



**Harborough District Council**  
**Contaminated Land Strategy Framework Document**

**Environmental Protection Act 1990**

**Section 78B**

## **EXECUTIVE SUMMARY**

Under Part IIA of the Environmental protection Act 1990, Harborough District Council has been given duties and responsibilities regarding to contaminated land in its area. The provisions of the legislation came into force on the 1st April 2000.

The Council's duties under the legislation are:

- To inspect the district for land that may be contaminated
- To inspect individual sites which may be contaminated and to ensure the appropriate action is taken to remediate the land.

One of the responsibilities of Harborough District Council is to publish a strategy document, detailing how the Council will fulfil it's duties under the above legislation.

### **Aims and Objectives of the Strategy**

The main purpose of the strategy is to explain how Harborough District Council will inspect the area for potentially contaminated land. It is anticipated that during this process a large amount of information will be collected. Some of this information will be confidential but a large proportion will be available for public viewing. This strategy also explains how the information will be managed and how it can be accessed.

The aims of the strategy are:

- To provide a strategic approach to the inspection and identification of land which may be contaminated;
- To establish written inspection procedures for the protection of human health, water resources, and sites of sufficient ecological and cultural significance;
- To provide a mechanism for the handling and dissemination of information on contaminated land;
- To establish communication links with organisations and individuals with an interest in contaminated land;

- To ensure that the requirements of Part IIA are well integrated and consistent with the planning process;

The inspection process should not interfere or discourage the redevelopment of brownfield sites and/or land that is contaminated.

### **What is contaminated land?**

The definition of contaminated land comes from the Environmental Protection Act 1990 Part IIA Section 78A (2) as amended  
*“any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that –*

- a) *significant harm is being caused or there is a significant possibility of such harm being caused; or*
- b) *significant pollution of controlled waters is being, or is likely to be, caused.”*

In general terms, contaminated land usually means land where industrial or other human activities have resulted in the presence of substances in the ground with potential to cause harm to human health, structures, or the environment. Statutory guidance has been developed on how to identify contaminated land.

For land to meet the statutory definition a significant pollutant linkage must be identified. In determining whether there is a significant pollution linkage, Harborough District Council will identify:

**A Source:** the physical presence of a contamination in or on the ground in a sufficient quantity to be a potential hazard.

**A Pathway:** a mechanism by which the Source can come into contact with someone or something that could cause harm.

**A Receptor:** something of someone that may be harmed by the contamination.

Where a pollutant linkage is present Harborough District Council will carry out an assessment of the risk to human health, structures or the environment.

If any of the identified land falls within the above statutory definition, the land will be classed as contaminated land and dealt with accordingly.

### **Prioritisation of the sites**

The inspection and identification of all the sites in the district will be a major undertaking. It has been necessary to establish a priority system to ensure that the sites with the greatest potential to cause harm are identified first. The following priorities have been established as a result of the assessment of the characteristics of Harborough district:

- Sites which may present a significant risk to human health;
- Sites which may present a significant risk to drinking water supplies;
- Sites that may present a significant risk to other surface water and groundwater supplies;
- Sites that may present a significant risk to Sites of Special Scientific Interest.;
- Sites that may present a significant risk to agricultural land;
- Sites that may present a significant risk to historical buildings or sites of archaeological interest.
- Sites that may present a significant harm attributable to Radioactive Substances.

### **Inspection of the District**

The initial inspection of the district has taken approximately 6 years to complete. The initial inspection process involved looking at the historical land use as well as the present day usage. Information collected from the preliminary survey of the district was used to prioritise the sites for further, more detailed inspections. The more detailed works on the individual sites will then be carried out based on the results of this prioritisation process.

As part of the more detailed individual site inspections, the Environment Agency will be consulted, as will any other statutory body that may have an interest in the site. The other statutory bodies could include Natural England, English Heritage or the Health and Safety Executive, depending on the nature of the site involved. Contact will be made at an early stage with any landowner and/or occupier of the site to determine whether any site investigation has been carried out previously.

If, after carrying out a desk based assessment and inspection of any available information of a site, the council is unable to determine that a site does not meet the statutory definition of contaminated land, it may be necessary for Harborough District Council to take samples from, and/or install monitoring wells on the land. Hopefully this will be carried out with the agreement of the landowner/occupier, however the local authority has been given powers of entry onto land to take any samples.

Only when Harborough District Council is satisfied with the information they have collated and a full risk assessment has been carried out, will it determine whether the site falls within the statutory definition of contaminated land.

### **Taking Action on Contaminated Land**

When a site has been determined as being contaminated land, Harborough District Council has a duty to ensure that the appropriate action is taken to remedy the problem.

It is hoped that the person who has been identified as being liable to pay for any remediation on the site – the “Appropriate Person”, and Harborough District Council will liaise and formulate a voluntary agreement to take action on the site. Where a voluntary agreement can not be reached, the district council has the power to serve a remediation notice. Any formal notice served and any other formal action taken will be kept on a Public Register. The Public Register will be maintained by Regulatory Services at The Symington Building Adam and Eve Street

Market Harborough. The register will be available for public viewing during normal office hours.

In addition to the information held on the Public Register, over time Harborough District Council will collect a lot of information relating to the state of contaminated land in the area. Unless this information has been classed as confidential, any individual or organisation can ask for the information. There may be a reasonable charge for this information to cover the costs of the council.

Any requests for information on contaminated land should be made to

Contaminated Land Officer  
Regulatory Services  
Harborough District Council,  
The Symington Building  
Adam & Eve Street,  
Market Harborough,  
Leicestershire  
LE16 7AG  
Tel: 01858 828282

## **Reviewing the Strategy**

To ensure that Harborough District Council fulfils its statutory function, the contaminated land strategy will have to be kept under review in line with any new information received on potential contaminated sites, or in relation to any new statutory guidance that it published. It is anticipated that a complete review of the strategy will take place within 10 years of the date of its publication.

Copies of this strategy are available on request in alternative languages or for the visually impaired.

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# 1 Introduction

Under Part IIA of the Environmental Protection Act 1990 [1], Local Authorities in England are given responsibilities for regulating contaminated land. Part IIA was brought into force on the 1<sup>st</sup> April 2000 by The Contaminated Land (England) Regulations 2000. SI2000/No.227 [6] and was amended by The Contaminated Land (England) (Amendment) Regulations 2001 SI2001 No.663 [7], The Radioactive Contaminated Land (Enabling Powers) (England) Regulations 2005 SI2005/No.3467 [8] and The Radioactive Contaminated Land (Modification of Enactments)(England) Regulations 2006 SI2006/No.1379 [9]. These were then superseded by The Contaminated Land (England) Regulations 2006 SI2006/No.1380 [10] which were then amended by The Radioactive Contaminated Land (Modification of Enactments) (England) (Amendment) Regulations 2008 SI2008/No.520 [12] and The Contaminated Land (England) (Amendment) Regulations 2012 2012/No. 263 [14].

There are two main parts to the local authority's duties under Part IIA, an inspection function and an enforcement function. It is a statutory requirement that each local authority publishes a strategy for carrying out inspections of its area to identify land potentially affected by contamination. This strategy fulfils that requirement. It deals principally with the inspection function, showing how the local authority will

- identify land within its area potentially affected by contamination,
- determine whether said land meets the definition of contaminated land, and
- manage the information that it collects in the process.

The purpose of the contaminated land legislation is to ensure that historically contaminated land is cleaned up in such a way that it does not pose a significant risk to health or the environment.

Prevention of new contamination is dealt with by different legislation, for example the Environmental Permitting regime and the Environmental Damage Regulations regime.

## **1.1 General Policy of Harborough District Council**

This strategy is written in the context of Harborough District Council's Corporate Priorities.

Corporate Priorities

- The Place: an enterprising and vibrant place
- The People: a healthy, inclusive and engaged community
- Your Council: innovative, proactive and efficient

Harborough District Council is fully committed to providing Best Value at all times. The principals of Best Value will be implemented for all aspects of the contaminated land regime.

## **1.2 Regulatory Context**

This strategy is principally concerned with the identification of land potentially affected by contamination and determining whether it meets the definition of contaminated land. In this section, an overview of the legislation is given, to place the strategy in context and explain some terminology that will be used later on in the document.

Please note that this section provides a summary and explanation of the main provisions of the contaminated land legislation. It is not a definitive or exhaustive guide, and it has no legal force. Please refer to the Environmental Protection Act 1990, Part IIA: inserted by Environment Act 1995, Section 57. See Environment Act 1995 for text of Part IIA. [1] and the statutory guidance, [19] for a full description.

### **1.2.1 Regulatory role of the Local Authority**

Local authorities have significant responsibilities for contaminated land.

Local authorities must:

- Ensure that their areas are inspected to identify sites potentially affected by contamination;
- Determine whether any particular site meets the definition of contaminated land;

- Act as the enforcing authority to ensure that contaminated land is remediated appropriately (except where the site is a special site, in which case the Environment Agency acts as the enforcing authority).

The enforcement role applies only to sites that are determined to be contaminated land. When such a site is determined, the authority will:

- Establish who is responsible for the contamination;
- Decide what remedial action is required;
- Ensure that the remedial action is carried out – either through agreement with the person responsible for the contamination, or by serving a remediation notice;
- Determine the apportionment of any costs of the remediation;
- Where enforcement action is undertaken record information about the regulatory action on a public register.

In carrying out its duties, the authority is required to act in accordance with the statutory guidance [19].

### **1.2.2 Regulatory role of the Environment Agency**

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

- To assist local authorities in identifying contaminated land, particularly where water pollution is involved;
- To provide site specific guidance to local authorities on contaminated land;
- To act as the enforcing authority when a site is designated as a Special Site;
- To publish periodic reports on contaminated land.

A Special Site is a site that meets one of the statutory definitions for Special Sites as outlined in section 78C of the Environmental protection act 1990 as amended. In general, Special Sites have had uses where the Environment Agency is likely to already have a regulatory responsibility, for example Integrated Pollution Control sites. Special Sites are not necessarily more contaminated than any other kind of site. Examples of

Special Sites are nuclear sites, MOD sites, oil refineries, and sites that may be causing significant pollution of water resources.

### **1.3 What is contaminated land?**

In general terms, contaminated land usually means land where industrial or other human activities have resulted in the presence of substances in the ground with potential to cause harm to human health, structures, or the environment. However, in English law the term “contaminated land” means something more specific than this. The duties and powers of local authorities extend only to land that falls within the statutory definition of contaminated land – enforcement action cannot be taken where land is not legally “contaminated land”.

The definition of contaminated land from the Environmental Protection Act 1990, Part IIA, Section 78A (2) [1] is:

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

- a) *significant harm is being caused or there is a significant possibility of such harm being caused; or*
- b) *significant pollution of controlled waters is being, or is likely to be, caused.”*

The meanings of the terms within the definitions are important. Section 4 of the statutory guidance [19] gives quite detailed explanations of what each term in the definition means. Below, a brief summary is given to aid understanding of the statutory meaning of contaminated land.

#### **1.3.1 Significant Harm to human health**

The following health effects should always be considered to constitute significant harm to human health:

- death;
- life threatening diseases (e.g. cancers);
- other diseases likely to have serious impacts on health;
- serious injury;

- birth defects; and
- impairment of reproductive functions

Harborough District Council may consider other health effects to constitute significant harm (alone or in combination) including:

- physical injury;
- gastrointestinal disturbances;
- respiratory tract effects;
- cardio-vascular effects;
- central nervous system effects;
- skin ailments;
- effects on organs such as the liver or kidneys; or
- a wide range of other health impacts.

In deciding whether or not a particular form of harm is significant harm, Harborough District Council shall consider the seriousness of the harm in question: including the impact on the health, and quality of life, of any person suffering the harm; and the scale of the harm and if treating the land as contaminated land would be in accordance with the broad objectives of the Contaminated Land regime

### **1.3.2 Significant Possibility of Significant Harm to Humans**

In determining whether there is a significant possibility of significant harm, Harborough District Council will use a risk assessment approach as outlined in the British Standard BS10175:2011+A2:2017 Investigation of potentially contaminated sites – Code of practice [21] or its successor documents, considering both the severity and the likelihood of the possible harmful effect. This will involve establishing:

- The nature and degree of harm predicted;
- The susceptibility of the receptors to which harm might be caused;
- The timescale within which and the probability that harm might occur.

