



Contaminated Land Inspection Strategy

2016 to 2020

**Statement of current position and future policy on investigations
published by Erewash Borough Council to meet its statutory
obligations under the Environmental Protection Act 1990**

**Version:
Review date:
Owner:**

**Finalv1
April 2020
Elizabeth Street Environmental Health Manager**

CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page No.</u>
	Executive Summary	5-6
1	Introduction and Regulatory Context	7
	1.1 Introduction	7
	1.2 Links to Corporate plan	8
	1.3 Existing Legislation	
	1.4 Regulatory Roles of Local Authorities and the Environment Agency	8
	1.5 Strategic Aims and Objectives and Priorities	9
	1.5.1 Aims	9
	1.5.2 Objectives	9
	1.5.3 Priorities	10
	1.6 Strategy Review and Consultation	10
2	Definition of Contaminated Land and Risk Assessment	11
	2.1 Legal Definition	11
	2.2 Contaminant Linkages	11
	2.3 The Process of Risk Assessment	12
3	Local Authority Inspection Duties	13
	3.1 Inspection Types	13
	3.2 Inspection Activity to 2009	14
	3.3 Completed Work Programme 2009 – 2014	15
	3.3.1 Prioritised sites investigated since 2009 which do not meet the legal definition of contaminated land	15
	3.3.2 Prioritised sites investigated since 2009 that meet The legal definition of contaminated land	15
	3.4 Proposed Work programme 2016 – 2020	16-17
	3.5 Contaminated Land Search Service	18
4	Determining Contaminated Land	19
	4.1 Powers to Investigate	19
	4.2 Potential Special Sites and Polluted Water	19
	4.3 Site Specific Liaison with Site Owners	19
	4.4 Liaison with Other Agencies and External Experts	20
	4.4.1 Environment Agency	20
	4.4.2 Natural England	20
	4.4.3 English Heritage	20
	4.4.4 External Experts	20
	4.5 Risks to Human Health	20
	4.5.1 Significant Harm and Significant Possibility of Harm	20
	4.5.2 Category Classification System	21
	4.6 Formal Designation of Contaminated Land	21
	4.7 Land in Another Authority's Area	22
	4.8 Reviewing Inspection Decisions	22
	4.9 Establishing an Appropriate Person & Remediation Notices	22

<u>Section</u>	<u>Title</u>	<u>Page No.</u>
4	4.10 Determining Liability	23
	4.11 Remediation Notices	23
	4.12 The Recovery of costs of Remediation	24
	4.13 Urgent Action	25
	4.14 Remediation by the Council	25
5	Information	26
	5.1 Public Register and Access to Information	26
	5.2 Database of Site Specific Information	26
	5.3 Information Management	26
6	Other Regulatory Regimes	27
	6.1 Development Control/ Planning	27
	6.2 Water Pollution	27
	6.3 Pollution of Controlled Waters not arising from Land	27
	6.4 Discharge Consents	28
	6.5 Waste Management Licensing	28
	6.6 Integrated Pollution Prevention and Control (IPPC)	28
	6.7 COMAH	28
	6.8 Contaminated Food	28
	6.9 Organisms	28
	6.10 Statutory Nuisance	28

Appendices

<u>Section</u>	<u>Title</u>	<u>Page No.</u>
Appendix 1	The policy on the recovery of costs associated with the remediation of contaminated land sites under part 2A of the Environmental Protection Act 1990 (as amended)	28-34
Appendix 2	Characteristics of the Erewash area	35-42
Appendix 3	Ponds, lakes and reservoirs in the Borough of Erewash	43
Appendix 4	Groundwater and surface water abstraction points in the Borough of Erewash	44
Appendix 5	Wildlife sites in the Borough of Erewash	45
Appendix 6	Potentially contaminative industries	46
Appendix 7	Overview of preliminary risk assessment methodology	47
Appendix 8	Statutory Guidance - Categories of harm and significant possibility of significant harm	48-58
Appendix 9	Sources of information used in identifying contaminated land	59-60
Appendix 10	Glossary of terms	61-65
Appendix 11	Higher prioritised sites requiring intrusive site investigation	66-67

Note: Contaminated land is a complex area which makes extensive use of technical jargon. To assist in this process a glossary of some of the technical terms used in this document is contained in Appendix 10.

EXECUTIVE SUMMARY

Part 2A of the Environmental Protection Act 1990 was introduced in 2000 to provide a means of dealing with unacceptable risks to human health and/ or the environment posed by land contamination. The Part 2A regime requires local authorities to inspect land within their district in order to identify contaminated land. Where such land is identified local authorities should ensure that remediation is undertaken to mitigate any unacceptable risks to human health and / or the environment and that the land is suitable for its intended use. Each authority is required to submit a strategy outlining how it intends to identify contaminated land within its district.

Following introduction of the Part 2A regime and associated guidance, Erewash Borough Council produced a Contaminated Land Strategy (2002). The strategy document detailed how the council intended to implement the Part 2A regime; and a proposed programme of inspection in order to identify and deal with land identified as contaminated land. This strategy document was later updated in 2009 and a work inspection programme devised for the period 2009 to 2014.

In April 2012 the Department for Environment Food and Rural Affairs (Defra) issued new Statutory Guidance for Part 2A which has resulted in some changes to the way that local authorities undertake their inspection work. The existing guidance was reviewed and revised to “provide clarity to regulators as to how to decide when land is and is not actually contaminated land”. Details of how Erewash Borough Council implement the strategy and undertake inspections are included within Section 3, Section 4 includes details of how land is formally determined as being contaminated land, apportioning costs and carrying out remediation.

The council is under a duty to periodically review the strategy. This updated strategy summarises the previous work programme during 2009 to 2014 and also sets out the proposed work programme to be undertaken over the next five years.

Work undertaken within the previous work programme 2009 to 2014 and detailed in the 2009 strategy, is now complete. This has involved desk based research and/or a site inspection of approximately a third of the sites located on the council’s prioritised Part 2A database of sites.

This updated strategy outlines the proposed work programme for 2016 to 2020 which will in part be a continuation of activities undertaken during 2009 to 2014. This will continue by obtaining information on prioritised sites via desk based techniques and site inspections to enable a decision to be made as to whether a site fits the legal definition of ‘contaminated land’. It is considered possible that following this work, some of these sites may require further assessment in the form of intrusive investigation. It is proposed that one site per year is assessed via intrusive investigation techniques which may include; drilling of boreholes, installation of groundwater and /or gas monitoring wells and soil sampling. However the number of sites investigated this way is dependent on available funding at the time the intrusive works are proposed.

In addition to the above it is likely that a number of prioritised sites will be investigated through the planning system where sites are identified for redevelopment and planning

permission is granted. Where Environmental Health are consulted by Planning Services at the application stage on land/ sites which are also located on the council's Part 2A prioritised list, conditions will be required to ensure that ground contamination is considered by the developer. The conditions will require that land/ the site are investigated and where risks to human health and / or the environment are identified that these are addressed through remediation.

The terms of reference used in the strategy are taken from the Environmental Protection Act 1990 Contaminated Land Statutory Guidance (April 2012). It is advised that this strategy is read in conjunction with this guidance document.

Within Erewash Borough Council, Environmental Health has responsibility for implementing requirements of Part 2A of the Environmental Protection Act 1990 (the Contaminated Land regime) and:-

- are the initial point of contact for enquiries about specific sites or enforcement.
- will liaise and co-ordinate with other Directorates to ensure that the council's responsibilities for implementing the contaminated land regime are effectively discharged.
- maintain the public register which can be viewed at the address below

The initial point of contact for enquiries about contaminated land is:

Erewash Borough Council
Environmental Health
Merlin House
Merlin Way
Ilkeston
Derbyshire DE7 4RA

Tel: 0115 907 2244 (main switchboard)

Fax: 0115 931 6079

Email: environmentalhealth@erewash.gov.uk

1. INTRODUCTION AND REGULATORY CONTEXT

1.1 Introduction

The UK has seen a huge growth in industry over the past 150 years which has created a considerable legacy of historical land contamination. Where land has been affected by contamination it may present an unacceptable risk to humans, ecosystems, water quality and property.

Part 2A of the Environmental Protection Act 1990 (EPA 1990) was introduced in April 2002 to provide a means of dealing with unacceptable risks posed by land contamination to human health and the environment. For reference relevant sections of the Act are provided in Appendix 8.

Section 57 of the Environment Act 1995, places a responsibility on local authorities to inspect their district from time to time with a view to identifying contaminated land/sites. Part 2A defines “contaminated land” and provides guidance on how local authorities should determine which land is contaminated and which is not.

The objectives of the Governments policy on contaminated land and the Part 2A regime are:

- i) To identify and remove unacceptable risks to human health and the environment.
- ii) To seek to ensure that contaminated land is made suitable for its current use.
- iii) To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.

These objectives follow the governments “suitable for use” approach. This approach recognises that the risks presented by any given level of contamination will vary greatly according to the use of the land and a wide range of other factors, such as the underlying geology of the site. The approach also identifies that risks from contaminated land can be satisfactorily assessed only in the context of specific uses of land, limiting remediation costs to what is needed to avoid unacceptable risks.

The purpose of this updated strategy document is to provide an update with regard to the inspection/ work programme undertaken between 2009 and 2014 and details of the proposed inspection / work programme for the period of 2016 to 2020. Details of how the Part 2A regime is implemented by the Council including how the inspection of sites are undertaken is included within in Sections 3 and 4 of the report.

1.2 Links to Corporate Plan

Erewash Borough Council's vision is *“To put Erewash on the map, a first class Borough in which people have pride and where they choose to live, work and play”*.

To achieve this, the Council's Corporate priorities for 2016-2020 are:-

1. A safe, clean and welcoming borough
2. Improved access to services

3. Delivering efficient and effective services that residents need
4. Creating opportunities for economic growth and prosperity
5. A well run and efficient council

Action in dealing with contaminated land supports the council's vision and directly contributes to the council's aims by:

- i) identifying and, if need be, removing/reducing risks to health or environment, and;
- ii) releasing land for development which is either disused or unsuitable for reuse in its current state.

1.3 Existing Legislation

Part 2A of the Environmental Protection Act 1990, inserted into that Act by Section 57 of the Environment Act 1995 provides a regulatory scheme for the identification and remediation of contaminated land. The Act is supported with detailed regulations for its administration in the Contaminated Land (England) Regulations 2000 (as amended in 2012).

In April 2012 Defra issued new statutory guidance on contaminated land following a review of the regime. The guidance was revised in order to provide greater clarity to regulators as to how to decide when land is and is not actually contaminated land. Although the primary legislation remains in place Defra introduced new statutory guidance, this revised guidance replaces previous statutory and non statutory guidance.

Where there have been changes within the Statutory Guidance of 2012 which impact the way that the Council deals with contaminated land, through inspection and determination of sites, details of these changes are included within the relevant sections of the strategy document.

1.4 Regulatory Roles of Local Authorities and the Environment Agency

Local authorities have the lead role under the Part 2A regime. The Statutory Guidance states: "The local authority has the sole responsibility for determining whether land appears to be contaminated land".

Erewash Borough Council as a local authority has a duty:

- to inspect its borough periodically for contaminated land;
- to determine whether any particular site satisfies the statutory definition of contaminated land;
- to determine whether any such land should be designated a 'special site'; and
- to enforce, where necessary, the remediation for all contaminated land, unless the site is judged to be a special site.

The Environment Agency has a secondary regulatory role in assisting local authorities, providing advice and guidance to the local authority with contaminated land matters, in particular those that relate to water pollution. The Environment Agency has a duty to:

- act as the enforcing authority when dealing with “special sites” (see Appendix 8)
- to assist the local authority with identifying contaminated land and provide specific advice; and
- publish periodic reports on the state of land contamination nationally

Effective implementation of the contaminated land regime involves close liaison with the Environment Agency. Erewash Borough Council work in partnership with the Environment Agency to ensure efficient and inclusive implementation of the regime.

1.5 Strategic Aims, Objectives and Priorities

1.5.1 Aims

To fulfil the statutory responsibility to identify and remove unacceptable risks associated with contaminated land, Erewash Borough Council aims:-

- To identify unacceptable risks to human health and the environment from the immediate and long term effects of contaminated land.
- To ensure compliance with and enforcement of Part 2A of the Environmental Protection Act 1990.
- To seek that, where development of land takes place within the Borough, the process deals effectively with any identified land contamination so that the land is suitable for its intended use.
- To ensure that procedures are in place for the open provision of information to the public, developers/property surveyors.
- To encourage market confidence in the redevelopment of brownfield sites in the Borough and promote the recycling of brownfield sites.
- To address the liability issues associated with the council's existing and former land holdings and avoid any new liability associated with land transactions.
- To encourage, as far as possible, voluntary remediation.

