



HAMBLETON DISTRICT COUNCIL
ENVIRONMENTAL HEALTH SERVICE

CONTAMINATED LAND STRATEGY

Date of Issue: 5th November 2013

Version Control

<i>Version No.</i>	<i>Amended by</i>	<i>Date</i>
1.0	John Warren	5 th June 2013
1.1	John Warren	5 th November 2013

EXECUTIVE SUMMARY

This document is the Contaminated Land Strategy for Hambleton District Council.

The authority produced an original strategy in 2001 as required by Part 2A of the Environmental Protection Act 1990.

Since then, there have been updates to the Regulations and major changes to the Statutory Guidance issued by Defra and also the approach to risk assessment in the UK which underpins assessment of land affected by contamination and the regulatory role played by local authorities.

The Strategy has been written to reflect the changes to the new Defra Statutory Guidance issued in April 2012 and outlines how the authority will identify, prioritise, inspect and, where required, determine land as contaminated land, and how remediation will be secured.

The Strategy considers the Priority Aims and Objectives of each authority and takes into consideration the diverse natural setting of the districts and local circumstances when deciding how to deal with land contamination.

The Strategy outlines a list of Priority Actions and Timescales for achieving these actions and policies and procedures that the authorities will adopt when faced with specific issues such as orphan sites, pollution incidents, hardship and risks to human health or controlled waters.

The Strategy also presents sections on how information is obtained and evaluated, how information is managed, how information will be communicated and with whom, and how, when and why decisions and information will be reviewed.

TABLE OF CONTENTS

1.	Introduction	1
1.1	General Policies of the Local Authority.....	1
1.1.1	Hambleton District Council	1
1.2	Regulatory Context	1
1.2.1	Legislation.....	1
1.2.2	Radioactive Contamination	2
1.2.3	Regulatory Role of Enforcing Authorities.....	3
1.2.4	Definition of Contaminated Land under Part 2A	3
1.2.5	Categories of Harm	4
1.2.5.1	Human Health	4
1.2.5.2	Non-Human (Ecological and Property) Receptors	5
1.2.5.3	Controlled Waters.....	5
1.2.6	Principles of Risk Assessment	7
1.2.7	Contaminant Linkages	7
1.2.8	Requirement for a Strategic Approach	8
2.	Characteristics of the Council Area	9
2.1	Hambleton District Council Area	9
2.1.1	Geographical Size and Location.....	9
2.1.2	Population Distribution	9
2.1.3	Council Owned Land and Property.....	9
2.1.4	Current Land Use.....	10
2.1.5	Protected Locations	10
2.1.6	Key Property Types.....	11
2.1.7	Water Resources	11
2.1.8	Known Information on Contamination.....	11
2.1.9	Current and Past Industrial History.....	12
2.1.10	Geology of the Area	12
2.1.11	Hydrogeology of the Area.....	13
2.1.12	Redevelopment History and Controls	14
3.	Strategy Aims, Objectives and Milestones.....	16
3.1	Aims of the Strategy.....	16
3.2	Objectives of the Strategy	16
3.3	Milestones.....	17
3.3.1	Hambleton District Council	17
4.	Priority Actions and Timescales.....	19
4.1	Priorities.....	19
4.2	Timescales.....	19
5.	Policies and Procedures.....	20
5.1	Internal Management Arrangements for the Inspection and Identification	20
5.1.1	Orphan sites.....	20
5.1.2	Urgent Sites	21
5.1.3	Pollution Incidents	21
5.1.4	Hardship	21
5.1.5	Voluntary Remediation	21
5.1.6	Special Sites	22
5.1.7	Harm to Receptors	22
5.1.7.1	Human Health	22

5.1.7.2	Controlled Waters.....	22
5.1.7.3	Ecological Receptors.....	22
5.1.7.4	Property (Animals, Crops etc.).....	23
5.1.7.5	Property (Buildings).....	23
5.2	Local Authority interests in land	23
5.3	Information Collection	23
5.3.1	Future Site Identification.....	23
5.4	Information and Complaints	24
5.5	Information Evaluation	24
5.5.1	Site Prioritisation	24
5.5.2	Site Assessments.....	24
5.5.2.1	Human Health	25
5.5.2.2	Controlled Waters.....	25
5.5.2.3	Ecological Receptors.....	26
5.5.2.4	Property (Crops, Animals)	26
5.5.2.5	Property (Buildings).....	26
6.	General Liaison and Communication Procedures.....	27
6.1	General Liaison and Communication Strategies.....	27
6.1.1	Information and Complaints	27
6.1.2	Internal Management Arrangements for Inspection and Identification	27
6.1.3	Land Searches.....	27
6.1.4	Environmental Searches	28
6.1.5	Communication Strategy	28
6.1.6	Statutory Consultees.....	28
6.1.7	Transboundary Liaison Between Authorities	28
6.1.8	Owners, Occupiers and Other Interested Parties	29
6.1.9	The Wider Community	29
7.	Programme for Inspection	30
7.1	Prioritisation of Sites	30
7.2	Council priorities for dealing with Contaminated Land:.....	30
7.3	Timetable for site assessment.....	30
7.4	Arrangements for carrying out detailed inspections.....	30
7.4.1	Stage 1 - Pre Inspection / Desk Study.....	31
7.4.2	Stage 2 – Site Visit and Visual Inspection.	31
7.4.3	Stage 3 – Intrusive Investigations.....	32
7.4.4	Final Categorisation of Sites	33
7.4.5	Designation of Special Sites.....	33
8.	Review Mechanisms	34
8.1	Triggers for undertaking inspection	34
8.2	Triggers for reviewing inspection decisions	34
8.3	Reviewing the strategy.....	35
9.	Information Management.....	36
9.1	Public Register.....	37
Appendices	Error! Bookmark not defined.
Appendix 1	Statutory Guidance Tables 1 and 2	Error! Bookmark not defined.
Appendix 2	HDC Land and Property Ownership	Error! Bookmark not defined.
Appendix 3	HDC Protected Locations	Error! Bookmark not defined.
Appendix 4	HDC Private Water Supply Information.....	Error! Bookmark not defined.
Appendix 5	HDC Owned Land Intersecting with Landmark Data... defined.	Error! Bookmark not defined.
Appendix 6	Prioritisation method.....	Error! Bookmark not defined.

TABLES

Table 2.1: Council Owned Commercial/Industrial Development Sites.....	10
Table 3.1: Summary of Original Strategy Implementation.....	17
Table 3.2: Summary of annual site investigation work	18

1. INTRODUCTION

Hambleton District Council (HDC) published a Contaminated Land Strategy in June 2001 as a statutory requirement of Part 2A of the Environmental Protection Act 1990. The strategy was written during the infancy of the Part 2A regime, and although it met the requirements of previous statutory guidance, it did not contain all of the recommended or optional elements of a strategy as suggested in the DETR Inspection Strategies Advice Note issued in May 2001.

Following the release, in April 2012, of new Statutory Guidance detailing how local authorities should deal with contaminated land, the Council decided to review its strategy.

1.1 General Policies of the Local Authority

1.1.1 Hambleton District Council

The Council's corporate vision is "Making Life Better... Improving quality of life for all by providing high quality services to our communities and helping to deliver community needs."

In order to ensure the Council remains focused on what is important, the vision has been broken down into several priority themes. The priority themes are:

- Prosperity – to develop communities that flourish without deprivation;
- Health – to ensure everyone is able to enjoy an active life;
- Safety – making people feel safer;
- Environment and Housing – to enhance and environment that is attractive, clean and safe;
- Citizenship – Strengthening communities

1.2 Regulatory Context

1.2.1 Legislation

Section 57 of the Environment Act 1995 inserted Part 2A into the Environmental Protection Act 1990, and created a new regulatory regime for the identification and remediation of contaminated land. The Contaminated Land (England) Regulations 2000, which came into force on 1st April 2000, enacted the Part 2A regime. The 2000 Regulations were replaced by the Contaminated Land (England) Regulations 2006 (S.I. 2006/1380).

In April 2012 the Government issued new Statutory Guidance, replacing Defra Circular 01/2006 Environmental Protection Act 1990: Part 2A Contaminated Land. The statutory guidance requires local authorities to take a strategic approach to the identification of land which may be contaminated and to produce a strategy for dealing with contaminated land in their area.

The guidance also introduced Categories of Harm in relation to human health (and controlled waters) in deciding whether or not land is contaminated on grounds of significant possibility

of significant harm (or significant pollution of controlled waters). These categories are explained further in section 1.2.5.

1.2.2 Radioactive Contamination

Radioactive contamination is dealt with separately to non-radioactive contamination and in April 2012 new statutory guidance was issued by the Secretary of State for Energy and Climate Change in accordance with section 78YA of the Environmental Protection Act 1990 ("the 1990 Act") as it applies to harm attributable to radioactivity.

Section 78YC of Part 2A EPA 1990 gives powers to the Secretary of State to make regulations applying the Part 2A regime, with any necessary modifications, for the purpose of dealing with harm attributable to radioactivity. These powers have been exercised in the Radioactive Contaminated Land (Enabling Powers) (England) Regulations 2005 and the Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006 to establish a legal framework for dealing with radioactive contaminated land in England.