### **1.3.3 Significant harm to, and significant possibility of significant harm to, non-human receptors**

There are 2 main groups of Non-human receptors. There are:

- Ecological Systems, and
- Property

Table 1. Ecological System effects (reproduced from Table 1 of Environmental Protection Act 1990, Part IIA. Contaminated Land Statutory Guidance, Department of Environment, Food and Rural Affairs, April 2012[19])

Relevant types of receptor	Significant harm	Significant possibility of Significant harm
<p>Any ecological system, or living organism forming part of such a system, within a location which is:</p> <ul style="list-style-type: none"> <li>• a site of special scientific interest (under section 28 of the Wildlife and Countryside Act 1981)</li> <li>• a national nature reserve (under s.35 of the 1981 Act)</li> <li>• a marine nature reserve (under s.36 of the 1981 Act)</li> <li>• an area of special protection for birds (under s.3 of the 1981 Act)</li> <li>• a “European site” within the meaning of regulation 8 of the Conservation of Habitats and Species Regulations 2010</li> <li>• any habitat or site afforded policy protection under paragraph 6 of Planning Policy Statement (PPS 9) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed RAMSAR sites); or</li> <li>• any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949.</li> </ul>	<p>The following types of harm should be considered to be significant harm:</p> <ul style="list-style-type: none"> <li>• harm which results in an irreversible adverse change, or in some other substantial adverse change, in the functioning of the ecological system within any substantial part of that location; or</li> <li>• harm which significantly affects any species of special interest within that location and which endangers the long-term maintenance of the population of that species at that location.</li> </ul> <p>In the case of European sites, harm should also be considered to be significant harm if it endangers the favourable conservation status of natural habitats at such locations or species typically found there. In deciding what constitutes such harm, the local authority should have regard to the advice of Natural England and to the requirements of the Conservation of Habitats and Species Regulations 2010.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to a relevant ecological receptor where the local authority considers that:</p> <ul style="list-style-type: none"> <li>• significant harm of that description is more likely than not to result from the contaminant linkage in question; or</li> <li>• there is a reasonable possibility of significant harm of that description being caused, and if that harm were to occur, it would result in such a degree of damage to features of special interest at the location in question that they would be beyond any practicable possibility of restoration.</li> </ul> <p>Any assessment made for these purposes should take into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>

Table 2. Property effects (modified from Table 2 of Environmental Protection Act 1990, Part IIA. Contaminated Land Statutory Guidance, Department of Environment, Food and Rural Affairs, April 2012[19])

Relevant types of receptor	Significant harm Significant possibility of	Significant possibility of Significant harm
<p>Property in the form of:</p> <ul style="list-style-type: none"> <li>• crops, including timber;</li> <li>• produce grown domestically, or on allotments, for consumption;</li> <li>• livestock;</li> <li>• other owned or domesticated animals;</li> <li>• wild animals which are the subject of shooting or fishing rights.</li> </ul>	<p>For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage. For domestic pets, death, serious disease or serious physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage.</p> <p>The local authority should regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose. Food should be regarded as being no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a contaminant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question, taking into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>
<p>Property in the form of buildings. For this purpose, “building” means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building, or buried services such as sewers, water pipes or electricity cables.</p>	<p>Structural failure, substantial damage or substantial interference with any right of occupation. The local authority should regard substantial damage or substantial interference as occurring when any part of the building ceases to be capable of being used for the purpose for which it is or was intended.</p> <p>In the case of a scheduled Ancient Monument, substantial damage should also be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question during the expected economic life of the building (or in the case of a scheduled Ancient Monument the foreseeable future), taking into account relevant information for that type of contaminant linkage.</p>

#### **1.3.4 Significant Pollution of controlled waters**

Under section 78A(9) of Part 2A the term “pollution of controlled waters” means the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter. The term “controlled waters” in relation to England has the same meaning as in Part 3 of the Water Resources Act 1991[3] , except that “ground waters” does not include waters contained in underground strata but above the saturation zone.

Harborough District Council shall focus on pollution which:

- i. may be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems;
- ii. which may result in damage to material property; or
- iii. which may impair or interfere with amenities and other legitimate uses of the environment

The following types of pollution should be considered to constitute significant pollution of controlled waters:

- (a) Pollution equivalent to “environmental damage” to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations 2009[13], but which cannot be dealt with under those Regulations.
- (b) 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.
- (c) A breach of a statutory surface water Environment Quality Standard, either directly or via a groundwater pathway.
- (d) 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)5)[18].

Harborough District Council may consider that the following types of pollution may constitute significant pollution:

- (a) significant concentrations<sup>6</sup> of hazardous substances or non-hazardous pollutants in groundwater; or
- (b) significant concentrations of priority hazardous substances, priority substances or other specific polluting substances in surface water; at an appropriate, risk-based compliance point.

It should only be concluded that pollution is significant if it is considered that treating the land as contaminated land would be in accordance with the broad objectives of the regime as described in Section 1 of the statutory guidance[19]. This means that Harborough District Council should conclude that less serious forms of pollution are not significant. In such cases we shall consult the Environment Agency.

The following types of circumstance should not be considered to be contaminated land on water pollution grounds:

- (a) The fact that substances are merely entering water and none of the conditions for considering that significant pollution is being caused set out in paragraphs 4.38 and 4.39 above are being met.
- (b) The fact that land is causing a discharge that is not discernible at a location immediately downstream or down-gradient of the land (when compared to upstream or up-gradient concentrations).
- (c) Substances entering water in compliance with a discharge authorised under the Environmental Permitting Regulations[15].

### **1.3.5 Principles of pollutant linkages: Source, pathway and receptor**

In order to be sure that any harm or pollution is a result of the presence of substances in, on or under the land, the local authority will check to see whether there is a demonstrable or plausible means for the substance (termed the “source”) to come into contact with something that may be harmed (the “receptor”). This means of contact is termed the “pathway”. Where a source, a receptor and a pathway exist together, we call this a pollutant linkage. If there is no pollutant linkage, the substance cannot cause harm.

For example, consider an industrial site that has become contaminated with lead (a toxic metal). The receptor of concern is the people that work on the site. To be harmed by the lead, the people must be able to come into physical contact with the soil that contains the lead – they must be able to inhale soil dust, or get soil in their mouths. If all the contaminated soil is covered by buildings, concrete and tarmac, the people cannot contact the soil. There is no pollutant linkage, and no risk of harm. In this case, even though a potentially harmful substance was present, the site would not legally be contaminated land.

### **1.3.6 Principles of risk assessment**

Risk assessment is the means by which the local authority will determine whether land appears to be contaminated land in accordance with the definitions above, in particular whether there is a significant pollutant linkage.

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

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

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

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

To find out more about risk assessment, we recommend Publications [60] and [62].

### **1.3.7 Policy on Remediation – ‘Suitable for Use’**

It is Government policy that land should be remediated to a standard where it is suitable for its current use, and significant harm or pollution of controlled waters can no longer occur. This is to be achieved by considering the pollutant linkages that have been identified and ensuring that each is treated such that the linkage is broken – for example:

- Remove or treat the source (the pollutant)
- Break or remove the pathway
- Protect or remove the receptor

In addition, remedying any effects that had already occurred as a result of the pollutant linkage would be required.

When identifying the best method for remediation, the local authority will use the concept of “best practicable technique”. Such techniques will have proven effectiveness, be practical to achieve in the particular circumstances of the site, and will be durable over a timescale appropriate to the problem. The authority will also consider the cost of the remediation in proportion to the severity of the harm or water pollution.

## **1.4 Objectives of the Strategy Document**

The main objectives of this strategy document are:

- To meet the statutory requirement to publish a strategy for the inspection of Harborough District Council’s area for contaminated land;
- To provide a readily available source of reference on Harborough District Council’s aims, objectives, procedures and information management systems for all interested parties, including members of the public, local businesses and landowners, environmental organisations and the Council itself.

## **1.5 Overview of the Inspection Process**

The basic tasks required to inspect the council's area for contaminated land are set out below. Several of these tasks have already been completed, and this strategy explains how and when the other tasks will be undertaken. Section numbers are given so that the detailed explanation of each task can be identified in the strategy document.

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Table 3. Inspection process detailed description section numbers

<b>Task</b>	<b>Section</b>
Establish links with statutory bodies and appropriate local organisations	8.4, 8.13
Acquire information required to carry out survey and inspection	5.1
Establish systems to manage the information and keep it updated	7.5
Carry out initial desk based survey of entire area and prioritise sites that may be contaminated for more detailed assessment (Stage 1)	4.1, 5.2, 5.3
Carry out preliminary risk assessment of sites in priority order and assign priority for detailed inspection (Stage 2)	4.1, 5.2, 5.3
Carry out detailed inspections in priority order	4.1, 6.3
Use risk assessment to determine whether inspected sites are contaminated land	6.3
Place details of contaminated land on a public register and commence appropriate action	7.2
Assess new information provided by the planning process, the public, statutory bodies or other organisations using the same procedures as above	5.4
Respond to enquiries, complaints and requests for information	8.1, 8.2, 8.13
Review the strategy and performance against objectives and targets regularly to ensure compliance with the law and to monitor progress	9

## **2 CHARACTERISTICS OF THE LOCAL AUTHORITY'S AREA**

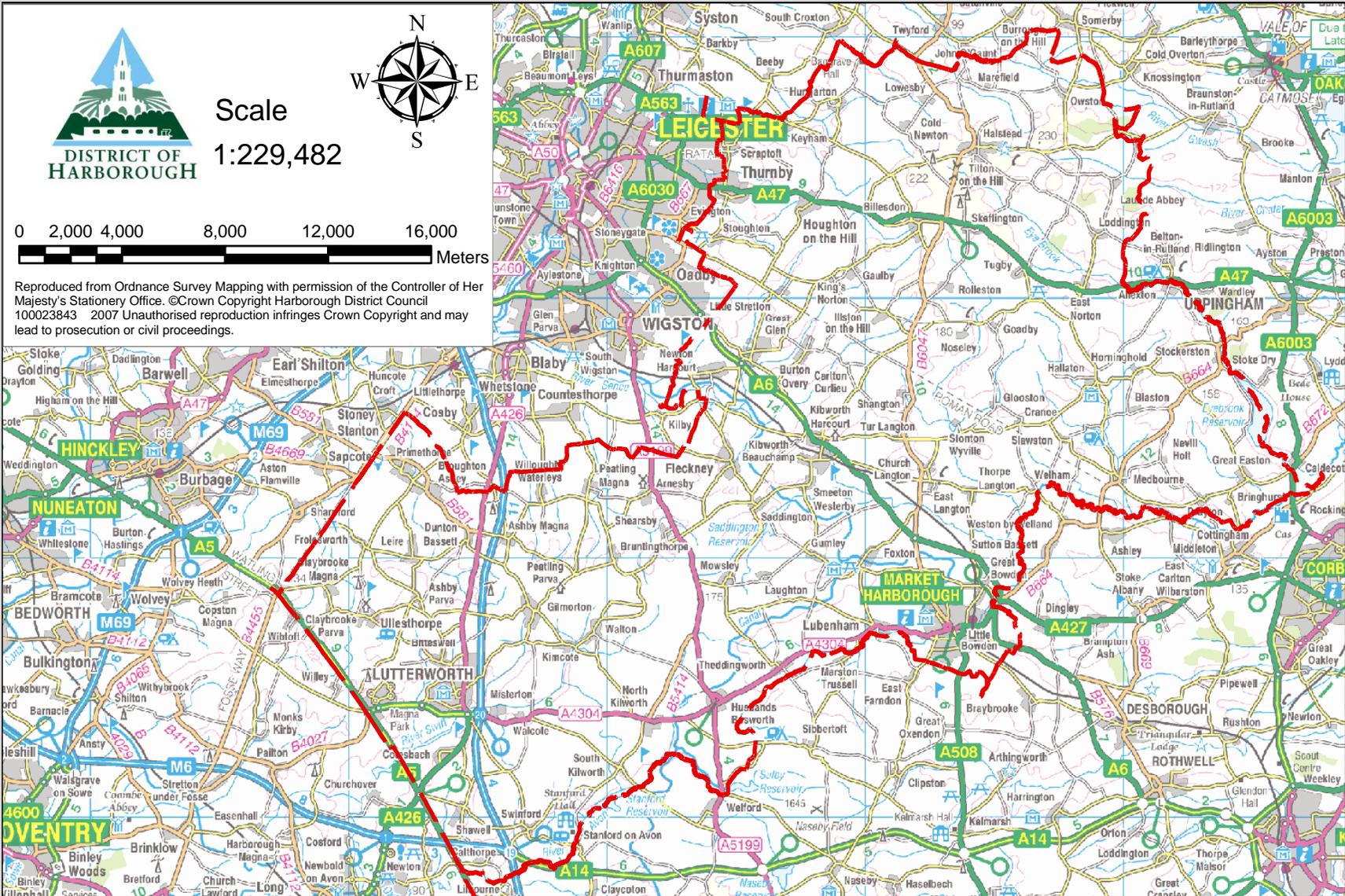
### **2.1 General Description**

Harborough District covers an area of 593 square kilometres (229 square miles) of rural south Leicestershire. It is one of seven Leicestershire districts and lies within the East Midlands Region. The population of approximately 90,000 (ONS mid-2016 estimate) is split between the two market towns of Market Harborough and Lutterworth, large villages such as Broughton Astley, Great Glen and Kibworth which serve as rural centres, a built up area of Leicester's urban fringe (Bushby, Thurnby and Scraftoft) and numerous small rural settlements. The district is predominantly rural and farming continues to be the most widespread land use in the area.