1.5.2 Objectives

Erewash Borough Council's objectives associated with contaminated land are:-

- To ensure that: on submission of planning applications for sites in the Borough with the potential for being contaminated, that planning permission is not approved until a site investigation with respect to contamination has been undertaken, and where required, remedial proposals have been approved and the works are completed and verified either prior to development commencing or, as appropriate, integrated into the development process and verified before occupation.
- To liaise with Development Services and exchange attribute data for continued development including updating of the GIS and associated database for identification of potentially contaminated sites.
- To compare potentially contaminated land sites with council ownership records to determine any potential liabilities, and with a view to identifying those sites for inspection and possible remediation.

- To liaise with the council's Legal Services and review the council's standard legal documentation for dealing with land and property transactions, in order to minimise any future liabilities.
- Contribute to the council's objective of prioritising the development of new housing on Brownfield sites within the borough.
- Reinforce the 'suitable for use' approach for developers to design and implement appropriate and cost effective remediation schemes as part of their redevelopment projects.

1.5.3 Priorities

Dealing with contaminated land can encompass complex and occasionally conflicting issues. To aid decision making when undertaking its duty to inspect the Borough for contaminated land, the council has prioritised its approach according to the following:

- Protection of human health;
- Protection of controlled waters;
- Protection of designated eco-systems;
- Prevention of damage to property;
- Prevention of any further contamination of land;
- Encourage voluntary remediation; and
- Encourage re-use of Brownfield sites.

1.6. Strategy Review and Consultation

The council is under a duty to periodically review the strategy, guidance suggests every 4 to 5 years and as it is a working document, it is subject to amendment from time to time. Each periodic review of the strategy needs to incorporate any changes in legislation, risk assessments or information from other external sources and an update regarding the previous work programme and details of the proposed programme for the forthcoming work period.

The review to produce this Contaminated Land Strategy 2016-20 has updated the work programme for this period and outlined progress with the previous work programmes. This strategy has not changed how the council will deal with contaminated land. Therefore it is not considered necessary to undertake consultation. A copy of this strategy will be provided to the following agencies who are statutory consultees for information. These agencies were part of a consultation process when the original strategy was developed in 2002:

- Environment Agency
- English Nature
- English Heritage
- Department for Environment, Food and Affairs
- Food Standards Agency
- East Midlands Development Agency
- Derbyshire County Council

As part of the council's committed to improving the way we provide customers with access to services and the quality of those services local business, voluntary and community groups and partnerships such as Erewash Partnership Limited, Ground Work Erewash and East Midlands Housing Associated (EMH) were also consulted.

2. DEFINITION OF CONTAMINATED LAND AND RISK ASSESSMENT

2.1 Legal Definition of Contaminated Land

Section 78A(2) defines contaminated land for the purposes of Part 2A as:

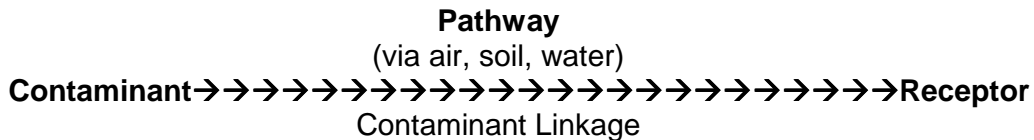
“any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that:

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

The process of assessing whether a site can be determined as contaminated land is complex. The Statutory Guidance of 2012 includes a new category classification system to assist local authorities in deciding whether there is a significant possibility of significant harm to health, a summary of this classification system is included within Section 4.5 and full details in Appendix 8.

2.2 Contaminant Linkages

When determining whether land is contaminated it is vital to establish whether a ‘contaminant linkage’ exists (sometimes called a pollutant linkage). Under Part 2A, for a relevant risk to exist there needs to be one or more contaminant-pathway-receptor linkages – “contaminant linkage” – by which a relevant receptor might be affected by the contaminants in question. In other words in order for a risk to exist there must be contaminants present in, on or under the land in a form and quantity that poses a hazard, and one or more pathways by which they might significantly harm people, the environment, or property; or significantly pollute controlled waters. For example:



- i) **Contaminant** means a substance which is in, on or under the land and which has the potential to cause harm to a relevant receptor, or to cause significant pollution of controlled waters.
- ii) **Pathway** means a route by which as receptor is or might be affected by contamination.
- iii) **Receptor** (the target) is something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property or controlled waters. The various types of receptor are explained in Appendix 10.

The term “contaminant linkage” means the relationship between a contaminant, a pathway and a receptor. All three elements of a contaminant linkage must exist in relation to particular land before the land can be considered to be potentially contaminated under Part 2A, including evidence of the actual presence of contaminants.

The term “significant contaminant linkage”, as used in this guidance, means a contaminant linkage which gives rise to a level of risk sufficient to justify a piece of land being determined as contaminated land.

2.3 The Process of Risk Assessment

Part 2A takes a ‘risk based’ approach to defining contaminated land and involves understanding the risks presented by land and the associated uncertainties. Statutory Guidance of 2012 guidance provides a definition of ‘risk’ which is a combination of:

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

The understanding of risks associated with a site is developed through a staged approach which broadly follows the following;

- A preliminary risk assessment which is informed by desk based study, a site walkover or inspection).
- A generic quantitative assessment / intrusive investigation.
- Detailed quantitative risk assessment in order to further quantify the risks.

These stages of assessment form part of the council's obligation to undertake ‘detailed inspection of sites’ and decision making with regard to whether land fits the legal definition of contaminated land. Section 3 of this strategy provides clarification with regard to what ‘detailed inspection’ entails and the inspection process undertaken by the council to date.

The need for and extent of any remediation following detailed inspection/ investigation will be based on a site-specific risk assessment. The council ensures that resources available are targeted towards sites that pose the most significant risk.

3. LOCAL AUTHORITY INSPECTION DUTIES

3.1 Inspection Types

Statutory Guidance recognises that there are two types of inspection likely to be carried out by local authorities;

- a) 'Strategic Inspection' which the council has been carrying out since the original strategy in 2002. This and the later revised strategy in 2009, incorporated details of how the council would collate information to make an assessment of land within the borough and identifying priority land or sites for more detailed assessment. This was undertaken using a geographical information system and bespoke prioritisation tool to create a prioritised list of ranked sites for further 'detailed' inspection. The list or data base of sites is known as the Part 2A prioritised list of sites
- b) 'Detailed Inspection' is where a local authority identifies land where it considers there is a reasonable possibility that a significant contaminant linkage exists, it should inspect the land to obtain sufficient information to decide whether it is contaminated land. Detailed inspection undertaken by the council follows the following phased and risk based approach:
 - 1) Desk based research and/ or a site walkover/ inspection is undertaken in the first instance. Where contaminant linkages are considered unlikely no further investigation is required and details are recorded on the database entry for that particular site or area of land.
 - 2) Following desk based research and a site walkover, where contaminant linkages are considered likely, a preliminary conceptual model is developed for the site. Following this where further investigation is considered necessary to clarify the risks 3) is undertaken.
 - 3) intrusive investigation/ generic risk assessment is undertaken, this may include drilling of boreholes and also installation of gas or groundwater monitoring wells, trial pitting, hand augering, soil sampling, groundwater and gas monitoring. Intrusive investigations are carried out in accordance with BS:10175 (2011) : Code of Practice for the Investigation of potentially contaminated sites. The scope of the investigation is determined based on the initial conceptual model developed for the site. Following this stage it may be concluded that a site or area of land is unlikely to meet the legal definition of contaminated land in which case no further investigation is required. Where the findings of the intrusive investigation indicate that the site is likely to be contaminated land, the procedures as outlined in Section 4.5 to 4.13 apply and are followed by the council. Where a decision cannot be made based on the evidence gathered to date, additional intrusive investigative works may be undertaken or 4) may be undertaken in order to further clarify the risks identified.
 - 4) Detailed Quantitative Risk Assessment (DQRA) may be required following intrusive investigation in order to further quantify risks to receptors (humans, water bodies and the environment). At the end of this stage a decision as to whether a site meets the legal definition of contaminated land will be made

by the council and where a determination of contaminated land is likely the procedures as outlined in Section 4.5 to 4.13 will be followed.

The council began the process of detailed inspection of sites following the prioritisation process and subsequent creation of a data base of prioritised sites. Detailed inspection of sites via desk based assessment, site inspections and intrusive site investigation, as described above in 1) to 4) has been ongoing since 2007.

During the detailed inspection of sites, where it becomes clear that land is unlikely to meet the legal definition of contaminated land, the inspection and risk assessment process finishes and effort redirected to other land or sites.

3.2 Inspection Activity to 2009

Implementation of the contaminated land regime requires a staged approach:

- Stage 1 Dealing with urgent sites;
- Stage 2 Production of the strategy document;
- Stage 3 Creation of a geographical information system (GIS) and associated database;
- Stage 4 Prioritisation of sites for inspection;
- Stage 5 Identify threats to controlled waters, protected areas of the environment and buildings; and
- Stage 6 Further prioritisation leading to more detailed inspection of sites.

All of the above six stages have now been completed with Stage 6 ongoing. Following completion of Stages 1 to 5:-

- i) No urgent sites have been identified during the development and implementation of the previous strategies.
- ii) A geographical information system and associated database is in place. Sites included on the list for further inspection have been ranked having regard to the potential for causing harm. This has been accomplished using a bespoke site prioritisation system.
- iii) Liaison with the Environment Agency has been established regarding several sites where pollution of controlled waters is an issue.
- iv) The initial site prioritisation has produced a list of sites of concern for which further information was needed before a decision on what action, if any, was required. Sites on the database/ prioritised list include those for which sufficient information can only be obtained by intrusive investigation and those for which a more detailed desk study and site walkover can provide sufficient information to allow a decision (that no further action is currently required) to be reached.

It is important to note that sites are occasionally added to the prioritised list where they are identified through reactive work or during periodic inspections of the borough. These are sites which have been identified as having the potential to be contaminated and require further investigation to assess whether they could be determined as contaminated land.

3.3 Work Programme 2009 to 2014

The 2009 to 2014 strategy identified **1493** prioritised sites that required further investigation to ascertain if the site fitted the legal definition of contaminated land.

3.3.1 The following provides details of the number of sites from the priority list that were investigated as part of the work programme for 2009 to 2014:-

- 675 sites have been investigated using desk based research and/ or site inspection. Based on the findings of these investigations, it has been concluded that these sites are unlikely to fit the legal definition of Contaminated Land;
- 6 sites have been investigated under Part 2A using desk based techniques, the findings of which indicated that intrusive investigative works were required. All 6 sites have been the subject of intrusive investigation, based on the findings of these intrusive works it has been concluded that these sites do not fit the legal definition of Contaminated Land;
- One of the prioritised sites is a former gas works located in the southern part of the borough. The site has been the subject of desk based research and intrusive investigation. The findings of phased intrusive investigation undertaken between 2008 and 2010 indicated that the site had the potential to be determined as Contaminated Land. Following discussion with the site owner, voluntary remediation was undertaken in 2014, thus it was not necessary to determine the site as contaminated land.
- 55 sites on the prioritised list have been investigated through the planning system to date. These are sites on the councils Part 2A prioritised list which have been redeveloped through the Planning system. Contaminated land conditions have been placed on permission granted and the sites have been investigated and where appropriate remediated. Of the 55 sites investigated through the planning process, 12 were redeveloped for commercial use and 43 for residential use.

3.3.2 Prioritised sites investigated since 2009 that met the legal definition of contaminated land: -

- Former Sandiacre Gas Works on Gas Street was investigated between 2009-10 via detailed desk study and intrusive investigation. This site, which is currently occupied by Wade Upholstery, has been determined as Contaminated Land under Part 2A of the Environmental Protection Act 1990. Details of this determination are included on the Councils Contaminated Land Register which can be viewed on the Councils website via the following link: <http://www.erewash.gov.uk/environment-waste/pollution/contaminated-land/former-sandiacre-gas-works.html>. However it should be noted that a formal remediation notice has not been served as Erewash Borough Council consider that; because of the likely costs and disruption to the business combined with a low consequence of the pollution linkage identified, that it would not be reasonable to serve a remediation notice at this stage. This situation will however be reconsidered if a change of use occurs in the future.