The radioactive contaminated land regime only covers contamination which has resulted from the after-effects of a radiological emergency or a past practice or past work activity.

It does not apply to current practices and natural background radiation. In addition, the regime and therefore this Guidance does not apply in relation to land within a nuclear site or an MOD nuclear site or where remediation is to be undertaken by a local authority in implementation of an emergency plan under regulation 13(2) of the Radiation (Emergency Preparedness and Public Information) Regulations 2001.

Part 2A requires that local authorities cause their areas to be inspected with a view to identifying radioactive contaminated land, and to do this in accordance with the statutory guidance.

The trigger for a local authority to cause land to be inspected is where it considers that there are *reasonable grounds* for believing that land may be radioactive contaminated land. HDC will have reasonable grounds if we have knowledge of relevant information relating to:

- a. a former historical land use, past practice, past work activity or radiological emergency, capable of causing lasting exposure giving rise to the radiation doses set out in the statutory guidance; or
- b. levels of contamination present on the land arising from a past practice, past work activity or radiological emergency, capable of causing lasting exposure giving rise to the radiation doses set out in the statutory guidance.

If HDC considers that there are reasonable grounds for believing land may be radioactive contaminated land we will inspect the land to obtain sufficient information to decide whether it is radioactive contaminated land.

If land is radioactive contaminated land it will fall within the definition of a special site prescribed in regulation 2 of the Contaminated Land (England) Regulations 2006 and the Environment Agency will be the enforcing authority in respect of that land.

1.2.3 Regulatory Role of Enforcing Authorities

The enforcing authorities under Part 2A are the local authorities (HDC) and the Environment Agency (EA). The roles of a local authority under Part 2A are:

1. to cause their areas to be inspected to identify contaminated land;
2. to determine whether any particular site is contaminated land;
3. to act as enforcing authority for all contaminated land which is not designated as a “special site”.

The EA has four principal roles with respect to contaminated land under Part 2A. It will:

1. assist HDC in identifying contaminated land, particularly in cases where water pollution is involved;
2. provide site specific guidance to HDC on contaminated land;
3. act as the “enforcing authority” for any land designated as a “special site”; and
4. publish periodic reports on contaminated land

The Council and the EA have four main tasks:

1. to establish who should bear responsibility for the remediation of the land;
2. to decide, after consultation, what remediation is required in any individual case and to ensure that such remediation takes place, either through agreement with the appropriate person, or by serving a remediation notice on the appropriate person if agreement is not possible or, in certain circumstances, through carrying out the work themselves;
3. where a remediation notice is served, or the authority itself carries out the work, to determine who should bear what proportion of the liability for meeting the costs of the work; and
4. to record certain prescribed information about their regulatory actions on a public register

1.2.4 Definition of Contaminated Land under Part 2A

Section 78A(2) defines contaminated land for the purposes of Part 2A as “any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that –

- (i) significant harm is being caused or there is a significant possibility of such harm being caused;
- (ii) significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused.

Radioactively contaminated land is defined as “any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that –

- (i) harm is being caused, or
- (ii) there is a significant possibility of such harm being caused.”

1.2.5 Categories of Harm

1.2.5.1 Human Health

In deciding whether or not land is contaminated land on the grounds of significant possibility of significant harm to human health the following categories 1 to 4 are used, in accordance with the Statutory Guidance:

Category 1 Where the Council considers there is an unacceptably high probability, supported by robust science-based evidence, that significant harm would occur if no action is taken to stop it.

Land will be deemed to be a Category 1: Human Health case where:

1. the Council is aware of similar land or situations that are known, or strongly suspected, to have caused such harm;
2. the Council is aware that similar degrees of exposure to the contaminant(s) in question are known, or strongly suspected, to have caused such harm before; and
3. the Council considers that significant harm may already have been caused by contaminants and that there is an unacceptable risk that it might continue to occur again if no action is taken.

Category 2 Where the Council concludes, on the basis that there is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm.

Land will be deemed to be a Category 2: Human Health case where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but nonetheless the Council considers on the basis of the available evidence that there is a strong case for taking action under Part 2A on a precautionary basis.

Category 3 Where the Council concludes that a strong case described in Category 2 above does not exist, and therefore the legal test for significant possibility of significant harm is not met.

Category 3: Human Health cases may include land where the risks are low, but nonetheless the Council considers that regulatory intervention under Part 2A is not warranted.

Placing land in Category 3 does not prevent others, such as a land owner or occupier of the land, from taking action to reduce risks outside of the Part 2A regime if they choose. In these circumstances, the Council will consider making available the results of our inspections and risk assessments to the owners or occupiers of Category 3 land to facilitate remediation action outside of the Part 2A regime.

In making the decision on whether land falls into a Category 2 or Category 3 case, the Council will first consider the assessment of the possibility of significant harm to human health, including an estimated likelihood of such harm, the estimated impact if harm did occur, the timescale over which it might occur, and the levels of certainty attached to these estimates.

If the Council cannot decide whether to make a decision on the above basis then the Council will then consider other factors, including:

- i) the likely direct and indirect health benefits and impacts of regulatory intervention, including the benefits of reducing or removing the risk posed by contamination, the risks from contaminants being mobilised during remediation, and any indirect impacts such as stress-related health effects that may be experienced by affected people, particularly local residents;
- ii) the initial estimate of what remediation would involve, how long it would take, what benefits it would bring, whether the benefits outweigh the financial and economic costs, and any impacts on local society or the environment from taking action that the authority considers to be relevant.

If it is not clear to the Council that the health benefits of remediation would outweigh the health impacts then Council will presume the land falls into Category 3 unless there is a strong reason to consider otherwise.

If, having taken the above factors into account, the Council still cannot decide whether or not a significant possibility of significant harm exists, then the Council will conclude that the legal test has not been met and the land will be placed into Category 3.

Category 4 Where the Council considers that there is no risk, or that the level of risk is low, of a significant possibility of significant harm.

Land will be deemed to be a Category 4: Human Health case where:

1. no relevant contaminant linkage has been established;
2. where there are only normal levels of contaminants in soil;
3. contaminant levels do not exceed relevant generic assessment criteria;
4. estimated levels of exposure to contaminants in soil are likely to form only a small proportion of what a receptor might be exposed to anyway through other sources of environmental exposure.

1.2.5.2 Non-Human (Ecological and Property) Receptors

The Council will have regard to the receptors described in Tables 1 and 2 of the Statutory Guidance as being relevant to Part 2A (see Appendix 1).

1.2.5.3 Controlled Waters

In establishing whether significant pollution of controlled waters is being caused, or whether there is a significant possibility of such pollution being caused, the Council will have regard to any technical guidance issued by the Environment Agency and will consult the Agency and have strong regard to its advice in cases where it is likely that land might be contaminated land.

In accordance with the Statutory Guidance the Council will consider the following types of pollution to constitute significant pollution of controlled waters:

1. Pollution equivalent to 'environmental damage' to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations 2009, but which cannot be dealt with under those Regulations;
2. Inputs resulting in deterioration of the quality of water abstracted, or intended to be used in the future, for human consumption such that additional treatment would be required to enable that use;

3. A breach of a statutory surface water Environment Quality Standard, either directly or via a groundwater pathway.
4. Input of a substance into groundwater resulting in a significant and sustained upward trend in concentration of contaminants, as defined in Article 2(3) of the Groundwater Daughter Directive (2006/118/EC).

The Council may also consider that significant concentrations of hazardous substances or non-hazardous pollutants in groundwater, or significant concentrations of priority hazardous substances, priority substances or other specific polluting substances in surface water constitutes significant pollution. Consultation with the Environment Agency will be required in these circumstances.

The Council will not consider the following types of circumstances to be contaminated land on the grounds of water pollution:

- i) If substances are merely entering water and none of the conditions for considering that significant pollution is being caused, as outlined above, are being met;
- ii) If land is causing a discharge that is not discernible at a location immediately downstream or down-gradient of the land;
- iii) Substances entering water in compliance with a discharge authorised under the Environmental Permitting Regulations.

In deciding whether or not land is contaminated land on the grounds of significant possibility of significant pollution of controlled waters the following categories 1 to 4 are used, in accordance with the Statutory Guidance:

Categories 1 and 2 will comprise cases where the Council considers that a significant possibility of significant pollution of controlled waters exists. Category 3 and 4 will comprise cases where the Council considers that a significant possibility of such pollution does not exist.

Category 1 (Water) – Where the Council considers that there is a strong and compelling case for considering that a significant possibility of significant pollution of controlled waters exists.

This will include cases where there is robust science-based evidence for considering that it is likely that high impact pollution would occur if nothing were done to stop it.

Category 2 (Water) – Where the Council considers the strength of evidence to put the land into Category 1 does not exist but, nonetheless, on the basis of the available scientific evidence and expert opinion, the risks posed by the land are of sufficient concern that the land should be considered to pose a significant possibility of significant pollution of controlled waters on a precautionary basis.