The district has a high quality natural and built environment. The eastern part of the district displays traditional features such as undulating landscapes, stretches of unfenced pastures and cultivated fields and patches of woodland, hedges and trees.

Most of the villages are compact and found in geographical and visually sensitive locations. There are 63 conservation areas and over 1200 listed structures within the district.

Figure. 1. Map of Harborough District Council Area



## 2.2 Industrial History

One of the legacies of Britain's industrial past is the resulting land contamination. An essential part of Harborough District Council's contaminated land strategy is to identify potentially contaminated sites where a pollutant linkage may exist and to deal with the problem.

Historically the Welland Valley has been a very good cattle-rearing area and over the years Market Harborough became the market centre for Southeast Leicestershire. As the market grew so did the associated trades including a tannery, woollen mill, grain warehouse and maltings.

The development of the railways during the 19th Century resulted in the industrial development of the area. Rubber processing and a battery factory were established in the late 19th Century. As the hosiery industry in Leicester City grew, it attracted similar developments in the smaller towns such as Fleckney. In the early 19th Century Fleckney became an important framework knitting centre.

With the industrialisation of the area the population grew which brought other industries into the towns that may have resulted in contamination. The production of town gas often left sites contaminated with waste products for example tar and sulphur. At the same time the development of sewage treatment works in the towns resulted in the disposal of sewage sludge around the treatment works.

Due to the geology of the area, there have been many areas of quarrying and extraction activities. The resulting holes in the ground have been useful locations to dispose of our waste. Until the mid 1970's there were very few controls over landfill and the records are limited. There are records of known landfill sites but it is anticipated that there are many sites in the district that are not recorded. As waste in the landfill site degrades it produces landfill gas which is made up of methane and carbon dioxide. Landfill gas is flammable and can cause explosions if it accumulates in confined spaces. The run-off or leachate from landfill sites has a high

concentration of dissolved organic substances and heavy metals which can contaminate surface or groundwater supplies.

### **2.3 Current land use**

The district is a largely rural area with the towns of Market Harborough and Lutterworth providing the main shopping and business services. The excellent road communication links in the district (M1/M6 junction and the A14 (M1/A1 link road) have been recognised by the development of the large distribution centre to the west of Lutterworth. Generally there is very little heavy industry in the district and what is present is generally concentrated around the main towns.

Towards the north west of the district there are several sand and gravel quarries and associated industries. The operational landfill sites are licensed by the Environment Agency and have strict pollution controls on them.

A large proportion of the district is used for agricultural purposes. Farming practises often use large quantities of pesticides and herbicides to maximise production. Excessive use of these substances may cause harm to human health and the environment. The Environment Agency controls the substances used on farms in order to protect the groundwater and surface water. As the substances used are generally biodegradable, it is not anticipated that farmer's fields will be determined as contaminated land. However, accidental large scale spillages or poor housekeeping on the farm may result in contamination.

The existing use of any land will have implications under the contaminated land regime. A housing development on a former industrial site could create the pollution linkage required for the site to be identified as "contaminated land". Land used for recreational purposes could also provide the appropriate linkage.

## **2.4 Known information on contamination**

Harborough District Council is aware of some sites in the district that are likely to be contaminated, and in some cases the authority is already in possession of a significant amount of information on these sites. In most cases the sites have come to the authority's attention via the planning process. Where development on potentially contaminated sites is proposed, developers have been asked to provide detailed information on sources, pathways and receptors and to carry out risk assessment. Where risk assessment shows that clean up is needed, the developer is required to provide a remediation method statement detailing how the clean up will be achieved.

There are also a number of lists and registers kept by Harborough District Council, Leicestershire County Council and the Environment Agency that contain details of sites that have had potentially contaminative uses. These include lists of closed landfill sites and registered petrol storage sites.

### **2.4.1 Part IIa work to date**

The council has prioritised 429 sites for further inspection

The council has determined that 171 sites are either unlikely to meet the definition or have been investigated and/or been remediated under the planning regime.

2 sites have undergone detailed inspection

- Site of the former Harborough gas works was investigated in 2009. Though contamination was found there was no pathway for it to effect a receptor, and
- Site of the former cuttings landfill in Thurnby was investigated in 2016, no significant soil contamination was discovered low levels of hazardous ground gases were detected, it was determined that the risk posed was low given the design of the houses and lack of flow.

## 2.5 Specific local features including protected locations

The contaminated land regime allows local authorities to take action to prevent significant harm to certain ecological sites. Where a site falls within the remit one of the following pieces of legislation the local authority can take action to require remediation of contaminated land.

- Sites of Special Scientific Interest (Wildlife and Countryside Act 1981 Section 28);
- National Nature Reserves (Wildlife and Countryside Act 1981 [2]);
- Marine Nature Reserves (Wildlife and Countryside Act 1981 [2]);
- Areas of Special Protection for Birds (Wildlife and Countryside Act 1981 [2]);
- European Sites – Special Areas of Conservation and Special Protection Areas, and candidate sites for these designations (The Conservation (Natural Habitats, &c.) Regulations 1994 SI1991/No. 2716 [5]);
- Any habitat or site afforded policy protection under National Planning Policy Framework 2012 Department for Communities and Local Government [20] (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and Listed Ramsar sites);
- Nature Reserves established under the National Parks and Access to the Countryside Act 1949 [1].

Where a site does not fall within the controls of the above pieces of legislation the local authority is not in a position to take action to prevent damage to wildlife and ecology.

There are 15 Sites of Special Scientific Interest in Harborough District (Table 4)

With the exception of Tilton Cuttings, which is a regionally important geological site, all of the Sites of Special Scientific Interest are also sites of ecological significance at County level.

Table 4. Sites of Special Scientific Interest

Site Name	Grid Reference
Saddington Reservoir	
Launde Bigwood	SK 787 038
Allextan Wood	SP 821 994
Great Bowden Borrow Pit	SP 743 898
Tilton Cutting	SK 761 056 to SK 765 050
Misterton Marsh	SP 557 852
Caves End Pits Shawell	SP 538 795
Eyebrooke Reservoir	SP 854 955
Chater Valley Launde	SK 804 045
Stanford Park	SP 587 793
Leighfield Forrest Loddington	SK 767 027
Eyebrooke Valley Woods	SP 826 977, SP 826 969, SP 836 934
Owston Woods	SK 790 065
Kilby – Foxton Canal	
Grand Union Canal	SP 623 981 to SP 695 915

## 2.6 Historic Buildings and Ancient Monuments

Harborough District Council has designated 63 Areas of planning conservation within the district. These have been designated in recognition of the areas special architectural or historic interest. There are also over 1400 listed structures within the district.

There are 78 Scheduled Ancient Monuments in the district.

Under the contaminated land regime buildings and property, ancient sites and important archaeological sites are considered as receptors and should be protected.

## **2.7 Geology**

When assessing contaminated land it is important to give regard to the geology of the local area. The geology can be the source of the contamination (e.g. radon gas, heavy metals, methane), it can act as the pathway for contamination to move from one place to the next or it can be the receptor for the contaminants (e.g. aquifers).

Information on the geology of the Harborough District can be taken from the 1:50,000 Geological Maps for Leicester, Market Harborough and Coventry (Sheet numbers 156, 170 & 169) – Solid and Drift editions [69] [70] [71]. Much of the area is dominated by the solid sequence of Upper Lias Clay followed by Marlstone Rock bed and Mid Lias Clays and sand, Lower Lias clays and Limestone, Rhaetic beds and Red Marl with beds of Sandstone and bands of Gypsum and Keuper Marl. There are isolated solid deposits of Inferior Oolite Northampton Sand.

In the Northwest of the area the bedrock is made up of Blue Lias Formation comprising of Rugby Limestone and Saltford Shale, underlain with Mercia mudstone. There are some exposed Triassic rocks of Keuper Marl dipping south-east but most of the Triassic rocks are obscured by thick deposits of glacial till and alluvium.

Over extensive areas of the North East and South East of the district, much of the superficial deposits are made up of glacial till with areas of Upper Lias Clays and Shales outcropping at the surface and isolated areas of Inferior Oolite Northampton Sand and Marlstone Rock bed.

Liassic rocks form the surface of much of the central, southern and eastern parts of the district. In the west and north-west much of this Lower Jurassic rock is buried beneath deposits of boulder clay, sand and gravel.

There is minor faulting in the Nevill Holt area to the South East of the district.

Alluvial deposits are present along the valleys and are particularly extensive for the River Welland and tributaries, River Sence, River Swift and Eyebrooke Reservoir.

The glacial deposits of sand and gravel have resulted in mineral extraction particularly in the west and north-west region of the district.

### **2.7.1 Geology as a Source of Contamination**

There are a number of potential sources of contamination from geology depending on the local circumstances. Gases such as methane, carbon dioxide and hydrogen sulphide can be generated from organic deposits such as peat and alluvial river deposits.

Where minerals are extracted through mining and quarrying, the waste products may result in high concentrations of heavy metals remaining as a source of contamination

Excessive heavy metal deposits can be found in some ironstones including Northamptonshire ironstone as a result, much of the district has concentrations of arsenic which exceed generic acceptance criteria..

Because of the presence of heavy metals in the underlying geology, levels of heavy metals can be found in overlying soils. The statutory guidance states that *“Normal levels of contaminants in soil should not be considered to cause land to qualify as contaminated land, unless there is a particular reason to consider otherwise. For the purpose of this Guidance, “normal” levels of contaminants in soil may result from:*

*(a) The natural presence of contaminants (e.g. caused by soil formation processes and underlying geology) at levels that might reasonably be considered typical in a given area and have not been shown to pose an unacceptable risk to health or the environment.*

*(b) The presence of contaminants caused by low level diffuse pollution and common human activity other than specific industrial processes. For*

*example, this would include diffuse pollution caused by historic use of leaded petrol and the presence of benzo(a)pyrene from vehicle exhausts, and the spreading of domestic ash in gardens at levels that might reasonably be considered typical.” As such the elevated levels of arsenic should not be considered to meet the definition of Contaminated Land”*

The British Geologic Survey were commissioned by DEFRA to establish ‘normal’ concentrations <http://www.bgs.ac.uk/gbase/NBCDefraProject.html>

Radon gas is a naturally occurring substance emitted by the radioactive decay of Radium present in all rocks and soils. There is a link between high radon levels in a property and the increased risk from cancer. Certain areas of Harborough District have been designated as Radon Affected Areas [39] and whilst radon does not fall into the definition of contamination for the purpose of this report, further information about radon gas and effects on health can be obtained from the Regulatory Services Section on 01858 828282.

### **2.7.2 Geology as the Pathway of Contamination**

Certain rock types are very effective in allowing the movement of substances dissolved in ground water. Rocks and sediments such as sand and gravel, chalks and limestone can have a high permeability which could allow rapid movement of liquids and gases.

As previously highlighted there are significant areas of glacial and river deposits of sand and gravel in the Harborough district which could act as a potential pathway for any contamination.

Soil can also act a pathway for contaminants, for example the uptake of heavy metals by vegetables directly through the soil. The motion of burrowing animals/insects in the soil may cause fissures increasing the likelihood of the movement of contaminants.

### **2.7.3 Geology as a Receptor**

The geology of the area plays an important part in determining the location of a receptor because of its role in supplying water. The rocks that bear

water are called aquifers. Due to the geological make up of the rocks, it is often the same rock type that acts as an aquifer as well as being a good transmitter of water. The protection of aquifers is an essential part of the contaminated land regime.

## **2.8 Hydrogeology**

Groundwater plays a basic and fundamental role in the environment. All groundwater and surface water is considered to be a receptor and as a receptor it is important that water is protected from contamination. Water can also act as a pathway for contaminants.

Hydrogeology is the study of groundwater. Surface water, from rivers, lakes or rain deposits enters the ground where-ever it is possible depending on topography, geological composition and vegetation cover. The optimal conditions for the development of a large reservoir of groundwater will include a well-vegetated, gently sloping or near-level landscape composed of fractured bedrock or coarse, well sorted soil.

Aquifers are porous rocks, often with a high permeability, that hold and supply water and they are one of the principal sources of drinking water.