3.4 Proposed Work Programme 2016 to 2020

The 2016 to 2020 strategy identifies **756** prioritised sites that require further investigation to ascertain if the site fits the legal definition of contaminated land. These are as follows: -

- 85 sites on the prioritised list have been identified as requiring further detailed inspection in the form of desk based assessment and/or a site inspection as a first stage of investigation;
- 24 sites on the prioritised list are either; going through the Planning system and are in the process of being investigated (intrusive investigation) and remediated (where appropriate), or it is anticipated that a Planning application for the site will be submitted for redevelopment of the site within the next 6 months.
- 514 sites on the prioritised list which are currently commercial or industrial use that have an industrial history but are considered unlikely to pose a significant risk to human health and/or the environment. However further desk based assessment and/ or inspection needs to be undertaken before this can be concluded with any certainty.
- 133 prioritised sites require intrusive investigative works as the next stage of assessment/ investigation. Of these sites 30 are considered to be the highest priority. These are primarily sites that have an industrial history and were redeveloped for residential use prior to the enactment of specific planning legislation that would have required comprehensive remediation prior to redevelopment taking place. It is considered possible therefore that ground contamination may be present and that a contaminant linkage may exist. Further information regarding these 30 sites is attached at Appendix 11.

For the purposes of the 2016 to 2020 strategy the following work programme will be completed by 2020: -

- 250 sites from the prioritised list will be investigated via desk based research and site inspection. Whilst a decision as to whether any of these sites fit the legal definition of contaminated land may be possible based on this information in some cases further intrusive works may be required.
- 5 of the highest priority sites will be investigated using intrusive methods to assess ground conditions and contaminant concentrations subject to availability of revenue budget.

With regard to sites requiring intrusive investigation, the costs of undertaking intrusive works will vary depending on the size of the site, past usage and contaminants likely to be present. As each investigation is likely to involve a significant amount of officer time and involve a number of phases/ stages over several months, the investigation of one site per year is feasible.

3.5 Contaminated Land Search Service

The council has a statutory duty to comply with the requirements of the Environmental Health Information Regulations when dealing with requests for the disclosure of information.

Uncertainty and fear of liabilities associated with contamination often causes conveyancing deals to fail which ultimately prevents house sales and inhibits redevelopment. Requests for further information regarding a particular property or land are regularly submitted to the Environmental Health from legal representatives involved in the conveyancing of properties. The request is usually made where the buyers environmental search has 'failed' due to concerns with land contamination at or within close proximity to a property or land. The council can usually confirm as to whether the land or property or area within its immediate vicinity is on the councils list of prioritised sites and the status with regard to investigation/ detailed inspection of the land or property.

4. DETERMINING CONTAMINATED LAND

4.1 Powers to Investigate

Section 108 of the Environment Act 1995 gives the local authority powers to authorise, in writing, suitable persons to investigate potentially contaminated land. The powers include:

- To enter at any reasonable time (or in urgent cases at any time) any premises/land to make such examination and investigations necessary.
- To take samples, photographs, carry out tests, install monitoring equipment etc.

If access is refused an authorised officer may obtain a warrant to enter. The powers of entry outlined above can only be used where there is a reasonable possibility that a contaminant linkage exists, i.e. a pollutant is present with an appropriate pathway and receptor. In addition it should be noted that these powers will only be used where it has proved impossible to obtain information by other means.

The council has adopted an Enforcement Policy which seeks to achieve effective, well targeted regulation but at the same time promotes fairness and protection from harm. To this end the council will seek voluntary action before taking enforcement action. All enforcement decisions are made in accordance with the enforcement policy.

Council owned land will be dealt with in the same way as privately owned land. The council will ensure that if land in its ownership requires attention to address land contamination issues the appropriate works will be carried out.

4.2 Potential Special Sites and Polluted Groundwater

In cases where the site is a potential special site the Environment Agency will be requested to carry out the investigation on the Authority's behalf. In circumstances where groundwater is already contaminated collaboration with the Environment Agency will be sought in order to determine whether or not measurable ongoing pollution from the land is continuing. In cases where ongoing pollution from the land cannot be demonstrated the Environment Agency will be the regulator on the site using their powers under the Water Resources Act 1990 unless a statutory nuisance results from the pollution plume (e.g. odour nuisance) in which case the local authority has the power to act.

4.3 Site Specific Liaison with Owner

The detailed inspection process which the council has adopted has been described in Section 3 of this revised strategy. Once a site has been identified as requiring a detailed inspection, all reasonable efforts will be made to identify and contact the owner or occupier using the following sources of information:

- Local knowledge;
- Land Registry records;
- Council records;
- Trade directories;
- Posting public and site notices.

If contact is made with the owner, an explanation of the reasons for interest in the land will be given in writing and a mutually convenient date and time arranged for the inspection to take place. With the exception of urgent cases the owner will be given 28 days to respond to a request for access (an initial period of 21 days, followed, if appropriate, by a further 7 days in the form of a reminder). If permission is not given or a landowner cannot be identified the council may decide to exercise powers of entry.

Once entry has been made and the inspection commenced, the landowner (if known) will be kept informed and if they wish may have a representative present whilst work proceeds.

4.4 Liaison with Other Agencies and External Experts

4.4.1 Environment Agency

Where information gathered for a particular site indicates that it is likely to be designated as a special site, the council will seek to involve the Environment Agency prior to the detailed inspection stage. Where appropriate the council will seek agreement with the Environment Agency that they carry out the inspection rather than the council. In cases where ongoing pollution from the land cannot be demonstrated the EA will be the regulator on the site using their powers under the Water Resources Act 1990 unless a statutory nuisance results from the pollution plume (e.g. odour nuisance) in which case the local authority has the power to act.

4.4.2 Natural England

Natural England will be consulted where information gathered indicates a potential to affect eco-systems, in particular Sites of special Scientific Interest (SSSI). They will also be consulted where it becomes apparent that there is a need to perform intrusive investigation on or near land which falls within their remit.

4.4.3 English Heritage

English Heritage will be consulted prior to undertaking any intrusive investigation on land which may have historic or archaeological significance.

4.4.4 External Experts

In complex cases external expertise may be sought to conduct a robust risk assessment. Where risks are clearly high or low or whether the council feels they have sufficient expertise there is likely to be little need to consult with external experts. In more complex cases the council may consider it necessary to bring in external expertise.

4.5 Risk to Human Health

4.5.1 Significant Harm to Human Health and Significant Possibility of Harm

The Statutory Guidance of 2012 includes categories of harm that should be considered to be significant harm to human health. In all cases 'the harm should be directly attributable to the effects of contaminants in, on or under the land on the body(ies) of the person (s) concerned'.

Categories for determining land that is contaminated land on the basis that 'significant harm is being caused' exists where (a) the authority has carried out an appropriate, scientific and technical assessment of all the relevant and available evidence; and (b)

on the basis of that assessment, the authority is satisfied on the balance of probabilities that significant harm is being caused.

The term: 'significant possibility of significant harm to human health' means the risk posed by one or more contaminant or pollutant linkage relating to the land. It comprises: a) the estimated likelihood that significant harm might occur to an identified receptor, taking into account the current use of the land and: b) the estimated impact if the significant harm did occur, in other words the nature of the harm and the seriousness of the harm to any person who might suffer it and the extent in terms of how many people may suffer it.

4.5.2 Category Classification System

To assist local authorities in deciding whether there is a 'significant possibility of significant harm to health' the Statutory Guidance of 2012 has introduced a 4 category classification system. The categories are as follows:

- Category 1 – where 'there is an unacceptably high probability, supported by robust science-based evidence, that significant harm would occur if no action is taken to stop it'.
- Category 2 – where 'there is a strong case for considering that the risks from the land are of sufficient concern and that the land poses a significant possibility of significant harm'.
- Category 3 – where there is not the strong case described in the test for Category 2. This may include: 'land where the risks are not low, but none the less the authority considers that regulatory intervention under Part 2A is not warranted'.
- Category 4 – where there is no risk or the level of risk is posed to be low.

In summary land classified as Category 1 and 2 is capable of being determined as contaminated land. Land classified as Category 3 and 4 would not fit the legal definition of contaminated land.

4.6 Formal Designation of Contaminated Land

Formal designations of contaminated land will be undertaken in the following manner:

- Appropriate persons will be notified of the intention to consider determining the site as contaminated land at least 10 working days prior to the meeting.
- The notification will confirm the Council's intention and set out the reasons why determination is being considered.

The Statutory Guidance of 2012 requires local authorities to prepare a 'risk summary' 'where on the basis of its risk assessment, the authority considers it likely that the land in question may be determined as contaminated land'. The summary will contain the council's understanding of the risks and other factors the council considers to be relevant and uncertainties. The council will not proceed to formal determination of land as contaminated land until a risk summary has been prepared. The risk summary will include:

- A summary of the council's understanding of the risks, including a description of: the contaminants involved; the identified contaminant linkage (s); the potential impacts (s); the estimated possibility that the impacts(s) may occur; and the timescale over which the risk may manifest.

- A description of the councils understanding of the uncertainties with the assessment.
- A description of the risks in a non-technical and understandable way.
- A description of the councils initial views on possible remediation including a description of what remediation might entail, how long it might take, likely effects of remediation on local people and businesses

Immediately following the determination of a site the appropriate persons will received formal notification of the fact and confirmation that the council will seek remediation without the service of a remediation notice.

4.7 Land in another Authority's Area

Section 78X(2) of Part 2A allows an authority to take action in respect of contaminated land situated outside its own area if the condition of the land is affecting its residents or environment. This is important where a site lies close to or accesses authority boundaries. In these circumstances Erewash Borough Council will liaise with the other local authority involved to ensure a satisfactory outcome is achieved for both parties.

4.8 Reviewing Inspection Decisions

There may be occasions when the findings of previous inspection decisions should be reviewed. This might occur, for example, if there were:

- Significant changes in legislation;
- Establishment of significant case-law or other precedent, and
- Revision of standards set for exposure assessment.
- Changes in land use.

Where such reviews are undertaken full details will be recorded on the database which will allow for a full audit of the process, should this be found to be necessary.

Triggers for Undertaking Non-Routine Inspections include:

- Unplanned events, i.e. spills;
- Introduction of new receptors;
- Identification of localised health effects;
- Responding to information.

4.9 Establishing the 'Appropriate Person' and Remediation Notices

Irrespective of whom the regulator is (see 5.2), if an area of land is contaminated and poses a risk, the following four steps will be taken in dealing with contaminated land.

- i) Establishing who the 'appropriate person' is to bear responsibility for the remediation.
- ii) Deciding what remediation is appropriate and to ensure that this occurs, through:
 - reaching a voluntary agreement;
 - serving a remediation notice, if agreement cannot be reached; and

- in certain circumstances, carrying out the work in default of a remediation notice; and potentially recovering costs through litigation from the appropriate person(s).
- iii) Determining who should accept what proportion of the liability for meeting the costs of the work involved in the remediation at the outset.
- iv) Maintaining a public register of regulatory action undertaken on contaminated land.

An important attribute of this approach is that it applies the ‘polluter pays’ principle to apportionment of liability. The ‘appropriate person’ (or persons) to bear responsibility for remediation will normally be the person who caused or knowingly permitted the contamination.

4.10 Determining Liabilities

The provisions for the establishment of liability are detailed in Part 2A. Reference should be made to The Statutory Guidance of 2012 details the procedure to be followed by the enforcing authority for:-

- a) In the first instance identifying persons who caused or knowingly permitted each linkage in terms of section 78F(2) of Part 2A referred to as Class A persons. If no Class A persons can be found, the authority will seek to identify the owners or occupiers of the land in terms of Section 78F (4) of Part 2A (Class B persons). The persons responsible for each linkage constitute a liability group (Class A or Class B).
- b) Characterising the remediation actions necessary to break the pollutant linkage.
- c) Attributing responsibility between the liability groups.
- d) Considering whether any member of a liability group should be excluded from liability (Financial circumstances are not considered at this stage).
- e) Apportioning costs attributed to a liability group to the individual members of that group (Both Class A and Class B persons may be excluded from liability if they meet the criteria laid down in the legislation).

In some cases it will not be possible to find a class A or Class B person liable for a linkage, that linkage becomes known as an “orphan linkage”. Exclusions may also apply where the authority considers whether members of the group shall be excluded in accordance with rules set out in Section 7 (c and e). The term “exclusion” means and decision by the authority that a person is to be treated as not being an appropriate person in accordance with section 78F (96) of Part 2A. In some circumstances the Council may have to undertake the remediation and bear the costs incurred.

4.11 Remediation Notices – Decision Making Process

Once land has been determined as contaminated land, the council will consider how the land should be remediated based on consultation with professionals involved in investigation of the site and relevant technical documents and working methods. Where appropriate, the council will issue a remediation notice to require such remediation to be undertaken.