This will include land where there is a relatively low likelihood that the most serious types of significant pollution might occur.

Category 3 (Water) – Where the Council concludes that the risks are such that the tests set out in Categories 1 and 2 above are not met, and therefore regulatory intervention under Part 2A is not warranted.

This will include land that the Council considers is very unlikely that serious pollution would occur, or where there is a low likelihood that less serious types of significant pollution might occur.

Category 4 (Water) – Where the Council concludes that there is no risk, or that the level of risk posed is low.

This will include land where:

- i) no contaminant linkage has been established in which controlled waters are the receptor in the linkage; or
- ii) the possibility only relates to types of pollution that are not considered to be significant pollution (described above); or
- iii) the possibility of water pollution similar to that which might be caused by background contamination.

1.2.6 Principles of Risk Assessment

The definition of contaminated land is based upon the principles of risk assessment. Risk is defined in the statutory guidance as the combination of:

- a. The likelihood that harm, or pollution of water, will occur as a result of contaminants in, on or under the land; and
- b. The scale and seriousness of such harm or pollution if it did occur

The Council will base any risk assessment on information which is:

- a. Scientifically based;
- b. Authoritative
- c. Relevant to other assessment of risks arising from the presence of contaminants in soil; and
- d. Appropriate to inform regulatory decisions in accordance with Part 2A and the statutory guidance.

1.2.7 Contaminant Linkages

A “contaminant linkage” means the relationship between a contaminant, a pathway and a receptor.

For a relevant risk to exist there must be one or more contaminant-pathway-receptor linkages by which a receptor might be affected by contamination.

A contaminant linkage requires each of the following to be identified:

- a) a **contaminant**;
- b) a **receptor**; and
- c) a **pathway capable** of exposing a receptor to the contaminant.

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

A **receptor** is something that could be adversely affected by a contaminant such as a person, an organism, an ecosystem, property or controlled waters.

A **pathway** is a route by which a receptor is or might be affected by a contaminant.

All three elements of a contaminant linkage must exist before the land can be considered potentially contaminated land under Part 2A.

For the purposes of Part 2A, a “significant contaminant linkage” means a contaminant linkage which gives rise to a level of risk sufficiently to justify a piece of land being determined as contaminated land.

1.2.8 Requirement for a Strategic Approach

The statutory guidance requires HDC to take a strategic approach to carrying out inspections under section 78B(1). The approach is intended to be rational, ordered and efficient and it will reflect local circumstances. The Council will also seek to ensure that the most pressing and serious problems are located first and that resources are concentrated on investigating in areas where contaminated land is most likely to be identified.

2. CHARACTERISTICS OF THE COUNCIL AREA

2.1 Hambleton District Council Area

Hambleton is the one of the largest local authorities by land area in England and is predominantly rural in nature. There are several thriving market towns which form the main centres of population. The topography is mostly low lying and incorporates the River Swale catchment area, Vale of York and the Vale of Mowbray. The main areas of high ground lie to the east of the district where the North Yorkshire Moors National Park (incorporating the Cleveland Hills and Hambleton Hills (from which the authority takes its name)) are located.

2.1.1 Geographical Size and Location

Hambleton is located in the county of North Yorkshire and covers an area of 1,310 square kilometres (506 square miles). Immediately to the north of the District are the heavily built up areas of Darlington, Stockton and Middlesbrough and the highly industrialised Tees Valley. To the south lies the City of York and the eastern boundary extends into the North York Moors National Park. To the south-east of the district the Hambleton Hills give way to the more undulating landscape of the Howardian Hills which is designated as an Area of Outstanding Natural Beauty.

2.1.2 Population Distribution

Hambleton district is home to approximately 85000 people and is characterised by a dispersed settlement pattern of market towns, villages and hamlets, which form strong elements of the District's identity. The pattern is dominated by the market towns of Northallerton, Thirsk, Bedale, Easingwold and Stokesley, which accommodate around 45% of the total population. The remainder of the population is found in the 130 villages and hamlets and individual dwellings scattered across the district.

With a low population density of 65 people per sq km the Council faces challenges in service delivery and the provision of employment opportunities.

2.1.3 Council Owned Land and Property

The Council's land holdings are relatively small, particularly since the Council undertook a large-scale voluntary transfer of its housing stock of approximately 4,500 properties to the Broadacres Housing Association in 1993.

Since then, the Council has bought land for re-development as industrial estates and re-sold the land in individual parcels, though ownership of a number of workshop units has been retained. The Council owns several areas of recreational land which are leased to the local Town or Parish Council. The Council also owns a number of car parks and buildings related to tourism and leisure, e.g. leisure centres, swimming pools and tourist information centres. A full list of land and property ownership is included in Appendix 2.

2.1.4 Current Land Use

Hambleton is a rural area and therefore the majority of the land use is devoted to agriculture with a variety of livestock, arable and mixed farms. There is little or no ‘heavy’ industry in the area although there are a number of small modern industrial estates scattered across the district which house a mixture of industrial and commercial activities.

The Council owns several developments and these are shown in Table 2.1 below.

Table 2.1: Council Owned Commercial/Industrial Development Sites

Name of Development	No of units	Type of Development
Bedale Craft Yard, Bedale Station	10 + Station House	Craft Units
Binks Close, Standard Way, Northallerton	8	Light Industrial
Lumley Close, Thirsk Industrial Park	10	Light Industrial
Wainstones Court, Ellerbeck Way, Stokesley	7	Light Industrial
Springboard Business Centre, Ellerbeck Way, Stokesley	20 office units located in 1 building	Managed Office accommodation
Evolution Business Centre, County Business Park Northallerton	30 office units located in 1 building	Managed Office accommodation
Leeming Bar Food Enterprise Centre, Leeming Bar Business Park	11 food grade units	Food grade manufacturing units
Momentum, Ellerbeck Court, Stokesley	7	Self Service offices
Land		
Leeming Bar Business Park	Approx 9 acres remaining	Serviced land for sale
Leeming Bar Industrial Estate	Approx 2 acres	Unserviced land for sale

There is a strong military presence in Hambleton due to the active RAF bases at Leeming, Linton on Ouse and Topcliffe. These airfields were built during the Second World War and these three have continued to the present day.

Other main employment sectors include public administration, education and health, manufacturing, construction, finance and IT, hotels, restaurants and tourism.

2.1.5 Protected Locations

The Hambleton area is extremely diverse and this is reflected in the range of Sites of Importance for Nature Conservation (SINCs) and Sites of Special Scientific Interest (SSSIs). There are 47 SINCs, 4 SSSIs and there is one designated Local Nature Reserve (Nosterfield, part of SINC ref SE27-04 Nosterfield Quarry South). In addition, there is one Area of Outstanding Natural Beauty (Howardian Hills).

A full list of these protected locations is presented in Appendix 3.

2.1.6 Key Property Types

Hambleton has a rich historical heritage which is reflected in the number of Scheduled Ancient Monuments, Listed Buildings and other areas of archaeological and historical importance. The market towns and villages are generally of high environmental quality and this characteristic contributes to the culture and identity of Hambleton, reflected in the 48 designated conservation areas and approximately 1738 listed buildings (Grade I – 43, Grade II* - 84, Grade II – 1624 **).

In addition there are 3 Registered Parks and Gardens, approximately 250 Scheduled Ancient Monuments and 2 Historic Battlefields.

** - English heritage data differs slightly to HDC data and therefore a slight anomaly exists over the total number of listed buildings.

2.1.7 Water Resources

The Hambleton area is dominated by the River Swale catchment area and to a lesser extent, the River Leven catchment in the northeast of the district. Both rivers have numerous tributaries of varying size and water quality, the majority of which are good or very good quality. River quality is classified by the EA as General Quality Assessment (Chemical) tests which measure dissolved oxygen, BOD (Biological Oxygen Demand) and ammonia.

The EA has defined a series of Groundwater Source Protection Zones which provide an indicator of the potential risk of contamination affecting the groundwater supplies. Generally, the closer the contamination is to the groundwater, the greater the risk. There are nine Groundwater Protection Zones in Hambleton (Ainderby Steeple, Kepwick, Kilburn, Dunsforth, Hollin Hill, Stubbing Nook, Pickhill, Sandhutton and Moorland Poultry) and therefore these would need to be considered as potential sensitive receptors when carrying out inspections in the areas close to them.

There are also a significant number of groundwater and surface water abstraction points within the District licensed by the EA, the majority of which are for agricultural irrigation purposes, but also for domestic supply and industrial/commercial use.

There are approximately 270 private water supplies (PWS) which are known to the local authority. These are also potential receptors and have been considered when investigating potential contaminated land sites.

The 270 PWS have been cross-referenced with potential areas of contamination identified from Landmark records. There are 56 PWS that are within 100m of Landmark historical land uses. These sites are shown in Appendix 4.

2.1.8 Known Information on Contamination

There is very little information available on known contamination in the Hambleton district area. Sites which may have had some previous industrial use, such as gas works and factories, have been redeveloped in recent years. Contamination found on these sites was remediated under the planning regime in order to make the land safe and suitable for use.