Aquifers are classified as

### **2.8.1 Principal Aquifers**

These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

### **2.8.2 Secondary Aquifers**

These include a wide range of rock layers or drift deposits with an equally wide range of water permeability and storage. Secondary aquifers are subdivided into 3 types.

#### **2.8.2.a Secondary A**

These are permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers;

#### **2.8.3 Secondary B**

These are predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.

#### **2.8.4 Secondary Undifferentiated**

The classification has been assigned in cases where it has not been possible to attribute either category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

In addition water is abstracted from rivers and reservoirs and treated before entering the mains water supply. Some properties are supplied with private drinking water through springs and bore-holes serving individual properties

The Environment Agency has defined Source Protection Zones for water supplies used for public drinking water. The Source Protection Zones give an indication of the risk to groundwater supplies from potential polluting activities and the accidental releases of pollutants. The Source Protection Zones have been sub-divided into four zones. The Environment Agency has identified three Source Protection Zones in the district. The shape and size of each of the zones is controlled by many factors including natural ground conditions and other environmental factors including the abstraction of groundwater.

The Environment Agency is also responsible for protecting the quality of surface water. Surface water includes all rivers, streams, lakes and ponds. The main rivers in the Harborough district are:

- the River Welland, which flows east from Market Harborough towards Corby; and
- the River Swift, which flows through Lutterworth.

There are three reservoirs in the district, these are:

- Eye Brook Reservoir,
- Saddington Reservoir, and
- Stanford Reservoir.

The surface water supplies are maintained by precipitation and groundwater sources. As the rain must pass through or over the land before it reaches the surface water supply, if it passes through land affected by contamination contaminants may be transferred to the water supply. It is recognised that the closer the contaminated land is to the water supply the greater the risk that the water quality will be affected.

## **2.9 Conclusions**

Whilst this chapter has identified potential sources and receptors in the district due to the local characteristics at this stage no specific sites have been located or has the pollution linkage been established. The mechanism to identify the specific sites and the appropriate time scale involved is discussed in section 3, 4 and 5

Generally the potential sources of contamination are:

- Old landfill sites;
- Old gas work sites;
- Heavy engineering sites;
- Manufacturing/industrial sites;
- Transportation and distribution sites (including railway land);
- Mining works.

The potential receptors for contaminated land include:

- Residential areas;
- Sports and leisure areas;
- Surface and groundwater supplies including aquifers, particularly where a source protection zones, or private water supply exists;
- Sites of Special Scientific Interest;
- Scheduled Ancient Monuments;
- Conservation areas.

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### **3 The Local Authority Strategy: Overall Aims**

In this section we set out the specific aims and objectives of this strategy to meet our obligations (see also Section 1).

#### **3.1 Aims of the Strategy**

Harborough District Council wishes to identify contaminated land present in its area in the most practical and efficient way and ensure that the most pressing and serious problems are addressed first. With these priorities in mind, the following overall aims for this strategy have been identified:

- To protect human health, important ecological sites and the water environment;
- To have a transparent decision making process wherever possible. To demonstrate this commitment, any land where the council may be the appropriate person will be assessed as a priority (i.e. land owned by, formerly owned or leased by the local authority, or where the local authority was responsible for the site condition/activities). The enforcement duties of Harborough District Council in this strategy will be kept separate from the responsibilities of the council as a landowner;
- To have a body of information for contaminated land that is useful and accessible;
- To be efficient, consistent and rational in carrying out all inspection work;
- To carry out the investigation of contaminated land in conjunction with other Council policies and strategies.

#### **3.2 Objectives and Milestones**

In order that the aims highlighted above can be met, it is necessary to have realistic objectives set. Where relevant, target dates for each of the objectives will be set. The completion and publication of the contaminated land strategy is a significant milestone and the review process incorporated in the strategy will ensure that the strategy remains effective in achieving these aims.

Table 5 sets out the actions required in order that the inspection of the land in Harborough district is carried out in accordance with the published aims and objectives.

Table 5. Inspection actions timescale

Task	Status /Revised Target Date
Purchase and installation of historical map data. Undertake the training of staff in the use of the GIS (Geographical Information System).	Completed
Publish the final Contaminated Land Strategy	Completed
Produce/purchase a data handling system	Completed
Produce a preliminary database of potentially contaminated sites from known information other than historical maps	Completed
Examine historical maps for potentially contaminated sites. Assign Survey Priority Categories to ALL sites on the data base including Harborough District Council's own land.	Completed
Complete risk assessments to establish Inspection Priority.	Completed, however the priority list may change over time as more information is obtained on sites
Instigate detailed inspections of High Inspection Priority sites	On going
Carry out a review of the Strategy and inspection procedures	March 2018
Commence phased approach to detailed site inspections	2018 onwards
Review site inspection strategy .	2028

The target dates for the inspection of sites are only proposed at this time as it is appreciated that the inspection process will be an on-going activity and may take many years to complete. The initial priority rating of any site will always be subject to change as new developments are planned. Sites that previously would not fall under the definition of contaminated land

may fall within the regime if the source, pathway, receptor linkage is created through potential land use changes.

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## **4 Local Authority Priority Actions**

In this section of the strategy we set out what our priorities for action are and why, with reference to:

- The background information presented in Sections 1 and 2;
- Harborough District Council's overall aims as presented in Section 3.

We also explain how these priorities are incorporated into our procedures for identifying contaminated land. These procedures are detailed in Sections 5 and 6.

### **4.1 Priorities**

Having regard to the local circumstances described in Section 2, the following priorities are for dealing with land that may fall within the definition of contaminated land.

#### **4.1.1 Sites which may present a significant risk to human health;**

Where there is a significant risk of humans coming into contact with land contamination including:

- residential land,
- allotments,
- schools,
- playing fields etc.

#### **4.1.2 Sites which may present a significant risk to drinking water supplies;**

Sites which may present a risk to drinking water supplies include:

- sites containing private water supplies,
- surface water sources supplying drinking water abstractions. and
- ground water sources supplying drinking water abstractions

#### **4.1.3 Sites that may present a significant risk to other surface water and groundwater supplies;**

There is no principal aquifers in the district however there are Secondary A and Secondary undifferentiated aquifers which need to be protected. All surface water should be given high priority because of its vital role in the health of humans and ecological benefits.

There are 2 zone 3 source protection zones in district

**4.1.4 Sites that may present a significant risk to Sites of Special Scientific Interest.;**

As previously described there are a number of Sites of Special Scientific Interest in the district. Where a SSSI is at risk from contaminated water the site would be considered a higher priority as highlighted above.

**4.1.5 Sites that may present a significant risk to agricultural land;**

Sites where contamination would have a direct impact on the health or quality of, crops or farm animals. the contaminated land regime deals with damage to property which includes crops and livestock .

**4.1.6 Sites that may present a significant risk to historical buildings or sites of archaeological interest;**

A build up of gases such as methane released from contamination sources may create a risk to buildings. Polluted ground water and high pH soils may undermine the fabric of the buildings.

**4.1.7 Sites that may present a significant risk from lasting exposure to any person resulting from the after-effects of a radiological emergency, past practice or past work.**

The Industry Profile series of documents, produced by DEFRA and its predecessors, provides background information on many of the activities which have given rise to land contamination, and factors which may assist in the identification of sources of contamination. An industry profile has been prepared specifically for land uses which may be subject to radiological contamination.

**4.2 Compilation of Potentially Contaminated Land Sites**

Initially a database of potentially contaminated land sites was created, compiled from two primary sources, the Landmark and Environment Agency datasets. The Landmark digital historic land use database is composed of 6 historic time periods or epochs. The different epochs were merged together and the data was cleaned up by removing sites with

identical identification numbers to obtain a single dataset of potentially contaminated land sites from the historical mapping. This has been augmented with historic landfill site data provided by the Environment Agency.

Council officers have identified additional sites from historic mapping and as a result of referrals and consultations from other departments and agencies

### **4.3 Assigning Hazard Scores**

The initial hazard scores were based on the site description from the Landmark dataset, Each site was then categorised into class divisions in accordance with the Department of the Environment classification (DoE) Pilot Survey of potentially contaminated land in Cheshire – A Methodology for Identifying Potentially Contaminated Land, 1990 [61].

A hazard score from 1-5 was subsequently attributed for each DoE category (1 being the least hazardous and 5 being the most). This provided a consistent classification system for categorising sites of similarly hazardous land uses.

The initial hazard score is important as it contributes towards the final assessment score in the proximity analysis.

The most hazardous sites identified in the DoE Pilot Survey included:

- landfills;
- military land;
- oil and petroleum refining and storage; and
- gas manufacture and distribution sites.

The least hazardous sites included:

- warehouses,
- quarries and
- air shafts.

The hazard score can be amended as more information is obtained on the site.

#### **4.4 Pathway and Receptor Proximity Scores**

The pathway and receptor datasets that are available for use in the prioritisation process include:

- Residential areas;
- Schools;
- Hospitals;
- Private water supplies;
- Rivers;
- Source protection zones;
- Groundwater vulnerability maps;
- Sites of Special Scientific Interest;
- Schedule of ancient monuments.

Pathway and Receptor sensitivities in our model were accounted for by using buffer zones to represent the distance from the site boundary to the receptor. The larger the buffer zone, the more sensitive the pathway or receptor. Two buffer zones are used in the prioritisation model, an inner (category A) and outer (category B) buffer zone, with the inner buffer attracting a higher category score (see Figure. 2). This score is important as it will also influence the prioritisation score.

The analysis was run for each pathway or receptor dataset, and the model automatically calculated the proximity of each potentially contaminated land site to each pathway or receptor feature within the dataset.

Figure. 2. Schematic diagram of proximity scoring method.

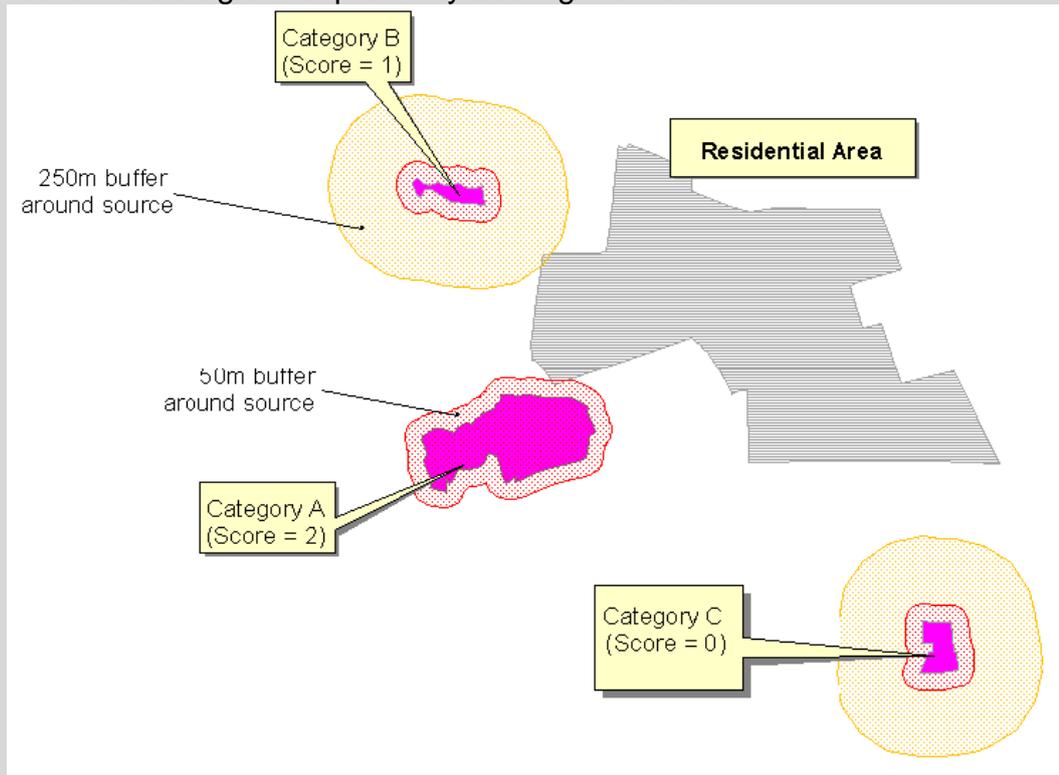


Table 6 indicates the inner and outer buffer zone distances and hence relative sensitivity, of individual receptors. These were determined based on a consultants contaminated land expertise and experience of using the prioritisation model.