The aim of remediation is to (a) remove identified significant contaminant linkages, or permanently to disrupt them to ensure they are no longer significant and that risks are reduced to below an acceptable level; and/ or (b) to take reasonable measures to

remedy harm or pollution that has been caused by a significant contaminant linkage.

Remediation may involve a range of treatment, assessment and monitoring actions, sometimes with different remediation actions being used in combination or sequentially. Remediation may also require a phased approach, with different remedial actions being carried out in parallel or sequentially.

If voluntary remediation is not undertaken a remediation notice will be served on the appropriate persons specifying the works necessary to remove the pollution linkage(s).

Remediation notices will only be served if all other ways of remediating the site have been investigated but have failed. The one exception to this rule will be cases or urgency where delay could endanger life or environment. Notices will therefore only be served where:

- a) There is no prospect of remediation taking place by any other route;
- b) The council does not have the power to undertake the remediation itself.
 - ii) Remediation notices will be served on all appropriate persons (notice cannot be served less than 3 months after formal notification that the land is contaminated unless urgent action is deemed necessary).
 - iii) The remediation required will vary from site to site dependent on the nature of the contamination present, the proposed/existing usage and underlying geology. Each site therefore will require a unique remediation plan.
 - iv) The Head of Environmental & Housing Services will specify the remediation measures to be carried out in the remediation notice. These measures will be both appropriate and cost effective. The aim of the remediation is to ensure that the land is no longer classed as contaminated land. It should be noted that the notice will not require the removal of all contamination from the site.

All remediation notices will be served in accordance with Section 78E of the Environmental Protection Act 1990.

4.12 The Recovery of the Costs of Remediation

Statutory Guidance for the recovery of costs for remediation are covered under Section 78P(2) of the Act. The Policy on the recovery of costs associated with the remediation of contaminated land sites under part 2A of the Environmental Protection Act 1990 (as amended) is given in Appendix .

In addition to having regard to guidance issued by the Secretary of State, the council must consider any hardship which the recovery may cause to the person from whom the cost is recoverable. The policy mentioned in (i) above provides a framework to ensure that these decisions are made in a fair, consistent and transparent manner. However, the decision to waive recovery of monies has important implications way beyond the actual payment being considered. This is due to the provisions of Sections 78H(5) and 78N(3) which effectively prevent the service of a remediation notice if the local authority believes it is likely to seek to recover only a proportion of the cost of remediation.

4.13 Urgent Action

Where the council is satisfied that there is imminent danger of serious harm or serious pollution of controlled waters it must take action, including where appropriate, undertaking remediation. In the case of a special site the council will consider authorising persons nominated by the Environment Agency to exercise powers on its behalf. Where the council undertakes remediation it will seek to recover its costs subject to the provisions of its cost recovery policy.

4.14 Remediation by the Council

Before the council can serve a remediation notice it will first determine whether it has the power to carry out any of the remediation actions itself. These are five specified circumstances where this may be the case:

- Where urgent action is required;
- Where no 'appropriate person' can be found;
- Where one or more 'appropriate persons' are excluded (on grounds of hardship);
- Where the council has made an agreement with the 'appropriate person' that it should carry out the remediation;
- In default of a remediation notice.

5. INFORMATION

5.1 Public Register and Access to Information

The council are required to maintain a register of contaminated land. Details are the register are on the councils website: <http://www.erewash.gov.uk/environment-waste/pollution/contaminated-land.html> The register includes a record of determinations that land is contaminated land identifying the location, boundaries and area of land in question including appropriate grid references. Each record explains why the determination has been made including:

- Remedial notices served;
- Risk summary (only for sites determined post 2012);
- Relevant conceptual model comprising text, plans cross sections, photographs and tables as necessary;
- A summary of the relevant assessment of this evidence;
- Remediation declarations;
- Remediation statements;
- Notification of claimed remediation;
- Determination of sites as 'special sites';
- Appeals against remediation and charging notices;
- Convictions.

It should be noted that in some instances, for reasons of national security or commercial /legal confidentiality, information may be excluded from the register.

5.2 Database of Site Specific Information

As well as the Public Register the council hold a database of potentially contaminated land (Part 2A prioritised list). This is a far wider-reaching set of data which essentially collates historical information, actions taken (including sampling data and analytical results) and the decision making process. The amount of information held will vary from site to site.

Some sites held on the database were sites originally identified during the early prioritisation process but have been removed at an early stage because there is no prima face case for treating them as contaminated land. Some of these sites might come into the prioritisation scheme in the future if the land use changes. The most common example of this is currently in-use railway lines.

5.3 Information Management

The Environmental Protection Team operates a GIS and associated database. These systems are used to correlate and store information. Where possible all data is stored electronically but some paper documents are retained where an electronic version is unavailable and/or scanning is impractical.

6. OTHER REGULATORY REGIMES

The Statutory Guidance of 2012 States that “enforcing authorities should seek to use Part 2A only where no appropriate alternative solution exists”. The Part 2A regime is one of several ways in which land contamination can be addressed. There are other legislative regimes which may provide a means of dealing with land contamination issues.

6.1 Development Control

Planning guidance indicates that land should not be given planning permission unless it can be assured that the resulting development will not give rise to a site being considered statutorily contaminated. This would normally arise by the introduction of a new receptor such as the building of housing on a former industrial site. However in some cases a new pathway could be the issue as previously sealed surfaces are broken out and made vulnerable to leaching pollutants into controlled waters.

6.2 Water Pollution

Although the Water Resources Act 1990 remains in force for pollution of controlled waters from contaminated land the government has indicated through statutory guidance that the preferred means of regulation should be via Part 2A of the Environmental Protection Act 1990.

6.3 Pollution of Controlled Waters not arising from land

Once controlled waters are already contaminated and input from the land has ceased Part IIA of EPA 1990 does not apply. This can lead to problems particularly where free product is floating on a groundwater body, for example where petrol storage tanks or lines have leaked. In such circumstances any minor additions to the groundwater from the vadose zone of the strata will be very hard to demonstrate and certainly it would be hard to demonstrate that “pollution of controlled water” was actually taking place. In such circumstances advice will be sought from the Environment Agency to establish whether they are prepared to use their powers to achieve clean up of the groundwater body.

Where pollution to surface waters is taking place land contamination could occur (or could already have occurred, either by overbank deposition at times of flood or by dredging activities

6.4 Discharge Consents

The above comment relating to pollution of surface waters applies particularly where discharge consents allow the continuing input of pollutants. However modern standards should minimise this effect for current discharges and where historic discharges had occurred the site from which the discharge took place would be likely to be of a greater concern than the pollutants arising from secondary deposition. Of particular concern here would be sewage works.

6.5 Waste Management Licensing

Determined contaminated sites that are currently licensed by the Environment Agency under waste management licensing (or if they are permitted under the newer regime which is being gradually introduced) would be special sites and thus would be regulated by the Environment Agency. The Environment Agency should control operations such that pollution linkages are not established. Sites which have previously been licensed under older legislation and which closed when licence surrender was easier would be the local authority's responsibility. Old licensing documentation is available from DCC but the extent to which licence conditions were complied with is highly uncertain. In cases where there is a sensitive receptor such sites would need to be investigated using intrusive techniques.

6.6 Integrated Pollution Prevention and Control (IPPC)

A1 and A2 processes require a base line study of land contamination prior to the issue of a permit. The surrender of any permit will not be allowed unless any contamination caused during the permitted period is dealt with to the extent that the land is in the state it was in at the start of the permit. This requirement is more onerous than the Part 2A provision which requires the regulator to demonstrate significant risk of significant harm.

6.7 COMAH

In the event of a catastrophe at a COMAH site the resulting contamination would come under part 2A of the Environmental Protection Act 1990.

6.8 Contaminated Food

The Food and Environmental Protection Act 1985 gives the Secretary of State power to make orders requiring the destruction of foodstuffs which would be hazardous if consumed. An example of how this power could be used would be to require destruction of produce being grown on a contaminated site. Remediation of the site would be undertaken using Part 2A powers.

6.9 Organisms

Part 2A does not apply to contamination caused by living organisms e.g. bacteria, viruses or protozoa as they do not fall within the definition of substances. The council will liaise with the Environment Agency in respect of MOD land and Defra on all other sites.

6.10 Statutory Nuisance

Once a site is declared to be contaminated land the statutory nuisance provisions of the Environmental Protection Act 1990 (Part III) can no longer be applied. However, land in a contaminated state, but which has not been declared contaminated land, could still be subject to action under Part III where the effects of the substances on the land give rise to offence to human senses (i.e. smells). It should be noted that statutory nuisance cannot be used where harm is being caused to specified receptors (particularly human health) or controlled waters are being polluted.

APPENDIX 1

THE POLICY ON THE RECOVERY OF COSTS ASSOCIATED WITH THE REMEDIATION OF CONTAMINATED LAND SITES UNDER PART IIA OF THE ENVIRONMENTAL PROTECTION ACT 1990 (AS AMENDED)

1. Introduction

1.1 It is the aim of this policy to demonstrate the considerations and procedure that will be undertaken by Erewash Borough Council when pursuing the recovery of the costs it has incurred in contaminated land remediation. It is intended to promote transparency, fairness and consistency within the process for recovering remediation costs under Part IIA of the Environmental Protection Act 1990 (as amended by Section 57 of the Environment Act 1995) and comply with the statutory guidance provided by the Secretary of State.

1.2 The policy specifies circumstances where the Erewash Borough Council would be prepared to consider waiving or reducing the recovery of remediation costs having given due regard to hardship and other relevant factors.

2. Background

2.1 Erewash Borough Council is an enforcing authority for the purpose of Part IIA of the Environmental Protection Act 1990 has the responsibility to:

- (a) Cause its areas to be inspected in order to identify contaminated land, including intrusive site investigations where required. The legislation requires that the Council produce a Contaminated Land Inspection Strategy detailing how it will undertake this process;
- (b) Determine whether any particular site is contaminated land;
- (c) Act as enforcing authority for all contaminated land which is not designated as a “special site” (the Environment Agency will be the enforcing authority for special sites).

2.2 The Contaminated Land Regime takes a “suitable for use” approach, ensuring that land is suitable for its current use. No consideration is given to future possible uses as it is expected that this issue will be addressed through the planning process.

2.3 If Erewash Borough Council declare a site to be contaminated land it will have four main tasks:

- (a) To establish who should bear responsibility for the remediation of the land (the “**appropriate person**” or persons). Normally this will be the person(s) responsible for the pollution or if they cannot be found the site owners;
- (b) To decide, after consultation, what remediation is required in any individual case and to ensure that such remediation takes place, either through agreement with the appropriate person, or by serving a remediation notice on the appropriate person if agreement is not possible or, in certain circumstances, through carrying out the work itself;
- (c) Where a remediation notice is served, or the authority itself carries out the work, to determine who should bear what proportion of the liability for meeting the costs of the work; and
- (d) To record certain prescribed information about its regulatory actions on a public register.

2.4. In those cases where Erewash Borough Council by virtue of section 78N(3)(a), (c), (e) or (f) of the Environmental Protection Act 1990 does any particular thing by way of remediation, it is entitled, subject to limitations, to recover the reasonable cost it incurred from the appropriate person, or persons, by virtue of Section 79P of the Environmental Protection Act 1990 (as amended by the Environment Act 1995)

2.4 Section 78P of the 1990 Act states that in deciding whether to recover the cost, and, if so, how much of the cost to recover, the Council shall have regard to any hardship which the recovery may cause to the person from whom the cost is recoverable; and to any guidance issued by the Secretary of State for the purposes of this subsection.

2.5 Appropriate persons are divided into two classes as follows:

(a) **Class A Persons** - These are persons who have caused or knowingly permitted the pollution in question to be in, on or under the ground. Where a Class A Person exists they are liable for the costs of remedial work. As well as the original polluters they can include persons who had the opportunity to clean up a site but failed to do so. This would include developers and, indeed, the statutory guidance has provisions to exclude from liability original polluters if the site only becomes statutorily contaminated land by virtue of someone introducing new receptors, such as housing, onto that land.

(b) **Class B Persons** - These are persons who own or occupy the contaminated land, but who have not caused or knowingly permitted the significant pollutant to be in, on or under the land and become liable where a Class A person cannot be found. Where a Class A Person does not exist, the Class B Person becomes liable for the costs of remedial work. It should be noted that Class B persons may not be given liability to carry the costs of clean up when the harm that is to be prevented is pollution to controlled waters.