There are large numbers of historical industrial sites, such as mining, quarrying, sand and gravel extraction, brickmaking and railways that have the potential to have caused

contamination. The former airfields in the district that were used during the Second World War are also potential sources of contamination, primarily due to the storage and disposal of munitions and fuels. However, until each site is investigated and assessed then the actual risks to human health, controlled waters or the wider environment cannot be quantified.

2.1.9 Current and Past Industrial History

Historically, the main industries were agriculture, mining and quarrying, brick making and railways. Today, most of these have declined or are obsolete and modern industries and commerce such as service industries, public sector, retail and manufacturing/construction have taken over as the main employers.

The District has always been predominantly rural in nature, however there have been a number of historical land uses which have since declined, but which may have produced a legacy of contamination.

In particular, brick-making used to be a widespread activity within the District, though now there is only one large scale brickworks remaining. Mining and quarrying was an important activity, especially around the northern fringes of the North York Moors where ironstone, whinstone and alum were mined or quarried extensively.

Many areas that have been mined or quarried in the past have been infilled, the contents of which are often unknown. This infilling of ground could lead to contamination and therefore needs to be investigated further.

Many of the market towns also contained a number of factories, such as the linoleum factory in Northallerton and linen factories in Brompton and Stokesley, although these have since been redeveloped.

2.1.10 Geology of the Area

The geology of the area is composed of a succession of rocks from Carboniferous millstone grit in the West, to the Middle Jurassic oolitic limestones of the North Yorkshire Moors, in the East.

In the West there are small areas underlain by Millstone Grit, but it is more common to find areas of magnesian limestone of Permian age, together with bands of marl which contain evaporites such as gypsum and anhydrite. These are overlain by Triassic and Lower Jurassic beds of sandstones and mudstones, the most extensive of which is the Sherwood Sandstone and the Mercia Mudstone. These are followed by The Penarth and Lias Groups which consist of the Redcar Mudstone and a series of mudstones and sandstones and include a band of Cleveland Ironstone, which contains ironstone seams.

Further east in the North Yorkshire Moors there are outcrops of the Middle Jurassic Ravenscar Group which consists of a complex series of limestones and ironstones which are interspersed with sandstones and grit. These are overlain with Lower Calcareous Grit and then by Oolitic Limestone which constitutes large areas of the moors themselves.

The detailed geology is complicated by a series of fault lines which extend from North to South along the western edge of the North Yorkshire Moors and which run in an East-West alignment. These faults can affect all the rocks between the Sherwood Sandstone and the Ravenscar Group.

The Vale of York was created by the flow of ice from the North and West between the higher ground of the Yorkshire Dales and the North Yorkshire Moors. As the ice retreated it formed a series of rivers and lakes in the valley in which a rich variety of material was deposited.

The East and West boundaries of the District are characterised by the deposit of fluvio-glacial sand and gravel with evidence in some areas of the remains of river terraces. The majority of the Vale of York is dominated by the deposit of glacial till, but there is a wide central band of glacial lake deposits running through the Vale in a NW to SE alignment. These deposits consist of a mixture of sand and gravel and silt and clay.

2.1.11 Hydrogeology of the Area

The Policy and Practice for the Protection of Groundwater, National Rivers Authority (NRA) Region Appendix for the Yorkshire Region identifies the Sherwood Sandstone Group and the Magnesian Limestone strata as Major Aquifers. This document still applies to the Environment Agency into which the NRA was amalgamated.

The Sherwood Sandstone Group outcrops in the relatively low-lying Vale of York, resulting in low hydraulic gradients within the aquifer and small seasonal variations in water levels. Both fissure and inter-granular flow are important methods of groundwater movement and there is a complex hydrogeological relationship between the sandstone and its overlying cover of fluvio-glacial and lacustrine deposits.

Groundwater quality is generally good, though it deteriorates significantly to the East, where there are high levels of sulphates associated with the Mercia Mudstone and where high concentrations of iron and manganese may be found. In addition, nitrates may be a problem where the cover of drift deposits is thin or of a sandy nature. The Sherwood Sandstone is extensively used for public supply and also for private borehole supplies, which together with its vulnerability where the drift allows infiltration, make it very susceptible to pollution.

The Magnesian Limestone which outcrops to the West of the Sherwood Sandstone, is also classed as a major aquifer. It is composed of the Lower and Upper Magnesian Limestones which are separated by the Middle Permian Marls, which also contain evaporites such as gypsum and anhydrite. The limestone is often fissured and the beds may produce large yields of groundwater, but the ease of water movement also makes them very susceptible to pollution.

The Ravenscar Group is classed as a minor aquifer which gives rise to numerous small springs, some of which are used for water supply.

The Drift deposits are also classed as a minor aquifer and the close proximity of the water in these deposits to the ground surface makes them highly susceptible to pollution. Few public supplies are now taken from the drift deposits, though there are still some shallow wells providing private water supplies and farmers may use supplies from the drift to provide water for agricultural spray irrigation.

The Millstone Grit, which only outcrops in a very few places on the very Western boundary of the District, is also classed as a minor aquifer. Its geology is extremely complex as a result of extensive faulting, but it is used for a large number of public supply sources, including large surface reservoirs.

The Mercia and Redcar Mudstones are classed as non-aquifers. These are impervious layers which provide important protection to the main aquifers where they exist as overlying layers. The Middle Permian Marls which separate the Upper and Lower Magnesian Limestones are also classed as a non-aquifer.

2.1.12 Redevelopment History and Controls

Redevelopment has not occurred on a large scale due to the rural nature of the district. Industrial sites have tended to expand slowly on the edges of the main settlements and at the current time there are no plans to change the nature of these sites. These sites consist mostly of small factories and business units. The following list shows the largest residential, commercial and agricultural developments in the HDC area in recent years.

RESIDENTIAL

1. 09/00795/FUL - Revised application for the layout of land and construction of 283 dwellings, associated garages and landscaping as amended by plan received by Hambleton District Council on 02 November 2009 at Former York Trailers, Northallerton. (Yuill Homes, Taylor Wimpey)
2. 10/02373/OUT - Outline application for a mixed use development comprising of 925 dwellings (C3), employment (B1, B2 & B8) , neighbourhood centre, comprising: shops (A1), financial and professional services (A2), restaurant(s) and cafe(s) (A3), drinking establishment(s) (A4), hot food takeaway(s) (A5), hotel (C1), extra-care facility (C2) and medical centre and other non-residential institutions (D1), primary school (D1), community uses including recreation playing pitches and allotments, car parking and means of access (all matters reserved apart from means of access). Phase I residential 107 dwellings & Phase I commercial (B1c) all details to be considered as amended by plans received by Hambleton District Council on 20th September 2011 and 7th October 2011 at Land Off Topcliffe Road And Gravel Hole Lane, Sowerby, Thirsk, North Yorkshire (Castlevale)
3. 11/01661/FUL - Construction of 93 dwellings, associated parking, highway works and the provision of public open space as amended by plans received on 14 December 2011 at York Road, Easingwold (Redrow Homes)
4. 12/00842/REM - Application for reserved matters for the construction of 89 dwellings, garages, electricity sub station, access and the provision of public open space as per amended plans received by Hambleton District Council on 24th and 28th August 2012 at The Abattoir, Aiskew (Taylor Wimpey)
5. 12/02437/FUL - Construction of a new 52 apartment extra care development with associated communal facilities including a new public library (Cherry Garth Homes, Chapel Street, Thirsk (Housing 21)

COMMERCIAL

6. 08/04438/FUL - Construction of a soft drinks manufacturing and bottling facility with associated warehousing, office space, car parking and landscaping as amended by plans received by 12 December 2008 (OS Field 1200, Tutin Road, Leeming Bar Industrial Estate, Leeming Bar (Caw Ingredients)

7. 09/01546/OUT - Outline application for the construction of a new production and finishing building with associated external storage, access, parking and drainage attenuation pond at Dalton Industrial Estate, Dalton (Severfield Rowen PLC)
8. 10/01741/FUL - Application for a planning permission to replace an extant planning permission in order to extend the time limit for implementation for a two storey extension to existing furnishing store, associated car parking and landscaping at Barkers, Finkills Way, Northallerton (Barkers Northallerton Ltd)
9. 08/02488/REM - Application for the approval of reserved matters for the construction of 12 industrial units (class B1, B2 and B8) at Busby Stoop Road, Thirsk (Forward Investments)
10. 11/02122/FUL - Construction of 12 light industrial units (B1) at Former Dispol Uk Ltd, Station Road, Thirsk (AV Ogden Holdings Limited).