Table 6. Pathway & Receptor Sensitivity

Pathway or Receptor	Category		
	A	B	C
Residential/Settlement (including proposed land allocations from the Local Plan)	0-50m	51-250m	>250m
Schools	0-50m	51-250m	>250m
Hospitals	0-50m	51-250m	>250m
Main rivers	0-50m	51-500m	>500m
Private Abstraction wells	0-50m	51-250m	>250m
Source Protection Zones	0-50m	51-500m	>500m
Ground water vulnerability zones	0-50m	51-500m	>500m
Sites of Special Scientific Interest	0-50m	51-250m	>250m
Conservation areas	0-50m	51-250m	>250m
Schedule of ancient monuments	0-50m	51-250m	>250m

## **5 SURVEYING THE AREA AND PRIORITISING SITES FOR DETAILED INSPECTION**

In this section we set out our procedures for carrying out the survey of our area to identify contaminated land, and explain how we prioritise potentially contaminated sites for detailed inspection. The procedures for carrying out detailed inspections are explained in Section 6.

### **5.1 Information collection for survey and inspection**

A considerable amount of work has been undertaken to identify potentially contaminated sites and to devise a time table for more detailed inspections

There are two basic categories of information used in the initial risk rating process. The first is information used to identify sites where contamination may be present (listed in Table 7). The second is information about environmental sensitivity (listed in Table 8). This information is used to determine whether significant harm or pollution of controlled waters may be occurring.

Section 5.4 explains how the information in Table 7 and Table 8 is used to identify land that may be contaminated, and prioritise the land for detailed inspection. Section 7 explains how the information is managed and kept up to date. As information is collated it will be loaded into a Geographical Information System (GIS).

Table 7. Indicators of Potentially Contaminated Land

Type of information	Source of Information
Records of actual harm or pollution of controlled waters	Environment Agency, Regulatory Services and Development Control departments
Historical maps (scales 1:10,000 ; 1:2,500) Published 1850's, 1890's/1900's, 1920's, 1930's, 1950's, 1960's/70's, 1980's/90's.	Digitised historical maps on GIS system, local libraries, county libraries, local record office, Bodleian Library
Sites with Integrated Pollution Control authorisations	Environment Agency, Regulatory Services Department
Registers of other potentially contaminative uses e.g. scrap yards, petrol stations, quarries	Environment Agency, Leicestershire County Council
Sites with waste management licences	Environment Agency
Closed landfill sites	Environment Agency, Regulatory Services Department
Existing lists of potentially contaminated land	Regulatory Services Department,
Current land uses	Ordnance Survey maps, Development Control Department (Structure Plans)
Records of remediation or clean-up work	Regulatory Services Department, Environment Agency
Other general historical information	Planning records, libraries.

Table 8. Indicators of Environmental Sensitivity

Type of information	Source of Information
<b>Water resources</b>	
Groundwater source protection zones	Environment Agency
Aquifer classification and vulnerability	Groundwater Vulnerability Maps, Geological Maps
Locations of drinking water abstractions	Environment Agency, Health & Enforcement Services
Surface waters (rivers, streams, ponds, lakes etc.)	Ordnance Survey mapping and Environment Agency
Flood information (floodplain/washland area/other flood risk areas)	Environment Agency, Planning department
Environmentally sensitive areas	Environment Agency
Nitrate sensitive areas	Department for Environment, Food and Rural Affairs DEFRA
<b>Ecology and Wildlife</b>	
Sites of Special Scientific Interest (SSSI's), Nature Reserves, Ecological sites	Natural England
<b>People and Property</b>	
Land uses (e.g. residential areas)	Ordnance Survey (Current mapping) / Planning Department (Structure Plans) DEFRA
Listed buildings/Conservation Areas	English Heritage, Planning department
Scheduled Ancient Monuments, sites of archaeological interest	Leicestershire County Council, English Heritage, Planning department.

## 5.2 Methodology for Initial Survey and Prioritisation

The flow chart (Figure. 3) summarises the procedure used to carry out an initial survey of the district and prioritise the sites that are identified for detailed inspection. The detailed inspection process is explained in Section 6. The initial survey and prioritisation outlined here is a desk based procedure, utilising information that the authority collected from the sources listed in Table 7 and Table 8. Visits to sites, sampling and laboratory testing are part of the detailed inspection process in Section 6. This is considered to be the most rapid and efficient means of ensuring that serious problems are identified quickly.

To ensure that information collected on a site, and the reasoning for decisions made, is well organised and easily retrieved, it will be entered into a computer database. Each site will be assigned a unique reference number. This number will also identify the site on the GIS system. Further details of the information management system are given in Section 7.

### 5.3 Preliminary Prioritisation

The prioritisation model calculates a more detailed Assessment Score by using the following equation and factors described above. Thus,

$$\begin{aligned} \text{assessment score} &= Set^H + Sch^H + Hosp^H + Pwa^H + Spz^H + Lpa^H + Con^H \\ &+ Ri^H + SSSI^H + SAM^H \end{aligned}$$

<i>H</i>	=	Hazard score
<i>Set</i>	=	Settlement score
<i>Hosp</i>	=	hospital score
<i>Pwa</i>	=	private water supply score
<i>Spz</i>	=	source protection zone score
<i>Lpa</i>	=	Local Plan area score
<i>Con</i>	=	conservation area score
<i>Ri</i>	=	River score
<i>SSSI</i>	=	SSSI Score
<i>SAM</i>	=	Scheduled ancient monument score

The Assessment score can be ranked to indicate which sites should be reviewed and inspected first (i.e. it allows the sites to be prioritised for inspection).

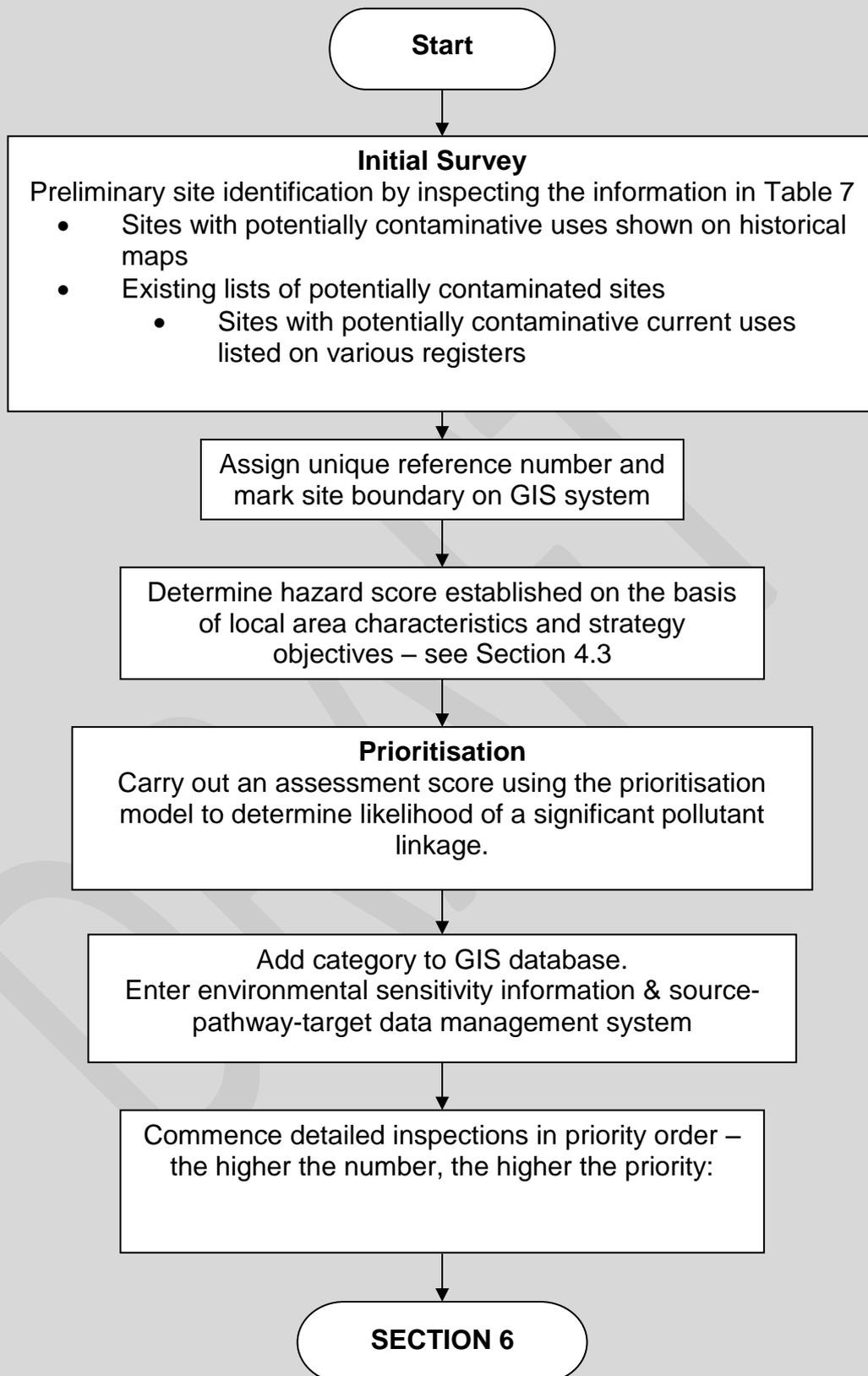
### 5.4 Ongoing Identification of Potentially Contaminated Sites

The work of identifying and prioritising sites that may be contaminated will continue after the initial survey and prioritisation work is complete. New information provided by the statutory bodies involved, the planning process and by the general public, businesses and other organisations

may identify new sites or affect the prioritisation of sites that have already been identified.

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Figure. 3. Flow chart showing method for initial survey and prioritisation



## **5.5 Information Evaluation**

In this section the methods for evaluating information are briefly explained. The subheadings refer to the stages shown in the flow chart above in Section 5.2.

### **5.5.1 Initial Survey of the area**

The purpose of the initial survey was to create a list of potentially contaminated sites within Harborough District Council's area. In general, this was based on evidence that the site is being, or has been, used for an activity that may have caused contamination (a potentially contaminative use).

Initially records were collated of land either known or suspected to be contaminated, from both council sources and from the Environment Agency. Next, historical maps will be reviewed and areas that may have had potentially contaminative uses identified. These will then be added to the list.

The District Council, the County Council and the Environment Agency hold registers of sites where potentially contaminative activities are currently carried out. These exist as result of other environmental legislation. These registers will be reviewed and sites added to the list of potentially contaminated sites as appropriate. Examples of registers which may contain details of potentially contaminative uses are; Integrated Pollution Control sites; sites with waste management licences; registered scrap yards; and registered petrol storage sites.

Some sites may be identified by more than one of the above searches. Site boundaries will be entered onto a GIS system and a unique identification number will be assigned to each site. This will ensure that all information relating to the same site is logged under the same reference number.

### **5.5.2 Sites where remediation has already been carried out**

Harborough District Council and the Environment Agency hold records of sites that have already been remediated. This information will be collected and examined as part of the initial survey. These sites would be placed on the list of potentially contaminated sites for prioritisation. They will be evaluated in the same way as the other sites, and the remedial action taken into account when prioritising the detailed inspection.

### **5.6 Priorities for taking action on sites that are Contaminated Land**

The detailed inspection will lead to a determination of whether the site is contaminated land or not. Where sites are found to be contaminated land, an action priority classification will be given, since some contaminated land sites will be more serious than others. This approach is essential in order that resources can target the most serious problems first.

Section 8 explains how we will obtain and respond to new information and complaints. Section 9 details how new information will trigger reviews of the survey, prioritisation and inspection process.

## **6 Programme for Inspection**

The survey of the district will result in a prioritised list of sites that require detailed inspection to determine whether they are areas of contaminated land. Section 5 explains how the prioritised list of sites will be generated in a systematic and efficient manner. This section explains how the detailed inspections will be carried out.

### **6.1 Ensuring Compliance with Statutory Guidance on Inspection**

Harborough District Council is obliged to demonstrate that the arrangements for the detailed inspections comply with the statutory guidance relating to the inspection of particular areas of land. The guidance is summarised below. The remainder of Section 6 explains in more detail how the inspections will be carried out in compliance with the statutory guidance.

The detailed inspection should provide sufficient information or evidence to indicate the actual presence of a pollutant;

The detailed inspection may include the following actions:

- a) Collection and assessment of documentary information, or other information from other bodies (see Section 5),
- b) A site visit to carry out a visual inspection and, in some cases, limited surface sampling,
- c) An intrusive investigation of the land (e.g. trial pits, boreholes);

Harborough District Council has the statutory power to enter a site/area in order to carry out inspection and take samples under section 108 of the Environment Act 1995;

Before exercising its powers of entry to a site, the district council should be satisfied on the basis of information already obtained that:

- a) There is a reasonable possibility of the presence of a contaminant, a receptor and a linkage,

- b) Where intrusive investigation is deemed necessary it is likely that the contaminant is actually present and given the current use of the land , a receptor is actually or likely to be affected;

Harborough District Council should not use its power of entry to carry out any intrusive investigation if:

- a) Detailed information\* on the condition of the land has been provided by the Environment Agency, or some other person,
- b) A person offers to provide such information\* within a reasonable and specified time and subsequently provides the information within the agreed time period;

\*provided that the information is reliable and adequate

Any intrusive investigations should be carried out in accordance with the appropriate technical standards (see references [21] [22] [23] [25] [26] [49]).