3. Matters to be considered with regard to applications for the recovery of costs associated with the remediation of contaminated land to be waived or reduced

3.1 General considerations

3.1.1 In making any cost recovery decision, Erewash Borough Council will have regard to the following general principles which are based on the statutory guidance:

- (a) Erewash Borough Council will aim for an overall result which is as fair and equitable as possible to all who may have to meet the costs of remediation, including national and local taxpayers; and
- (b) The “polluter pays” principle, by virtue of which the costs of remediating pollution are to be borne by the polluter. Erewash Borough Council will therefore consider the degree and nature of responsibility of the appropriate person for the creation, or continued existence, of the circumstances which lead to the land in question being identified as contaminated land.

In general, this will mean that the council will seek to recover in full its reasonable costs. However, Erewash Borough Council will waive or reduce the recovery of costs to the extent that the authority considers appropriate and reasonable, either:

- (a) To avoid any hardship which the recovery may cause to the appropriate person; or
- (b) To reflect one or more of the specific considerations set out below.

3.1.2 When deciding how much of its costs it should recover in any case, Erewash Borough Council will consider whether it could recover more of its costs by deferring recovery and securing them by a charge on the land in question under section 78P of the Environmental Protection Act 1990 with a view to recovering its costs either in instalments or when the land is next sold. There are limitations determining whether a charge on the land can be applied under section 78P such that it can only occur if the appropriate person is a Class A person and still owns the land.

3.2 Considerations Applying both to Class A and Class B Persons

3.2.1 Commercial Enterprises

3.2.1.1 In the case of a small or medium-sized enterprise (as defined in the European Commission's Community Guidelines on State Aid for Small and Medium-Sized Enterprises, published in the Official Journal of the European Communities) which is the appropriate person, or which is run by the appropriate person, in deciding an application for Erewash Borough Council to waive or reduce the costs of remedial work the Council will consider:

- (a) Whether recovery of the full cost attributable to that person would mean that the enterprise is likely to become insolvent and thus cease to exist; and
- (b) If so, the cost to the local economy of such a closure.

3.2.1.2 Where the cost of closure appears to be greater than the costs of remediation which Erewash Borough Council would have to bear itself, it will consider waiving or reducing its costs recovery to the extent needed to avoid making the enterprise insolvent.

3.2.1.3 However, Erewash Borough Council will **not** waive or reduce its costs recovery where:

- (a) It is clear that an enterprise has deliberately arranged matters so as to avoid responsibility for the costs of remediation;
- (b) It appears that the enterprise would be likely to become insolvent whether or not recovery of the full cost takes place; or
- (c) It appears that the enterprise could be kept in, or returned to, business even it does become insolvent under its current ownership.

3.2.2 Trusts

3.2.2.1 Where the appropriate persons include persons acting as trustees, Erewash Borough Council will assume that such trustees will exercise all the powers which they have, or may reasonably obtain, to make funds available from the trust, or from borrowing that can be made on behalf of the trust, for the purpose of paying for remediation. Erewash Borough Council will, nevertheless, consider waiving or reducing its costs recovery to the extent that the costs of remediation to be recovered from the trustees would otherwise exceed the amount that can be made available from the trust to cover those costs.

3.2.2.2 However, as exceptions to the approach set out in the preceding paragraph, Erewash Borough Council will not waive or reduce its costs recovery:

- (a) Where it is clear that the trust was formed for the purpose of avoiding paying the costs of remediation; or
- (b) To the extent that trustees have personally benefited, or will personally benefit, from the trust.

3.2.3 Charities

3.2.3.1 Since charities are intended to operate for the benefit of the community, Erewash Borough Council will consider the extent to which any recovery of costs from a charity would jeopardise that charity's ability to continue to provide a benefit or amenity which is in the public interest. Where this is the case, Erewash Borough Council will consider waiving or reducing its costs recovery to the extent needed to avoid such a consequence. This approach applies equally to charitable trusts and to charitable companies.

3.2.4 Social Housing Landlords

3.2.4.1 Erewash Borough Council will consider waiving or reducing its costs recovery if:

- (a) The appropriate person is a body registered as a social housing landlord under section 2 of the Housing Act 1996 (for example, a housing association);
- (b) Its liability relates to land used for social housing; and
- (c) Full recovery would lead to financial difficulties for the appropriate person, such that the provision or upkeep of the social housing would be jeopardised.

3.2.4.2 The extent of the waiver or reduction should be sufficient to avoid any such financial difficulties.

3.3 Specific considerations applying to Class A Persons

3.3.1 Subject to paragraph 3.3.2 below, there will be a bias towards Erewash Borough Council **not** being willing to reducing its costs recovery where a Class A person caused or knowingly permitted the significant pollutant to be in, on or under the land in the course of carrying on a business especially where they are likely to have earned profits from the activity which created or permitted the presence of those pollutants.

3.3.2 Erewash Borough Council will consider waiving or reducing its costs recovery from a Class A person if that person demonstrates to its satisfaction that:

- (a) Another identified person, who cannot now be found, also caused or knowingly permitted the significant pollutant to be in, on or under the land; and
- (b) If that other person could be found, the Class A person seeking the waiver or reduction of the authority's costs recovery would either:
 - (i) Be excluded from liability by virtue of one or more of the exclusion tests set out in Part 5 of Chapter D of Annex 3 to Defra Circular 01/2006, or
 - (ii) The proportion of the cost of remediation which the appropriate person has to bear would have been significantly less, by virtue of the guidance on apportionment set out in Part 6 of Chapter D of Annex 3 to Defra Circular 01/2006.

3.3.3 Where an appropriate person is making a case for the recovery of Erewash Borough Council's costs to be waived or reduced by virtue of paragraph 3.3.2 above, Erewash Borough Council will expect that person to provide evidence that a particular person, who cannot now be found, caused or knowingly permitted the significant pollutant to be in, on or under the land. Erewash Borough Council will not regard it as sufficient for the appropriate person concerned merely to state that such a person must have existed.

3.4 Specific Considerations Applying to Class B Persons.

3.4.1 Land Owners other than Owner-Occupiers of Dwellings

3.4.1.1 Erewash Borough Council will consider waiving or reducing its costs recovery from a Class B person if that person demonstrates to the satisfaction of the Council that the costs of remediation are likely to exceed the value of the land. In this context, the “value” shall be taken to be the value that the remediated land would have on the open market, at the time the cost recovery decision is made, disregarding any possible blight arising from the contamination.

3.4.1.2 In general, the extent of the waiver or reduction in costs recovery should be sufficient to ensure that the costs of remediation borne by the Class B person do not exceed the value of the land. However, the Council will seek to recover more of its costs to the extent that the remediation work would result in an increase in the value of any other land from which the Class B person would benefit.

3.4.1.3 Erewash Borough Council will consider reducing its costs recovery where a Class

B person who is the owner of the land demonstrates to its satisfaction that:

- (a) They took such steps prior to acquiring the freehold, or accepting the grant or assignment of a leasehold, as would have been reasonable at that time to establish the presence of any pollutants;
- (b) When they acquired the land, or accepted the grant or assignment of the leasehold, they were nonetheless unaware of the presence of the significant pollutant now identified and could not reasonably have been expected to have been aware of its presence; and
- (c) It would be fair and reasonable, taking into account the interests of national and local taxpayers, that they should not bear the whole cost of remediation.

3.4.1.4 In making the above consideration, Erewash Borough Council will bear in mind that the safeguards which might reasonably be expected to be taken will be different in different types of transaction (for example, acquisition of recreational land as compared with commercial land transactions) and as between buyers of different types (for example, private individuals as compared with major commercial undertakings).

3.4.1.5 In considering what might reasonably be expected by way of knowledge that might be obtained the Council will have regard to the state of knowledge on the issue of contaminated land at the time the purchase was made. This too will be looked upon with regard to the nature of the transaction but for commercial land transactions it will be assumed as a starting point in the considerations that any transactions concluding after the start of 2002 will be assumed to have been carried out in a regime in which there is an expectation that the purchaser will make extensive enquiries regarding contamination issues before concluding a purchase.

3.4.2 Owner-occupiers of Dwellings

3.4.2.1 Where a Class B person owns and occupies a dwelling on the contaminated land in question Erewash Borough Council shall have particular regard to the Secretary of State’s guidance (under section 78) to take into account hardship when deciding whether to reclaim. In judging the extent of a waiver or reduction in costs recovery from an owner-occupier of a dwelling, Erewash Borough Council will apply a “means test” based on the methodology used for applications for housing renovation grant (HRG), as suggested by the Secretary of State’s guidance.

3.4.2.2 In such a case the HRG approach will be applied as if the appropriate person were applying for HRG and the Council had decided that the case was appropriate for grant assessment. Using this analogy, Erewash Borough Council would conclude that costs recovery should be waived or reduced to the extent that the appropriate person contributes no more than if the work were house renovations for which HRG was being sought. For this purpose, any upper limits for grants payable under HRG will be ignored.

3.4.2.3. Where a Class B person owns and occupies a dwelling on the contaminated land in question, Erewash Borough Council will also consider waiving or reducing its costs recovery where that person satisfies the Council that, at the time the person purchased the dwelling, he did not know, and could not reasonably have been expected to have known, that the land was adversely affected by presence of a pollutant.

3.4.2.4 In considering what might reasonably be expected by way of knowledge that might be obtained the Council will have regard to the state of knowledge on the issue of contaminated land at the time the purchase was made. For transactions relating to owner occupation it will be assumed as a starting point in the considerations that any transactions concluding after the start of 2002 will be have been carried out in a regime in which there is an expectation that the purchaser will make extensive enquiries regarding contamination issues before concluding a purchase.

3.4.2.5 Any such waiver or reduction shall be to the extent needed to ensure that the Class B person in question bears no more of the cost of remediation than it appears reasonable to impose, having regard to his income, capital and outgoings. Where the appropriate person has inherited the dwelling or received it as a gift, the approach in paragraph 3.4.2.1 above should be applied with respect to the time at which they received the property.

3.4.2.6 Where the contaminated land in question extends beyond the dwelling and its curtilage, and is owned or occupied by the same appropriate person, the approach in paragraph 3.4.2.3 above shall be applied only to the dwelling and its curtilage.

4. Applications for the recovery of costs associated with the remediation of contaminated land to be waived or reduced.

4.1 Subject to paragraph 4.2 below, all applications for the recovery of costs associated with the remediation of contaminated land to be waived or reduced shall be made in writing to Erewash Borough Council and signed by the applicant.

4.2 Erewash Borough Council may, having regard to the applicant's circumstances, agree that an application for the recovery of costs associated with the remediation of contaminated land to be waived or reduced may be made in a format other than writing. Such an agreement shall be in writing and shall specify the application formats that are acceptable.

4.3 It shall be the responsibility of the applicant to supply any information required by Erewash Borough Council to process their application for a waiver or reduction in the recovery of remediation costs

4.4 In making any cost recovery decision, Erewash Borough Council will always consider any relevant information provided by the appropriate person and other sources. Erewash Borough Council will seek to obtain such information as is reasonable, having regard to:

- (a) How the information might be obtained;
- (b) The cost, for all the parties involved, of obtaining the information, and
- (c) The potential significance of the information for any decision.

4.5 Applications for the recovery of costs associated with the remediation of contaminated land to be waived or reduced shall be determined jointly by the Director for Places and Environment and the Director for Resources.

5. Appeals regarding the outcome of an application for the recovery of costs associated with the remediation of contaminated land to be waived or reduced

5.1 In the event of an applicant being dissatisfied with the outcome of an application for the recovery of costs associated with the remediation of contaminated land to be waived or reduced they may appeal to Erewash Borough Council against the decision.

5.2 Subject to paragraph 5.3 below, all appeals regarding the outcome of an application for the recovery of costs associated with the remediation of contaminated land to be waived or reduced shall be made in writing to Erewash Borough Council and signed by the applicant.

5.3 Erewash Borough Council may, having regard to the applicant's circumstances, approve an appeal regarding the outcome of an application for the recovery of costs associated with the remediation of contaminated land to be waived or reduced being made in a format other than writing. Such an approval will be in writing and will specify the application formats that are acceptable.

5.4 Appeals regarding the outcome of an application for the recovery of costs associated with the remediation of contaminated land to be waived or reduced shall be determined by the Council Executive.

6. Consultation on the Cost Recovery Policy

A consultation exercise the draft policy on the recovery of costs associated with the remediation of contaminated land sites was undertaken from 29th June 2009 to 29th July 2009. Consultation consisted of:

- i) A press release;
- ii) Posting copies of both draft documents on the website;
- iii) A mail-out to commercial, regulatory and other groups;
- iv) Displaying copies of the draft documents in public libraries with pre-paid envelopes and feedback forms.