AGRICULTURAL

11. 09/04173/FUL - Construction of 12 replacement turkey sheds as amended by plans received by Hambleton District Council on 23 January 2010 at Skipton Airfield, Sandhutton (Cranberry Foods Ltd)
12. 10/01239/FUL - Revised application for construction of a range of agricultural buildings and reception area at Haddocks House, Myton on Swale (Mr K D Morrison)
13. 10/02682/FUL - Construction of 6 no. poultry units for broiler rearing at Fleet Bank Lane, Tollerton (Musterfield Poultry Grower Ltd)
14. 11/01930/FUL - Demolition of 4 existing poultry sheds, construction of 4 new poultry sheds (phase 1) and three new poultry sheds (phase 2) with associated equipment and a balancing pond at Mowbray House, Sandhutton Lane, Carlton Miniott (Amber Real Estate Investments Ltd)

3. STRATEGY AIMS, OBJECTIVES AND MILESTONES

3.1 Aims of the Strategy

The aims of this strategy are:

1. To comply with legislation relevant to contaminated land;
2. To ensure a strategic approach is used for dealing with contaminated land;
3. To ensure that the HDC strategic inspection priorities are taken into account (see below);
4. To ensure that the remediation of contaminated land is appropriate, practicable, durable and effective;
5. To ensure, wherever possible, that the polluter pays for the cost of remediation;

3.2 Objectives of the Strategy

The objectives that will help HDC achieve the aims of the strategy are:

Objective 1 (Aim 1 – To comply with legislation relevant to contaminated land)

- To implement the primary legislation Part 2A Environmental Protection Act 1990;
- To use the Contaminated Land Regulations to deal with special sites, remediation notices, rights of entry compensation, appeals procedures, content of public registers;
- To follow the statutory guidance in relation to the definition, identification and remediation of contaminated land, all matters relating to liability for remediation, and recovery of costs of remediation and relief from hardship.

Objective 2 (Aim 2 – To ensure a strategic approach is used for dealing with contaminated land)

- To identify land which merits detailed inspection in a rational, ordered and efficient manner;
- To identify the most pressing and serious problems first;
- To concentrate resources on areas where contaminated land is most likely to be found.

Objective 3 (Aim 3 – To ensure that the strategic inspection priorities are taken into account)

- To consider HDC strategic priorities when dealing with contaminated land, namely:

- Priority 1: To protect human health
- Priority 2: To protect controlled waters
- Priority 3: To protect designated ecosystems
- Priority 4: To protect crops and animals
- Priority 5: To prevent damage to buildings and monuments

Objective 4 (Aim 4 – To ensure that the remediation of contaminated land is appropriate, practicable, durable and effective)

- To assess land contamination against current UK standards and to use information that is scientifically based, authoritative, relevant and appropriate.
- To consider the costs involved and the seriousness of harm or pollution of controlled waters;
- To ensure that the best practicable techniques are used for the remediation;
- To consider the technical, site, time and regulatory constraints of remediation.

Objective 5 (Aim 5 – To ensure, wherever possible, that the polluter pays for the cost of remediation)

- To identify and attribute responsibility to the appropriate liability group and responsible persons;
- To seek to recover the costs of remediation from the responsible persons.

3.3 Milestones

3.3.1 Hambleton District Council

The original contaminated land strategy included a number of specific targets in relation to the development and implementation of the strategy and for review purposes. These can be summarised as follows:

Table 3.1: Summary of Original Strategy Implementation

Action	Date(s)	Progress
Agreement on strategic principles	1 st March 2001	Achieved
Draft strategy completed	6 th April 2001	Achieved
Consultation on draft strategy Obtain hardware, licences and staff training for GIS Development of contaminated land database	9 th April -18 th May 2001	Achieved
Preparation and Cabinet approval of final strategy document Publication of final strategy	21 st May – June 2001	Achieved
Initial collation of data and inspection of District to identify potential sites and prioritise those requiring more detailed site investigation and/or remediation	July 2001 – March 2004	Achieved
Detailed site investigation and remediation programme	April 2004	Ongoing

Most of these targets have been achieved, including agreement of strategic principles, draft strategy, development of GIS and contaminated land database and publication of final strategy.

The collation of data and the prioritisation and inspection of sites had a predicted timeframe of July 2001 to March 2004. This work was finally completed in March 2010, six years later than originally predicted. This large delay was due to a number of factors including staffing shortages, the large volume of information gathered, number of sites identified, complexities of the various prioritisation methodologies used, and finally the time needed to develop a workable in-house prioritisation system.

The detailed site investigation and remediation programme was started in April 2005, before the prioritisation work had finished, one year later than originally planned. This delay was due to a 'knock-on' effect from the problems experienced in site prioritisation mentioned above. However, the Council decided to begin detailed inspections of sites which were deemed to be 'high' risk, such as areas of former military use (airfields from world war two) and gas works.

The site investigation work carried out to date is summarised below:

Table 3.2: Summary of annual site investigation work

Year	Number of New Sites Inspected	Contaminated	Not Contaminated	Further investigation required
2005/2006	5	0	3	2
2006/2007	12	0	12	2
2007/2008	10	0	0	0
2008/2009	0	0	0	0
2009/2010	1	0	0	0
2010/2011	11	0	11	0
2011/2012	23	0	17	8

In 2010/2011, HDC had an inspection target of 25 inspections. Approximately half of this target was achieved. The 2011/2012 target for HDC was 25. In the HDC area 23 inspections were carried out.

The current aim for future years is to continue with the 25 inspections per year in order to help achieve the overall aims and objectives of the strategy.

4. PRIORITY ACTIONS AND TIMESCALES

4.1 Priorities

The current priorities for HDC are:

- Cross reference private water supplies registered with the local authority with sites of known historical land use (Landmark data).
- Continue inspecting highest risk sites in HDC area in accordance with prioritised list.

4.2 Timescales

The timescales for completing the prioritised activities identified above are as follows:

- Cross reference private water supplies and historical land use data – by end March 2013.
- Inspection of sites – 25 for HDC each year.

5. POLICIES AND PROCEDURES

There are many different aspects to the contaminated land regime and therefore it is important for HDC to set down certain policies on how they will deal with these numerous and often technically complex matters. The Council must first and foremost take into account the legislation and statutory guidance issued by the Secretary of State when dealing with contaminated land.

However, because the guidance applies across the whole of England the guidance it provides is only general guidance. In these circumstances, the Council must consider its own position and devise policies that are specific to the area.

The following policies and procedures are not intended to replace the statutory guidance or to allow the authority to deviate from what is specified in the regulations, but to provide a clear basis on which decisions can be reached when dealing with matters relating to contaminated land. These matters can often be complex, contentious and politically sensitive and therefore clarity, unambiguity and transparency are essential.

5.1 Internal Management Arrangements for the Inspection and Identification

5.1.1 Orphan sites

The term 'orphan site' is taken from the statutory guidance and means any site where a significant contaminant linkage has been identified but where there are no members of a liability group to pay for the cost of remediation. In cases such as this the cost of remediation falls to the local authority.

In accordance with the aims and objectives of this strategy, HDC will ensure the polluter pays for any remediation, wherever possible. However, it is possible that all members of a liability group may be excluded from liability under one of the 'exclusion tests' specified in the statutory guidance. If this happens then the Council may be liable for the costs of remediation.

The cost of remediation of contaminated land varies widely from a few hundred pounds for cases where there is a small volume of material to hundreds of thousands of pounds for large scale remediation. Because of this variance in cost it is not feasible for the Council to set aside a pool of money on the off-chance that a site may become an orphan site. It is not possible to predict when an orphan site may arise or the potential remediation costs required.

Therefore, it is proposed to apply for funding directly from central government when an orphan site arises, rather than making budgetary provision on an annual basis. Applications will be made to the Contaminated Land Capital Projects Programme once the costs of a remediation scheme are known.

5.1.2 Urgent Sites

The risks from contaminated land are generally taken to pose a threat to human health or the wider environment over a long period of time i.e. chronic health risks. However, there are occasions that require urgent action in order to prevent or minimise harm to one or more sensitive receptors.

If a site poses an unacceptable risk in that there is harm being caused to human health or significant pollution of controlled waters is being caused then the Council will need to investigate immediately rather than following the prioritised inspection list.

HDC will seek the advice of the Public Health England in relation to matters concerning human health, and the Environment Agency in matters relating to controlled waters, before carrying out any remediation.

5.1.3 Pollution Incidents

If the Council is made aware of a pollution incident in relation to controlled waters then the matter will always, in the first instance, be referred to the Environment Agency (EA).

If, after carrying out an investigation, the EA consider the matter falls outside of their remit but within that of the local authority, the Council will take responsibility for the site. The Council will carry out a preliminary risk assessment in order to prioritise the site. The placing in the prioritised list will determine the urgency and therefore the timing of any subsequent inspection under Part 2A.

If the Council is made aware of a pollution incident on land then an initial assessment of available information will be carried out to establish if the matter is one intended to be dealt with by the Environmental Damage Regulations 2009 (EDR).

If the EDR apply then the Council will investigate the matter accordingly and pursue the polluter to ensure that effective remediation is carried out.

If the EDR do not apply then the Council will carry out a preliminary risk assessment in order to prioritise the site. The placing in the prioritised list will determine the urgency and therefore the timing of any subsequent inspection under Part 2A.

5.1.4 Hardship

The Council has no policy specific to financial hardship. In cases when the appropriate person is a Class A person and the owner of the contaminated land then the Council will apply a land charge on the property to which the contaminated land applies. The costs of remediation will then be recovered from the Class A person when the property is sold.