All reasonable precautions should be taken to ensure that the council avoids harm, water pollution or damage to natural resources, or features of historical or archaeological interest, whilst carrying out an intrusive investigation;

Natural England shall be consulted on any action that would require the consent of this organisation, prior to carrying out intrusive investigations on any area notified as a Site of Special Scientific Interest;

Where it is no longer reasonable to assume a pollution linkage, no further detailed inspections should be carried out on the site.

## **6.2 Criteria for Selecting Areas and Individual Sites**

All sites which could potentially be considered as contaminated land will have a priority assessment before detailed inspection commences. The order in which detailed inspection will be carried out is given in Section 5.3, and the reasons for the order given are explained in Section 4.1.

There will normally be more than one site in each priority category, and it

is therefore necessary to decide which site is the most important. Before beginning detailed inspections on a group of sites in a priority category, the local authority inspector will review the information available for all the sites in the category and decide upon the order in which these will be inspected. Criteria for this decision will be based on the priorities as outlined in Section 4 to ensure that the highest risk sites are inspected first.

There are some other issues that may influence the order in which sites are dealt with:

- several detailed inspections may be progressed simultaneously, and the time taken to obtain information may vary between sites;
- If information is obtained indicating the possible existence of a site with a higher priority category than those being progressed at the time, resources will be diverted to investigating the potentially more serious problem.

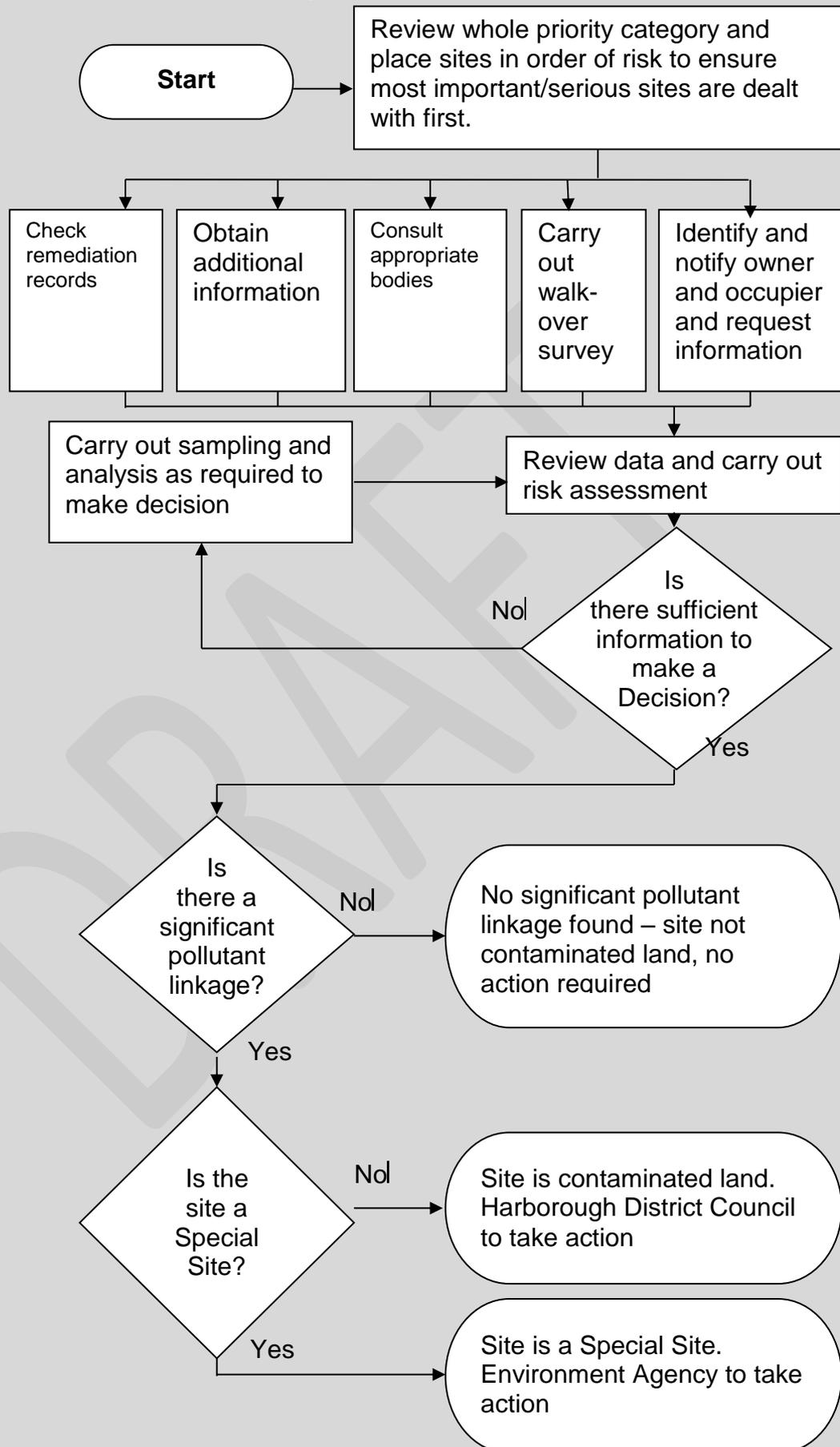
### **6.3 Methodology and Procedures for Detailed Inspection**

The purpose of the detailed inspection is to obtain sufficient information for Harborough District Council to establish if the land:

- a) appears to be contaminated land and/or;
- b) is a Special Site.

Procedures will be established for carrying out detailed inspections to obtain information sufficient to decide whether the site is contaminated land or a Special Site, and to comply with the statutory guidance outlined above. The methodology for detailed inspection is summarised in the flow chart below.

Figure. 4. Flow Chart for Detailed Inspection



### **6.3.1 Review priority category**

Before commencing detailed inspections on a particular priority assessment number the inspector will review the information for each site with that number and decide the relative urgency of each case in terms of the likelihood that significant harm is occurring. This will ensure that the potentially most serious sites are dealt with first. This review will take place only at the start of the inspection process on each category. Similar reviews of progress and relative urgency of cases will be undertaken at regular intervals as part of reviewing the strategy. Further details of review procedures are given in Section 9.

### **6.3.2 Check remediation records**

The first step in the detailed inspection is to check whether the site has recently been remediated. Records of site remediation are kept up to date through the planning process. If the site has been remediated, the likelihood of significant harm or water pollution may well have been reduced. If this is the case, the priority assessment will be amended to reflect the new situation. The inspector will not automatically assume that remediation has been effective in preventing a significant pollutant linkage, and will seek information to demonstrate that this is so.

### **6.3.3 Obtain additional information**

The initial survey and prioritisation process will have provided information that is adequate to determine the likely presence and significance of contamination in most cases. All sites are different, however, and where appropriate the inspector will carry out further research to clarify the possible sources, pathways and receptors. Examples of further research at this stage would be to request additional large scale historical maps from the Bodleian Library in Oxford; to look at aerial photographs held by the County Library and to make site specific enquiries to relevant statutory bodies and other organisations. Reference will be made to published guidance in seeking further documentary information [41].

#### **6.3.4 Consult appropriate bodies**

The site inspector for Harborough District Council will consult with officers within the Council and externally to seek further details and advice on a site specific basis. The list of consultees will depend on the nature of the possible significant pollutant linkage. For example, Natural England would be consulted if there was a risk of significant harm to an ecologically important area. The Environment Agency will be consulted in most cases. Links have already been established with the organisations that may need to be consulted; these are given in Section 8.

#### **6.3.5 Carry out walkover survey**

The inspector will visit sites during detailed inspection to confirm the current site use and condition and to look for any evidence of contamination. Walkover surveys will be carried out in accordance with published guidance on best practice [38].

Harborough District Council has statutory powers to enter sites to inspect them, but will normally inspect sites by agreement with the site owner and/or occupier. Prior to carrying out the walkover survey, the council's inspector will review the information currently held for the site to ensure that there still appears to be a reasonable possibility of the presence of a contaminant, a pathway and a receptor.

#### **6.3.6 Identify and notify owner and occupier**

Site owners and occupiers will be contacted at the detailed inspection stage. The principal purposes of this first contact will be to inform them that their site will be inspected for potential contamination problems, and to request any information (e.g. site investigation data) that already exists.

#### **6.3.7 Review data and carry out risk assessment**

Information from the above activities will be reviewed and used to produce an updated source-pathway-receptor risk assessment. The risk assessment will indicate whether significant harm or water pollution is likely, in a similar manner to the prioritisation procedure in Section 5.

Because there is now more information, the results of the risk assessment will be more reliable.

### **6.3.8 Data sufficient for decision**

The risk assessment may show that there is no significant pollutant linkage; for example the landowner may have carried out a site investigation and found no contamination to be present. In these cases, no action will be necessary and further inspections/ information will not be pursued. Triggers for a site inspection to be reviewed are detailed in Section 9.

### **6.3.9 Carry out sampling and analysis**

Where the risk assessment shows that there is a reasonable possibility of a pollutant linkage, the inspector will seek evidence that contamination is actually present on the site. This generally requires taking samples and analysing them for the contaminants that may be present.

The scope of the sampling and analysis required depends on the individual site. In all cases only the required information will be sought to decide whether the site is contaminated land or a Special Site. In deciding what kind of site investigation is needed, reference will be made to appropriate published guidance [42], [64].

In some cases the landowner or occupier, or other party (e.g. an organisation that is, or expects to be the appropriate person) may offer to carry out a site investigation. In these cases, the inspector will specify minimum requirements for the investigation (for example number of samples, contaminants that must be analysed for, position and depth of samples) to ensure that adequate information is obtained. An agreed timetable will also be devised within which the information must be provided.

Once adequate site investigation data is obtained, the risk assessment procedure will be repeated to confirm whether the site appears to be contaminated land or a Special Site.

## **6.4 Potential Special Sites**

A Special Site is a site which meets one of the definitions specified in The Contaminated Land (England) Regulations 2006 SI2006/No.1380.[10]

Special Sites will be regulated by the Environment Agency. The category of Special Sites includes sites where the Environment Agency already has regulatory responsibility, for example Integrated Pollution Control sites, to prevent duplication of regulatory roles. Special Sites are not necessarily more contaminated or more likely to cause significant harm than other contaminated land sites.

Examples of Special Sites are:

- Sites that could be contaminating drinking water resources;
- Industrial sites likely to have difficult contamination problems, such as waste acid tar lagoons, oil refining, explosives and sites regulated under Integrated Pollution Control;
- Nuclear sites;
- MoD land (with some exceptions, like off-base housing).

When the inspector identifies a site that is likely to be considered a Special Site, the Environment Agency will be notified and the information on the site copied to the Agency. When the Environment Agency has confirmed that they agree that a site falls within the definition of a Special Site, they will complete the inspection process to confirm whether the site is contaminated land. Harborough District Council will retain details of the site on its computer database. The Environment Agency will maintain a public register of Special Sites on similar line to the public register held by the local authority. The Agency will advise the council of any significant progress on the site's remediation.

## **6.5 Appointing Consultants**

Harborough District Council may, from time to time, need to appoint external consultants to assist in a number of areas to fulfil its statutory duties, for example:

- Advise on particular technical issues;

- Undertake some or all of the detailed site inspections;
- Prepare and undertake detailed technical presentations to the general public or to other bodies.

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## **7 Information Management**

### **7.1 General Principles**

In the course of preparing this strategy and subsequent work, Harborough District Council has obtained large amounts of information from a variety of sources that needs to be managed efficiently. Statutory Guidance states that we must state how this will be done. This section of the strategy sets out how the information that has been obtained, and information that will be obtained in the future, will be managed. This includes arrangements that have been made to allow access to the information we hold.

It is the intention of Harborough District Council to have an inspection strategy that is as transparent as possible, so that reasons for the decisions made concerning contaminated land can be readily understood. Information will therefore be managed as set out below to achieve this aim and to comply with requirements of the statutory guidance [19].