There were no responses which asked for the draft documents to be amended.

APPENDIX 2

CHARACTERISTICS OF THE EREWASH AREA

This section gives background information about the area of Erewash Borough Council and highlights some of the factors, in relation to potential 'contaminants', 'pathways' and 'receptors' which will influence the Council's approach to the inspection of 'contaminated land'.

1.1 Geographical Description of the Borough

Erewash lies between the cities of Derby and Nottingham and there is good access to its major towns of Ilkeston and Long Eaton. Both are within easy reach of the M1 (Junctions 25 and 26) and have excellent connections with the east and west Midlands. Erewash also benefits from its proximity to East Midlands Airport. Within an area of 42 square miles (or 26,955 acres) Erewash has a population of 110,300 living in 48,077 households.

The majority of our citizens live in close proximity to the borough's eastern boundary, in Ilkeston and Long Eaton (both c.37,000). The remaining residents live in the rural or semi-rural villages within relatively easy commuting distance of the two towns, as well as Nottingham and Derby.

The historic success of the Erewash economy was founded upon coal mining, iron working, textiles and railways. In 2007 Saint-Gobain Pipelines plc based at Stanton closed providing the potential for a new mixed use regeneration project, which will create in excess of 3,000 homes and new employment.

Whilst there is currently a shortage of land for new business, we recognise that the regenerated site has the potential to meet a 20 year plus supply need. Manufacturing industry still provides more than 30 per cent of jobs and accounts for 1 in 5 of the area's 2,400 firms. Areas of employment growth have occurred in engineering, furniture making, packaging, electronics and distribution. In some respects our local economy is stronger as a result of this diversification.

The average age for the borough is getting higher i.e. those aged 75 and over increasing from 7.6 percent in 2003 to 8.3 percent by 2010, bringing this group to a population of 9,300. We have made the identification of services for older people a priority in our equalities action plan and have identified a number of key actions in our Corporate Plan to support health and assist with maintaining independent living. Challenges for us

Neighbouring Authorities include: Amber Valley Borough Council, Broxtowe Borough Council, Rushcliffe Borough Council, North West Leicestershire Council, South Derbyshire Council and Derby City Council.

1.2 Outline Geological Aspects of the Borough

The geology of the Borough is depicted on two 1:50 000 scale, published geological maps (Derby Sheet 125, and Loughborough Sheet 141). A series of unpublished, 1:10 000 scale geological maps is also available at the British Geological Survey Keyworth office. There are three major elements to the geology of the Borough: the Bedrock, the Superficial Deposits and the Artificially Modified ground.

1.2.1 Bedrock

The oldest bedrock unit, cropping out in the extreme west of the Borough, between Breadsall and Duffield, consists of the Carboniferous (Namurian) - age Millstone Grit Group. These strata, several hundred metres thick, consist of pale grey, hard, feldspathic sandstones interbedded with dark grey mudstones and siltstones. The individual sandstone beds are commonly over 50 m thick and form major features of the landscape. Overlying the Millstone Grit are further Carboniferous (Westphalian age) strata consisting of the Lower and Middle Coal Measures, which crop out over much of the Borough north of Stanton by Dale. The Coal Measures, about 1000 m in aggregate thickness, are made up of alternating beds of grey mudstone, siltstone and pale grey sandstone. The numerous coal seams have been extensively exploited in the Derbyshire-Nottinghamshire Coalfield by surface, shallow-subsurface and deep underground mining techniques; beds of ironstone and fireclay are also present, and these have also have been locally exploited. The Coal Measures were faulted, mainly along north-north-west trends, and folded into a gentle syncline, at the end of the Carboniferous Period. These movements produced the regional dip of these strata, at angles of several degrees to the north or north-east.

1.2.2 Superficial Deposits

These deposits veneer the bedrock and consist of unconsolidated material of Quaternary age. The oldest deposits are seen as a few small patches of Till (boulder clay), of glacial origin, comprising numerous large and small rock fragments in a red to brown, clay-rich matrix. The most extensive Quaternary deposits are the sands and gravels that comprise the river terraces and modern alluvial tracts (floodplains) of the rivers Trent, Derwent and Dove. These deposits unite to form part of the wide Trent floodplain around Long Eaton. Hereabouts they are up to several metres thick, and have been extensively quarried for aggregate. Locally these deposits have commonly been found to contain local deposits of organic matter causing relatively high carbon dioxide levels. This is not confined to the alluvial silts.

1.2.3 Artificially Modified Ground

This is ground that has been remodelled as a result of human activities, which include infrastructure development, mineral exploitation and landscaping. It is ubiquitous in urban areas, and in the coalfield is seen as numerous colliery spoil heaps and opencast sites. Ground that has been worked by shallow subsurface techniques, including bell pits and pillar and stall workings, is a further important category and where not covered by urban development it commonly gives rise to areas of hummocky, disturbed terrain.

1.2.4 Extractive Industries

Subsided ground is one of the most important geohazards associated with current and former underground mining activities. It is a general problem in areas of coal mining, but can be exacerbated locally as a result of mining-induced fault reactivation, or by the collapse of shafts, bell pits and pillar and stall workings. Other problems associated with mining include the contamination of local water supplies by rising groundwaters that have flowed through abandoned underground workings. Mine gas is another hazard which can be expected in the north of the Borough and extractive industries such as brick pits and gravel pits also present the possibility of ground gas generation where they have been filled with unrecorded materials.

1.3 Pathways for Contamination into and via the Geology

The Borough is covered by soils of mixed permeability. Permeability means how readily the soil will allow water or contamination to pass to the rock below. Soil physical and chemical properties affect the downward passage of water and contaminants. These include: texture, structure, soil water regime and the presence of distinctive layers such as raw peaty topsoil and rock or gravel at shallow depth.

Urban areas that follow the River Erewash from Cotmanhay down through Ilkeston and Sandiacre to Long Eaton are areas of high soil permeability. The significance of these areas having high permeability soils is that they overlay major and minor aquifers (see section 2.5). All of the solid and drift geology below the surface soils can act as 'pathways' for contamination but the most important 'pathway' is via the drift deposits and the Permo-Trias rocks because this can affect the potable water supplies.

The rest of the Borough has mixed permeability soils ranging from negligibly permeable to intermediate to high. Ref: (Environment Agency Groundwater Vulnerability 1:100,000 Map Series, sheets 17, 18 & 23).

1.4 Possible Sources of Contamination within the Geology of the Borough

Within the Coal Measures iron rich and sometimes acid water is present both in the form of surface water entering via old mine workings and the associated disturbed strata as well as water trapped there since the formation of the rocks. Springs are also common in this formation and, therefore, may give rise to contaminated surface water flows. Additionally, various gasses are usually present in both the Coal Measures and Drift deposits close to rivers.

The Coal Measures which are classed as a minor aquifer, allowing the passage of water as well as containing water, extend beneath the Permo-trias. However, these rocks are not generally used as supply of water because of their acid nature caused by both the rocks and past mining activity.

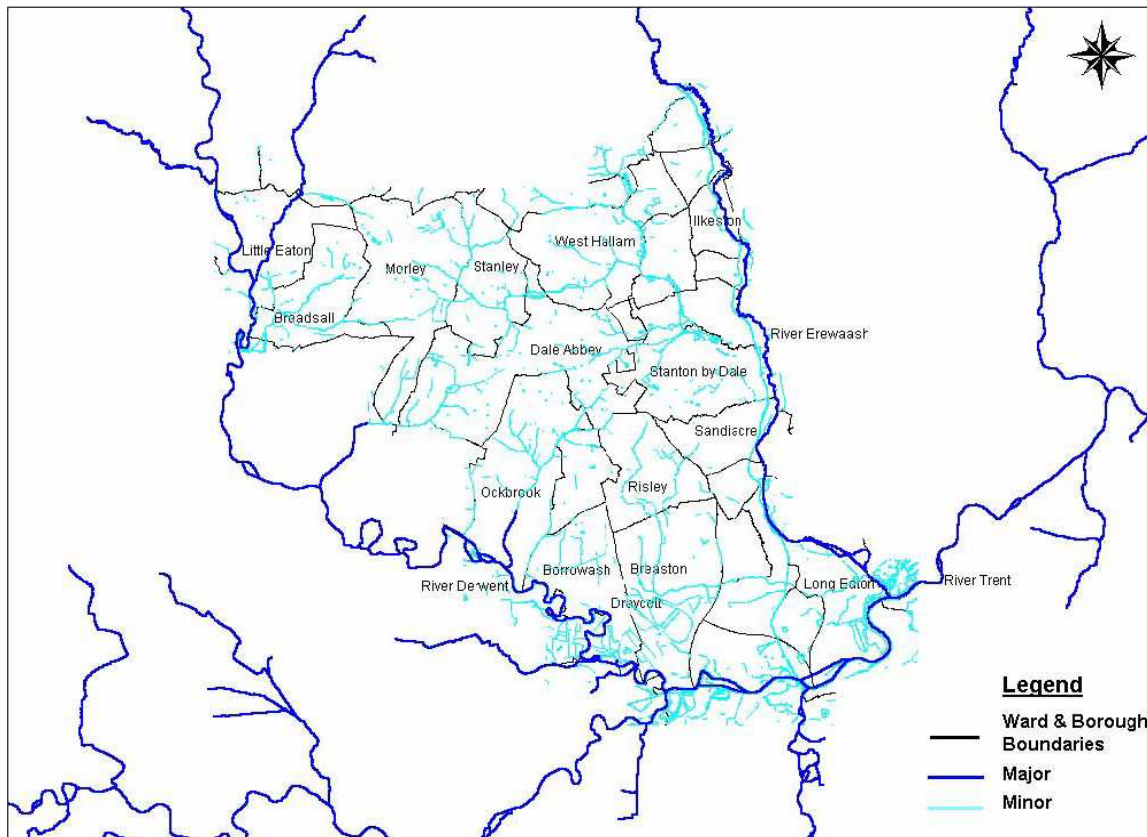
Additionally the Coal Measures geology often produces soils with arsenic concentrations significantly higher than the background and sometimes above published soil guideline values.

1.5 Hydrogeological aspects of the Borough

1.5.1 Key river networks and surface water courses in the Borough

Three key rivers coincide with two thirds of the Borough's boundaries. The River Derwent follows the western boundary near Eaton Bank to the west of Breadsall, where, before rejoining the Borough near Borrowash, it passes through the Derby City area. From Borrowash it flows in a south-easterly direction along the Borough boundary to a point near the west of Sawley where it enters the River Trent. The Trent then forms part of the southern boundary as far as Long Eaton where it leaves the Borough. The whole of the eastern boundary of the Borough flanks the River Erewash and enters the Trent at Long Eaton. See Figure 1 for map of key river networks and surface water courses in the Borough.

Figure 1. Key River Networks and Surface Water Courses



A list of lakes, ponds and reservoirs locations for Borough is given in Appendix 3

1.5.2 Private drinking water supplies

There is one known Private Water Supply under the regulatory control of the council. This borehole is located at Peat Meadow, Derby Road, Risley, Derby.

1.5.3 Groundwater - Abstractions Points

According to the Environment Agency Midlands Region Part 2a data there are 29 Groundwater Abstractions Points across the Borough that are used for a multitude of uses. For a list of the Abstraction Points, their locations and purpose see Appendix 4.

