (surface, ground and drinking water supply) and high priority human receptors (e.g. schools). Receptors are as formally described in the legislation.

The scheme cannot identify contaminated land, but it does prioritise that land which has the potential to be contaminated. It is designed to be used with expert judgement of the output results, in assessing whether the juxtaposition of sources, pathways and receptors is indeed likely to result in pollutant linkage.

APPENDIX 4

CONTENTS OF THE PUBLIC REGISTER

Below is a summary of the contents of the Public Register. For the full legal text, refer to Schedule 3 of the Contaminated Land (England) Regulations 2006 [3]

Remediation Notices

- Details of the remediation notice:
- 1. who Babergh DC has served a notice on;
- 2. where the contaminated land the notice refers to is;
- 3. why the land is contaminated land, what the contamination is and where it came from (if not from the land in question);
- 4. what the contaminated land is currently used for;
- 5. details of what remediation each appropriate person has to do and when this has to be done by; and
- 6. the date of the notice.

Appeals Against Remediation Notices

• Details of any appeal against a remediation notice served by Babergh DC and any decision on such an appeal.

Remediation Declarations

• Any remediation declaration prepared and published by Babergh DC and for any such declaration, details of items 2-5 as detailed in 'Remediation Notices' above.

Remediation Statements

• Any remediation statement prepared and published by the responsible person or by Babergh DC and for any remediation statement, details of items 2-5 as detailed in 'Remediation Notices' above.

Appeals Against Charging Notices

• Any appeal against a charging notice served by Babergh DC and any decision on such an appeal.

Designation of Special Sites

- Details of any land in Babergh DC's area of responsibility designated as a special site by Babergh DC or the Secretary of State and the reasons for this.
- Any notice given by the Environment Agency of its decision to adopt a remediation notice (the Environment Agency being the enforcing authority for special sites).

Any notice given by or to Babergh DC terminating the designation of any land as a • special site.

Notification of Claimed Remediation

Any notification given to Babergh DC of remediation claimed to have taken place.

Convictions for Offences in relation to a Remediation Notice

Any conviction of a person for any offence in relation to a remediation notice served by Babergh DC, including the name of the offender, the date of conviction, the penalty imposed and the name of the Court.

Guidance issued to Babergh DC by the Appropriate Agency

Details of any guidance issued to Babergh DC for a particular site (by the Environment Agency in most cases).

Other Environmental Controls

- Where Babergh DC cannot issue a remediation notice because the powers of the appropriate agency (usually the Environment Agency) may be exercised instead:
 - 1. details of items 2-5 in 'Remediation Notices' above for the contaminated land; and
 - 2. any steps of which Babergh DC has knowledge, taken towards remedying any significant harm or pollution of controlled waters that causes the land to be contaminated land.
- Where the powers of the appropriate waste regulation authority or waste collection authority may be exercised instead (in relation to deposition of controlled waste which causes the land to be contaminated land) Babergh DC may not issue a remediation notice and may record the following details on the register:
 - 1. details of items 2-5 in 'Remediation Notices' above for the contaminated land; and
 - 2. any known steps taken to remove the waste, or reduce the consequences of its deposit, including steps taken by a waste regulation authority or waste collection authority and the name of the authority.
- Where Babergh DC cannot specify something by way of remediation in a remediation • notice because this would impede or prevent a discharge to a water body for which a discharge consent is in force:
 - 1. details of the consent; and
 - 2. details of items 2-5 in 'Remediation Notices' above for the contaminated land.

APPENDIX 5

DEFINITION OF A SPECIAL SITE

Extracted from: The Contaminated Land (England) Regulations 2006

Land required to be designated as a special site

2.—(1) Contaminated land of the following descriptions is prescribed for the purposes of section 78C(8) as land required to be designated as a special site—

(a) land affecting controlled waters in the circumstances specified in regulation 3;

(b) land which is contaminated land by reason of waste acid tars in, on or under the land;

(c) land on which any of the following activities have been carried on at any time—

(i) the purification (including refining) of crude petroleum or of oil extracted from petroleum, shale or any other bituminous substance except coal; or

(ii) the manufacture or processing of explosives;

(d) land on which a prescribed process designated for central control has been or is being carried on under an authorisation, where the process does not solely consist of things being done which are required by way of remediation;

(e) land on which an activity has been or is being carried on in a Part A(1) installation or by means of Part A(1) mobile plant under a permit, where the activity does not solely consist of things being done which are required by way of remediation;

(f) land within a nuclear site;

(g) land owned or occupied by or on behalf of-

(i) the Secretary of State for Defence;

(ii) the Defence Council,

(iii) an international headquarters or defence organisation, or

(iv) the service authority of a visiting force,

being land used for naval, military or air force purposes;

(h) land on which the manufacture, production or disposal of-

(i) chemical weapons,

(ii) any biological agent or toxin which falls within section 1(1)(a) of the Biological Weapons Act 1974 (restriction on development of biological agents and toxins), or

(iii) any weapon, equipment or means of delivery which falls

within section 1(1)(b) of that Act (restriction on development of biological weapons),

has been carried on at any time;

(i) land comprising premises which are or were designated by the Secretary of State by an order made under section 1(1) of the Atomic Weapons Establishment Act 1991 (arrangements for development etc of nuclear devices);

(j) land to which section 30 of the Armed Forces Act 1996 (land held for the benefit of Greenwich Hospital) applies;

(k) land which is contaminated land wholly or partly by virtue of any radioactivity possessed by any substance in, on or under that land; and

(l) land which-

(i) is adjoining or adjacent to land of a description specified in any of sub-paragraphs (b) to (k); and

(ii) is contaminated land by virtue of substances which appear to have escaped from land of such a description.

(2) For the purposes of paragraph (1)(b), "waste acid tars" are tars which-

(a) contain sulphuric acid;

(b) were produced as a result of the refining of benzole, used lubricants or petroleum; and

(c) are or were stored on land used as a retention basin for the disposal of such tars.

(3) In paragraph (1)(d), "authorisation" and "prescribed process" have the same meanings as in Part 1 of the 1990 Act (integrated pollution control and air pollution control by local authorities) and the reference to designation for central control is a reference to designation under section 2(4) (which provides for processes to be designated for central or local control).

(4) In paragraph (1)(e), "Part A(1) installation", "Part A(1) mobile plant" and "permit" have the same meanings as in the Pollution Prevention and Control (England and Wales) Regulations 2000.

(5) In paragraph (1)(f), "nuclear site" means—

(a) any site in respect of which, or part of which, a nuclear site licence is for the time being in force; or

(b) any site in respect of which, or part of which, after the revocation or surrender of a nuclear site licence, the period of responsibility of the licensee has not come to an end.

(6) In paragraph (5), "nuclear site licence", "licensee" and "period of responsibility" have the meanings given by the Nuclear Installations Act 1965.

(7) For the purposes of paragraph (1)(g), land used for residential purposes or by the Navy, Army and Air Force Institutes must be treated as land used for naval,

military or air force purposes only if the land forms part of a base occupied for naval, military or air force purposes.

(8) In paragraph (1)(g)—

"international headquarters" and "defence organisation" mean, respectively, any international headquarters, and any defence organisation, designated for the purposes of the International Headquarters and Defence Organisations Act 1964

"service authority" and "visiting force" have the same meanings as in Part 1 of the Visiting Forces Act 1952

(9) In paragraph (1)(h), "chemical weapon" has the same meaning as in subsection (1) of section 1 of the Chemical Weapons Act 1996 disregarding subsection (2) of that section.