Recovery of costs from Class B persons will be in accordance with the standard debt recovery policies of the Council and may result in County Court or even High Court action.

5.1.5 Voluntary Remediation

HDC seek to encourage voluntary remediation whenever possible and in cases where this approach is favoured by a responsible person then the Council will oversee the works to ensure that they are carried out properly by professionally qualified and experienced

persons. If the responsible person wants to remediate land voluntarily then the Council will not necessarily make a formal determination, provided the remediation happens to an appropriate standard and timescale. If the responsible person fails to carry out the remediation as agreed then the Council may make a determination at any time.

5.1.6 Special Sites

Part 2A provides for certain land that meets the definition of contaminated land to be designated as a Special Site, if it meets one of a number of categories of land prescribed in the Contaminated Land (England) Regulations 2006.

In cases where HDC believes that land, if found to be contaminated land, would subsequently be a Special Site, we will ask the Environment Agency (EA) to carry out a site inspection on our behalf, prior to determination of that land as contaminated land. However, the responsibility for formal determination of any land as contaminated land remains with the Council

Once land has been determined to be contaminated land, and where the EA and Council agree (or the Secretary of State decides) that the land is also a Special Site, the EA will take over the role of enforcing authority from the Council.

Remediation of the site may include further investigation and assessment, action to remedy the unacceptable risks identified or monitoring. The EA is responsible for maintaining a public register of regulatory action for Special Sites.

5.1.7 Harm to Receptors

The statutory guidance specifies different levels of harm to different receptors at which land is to be designated as contaminated land. The strategy lists the HDC priorities under Objective 3 (page 19), which correspond to the receptors listed in the Statutory Guidance.

5.1.7.1 Human Health

The Council will treat each site on a case-by-case basis as the factors which determine what constitutes 'significant harm', such as contaminant, soil type, soil properties, pH, land use etc., will be different for each site.

The Council will also liaise with PHE for advice on any approach taken in deciding on what is significant or not significant.

5.1.7.2 Controlled Waters

The Council will seek the advice of the Environment Agency in these cases as they have the necessary expertise in this subject.

5.1.7.3 Ecological Receptors

The Council will always seek the advice of Natural England and the North Yorkshire County Council Ecologist in these cases. The Council will also consult species and/or habitat specific experts should this be necessary.

5.1.7.4 Property (Animals, Crops etc.)

The Council will liaise with and take advice from the Food Standards Agency (FSA), Defra or other specialist if there is any possibility of harm to receptors in this category, or if there is any possibility of harm to the food chain where humans will ultimately be the receptor.

5.1.7.5 Property (Buildings)

The Council will liaise with and take advice from the North Yorkshire Building Control Partnership on risks to general buildings. In cases where the building is a Listed Building, Scheduled Ancient Monument or other designated site, then the Council will seek the advice of its own Conservation Officer, NYCC, Natural England or any other specialist individual or organisation deemed competent by the Council.

5.2 Local Authority interests in land

The HDC Land Asset Register, as shown on the Council's GIS, shows 164 recorded entries of land and property owned by HDC.

This information has been cross-referenced with the Landmark historical land use data to see which properties coincide with sites of potential contamination. The results show there are 23 of these sites in the HDC area that coincide with historical land use sites

The sites in which HDC has an interest will not be inspected as a priority before other sites in the district that could pose a more serious risk to human health or other receptor. However, they will be assessed to see if the current occupiers need to be informed of the historical land use and whether the use of the land is likely to create contaminant linkages.

A list of sites that coincide with Landmark historical land use data is presented in Appendix 5.

5.3 Information Collection

The majority of information on historical land use in the HDC area was purchased from Landmark Information Group in the year 2000. Since this initial purchase, additional information has been obtained from a small number of sources including NYCC County Archives, Environment Agency, Kelly's Directory, via complaints and enquiries from members of the public, via the planning system, and anecdotal local knowledge.

All the information has been stored on the Council's GIS and added to the prioritised list of sites. Currently, there are over 3300 sites in the HDC area that require inspection under Part 2A.

5.3.1 Future Site Identification

The Council is confident that all the sites with a potentially contaminating historical land use have been identified however there is always the possibility of sites arising of which the Council is not aware. In these circumstances information from members of the public or other bodies would be the most likely source of information. New information may arise following pollution incidents and these will be dealt with at the time and prioritised accordingly.

5.4 Information and Complaints

Information received from third parties concerning potentially contaminated sites or possible harm or significant pollution of controlled waters will be recorded on the HDC Idox Uni-form system and where necessary further investigation will be undertaken.

Complaints received by the Environmental Health Service in respect of contaminated land will be dealt with by following the existing complaint procedure.

Any person making a complaint regarding a contaminated land site will be asked to supply their name, address and evidence of contamination or reasons for suspecting contamination. All details will be kept confidential as far as practicable.

Information received from an anonymous source regarding any site must be thoroughly evaluated before investigation, as information received anonymously cannot be treated with the same level of confidence as information received from a named source.

5.5 Information Evaluation

5.5.1 Site Prioritisation

HDC originally proposed an in-house method, based on a simple spreadsheet with scores for each site. The higher the score the higher priority the site was designated. This ultimately proved to be too time consuming and inconsistent with scores generated so this was abandoned.

It was then proposed to use the Landmark Information Group's ranking system of Low, Medium and High priority, which was based on a system originally developed by the University of Nottingham. The Landmark information on the GIS was sorted into low, medium and high groups and the high risk sites were then manually prioritised in order to generate a ranking score. The high risk sites were looked at first as they were considered to pose the highest risk to human health, due to their previous land use e.g. gas works, military land etc.

A major drawback in using this system was that it didn't take into consideration any pathways or receptors, it only considered the source. This approach is not consistent with statutory guidance and therefore an alternative approach was required.

The Council decided to re-visit the in-house prioritisation system as it was thought possible to automate the process using the information layers contained within the Council's GIS. After a period of information gathering and consideration it was proved not to be possible due to limitations with the existing software.

The Council continued with the in-house prioritisation and, following a period of approximately 3 months during 2009, completed the prioritisation. The method used is shown in Appendix 7.

5.5.2 Site Assessments

Site assessments of potentially contaminated land can be complex and therefore it is crucial to follow a defined series of steps with decisions that are clear, unambiguous and transparent.

The Environment Agency has published a guidance document entitled “Model Procedures for the Management of Land Contamination”, CLR 11, which was developed to provide the technical framework for applying a risk management process when dealing with land affected by contamination. The process involves identifying, making decisions on, and taking appropriate action to deal with, land contamination in a way that is consistent with government policies and legislation within the UK.

The basic risk management process in the Model Procedures has three main components:

- Risk assessment – establishing whether unacceptable risks exist and, if so, what further action needs to be taken in relation to the site;
- Options appraisal – evaluating feasible remediation options and determining the most appropriate remediation strategy for the site;
- Implementation – carrying out the remediation strategy and demonstrating that it is, and will continue to be, effective

This approach can be, and will be, used for the following categories of receptor and by using supporting guidance and documentation specific to each receptor.

5.5.2.1 Human Health

For evaluating a significant risk of significant harm to human health, the Council will compare any site specific information against published standards relevant to the UK.

The primary guidance document is the Environment Agency’s Contaminated Land Exposure Assessment (CLEA) guidance. The Councils will use this guidance to assess the risk of contaminated land to human health. Soil Guideline Values (SGVs) for various contaminants have been published and these will be used as part of the assessment.

In cases where there are contaminants for which no SGV has been published, the Council will use other, scientifically based and authoritative Generic Assessment Criteria (GAC) such as that published by the Chartered Institute of Environmental Health/Land Quality Management (CIEH/LQM). Each contaminant will be assessed on a site by site basis and if necessary site specific modelling will be carried out.

5.5.2.2 Controlled Waters

For pollution of controlled waters the Council will make a judgment of whether there is a significant pollutant linkage where controlled waters form the receptor. This will be carried out by a preliminary risk assessment, site visit and, if required, limited sampling. The Council will adhere to the EA document “Environment Agency Technical Advice to Third Parties on Pollution of Controlled Waters for Part 2A of the Environmental Protection Act 1990, No 07/02. EA, 2002.”

If a contaminant linkage is identified the Council will request the Environment Agency to carry out further work on the Council’s behalf.

At the initial sampling stage, results from sampling will initially be compared to the water quality regulations. If there are exceedances then a further site specific assessment will be carried out using the EA document “Methodology for the derivation of remedial targets for soil and groundwater to protect Water Resources.” The Council will continue to seek further advice from the EA during this assessment.

5.5.2.3 Ecological Receptors

The Council will assess risks to ecological receptors by using the Environment Agency Science report SC070009/SR1 “An ecological risk assessment framework for contaminants in soil.”

The Ecological Risk Assessment (ERA) Framework for contaminated soils was developed by the Environment to provide a structured approach for assessing the risks to ecology from chemical contamination in soils that is requirement under Part 2A.