1.5.4 Groundwaters - Major & Minor Aquifers and Source Protection Zones (SPZ's)

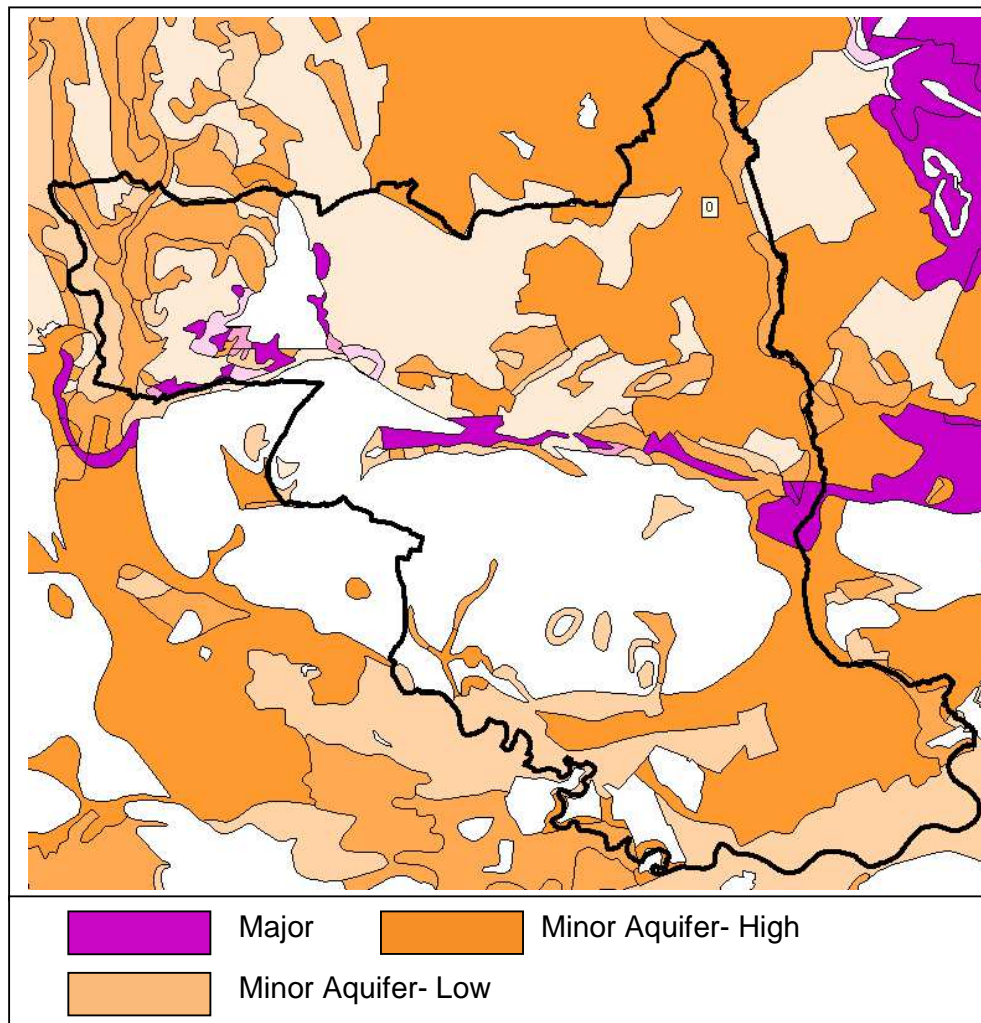
Groundwater is contained within underground strata known as aquifers. Abstraction points (see above) connected to these aquifers can provide water for potable water supplies and a multitude of agricultural and industrial uses. See Appendix 4 for uses of abstraction points across the Borough. Groundwater is usually of high quality and often requires little treatment before use. It is, however, vulnerable to contamination from both diffuse and point source pollutants from direct discharges into groundwater and indirect discharges into or onto land. Prevention from pollution is therefore essential

All groundwaters are controlled waters and are subdivided into two types depending on the strata; highly permeable (major aquifers) and variably permeable (minor aquifers). Major aquifers usually have a greater capacity to transmit contamination compared with minor aquifers.

The type of aquifers and their locations vary considerably across the Borough from major to minor to non-aquifer. Urban areas that follow the River Erewash from Cotmanhay down through Ilkeston and Sandiacre to Long Eaton overlay a mixture of major and minor aquifers. For example, much of Sandiacre overlays a major aquifer. Alternatively, other regions of the Borough, e.g. Long Eaton, have major aquifers overlying Minor Aquifers and vice-versa. Much of Risley and Ockbrook are areas classed as Non-Aquifer.

Areas which overlay aquifers are significantly associated with areas that have high permeability soils. Soils in the regions mentioned above range from high to intermediate permeability, i.e. they will readily transmit a wide range of pollutants to the underlying strata or more significantly to an aquifer.

Figure 3. MapInfo layer showing aquifer status in the Borough and groundwater vulnerability



1.6 Protected Locations

In Erewash Borough there are

- 3 Sites of Special Scientific Interest (SSSI's)
- 11 Local Nature Reserves (LNR's); and
- 8 sites recorded as Regionally Important Geological Sites (RIGS)

These are listed in Table 3.

Table 3 Protected Locations in the Borough of Erewash

Type	Sites	Location
SSSI	Morley Moor Brickpits SSSI, off Brick Kiln Lane	Morley Moor
SSSI &	Breadsall Railway Cutting SSSI, between A608 and	Breadsall
LNR	Lime Lane	
LNR	St. Chads LNR, Church Wilne	Church Wilne
LNR	Forbes Hole	Long Eaton
LNR	Fox Covert, West Park	Long Eaton
LNR	Pewitt Carr, by Nutbrook Canal	Ilkeston
LNR	Manor Floods	Ilkeston
LNR	Pioneer Meadows, south of Kirk Hallam	Kirk Hallam
LNR	Stanton Gate, north of bridge by Erewash Canal	Sandiacre
LNR	Stoney Clouds	Sandiacre
LNR	Trowell Marsh, North of Hallam Fields Lock	Stanton
LNR	Straws Bridge	West Hallam
RIGS	Dale Abbey Cliffs	Dale Abbey
RIGS	Dam Brook	Breadsall
RIGS	Dunshill	Dale Abbey
RIGS	Rigga Quarry	Little Eaton
RIGS	Stanton by Dale Golf Course Quarry	Stanton by Dale
RIGS	Stanton by Dale old Quarry	Stanton by Dale
RIGS	Croft Wood	Breadsall

The Derbyshire Wildlife Sites Register (WSR) lists 92 locations that are important for wildlife in the Borough (see Appendix 5 for location of sites). Sites recorded on the WSR or as RIGS are collectively known as Sites of Importance for Nature Conservation (SINC's).

The River Derwent valley on the west side of the Borough, at little Eaton, has been awarded World Heritage Site status due to its historical and cultural importance.

Locko Park near Spondon/Oakwood is registered by English Heritage as a Historic Park, i.e., a nationally important garden.

As well as its rich natural habitat and diversity, the Borough has a significant historic built environment with 228 listed buildings and six scheduled ancient monuments. See Table 4 for list of monuments. Furthermore, the Local Plan (March 2001) lists 20 conservation areas for preservation and enhancement.

English Heritage will be advised if it appears that a contaminated site under investigation may warrant some level of preservation or protection due to its historical significance.

Table 4 Scheduled Ancient Monument Sites in the Borough of Erewash

Parish	Monument No.	Monument title	Grid Ref. No.
Dale Abbey	39	Dale Abbey	SK 4380 3880
Dale Abbey	40	The Hermitage	SK 4390 3850
Long Eaton	228	Roman Fort (182m) of All Saint's Church, Sawley	SK 4750 3130
Morley	78	Moated Mound	SK 3920 4100
Sandiacre	146	Lock up and Pinfold	SK 4790 3710
West Hallam	141	Moated site in Moat Wood	SK 4390 4060

1.7 Industrial archaeology of the Borough

Coal mining used to dominate the Northern part of Ilkeston, but this has now declined altogether. Numerous collieries were worked over the past two centuries due to the extent of coal measures outcropping over the Northern area of the Borough.

Various Ironworks were and still are operational in the Borough. Previously Ironworks could be found in West Hallam and Long Eaton. Stanton Ironworks, a major producer, remained in operation (as St Gobain Pipelines) at Stanton by Dale until recently and one other firm is located at Sandiacre. The Stanton plant remains largely as a storage depot but casting operations ceased in 2008.

Another long-standing industrial activity of the area was that of hosiery and textiles. This took off particularly in the mid 19th and early 20th centuries, especially around the area of Long Eaton.

Quarrying of stone, gravel and sand has been undertaken at various locations throughout the Borough and some of these have subsequently been used for tipping. The local economy is now based largely on engineering and the manufacture of textiles and furniture.

See Appendix 6 for a list of potentially contaminative industries. This list is not exhaustive, but some of the industries listed may have been operational or are operational in the Borough.

1.8 Human Receptors

In order to be able to identify possible or potential harm to human receptors in the Borough, it is necessary to make an identification of sensitive land uses and potential pathways. Part 2A of the Act lists the following land use types where human receptors might be located.

- Allotments
- Residential developments with gardens
- Residential developments without gardens
- Schools/Nurseries
- Recreational parks, playing fields/open parkland
- Commercial/industrial

Formal identification of these locations can essentially be made through a combination of the use of Ordnance Survey maps, the Council's Geographical Information System (GIS), the Environmental Health Division's relational database for storing environmental enquiries and information from the Planning department.

APPENDIX 3

Ponds, Lakes and Reservoirs in the Borough of Erewash

Pond(s) and Approximate Location	Grid Reference
Ponds Southwest of Manners Industrial Estate	SK4245 & SK4145
Ponds Southeast of Morley Manor	SK4240
Ponds East of Priory Cottages, Morley	SK4138
Ponds North & East of Kirk Hallam Housing Est.	SK4045 & SK4046
Ponds South of Kirk Hallam Housing Est.	SK3945
Ponds/ Disused Canal at Stanton Iron Works	SK3946, SK3947, SK3947
Pond Southeast of Moorfield Farm	SK3845
Pond at Furnace Pond Farm	SK3844
Pond at Locko Park	SK3841
Ponds Northwest of Constitution Hill	SK3644
Pond Northwest of Toton Sidings	SK3548
Ponds West of and South of Draycott House	SK3443
Pond East of Long Eaton Football Ground	SK3350
Pond Northeast of Breaston Fields Farm	SK3346, SK3347
Ponds East of Fields Farm Road	SK3249
Pond at Wyvern Avenue, Long Eaton	SK3248
Ponds West of Trent Rifle Range	SK3149
Pond Near Lock Lane, Long Eaton	SK3148
Ponds Southeast of Ivy House Farm	SK3146
Ponds at Church Wilne	SK3244, SK3245, SK3144, SK3145
Lake Locations	Grid Reference
The Lake at Deer Park	SK3840
Reservoir Locations	Grid Reference
Church Wilne	SK3245, SK3246

This table is not all inclusive, it only lists significant ponds within the Borough. Information contained within the table was obtained from the Ordnance Survey's Explorer Series map titles 259 Derby and 260 Nottingham.

APPENDIX 4

Groundwater and Surface water Abstraction Points in the Borough of Erewash Borough Council

Number	Point Name	Use/Description	Easting	Northing
1	Little Eaton (Nottingham) – River Derwent	Potable Water Supply – Direct (SW)	3594	4076
2	Draycott Intake – River Derwent	Potable Water Supply – Direct (SW)	4451	3270
3	Breadsall – Well	General Farming & Domestic	369	403
4 (borderline)	River Derwent at Little Eaton	Potable Water Supply – Direct (SW)	3592	4081
5	Little Eaton Tunnel (No1)	Potable Water Supply – Direct (SW)	3560	4147
6	Little Eaton Tunnel (No2)	Potable Water Supply – Direct (SW)	3536	4101
7	Land at Breadsall – River Derwent	Spray Irrigation – Direct (SW)	3589	3990
8	River Derwent at Allestree, Derby	Spray Irrigation – Direct (SW)	3589	3990
9	Derby Garden Centre	Horticultural Watering	3650	4050
10	Bankfields Farm – Well	General Farming & Domestic	435	333
11	Locko Park Lake (Lees Brook)	Spray Irrigation – Direct (SW)	4057	3807
12	Borrowash – River Derwent	Hydroelectric Power Generation (SW), Milling & Water Power other than Electricity Generation (SW)	4148	3410
13	Land at Sawley – Well	Spray Irrigation – Direct (SW)	4871	3147
14	Trent Lock Golf Centre – Borehole A	Spray Irrigation – Direct (SW)	4820	3125
15	Trent Lock Golf Centre – Borehole B	Spray Irrigation – Direct (SW)	4822	3124
16 (borderline)	Lockington Ground, Notts. – River Trent	Spray Irrigation – Direct (SW)	480	308
17 (borderline)	Thrumpton Hall Fish Ponds – River Trent	Fish Farm/Cress Pond Throughflow	496	309
18 (borderline)	Ratcliffe-on-Soar Power Station – River Trent	Process Water (SW)	496	308
19	Trent Lock Dry Dock – Erewash Canal	Process Water (SW)	4887	3150
20 (borderline)	Land at Long Eaton – River Trent	Spray Irrigation – Direct (SW)	5025	3161
21 (borderline)	Barton in Fabis – River Trent	Spray Irrigation – Direct (SW)	5115	3230
22	Belmont Nurseries – Well	General Farming & Domestic	470	338
23	Land at Breaston - Well	General Farming & Domestic	470	339
24	Trent College, Long Eaton - Well	General Use Relating to Secondary Category (Medium Loss)	4820	3384
25	Stanton Iron Works, Notts- Nutbrook	Transfer between Sources (Pre Water Act 2003)	462	403
26	Stanton Iron Works, Notts-Nutbrook Canal (1)	Non-Evaporative Cooling (SW), Process Water (SW)	474	389
27	Stanton Iron Works, Notts-Nutbrook Canal (2)		472	391
28	Stanton Iron Works, Notts-Nutbrook Canal (3)		468	393
29	Cottage Farm – Well	General Farming & Domestic (SW)	454	342
30	Manor Farm – Stanley Brook	General Farming & Domestic (SW),	413	402
31	Manor Farm – Stanley Brook (2)	Spray Irrigation – Direct (SW)	405	403
32	Holmes Farm – Well	General Farming & Domestic	458	338
33	Acton Road Works, Long Eaton – Borehole	Process Water	4958	3265
34 (borderline)	Bessell Lane Works, Stapleford – Borehole	Non-Evaporative Cooling, Process Water	4848	3607
35	Kirk Hallam – Stanley Brook	Make-Up or Top Up Water (SW)	45233	41091
36 (borderline)	Bennerley Coal Disposal Point – River Erewash	General Washing/Process Washing (SW), Dust Suppression (SW)	4706	4393
37 (borderline)	Nottingham Canal/River Erewash	Make-Up or Top Up Water (SW)	4773	4171
38	Mill Lane, Breaston – Derbyshire	General Farming & Domestic	4645	3470
39	3 Boreholes at Junction Service Station	Pollution Remediation	4801	3240