### **7.2 The Public Register**

Harborough District Council is obliged to maintain a public register of information about contaminated land in its area of responsibility. Details of what must be included in the register are :

- a) Remediation Notices. To include:
  - a. Details of the remediation notice;
  - b. Who the notice has been served on;
  - c. Where the contaminated land the notice refers to is;
  - d. Why the land is contaminated land, what the contamination is and where it came from (if not from the land in question);
  - e. What the contaminated land is currently used for;
  - f. Details of what remediation each appropriate person has to do and when this has to be done by;
  - g. The date of the notice.
- b) Appeals Against Remediation Notices. To include:

- a. Details of any appeal against a remediation notice served by Harborough District Council and any decision on such an appeal.
- c) Remediation Declarations. To include:
  - a. Any remediation declaration prepared and published by Harborough District Council and for any such declaration:
    - i. Where the contaminated land the Declaration refers to is;
    - ii. Why the land is contaminated land, what the contamination is and where it came from (if not from the land in question);
    - iii. What the contaminated land is currently used for;
    - iv. Details of what remediation each appropriate person has to do and when this has to be done by;
    - v. The date of the Declarations.
- d) Remediation Statements. To include:
  - a. Any remediation statement prepared and published by the responsible person or by Harborough District Council and for any remediation statement,
    - i. Where the contaminated land the remediation statement refers to is;
    - ii. Why the land is contaminated land, what the contamination is and where it came from (if not from the land in question);
    - iii. What the contaminated land is currently used for;
    - iv. Details of what remediation each appropriate person has to do and when this has to be done by;
    - v. The date of the remediation statement.
- e) Appeals Against Charging Notices. To include:
  - a. Any appeal against a charging notice served by Harborough District Council and any decision on such an appeal.
- f) Designation of Special Sites. To include:
  - a. Details of any land in Harborough District Council's area of responsibility designated as a Special Site by the district council or the Secretary of State and the reasons for this designation.

- b. Any notice given by the Environment Agency (EA) of its decision to adopt a remediation notice (The EA being the enforcing authority for special sites).
- c. Any notice given by or to Harborough District Council terminating the designation of any land as a Special Site.
- g) Notification of Claimed Remediation. To include:
  - a. Any notification given to Harborough District Council of remediation claimed to have taken place
- h) Convictions for Offences in relation to a Remediation Notice. To include:
  - a. Any conviction of a person, for any offence in relation to a remediation notice served by the local authority, including the name of the offender, the date of conviction, the penalty imposed and the name of the Court.
- i) Guidance issued to Harborough District Council by the Appropriate Agency. To include:
  - a. Details of any guidance issued for a particular site (by the Environment Agency in most cases).
- j) Other Environmental Controls such as:
  - a. Where the local authority cannot issue a remediation notice because the powers of the appropriate agency (usually the Environment Agency) may be exercised instead:
    - i. Where the contaminated land is;
    - ii. Why the land is contaminated land, what the contamination is and where it came from (if not from the land in question);
    - iii. What the contaminated land is currently used for;
    - iv. Any steps of which the district council has information or has taken towards remedying any significant harm or pollution of controlled waters that cause the land to be contaminated land.
  - b. Where the powers of the appropriate waste regulation authority or waste collection authority may be exercised instead (in relation to deposition of controlled waste which causes the land

to be contaminated land) a remediation notice may not be issued however the following details may be recorded on the register:

- i. Where the contaminated land is;
  - ii. Why the land is contaminated land, what the contamination is and where it came from (if not from the land in question);
  - iii. What the contaminated land is currently used for;
  - iv. Any known steps taken to remove the waste, or reduce the consequences of its deposit, including steps taken by a waste regulation authority or waste collection authority and the name of the authority.
- c. Where a water discharge consent is in force a remediation notice may not specify any works that would impede or prevent a discharge to a water body for which a discharge consent is in force:
- i. Details of the consent;
  - ii. Where the contaminated land is;
  - iii. Why the land is contaminated land, what the contamination is and where it came from (if not from the land in question);
  - iv. What the contaminated land is currently used for;

### **7.2.1 Arrangement of Information in the Public Register**

For ease of reference, the above information is organised so that all the entries relating to a particular site can be readily consulted in connection with each other.

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

### **7.3 Information not on the public register**

During the course of any investigation in to a potentially contaminated site, a lot of information will be generated by the local authority. When a site is not considered to be contaminated land, this information will not be on the public register. A site will only appear on the public register when a Remediation Notice has been served. Wherever possible the landowner or occupier will be encouraged to take voluntary action to remediate contaminated land. When voluntary investigation and remediation is being undertaken land will not appear on the public register.

The statutory guidance [19] requires Harborough District Council to prepare a written record of any determination that particular land is contaminated land even when this site does not appear on the public register. This must include information summarised below (by reference to other documentation if necessary):

- A description of the particular significant pollutant linkage, identifying all three components of source, pathway and receptor;
- A summary of the evidence upon which the determination is based;
- A summary of the relevant assessment of this evidence; and
- A summary of the way in which the inspector considers that the requirements of the statutory guidance [19] have been satisfied

Under the Environmental Information Regulations 2004, any information that is held by the local authority on land is potentially available to the public on request. Information will not be made available when it is deemed to include commercially confidential matter, or it holds information that would be against national security interests if it was in the public domain. Arrangements for releasing information are given in section 8.

### **7.4 Confidentiality of Information**

Under certain circumstances information on contaminated land may not or cannot be placed on the public register (or released in response to other requests). Circumstances where information is withheld are:

- where this is in the interests of national security;

- where this is commercially confidential;
- where the information relates to the affairs of any individual or business.

Where information has been excluded from the public register for reasons of commercial confidentiality, a statement will be placed on the register to indicate this.

Supply of any other environmental information held by Harborough District Council is also subject to certain exceptions. These are:

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

The confidentiality of any information supplied to Harborough District Council by third parties is determined when this is received. Where a third party states that information it supplies to the local authority is commercially confidential, or cannot be released for any of the other reasons given above, then justification will be sought from the third party to give the reasons for this. Information which is confirmed as confidential on the basis of a justification cannot be released to other parties. Where Harborough District Council is unable to supply information it will give the reason for this.

Any person, organisation or business may request in writing that the information they provide is excluded from the public register on the grounds of commercial confidentiality giving suitable grounds for why the information should be excluded.

Harborough District Council must consider all requests they receive and decide whether there are sufficient grounds to exclude the information.

When it is decided that the information would not fall within the remit of commercial confidentiality, the person concerned will be notified in writing. That person then has 21 days in which to appeal to the Secretary of State. Whilst an appeal is pending, no information shall be placed on the public register. If no appeal is made, after the 21 day period the information will be placed on the public register.

When any information is excluded from the public register on the grounds of commercial confidentiality, that exclusion will generally lapse after 4 years. If the individual, organisation or business still considers the information to contain commercially confidential material, a further application to the local authority would have to be made.

## **7.5 Storage Systems**

Any information collected during the inspection procedure will be stored on a data management system and cross-referenced to the councils GIS system (ESRI ArcGIS, Idox Uniform and Idox EDRMS) software. The system will comprise of a digital map of the entire district, linked to a database containing all the information held by Harborough District Council.

The database will hold all the information from the public register for particular areas or sites. The information stored on the database will be linked to the GIS by means of a unique reference number.

## **7.6 Administration**

Any information collected will be managed by Regulatory Services. The Contaminated Land Officer is responsible for collation of data, entering this onto the system and subsequent management. This includes ensuring that all confidential information is identified and managed in an appropriate manner.

The Contaminated Land Officer is also responsible for ensuring that all information is accurately recorded and up to date. This is achieved in part

through links with other regulatory regimes (see section 7.7 below) and through the review process detailed in Section 8.

When digital data is supplied by third parties, the council will seek to ensure that a mechanism for regular updates of the data is put in place. Such data is supplied by both commercial organisations (e.g. digital historic maps) and public bodies such as the Environment Agency, Natural England and English Heritage.

## **7.7 Use by Other Harborough District Council Departments**

There are links between the regulatory role for the inspection of contaminated land and other regulatory regimes such as Development Control, Building Control, and Land Charges. Other departments of the council will, from time to time, therefore need access to the information obtained in this strategy for internal use. For example, when the Development Control department receives an application to redevelop a site, it will need to consult any information held by Regulatory Services for that site (or adjacent sites) to identify any potential issues to be addressed. These consultations are also used to keep information obtained up to date.

For internal use, other departments of the council will have access to the contaminated land public register. They will also have access to other information which has been obtained in the course of this work and used to compile the public register. This will include access to confidential information as is required by Officers of Harborough District Council in order to carry out their duties. Where access to confidential information takes place, the appropriate officer will record this so that such access can be audited.

## **8 General Liaison and Communication Strategies**

In this section we identify the organisations that Harborough District Council has regular contact with in carrying out its contaminated land duties, and detail the arrangements for transfer of information.

We also explain how external organisations and the public can contact the district council to ask for, or offer, information about contaminated land.

### **8.1 Access to the Public Register and requesting information**

Harborough District Council is under a duty to keep the public register available for free inspection at any reasonable time. In addition to the information on the public register there may be other information relevant to a particular site or to the concept of contaminated land generally that may be available to the public. There may be a charge for some of the information. Details of any charge would be made available before carrying out any work.

The public register is located at Harborough District Council offices, and is available for inspection, free of charge between the hours of 9:00 am and 4:45pm, Monday to Friday (except Bank Holidays). Facilities are also provided for making copies of individual register entries. If required, visitors can ask for help in getting to know the layout of the public register and how to find information at the time of their visit.

The Public Register for Contaminated Land is available at:

Regulatory Services  
Harborough District Council  
The Symington Building  
Adam & Eve Street  
Market Harborough  
Leicestershire  
LE16 7AG

Tel: 01858 828282

Requests for copies of information from the public register may be made in writing, by telephone or e-mail. Copies of information not on the public register may also be requested.

## **8.2 Responding to complaints from the public or other organisations**

Harborough District Council's responsibility for contaminated land includes responding to information and complaints from the general public, and providing information in response to enquiries. You may wish to:

- Tell us about contaminated land or water pollution;
- Complain about the condition of land;
- Find out about contaminated land in your area;
- Find out more about contaminated land in general;
- Complain about our performance in dealing with contaminated land.

Organisations and members of the public can contact the council at any reasonable time to offer information about contaminated land.

Any complaints or offers of information should be addresses to Regulatory Services at the above address.

## **8.3 Internal Liaison and Communication**

There are links between the regulatory role for the inspection of contaminated land and other regulatory regimes such as planning and development control. Officers of Harborough District Council will, in the course of their duties, liaise with and share information between the inspection team and other departments.

The National Planning policy Framework places a duty on developers to ensure that a site is safe for a proposed development and as a minimum the site cannot be designated as Contaminated land under part IIa of the Environmental Protection Act 1990 [4]. In order to ensure these requirements are met, Development Control Officers will consult with the Contaminated Land Officer (CLO) in every case when a planning application is received for development, on or near a potentially contaminated site.

On receipt of information the Contaminated Land Officer will assess the application and advise whether further investigations and/or remediation works are required, to ensure that the land is suitable for the proposed

use. Any remedial works that are required will form part of the planning conditions. If remedial works are required, the CLO will ask the developer for a Remediation Scheme and a Verification Plan outlining what works are to be carried out and how they will be evidenced. Prior to the development being brought into use, a verification report confirming what works were carried out will be required so that planning conditions relating to contaminated land can be removed.

#### **8.4 Contact Mechanisms for Other Statutory Bodies**

Harborough District Council needs to consult other statutory bodies from time to time during the course of the detailed inspection process for its area of responsibility. These bodies may be able to supply specialist advice and information about sites and receptors, or they may have a prior interest. For example, the Environment Agency will be consulted when the site may be causing water pollution, and Natural England will be consulted if harm to designated areas of ecological importance is suspected. Other Statutory bodies that may be consulted include:

- Environment Agency;
- Leicestershire County Council;
- English Heritage;
- Natural England;
- DEFRA – Department of Environment Food and Rural Affairs;
- The Health and Safety Executive (HSE); and
- Health protection Agency (HPA).

Neighbouring local authorities may be contacted from time to time where issues are identified which may have a direct effect on them.

#### **8.5 Environment Agency**

Harborough District Council has responsibilities for consulting with the Environment Agency (EA) as part of the inspection strategy. The geographical location of the district means that it is covered by two Environment Agency Regions.

There are a number of occasions when the Environment Agency (EA) may be contacted:

- Consult the EA on pollution of controlled waters;
- To seek advice on a site specific basis;
- Transfer responsibility for special sites to the EA;
- Provide summary information on contaminated land (see below).