The report sets out a three-tiered risk assessment process that has been designed to:

- establish whether pollutant linkages between the contamination and the designated ecological receptors are likely to exist;
- gather sufficient information for making decisions regarding whether harm to those receptors is, or could, occur.

The Science Report does not provide criteria on which determinations of contaminated land can be made but is intended to structure decision-making and, as such, the Council will always seek the advice of Natural England, the NYCC Ecology Officer or species/habitats specialists.

5.5.2.4 Property (Crops, Animals)

The Council will assess and manage risks to property in the form of crops and animals etc by following the Model Procedures and by seeking advice from the FSA, Defra or other specialist appropriate to the specific receptor.

5.5.2.5 Property (Buildings)

The Council will assess and manage risks to buildings by referring to the following guidance documents published by the Environment Agency:

- Research and Development Technical Report P331 Risks of Contaminated Land to Buildings, Building Materials and Services
- R&D Technical Report P5-035/TR/01 Assessment and Management of Risks to Buildings, Building Materials and Services from Land Contamination.

6. GENERAL LIAISON AND COMMUNICATION PROCEDURES

6.1 General Liaison and Communication Strategies

All communications relating to contaminated land will be directed through the Senior Scientific Officer (SSO) in Environmental Health (Scientific Services).

The Council is part of the Yorkshire and Humberside Pollution Advisory Council (YAHPAC) and represent the authorities at regular meetings.

Service areas in addition to Scientific Services that will be involved in the inspection process include Economic Development, Development Control Services, and Legal Services.

6.1.1 Information and Complaints

Information requests and complaints relating to potentially contaminated land are likely to be received from members of the public, businesses or community groups. These will be received and recorded by Environmental Health Technical Support team and will be allocated to the SSO for action.

6.1.2 Internal Management Arrangements for Inspection and Identification

Within Hambleton District Council, Scientific Services has responsibility for implementing Part 2A. The SSO is lead officer for contaminated land, reporting to the Lead Environmental Health Officer in the Residential team. The SSO will deal with the day-to-day implementation of the Strategy once it has been approved by elected members.

The SSO will be responsible for serving remediation notices, subject to consultation with the Lead Environmental Health Officer, the Environmental Health Manager and the Legal Adviser.

Elected members will be informed at the earliest opportunity of any plans to designate an area of council-owned land, or land where the Council is the “appropriate” person and may be liable for remediation costs.

Where a site is suspected as being a Special Site, the Environment Agency will be consulted from the commencement of any investigation. Where possible, before authorising or carrying out any land inspection, the SSO will consider whether it would meet any of the descriptions of land to be designated as a Special Site.

6.1.3 Land Searches

Land Search enquiries containing general questions on contaminated land are currently dealt with by Land Charges. Specific enquiries are forwarded to the SSO for response.

6.1.4 Environmental Searches

The Council also provides information on potentially contaminated land as part of Environmental Searches which individuals or companies request. The amount of information provided is determined by the needs of the requester and the level of fee applicable to the search.

6.1.5 Communication Strategy

HDC has a Community Engagement Strategy 2010 to 2015 which details how the authority engages members of the public and the wider community on Council matters. All communications with the public and other organisations in respect of implementing the Contaminated Land Strategy and dealing with contaminated land issues will be in accordance with the corporate standards for community engagement.

6.1.6 Statutory Consultees

The collection of data on potentially contaminated land will require a high degree of liaison/consultation with both internal and external bodies. The statutory organisations to be approached are:

- Environment Agency
- Department for Environment, Food and Rural Affairs
- Natural England
- English Heritage
- Food Standards Agency
- North Yorkshire County Council
- Public Health England

The Council's main consultee will be the Environment Agency through their role as advisor on contaminated land issues. Working contacts have already been established with the local Environment Agency officers. The Environment Agency and the Local Government Association has compiled a memorandum of understanding that describes how information will be exchanged. The Council will therefore exchange information with the Environment Agency following the guidelines agreed by this national forum.

Actions carried out under Part 2A, which may affect nature conservation interests including protected species, must be carried out with regard to existing relevant statutory legislation and guidance.

6.1.7 Transboundary Liaison Between Authorities

YAHPAC provides an existing mechanism for ensuring cross-boundary liaison between authorities on contaminated land issues. It has been recognised, however, that a formal notification procedure is needed to deal with site-specific issues. Therefore, the following will be adopted.

If an authority suspects any transboundary linkage may exist then it will notify the appropriate neighbouring authorities within ten working days. If the authority considers that urgent action may be required then this notification should take place immediately.

The two authorities will agree an action plan identifying each authority's role in determining the status of the land and associated issues. The enforcing authority will be the authority in whose area the source is situated.

6.1.8 Owners, Occupiers and Other Interested Parties

The Council's approach to regulatory duties is generally to seek voluntary action before taking enforcement action. This is described in the Environmental Health Service's enforcement policy available on the Council's website. It is intended to maintain this approach for issues of land contamination. This recognises the fact that in many cases, more effective remediation can be achieved by agreement rather than by enforcement.

6.1.9 The Wider Community

The SSO and the Council will at all times endeavour to communicate the risk of harm to human health or the environment. The Council recognises that residents or interested persons adjacent to a potentially contaminated site may have a variety of concerns prior to any investigation work. The Council will regularly consult and liaise with occupiers and owners, offering free advice and guidance where possible.

In the early stages of a site investigation the Council may not be in a position to quantify the risk. Where this is the case, the Council will aim to issue a preliminary risk assessment as soon as possible. Where further intrusive investigations are required the ward councillors for the area in which the site resides will be notified. Consultation with the Director of Leisure and Health will be carried out where investigations requiring new budgetary requirements may be required.

The Council already have several communication practices which may be used for providing information on issues associated with contaminated land. These include:

- The Press Office
- Ward and Town/Parish Council conferences
- Public meetings
- Area Committees
- Council website

The Council recognises that communicating with large national landowners or large organisations (for example Railtrack Plc) will need to take into account that these landowners may have funding problems and higher priorities in terms of contaminated sites that need remediation. It is the aim of the Council to work with representatives from such organisations to ensure that a suitable timescale is agreed, taking into account the risk to receptors from the contaminated land in question.

7. PROGRAMME FOR INSPECTION

7.1 Prioritisation of Sites

As part of the Council's previous strategy a list of potentially contaminated sites have been identified and prioritised. The prioritisation assesses the historical land use and considers its proximity to pathways and receptors and rates them for likely risk.

7.2 Council priorities for dealing with Contaminated Land:

1. To protect human health
2. To protect controlled waters
3. To protect designated ecosystems
4. To prevent damage to property (animals, crops, buildings etc)
5. To prevent any further contamination of land (pollution incidents)
6. To encourage voluntary remediation
7. To encourage re-use of brownfield land to assist economic development

7.3 Timetable for site assessment.

A rolling inspection programme of 25 sites per year has been identified and listed in the Environmental Health service plan. There may be occasions on which it becomes necessary to carry out an inspection in advance of the timetable set out in the strategy. These triggers would include:

- Pollution incidents resulting in land contamination
- Development of Council owned land creating new potential receptors.
- Assistance with proposals for voluntary remediation prior to timetabled inspection
- Identification of local health problems related to possible land contamination.

7.4 Arrangements for carrying out detailed inspections

All phases of inspection will comply with current recognised guidance and good practice. All reasonable precautions will be taken to avoid causing harm to the environment resulting from intrusive investigations.

Before a site can be determined as contaminated the confirmed presence of a significant contaminant linkage must be identified. Specific site inspections will take place in three stages:

- Stage 1: Desk Study
- Stage 2: Site Walkover
- Stage 3: Intrusive Investigation

7.4.1 Stage 1 - Pre Inspection / Desk Study

The initial risk assessment phase for sites will be the completion of a desk study which will entail a preliminary risk assessment. The objective of this work is to develop an outline conceptual model and establish whether or not there are any potentially unacceptable risks to the identified receptors, arising from potential contamination at the site.

The main activity at this stage is the collection of information, focusing on the sites' three-dimensional characteristics and interaction with the surrounding environment. It identifies all possible receptors, potential contamination and contaminant migration pathways, and shows the possible relationships between them (potential pollutant linkages), taking into account the current and proposed uses of the site. This includes:

- Historic search of all digital mapping information.
- Search of historic information supplied by Landmark Information Group.
- Collection of other information held by the Council, e.g. planning records of previous site investigation.
- Review of information in the former Department of Environment [DOE] Industrial Profiles for the site on possible contaminants on the site.
- Locate and contact the landowner/occupier/appropriate person(s).
- Recording the information collected on Idox Uni-form system.
- Liaison with Environment Agency, Natural England and English Heritage, Defra, FSA, and PHE as necessary.

When carrying out assessments of agricultural and rural land consideration will be given to the DEFRA system of Agricultural Land Classification [ALC] held by the Planning Department.

The results of the Desk study will enable an assessment as to whether further investigation is required to determine whether:

- (a) The land is 'contaminated land' as defined in the statutory guidance
- (b) The land falls within the definition of a 'Special Site'

7.4.2 Stage 2 – Site Visit and Visual Inspection.

Site walkovers will be undertaken to validate information collected during the desk study for example to confirm the present conditions of the site, the surrounding area, identify any differences from historic records, to identify any significant surface features and to collect evidence as necessary.

In practical terms the inspection will involve the following steps:

- Notify the land owner of the intention to carry out the inspection.
- Carry out preliminary site inspection of the site in accordance with written procedures and complete site investigation pro forma.
- Collect visual (photographic) evidence of the current site conditions.
- Carry out limited surface sampling from the site. For example soils, waters, herbage or vapours.

This reconnaissance survey will consider any physical constraints that may affect subsequent intrusive investigations, (e.g. limited access to the site, underground or overhead

services, proximity to sensitive uses affecting working hours, etc). Dialogue with local residents may also prove useful as sources of historical knowledge. The results of the inspection will be recorded on the Idox Uni-form database linked to the GIS system.

7.4.3 Stage 3 – Intrusive Investigations

Following stages 1 and 2 the 'Conceptual Site Model' (CSM) will be refined if required. Should the CSM indicate that a contaminant linkage exists on the site an investigation will be undertaken. All stakeholders, including adjacent occupiers having regard to the risk communication strategy, will be notified. If the site is suspected to be a 'special site' liaison will be made with the EA. Liaison as necessary with Natural England [in relation to significant contamination near SSSI's etc (Wildlife and Countryside Act 1981) and English Heritage [in relation to significant contamination on or near archaeological sites.

Due to the detailed nature of the assessment requirements the Council may employ an independent environmental consultant to undertake the intrusive investigations. This enables the Scientific Services team to focus on other project management issues such as communications with other interested parties, and liaising with other Council sections to ensure that the investigations are effectively completed.

Before engaging consultants the Council will consider the following:

- The Council has set up a framework agreement which contains a list of specialist contractors with the necessary expertise; these will work at agreed rates for the Council.
- The purpose and objectives for the works will be clearly stated to the consultant, e.g. extent of the investigation, number and type of samples/sampling protocols, type of analysis required, whether a remediation scheme is required or whether only a site determination is required.
- A clear brief for the works will be agreed including the method of reporting and the expected outcomes.
- Health and Safety requirements need to be closely followed, particularly the 'Protection of Workers and the General Public During the Development of Contaminated Land' 1991 [ISBN 011885657X].
- Full details of desk study information and preliminary investigation will be provided to the consultant before the start of any work.

The scope of the site investigation will be designed around the conceptual model and meet the requirements of British Standards BS 10175, the code of practice for investigation of potentially contaminated sites. Any intrusive investigations are likely to include:

- Surface sampling: spot samples, surface scrapes
- Excavations: trial pits, trial trenches
- Borings: probes and augers, percussion drilling, rotary drilling
- Vapours and gas surveys
- Controlled Waters Sampling: Sampling of ground waters from standpipes and piezometers, surface water sampling etc.

In order to obtain sufficient data on which to make a proper assessment of the site following a detailed ground investigation, it may be necessary to carry out either repeat sampling programmes or an extended monitoring exercise.

7.4.4 Final Categorisation of Sites

Where, as the result of a detailed site inspection, the Council identifies a contaminant, a pathway and a receptor with respect to the current use of land within its area and is satisfied that as a result of that pollutant linkage, either:

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

then it will determine that the land is contaminated land for the purposes of section 78A (2) of the Environmental Protection Act 1990 and will make a written record of that determination.

Having determined that land is contaminated land, the Council will, in accordance with section 73B (3) of the Act, give written notice of that determination to the following people:

- The Environment Agency;
- The owner of the land;
- Any person(s) appearing to the council to be in occupation of the land;
- Any person(s) appearing to the council to be an 'appropriate person'.

7.4.5 Designation of Special Sites

Certain classes of contaminated land prescribed by regulation 2 of the Contaminated Land (England) Regulations 2006 are required to be designated as 'special sites'.

If it appears to the Council that land which has been determined as contaminated land is required to be designated a 'special site' it will give written notice of that decision to relevant parties.

Where such a notice is given, the Environment Agency is required to respond within 21 days indicating whether or not it agrees with the council's decision. In cases where the Environment Agency and the Council disagree the matter will be referred to the Secretary of State who may confirm or reverse the Council's decision with respect to all or part of the land.

8. REVIEW MECHANISMS

The strategy outlines the general approach to be taken in inspecting land in the District for contamination. This section will describe instances when inspections will occur outside this general inspection framework, circumstances under which previous inspection decisions should be reviewed and measures to be taken to ensure the strategy remains effective and up-to-date.

8.1 Triggers for undertaking inspection

The strategy has already recognised there may be occasions where inspections may have to be carried out outside of the general inspection framework. Triggers for undertaking non-routine inspection may include:

- a. Unplanned events - e.g. pollution incidents, natural disasters;
- b. Introduction of new receptors - e.g. if housing is to be built on a potentially contaminated site, designation of a new protected ecosystem, persistent trespass onto a site by unauthorised persons;
- c. Supporting voluntary remediation – e.g. landowners who wish to remediate their land in advance of any action by the Council;
- d. Identification of localised health effects which appear to relate to a particular area of land;
- e. Responding to information from other statutory bodies, owners, occupiers, or other interested parties e.g. Environment Agency; or
- f. As a result of planning applications or regeneration initiatives.

While these occurrences may trigger non-routine inspections, if this strategy is to prove effective, they must not be allowed to significantly interfere with the milestones laid down in the general inspection framework. It will be important to consider this issue in all strategy reviews.

8.2 Triggers for reviewing inspection decisions

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

- a. Significant changes in legislation;
- b. Establishment of significant case law or other precedent;
- c. Revision of the guideline values for exposure assessment;
- d. Previous remediation schemes considered insufficient;
- e. New evidence of a pollutant linkage.

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

8.3 Reviewing the strategy

The strategy will be reviewed in accordance with the Statutory Guidance, which recommends a review at least once every five years, although it is likely that a review will take place more frequently.

9. INFORMATION MANAGEMENT

Contaminated land investigations, from the preparation of a Strategy, site identification, site prioritisation, inspection and decision making will generate a large volume of information. It is therefore essential that this information is managed effectively so that the contaminated land service is delivery to customers and stakeholders as efficient and cost-effective as possible.

HDC currently uses various electronic systems to manage information.

The Strategy and information used in the preparation of the Strategy is held electronically on Council servers. The Strategy is published on the Council's website where it can be viewed and/or downloaded. Paper copies are also available on request.

Guidance produced by external bodies such as the Environment Agency, Defra, and the Public Health England are stored electronically and we also have links to their websites to check for updates and releases of new guidance.

Site identification information is held electronically and also on paper records. The bulk of the information is electronic and is made up of Landmark Information Group historical land use data. This information is stored on the Council GIS (Graphical Information System) ArcMap. The data is presented as a series of points, lines and regions that identify a historical land use between 1850 and present day. The information is supported by tables containing land use information, dates, grid references etc that assist the site prioritisation.

The prioritisation of potentially contaminated land was carried out in-house using a spreadsheet scoring system. Relevant information such as historical land use, development history, current land use, nearby receptors, geological and hydrogeological features, property types and controlled waters were all added to the system and a score generated.

Information was also required to be used from a variety of sources including the British Geological Survey (BGS) and Environment Agency and internal sources such as the planning department. BGS and EA data is held on the Council GIS as discrete layers which were cross referenced with site data to formulate a score. The results of the prioritisation are stored as spreadsheets on the Council computer system.

Site investigations require a mixture of electronic documentation and paper records. The main system used to record the site investigation is the Idox Uniform system (Contaminated Land Module). Each site that is due to be inspected each financial year is entered onto the system along with site specific information relating to sources, pathways and receptors. Details of any site visits, walkovers, risk assessments, communications with land owners, consultants, or other stakeholders is recorded to create a complete record of all actions.

When a site does not require any further investigations then the case is closed, with reasons, for the decision. If a site requires further investigation then this is also recorded but the case is kept open for future actions.

Any documents that are received or sent by the Council are captured electronically on the Council Document Management System (DMS) Anite as a permanent record.

The numbers of site investigations carried out are reported on a monthly and annual basis to management so that progress can be measured against the Service Plan target for the year. Overall performance is reported in the Environmental Health Service Annual report which is available on the Council website.

9.1 Public Register

The Council is required to maintain a public register by Section 78R of the Environment Act 1995. The register, which is available for inspection by the public, is intended to act as a full and permanent record of all regulatory action taken by the Council in respect of the remediation of contaminated land.

Schedule 3 of the Contaminated Land (England) Regulations 2006 Schedule 3 specifies the following as required to be entered on the public register:

- Remediation Notices
- Appeals against remediation notices
- Remediation declarations
- Remediation statements
- Appeals against charging notices
- Designation of special sites
- Notification of claimed remediation
- Convictions for offences

The public register is available to view during normal opening hours 8.45am and 5.15pm Monday to Thursday and 8.45am to 4.45pm Friday. Photocopies will be charged at the Council's standard rates.

APPENDICES – available on request from the Environmental Health Service.