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

As part of the development of this strategy, the Environment Agency has already provided some information, including details on sites which are regulated under the Integrated Pollution Control regime and the Waste Management Licensing regime

## **8.6 Leicestershire County Council**

The County Council holds various pieces of information that could be useful in the identification of sites which may be classified as contaminated land. Examples of this would include old landfill sites and mineral workings. The appropriate officers at the County Council will be contacted as part of the initial survey of the District.

The County Council is also a landowner and some of their sites may be affected by land contamination. Confirmation will be sought from the County Council on details of their current and former land ownership. In addition they will be asked to provide details of any known remediation works that have been carried out on their land

## **8.7 Neighbouring Authorities.**

The local authorities which boarder the boundary of Harborough District Council are listed below:

- Melton Borough Council
- Charnwood Borough Council
- Leicester City Council
- Oadby and Wigston Borough Council
- Blaby District
- Rutland County Council
- Corby Borough Council
- Daventry District Council
- Kettering Borough Council
- Rugby Borough Council

### **8.8 English Heritage**

English Heritage holds a lot of information on listed buildings, scheduled ancient monuments and other sites of historic interest.

### **8.9 Natural England**

Natural England is responsible for designating sites with ecological significance and providing advice on ecology and conservation.

### **8.10 Water Authorities**

The provision of drinking water and sewage treatment in Harborough district is split between Anglian Water and Severn Trent. As water authorities they will have an interest in contaminated sites which may affect their water supplies.

### **8.11 Health & Safety Executive**

Where it is anticipated that a contaminated site may be causing a significant health risk, or during the course of an inspection, health and safety issues are raised which are outside the controls of the contaminated land legislation, the Health and Safety Executive will be consulted.

## **8.12 Contact Mechanisms for Owners, Occupiers and Other Interested Bodies**

### **8.12.1 Owners/occupiers**

Harborough District Council will normally contact site owners and occupiers when a detailed inspection is required, in order to make arrangements for a site visit (see Section 6). Site owners and occupiers will also be requested to provide any information regarding the site that is relevant to contamination.

Landowners and businesses can contact Harborough District Council for information about contaminated land at any time. Contact details are given in Section 8.1.

### **8.12.2 Other interested bodies**

The following list of local organisations/groups within the community that may also need to be contacted for information about sites and/or to be advised on the possible presence of sensitive sites and contaminated land. Other organisations may be contacted from time to time to give advice on specific sites.

- Harborough Museum,
- Lutterworth Museum and Historical Society
- Lutterworth Town Council
- Leicestershire and Rutland Wildlife Trust
- Leicestershire Archaeological and Historical Society
- British Geological Society
- Leicestershire Chamber of Commerce & Industry

Organisations who wish to contact Harborough District Council about contaminated land should use the contact information given in Section 8.1.

## **8.13 Risk Communication**

Harborough District Council has the responsibility of communicating information regarding contaminated land to the land owner/occupier, local residents and other interested groups. It is the policy of the District Council

that people are allowed access to information that they may wish to see (this does not apply when the required information has been determined as confidential), and also that they are aware that such information exists.

When Contaminated Land is identified, we will also identify people who may want to know about the contamination. We will contact people who may be interested, explain what the contamination is and what Harborough District Council is doing about it. All individuals or groups concerned will be kept informed of the progress of any remediation works. If applicable a Public Information leaflet will be prepared and distributed.

## **9 Review Mechanisms**

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

### **9.1 Reviewing Inspections and Responding to New Information**

The process for identifying potentially contaminated land is an ongoing activity. Further information may come to light at any stage of the procedure, and Harborough District Council will take into account information obtained from, or volunteered by, the public, site owners, businesses and voluntary organisations. New and updated information will also often be provided as a result of regular exchanges of information between the various council departments (particularly between Environmental Health and Planning), the Environment Agency and other statutory bodies (see Section 8 for details).

Sections 5 and 6 explains how potentially contaminated land will be identified and carry out inspections to determine which sites are contaminated land. Any decisions about contaminated land will be made on the basis of information available at the time. The decision relates to 'current use' [19] which means any use which is currently being made, or is likely to be made and which is consistent with any existing planning permission. 'Current use' includes:

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

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

For agricultural uses, 'current agricultural use' [19] does not extend beyond growing or rearing of crops or animals which are habitually grown or reared on the land.

When further information is obtained for a site, Harborough District Council will check the database to determine whether the site concerned has already been assessed. If so, the site priority will be reviewed in the light of the new information. If the site has not previously been identified, the procedure will be followed as outlined in Section 5.4, including the new information, to determine its priority category.

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

Examples of information that will result in the revision of a site's prioritisation and inspection decisions are as follows:

- Proposed changes in the use of surrounding/adjacent land (planning applications and Development Structure Plan reviews);
- Planning applications;
- Unplanned changes in the land use (persistent unauthorised use of land by children, travellers, fly-tipping);
- Unplanned events where consequences cannot be addressed through other relevant environmental legislation (localised flooding, landslides, accidents, fires, spillages);
- Reports from statutory bodies of localised health effects that appear to relate to a particular area of land;
- Reports from statutory bodies of adverse ecological effects that appear to relate to a particular area of land;
- Reports from statutory bodies of adverse water quality effects that appear to relate to a particular area of land;
- Verifiable reports of unusual or abnormal site conditions received from members of the public, business, voluntary organisations (wildlife trusts, conservation groups, environmental pressure groups, etc.);

- Updates of information provided by the Environment Agency e.g. changes to receptors such as Source Protection Zones, abstraction licence applications;
- Updates of information provided by Natural England e.g. new SSSI's or other designated protected areas.

## **9.2 Review of the Inspection Strategy**

Harborough District Council will routinely carry out a review of its inspection strategy to ensure that:

- The inspection strategy is fulfilling the council's statutory obligations;
- The inspection strategy is appropriate to the needs of Harborough District Council;
- The inspection strategy and its procedures incorporate and develop in line with practical experience and new information gained during its operation;
- Inspection procedures represent efficient use of resources.

This strategy document is reviewed and amended where necessary. It is proposed that the next complete review of the strategy will be carried out within 10 years of the date of publication of this document.

## **9.3 Auditing Procedures**

There is a need for Harborough District Council to demonstrate that it is fulfilling its obligations with respect to contaminated land inspection, maintenance of a register and reporting under the contaminated land legislation [4]

To ensure that the system is operating efficiently and properly, an auditor will be appointed by Harborough District Council to audit the data systems. The auditing will be undertaken by an internal auditor, a member of another local authority or by an external consultant.

## **10 OTHER SUPPORTING INFORMATION**

### **10.1 Glossary**

This glossary has been prepared to assist understanding of technical and legal terms used in this contaminated land strategy. Definitions should therefore be taken in the context of contaminated land; they are not necessarily full and all encompassing definitions appropriate to any purpose. Explanations of terms with legal meaning have been simplified and/or further explained for clarity and should not be assumed to comprise full legal definitions, these are given by the statutory guidance [19].

#### **ABSTRACTION**

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

#### **APPROPRIATE PERSON**

Any person who is found to be liable to pay for remediation under the terms of the Environmental Protection Act 1990 Part IIA [1]. This is firstly the polluter. If no polluter can be identified, then the landowner may be the appropriate person.

#### **AQUIFER**

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

#### **BROWNFIELD SITE**

Any land where there has been a previous land development (with the exception of land previously developed by agricultural or forestry buildings). A brownfield site does not mean that the land is contaminated.

#### **CHARGING NOTICE**

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

## CONTAMINATED LAND

The definition of contaminated land from the Environmental Protection Act 1990, Part IIA Section 78A(2) [1], is:

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

- a) *significant harm is being caused or there is a significant possibility of such harm being caused; or*
- b) *significant pollution of controlled waters is being, or is likely to be, caused.”*

## CONTROLLED WATERS

“Controlled waters” are all natural inland and near coastal waters, including groundwater. Therefore, all ponds, lakes, rivers, streams, estuaries and coastlines are controlled waters. Pollution of controlled waters means the addition of any “poisonous, noxious or polluting matter or any solid waste matter”.

## DISCHARGE CONSENT

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

## GEOGRAPHICAL INFORMATION SYSTEM (GIS)

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

## ENVIRONMENTAL PERMITTING PROGRAMME (EPP)

Under the Environmental Permitting Regulations 2007 [15], industrial sites operating particular processes require a permit to operate from the Environment Agency or the Local Authority (depending on the nature and scale of the process). In general, processes regulated under Environmental Permitting are likely to be more polluting than those not regulated; however this covers all forms of pollution and does not necessarily mean that these sites are likely to cause contamination of the ground.

#### PATHWAY

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

#### POLLUTANT LINKAGE

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

#### POTENTIALLY CONTAMINATIVE USE

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

#### PUBLIC REGISTER

The register maintained by the enforcing authority containing details of formal action that is or has been taken on land that is contaminated land.

#### RAMSAR SITE

Area which have been formally listed as a Wetland of International Importance by the Secretary of State.

#### RECEPTOR

A receptor is either:

- A living organism (including humans) or group of organisms,

- Ecological system
- property that is being, or could be harmed by a contaminant
- controlled waters which are being, or could be, polluted by a contaminant

## REMEDIATION

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

## REMEDIATION DECLARATION

A document prepared and published by the enforcing authority, detailing remediation actions that it would have specified for a given site, but is prevented from so doing by Section 78E (4) and (5). This says that the authority must only specify remediation that is reasonable, given the seriousness of the harm or water pollution, and the cost of the works that would have to be carried out.

## REMEDIATION NOTICE

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

## REMEDIATION STATEMENT

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

## RESPONSIBLE PERSON

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

## RUN-OFF

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

## SIGNIFICANT HARM

Significant harm includes:

- Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions in humans
- Irreversible adverse change, or threat to endangered species, affecting an ecosystem in a protected area (e.g. site of special scientific interest)
- Death, serious disease or serious physical damage to pets, livestock, game animals or fish
- A substantial loss (20%) in yield or value of crops, timber or produce
- Structural failure, substantial damage or substantial interference with right of occupation to any building

Further information on significant harm is given in the statutory guidance [19].

## SIGNIFICANT POLLUTANT LINKAGE

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

## SIGNIFICANT POSSIBILITY OF SIGNIFICANT HARM

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

- The nature and degree of harm predicted
- The susceptibility of the receptors to which harm might be caused
- The timescale within which the harm might occur

## SOURCE

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

## SOURCE PROTECTION ZONE

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

## SPECIAL SITE

A Special Site is a contaminated land site that is regulated by the Environment Agency instead of the Local Authority. The definition of a Special Site is given in Section 78C(7) and 78D(6) of the Environmental Protection Act 1990 [4]

Examples of Special Sites are:

- Sites that could be contaminating drinking water resources
- Industrial sites likely to have difficult contamination problems, such as waste acid tar lagoons, oil refining, explosives and sites regulated under Integrated Pollution Control
- Nuclear sites
- MoD land (with some exceptions, like off-base housing)

## WALKOVER SURVEY

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

## WASHLAND

An area of the floodplain that is allowed to flood or is deliberately flooded by a river or stream for flood management purposes, with potential to form a wetland habitat

## WASTE MANAGEMENT LICENCE

Under the Environmental Permitting Regulations 2016 [15], all businesses involved in waste management must hold a license for each site or premises on which waste management operations are carried out. Licenses are issued and enforced by the Environment Agency.

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## 11 REFERENCES

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- [6] The Contaminated Land (England) Regulations 2000. SI2000/No.227
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sites – Code of practice
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for methane and carbon dioxide ground gases for new buildings
- [24] BS8576:2013 Guidance on investigations for ground gas. Permanent  
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- [28] BS EN ISO 14688-1:2002 Geotechnical investigation and testing - Identification and classification of soil - Part 1 - Identification and description
- [29] BS EN ISO 14688-2:2004 Geotechnical investigation and testing - Identification and classification of soil - Part 2 - Principles for a classification
- [30] BS EN ISO 14689-1:2003 Geotechnical investigation and testing - Identification and classification of rock - Part 1 - Identification and description
- [31] BS EN ISO 22475-1:2006 Geotechnical investigation and testing - Sampling methods and groundwater measurements - Part 1 - Technical principles for execution
- [32] BS EN ISO 22476-2:2005 Geotechnical investigation and testing - Field testing - Part 2 - Dynamic probing
- [33] BS EN ISO 22476-3:2005 Geotechnical investigation and testing - Field testing - Part 3 - Standard penetration test
- [34] BS ISO 15176:2002 Soil quality - Characterization of excavated soil and other soil materials intended for re-use
- [35] BS ISO 17616:2008 Soil quality - Guidance on the choice and evaluation of bioassays for ecotoxicological characterization of soils and soil materials
- [36] BS ISO 18772:2008 Soil quality - Guidance on leaching procedures for subsequent chemical and ecotoxicological testing of soils and soil materials

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