APPENDIX 5

Wildlife Sites in the Borough of Erewash

Site No.	Name of Site	Location
ER 002	Alfreton Road Rough Grassland	Breadsall
ER 005	Breadsall Disused Railway	Breadsall
ER 010	Oaklands Brook	Breadsall
ER 013	Peckwash Mills	Little Eaton
ER 019	Camp Wood, Little Eaton	Little Eaton
ER 020	Cotter Wood, Little Eaton	Little Eaton
ER 021	Hatherings Wood, Little Eaton	Little Eaton
ER 022	Moor Plantation & Drum Hill	Little Eaton
ER 023	Moor Road Fields	Breadsall
ER 024	Breadsall Priory Golf Course	Breadsall
ER 031	Baguley's Wood, Grassland and Carr	Dale Moor
ER 033	Rifle Range Pond	Kirk Hallam
ER 034	Pioneer Meadows LNR	Kirk Hallam
ER 037	Sawley Carr	Sawley
ER 038	Church Wilne Reservoir	Draycott
ER 040	Risley Glebe	Risley
ER 043	Kirk Hallam Wood	Kirk Hallam
ER 045	Sowbrook Pond, New Stanton	New Stanton
ER 046	Nutbrook Canal & fields	New Stanton
ER 047	Kirk Hallam Fishing Pond	Kirk Hallam
ER 050	Golden Brook Lagoon, Nature Reserve	Breaston
ER 053	Quarry Hill Quarry, Stanton	Stanton by Dale
ER 054	Stoney Clouds LNR and adjacent Grassland	Sandiacre
ER 055	Erewash Canal, Hallam	Stanton
ER 061	Lock Lane Nature Reserve	Sawley
ER 062	Trent Lock Marsh	Sawley
ER 063	Trent Lock Pond	Sawley
ER 065	Fox Covert LNR	Long Eaton
ER 067	Cloud House, Sandiacre	Sandiacre
ER 070	Hagg Lane	Stanley
ER 073	West Hallam Common Field	West Hallam
ER 074	West Hallam Stream	West Hallam
ER 075	Barton Pool Nature Reserve	Attenborough
ER 076	Attenborough Junction Tip	Attenborough
ER 077	River Trent North Bank	Attenborough
ER 078	Attenborough West Gravel Pit	Attenborough
ER 079	Toton Sidings Pond	Long Eaton
ER 080	Narrow Bridge Fish Pond	Long Eaton
ER 081	Sheet Stores Junction Pond	Long Eaton
ER 082	Poplars Fish Ponds	Long Eaton
ER 083	South Junction Fish Pond	Long Eaton
ER 084	Waterloo Plantation, Hopwell	Hopwell
ER 089	Lindridge House Pond, Dale Moor	Dale Moor
ER 090	Furnace Pond, Dale Moor	Dale Moor
ER 092	Ladywood Disused Pit Woodland	Dale Abbey
ER 093	Lady Wood	Dale Abbey
ER 095	Arbour Hill, Woodland	Dale Abbey
ER 0101	Windmill Farm Field, Ockbrook	Ockbrook
ER 0107	Dunnshill Quarry	Dale Abbey
ER 0108	The Spots Plantation	Dale Abbey
ER 0109	Dunnshill Verge	Dale Abbey
ER 0112	Locko Park Lane	Locko Park
ER 0118	Dunnshill Shelterbelt	Dale Abbey
ER 0119	Spondon Wood	Dale Abbey
ER 0126	Drum Hill Fields, Breadsall Moor	Little Eaton
ER 0131	St. Chads LNR	Church Wilne
ER 0133	Meadow Lane Carr	Long Eaton
ER 0134	Forbes Hole LNR	Long Eaton
ER 0135	Bennerley flash	Ilkeston
ER 0136	Eaton Park Wood	Little Eaton
ER 0137	Pewitt Carr LNR	Ilkeston
ER 0141	Greenwood Avenue Field and Pond	Ilkeston
ER 0144	Oakwell Brickworks & The Beauty Spot	Ilkeston

APPENDIX 6

Potentially contaminative industries

The list below has been drawn up to provide a broad indication of the type of sites that are known to use, or to have used in the past, materials that could pollute the soil. The list is not exhaustive, also that inclusion on this list does not necessary infer the existence of a pollutant linkage.

Abattoirs	Farms	Printed circuit board manufacture
Adhesives manufacture	Fertiliser manufacture	Radioactive materials processing
Agriculture	Fellmongers	Railway land
Aircraft manufacture	Fibre glass works	Railway locomotive manufacture
Airports	Food processing	Refiners of nickel and antimony
Animal burial	Foundries	Resin manufacture
Animal by-product processing	Fuel manufacture	Rubber manufacture
Anodisers	Fuel storage	Scrap metal dealers
Anti-corrosion treatment	Garages and depots	Sealing compound manufacture
Asbestos products	Gas mantle manufacture	Sewage works
Asphalt works	Gas works	Sewage sludge disposal areas
Automotive engineering	Glass works	Sheet metal merchants & works
Battery manufacture	Glue manufacture	Ship breakers
Bearings manufacture	Gum and resin manufacture	Ship builders
Blacksmiths	Hatters	Skein silk dyers
Boiler makers	Hide and skin processors	Small arms manufacture
Bookbinding	Ink manufacture	Smokeless fuel manufacture
Brass & copper tube manufacture	Iron founder	Soap manufacture
Brass founders	Iron works	Solvent manufacture
Brewing	Lacquer manufacture	Solvent recovery
Car manufacture	Laundries	Steel manufacture
Carbon products manufacture	Leather manufacture	Stove enamellers
Cement works	Metal coating	Synthetic fibre manufacture
Ceramics manufacture	Metal manufacture	Tank cleaning
Chemical manufacture & storage	Metal sprayers and finishers	Tanneries
Chrome plating	Mining	Tar and pitch distillers
Coal carbonisation	Mirror manufacture	Textile manufacture
Coal merchant	Motor vehicle manufacture	Thermometer makers
Concrete batching	Oil fuel distributors and suppliers	Timber treatment
Coppersmiths	Oil merchants	Timber preservatives manufacture
Descaling contractors (chemical)	Oil refineries	Tin plate works
Detergent manufacture	Oil storage	Transport depots
Distilleries	Paint and varnish manufacture	Tyre manufacture & retreading
Dockyards	Paper works	Vehicle manufacture
Drum cleaning	Pesticides manufacture	Vulcanite manufacture
Dry cleaners	Petrol stations	Vulcanisers
Dye works	Photographic film works	Waste disposal
Dyers and finishers	Photographic processing	Waste recycling
Electricity generation	Paper manufacturer	Waste treatment
Electrical engineers	Plastics works	Zinc works
Electro platers	Plating works	
Engineering Works	Power stations	
Explosives manufacture (inc fireworks)	Print works	

APPENDIX 7

Overview of Preliminary Risk Assessment Methodology

The Preliminary Risk Assessment Methodology is an index based system initially developed by Shaun Rowson as part of an MSc project supervised by Paul Nathaniel at the University of Nottingham. The system is currently embedded in the MVM Contaminated Land database. It is intended to rank sites rather than giving a score which is proportionate to risk. It is thus likely to be non-linear

The system starts by assigning a score to the potential source. Source scoring is based on Sym's list (indicated in Appendix 6) and assigns a score of 30, 20 or 10 depending on the perceived risk from the source. For example Gasworks etc score 30, Engineering scores 20 and Food Processing scores 10. There is the possibility to manually switch the score on the basis of other evidence by entering High, Medium or Low Risk into the appropriate part of the database. This score is only likely to change if information about the site points to a source demanding a higher score.

The Receptors are then scored depending on nature and distance of the receptor with score ranging from 30 for schools and nurseries within 50m to a source protection zone 100-500m away scoring 10. Supplementary scores are added to surface water receptors (depending on the Environment Agency River Quality Objective) and any abstractions (depending on the use to which abstracted water is put). The receptor score might change over time as land uses change.

Only the highest scores from each these two categories are counted.

A score is then added which is dependent upon on the information available regarding a pathway. The scores range from a high of +20 (positive evidence of a pathway) to a low of -20 (evidence that pathway is unlikely). If no information exists a score of 6 is applied. Clearly it is this "information on pathway" score that is likely to change as more information becomes available.

This score is added to the highest from the two previous categories to produce a **basic score**.

The score is then modified by being added to according to the following parameters:

- 1) Solid Geology- scores up to 4;
- 2) Drift Geology-scores up to 4;
- 3) Soil Drainage Status – scores up to 3;
- 4) Geological faults - add 3 if a fault is within 50m;
- 5) Floodplain – add 3 if site is on a floodplain;
- 6) Nature and intactness of hard cover - scores up to 4;
- 7) Topography-add 3 if topography is such that it would exacerbate any problems.

These scores are summed and added to the basic score. Within Erewash this process has produced scores as high as 89 and for sites where full assessment data is available as low as 30. Sites with a score of more than 60 are currently being targeted as the high priority group for more detailed investigation.

Appendix 8 – Statutory Guidance

Categories of Significant harm and Significant Possibility of Significant harm

Significant harm to Health

The paragraphs below set out categories of harm that should be considered to be significant harm to human health. In all cases the harm should be directly attributable to the effects of contaminants in, on or under the land on the body(ies) of the person (s) concerned.

Conditions for determining that land is contaminated land on the basis that significant harm is being caused would exist where: (a) the local authority has carried out an appropriate, scientific and technical assessment of all the relevant and available evidence; and (b) on the basis of that assessment, the authority is satisfied on the balance of probabilities that significant harm is being caused (i.e. that it is more likely than not that such harm is being caused) by significant contaminant (s).

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 (such as that caused by chemical or biochemical properties of substance such as injury from explosive or asphyxiating properties of gases); birth defects; and impairment of reproductive functions.

Other health effects may be considered by the local authority to constitute significant harm. For example, a wide range of conditions may or may not 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 liver or kidneys; or a wide range of other health impacts. In deciding whether or not a particular form of harm is significant harm, the local authority should 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. The authority should only conclude that harm is significant if it considers that treating the land as contaminated land would be in accordance with the broad objectives of the regime.

If the local authority decides that harm is occurring but is not significant harm, it should consider whether such harm might be relevant to consideration of whether or not the land poses a significant possibility of significant harm. For example, this might be the case if there is evidence that the harm maybe a precursor to, or indicative or symptomatic of, a more serious form of harm, or that repeated episodes of minor harm (e.g. repeated skin ailments) might lead to more serious form harm in the longer term.

In cases where the local authority considers that: (i) significant harm may be being caused, or is likely to have been caused in the past; and (ii) there is a significant possibility that it may happen again, the authority may choose to consider whether to determine the land on grounds of significant possibility of significant harm (as an alternative to consideration that significant harm is being caused).

Significant Possibility of Significant Harm to Health

In deciding whether or not a significant possibility of significant harm to human health exists, the local authority should first understand the possibility of significant harm from the relevant contaminant or pollutant linkage(s) and the levels of uncertainty attached to

that understanding; before it goes on to decide whether or not the possibility of significant harm is significant.

Possibility of Significant harm to health

In assessing the possibility of significant harm to human health from the land and associated issues, the local authority should act in accordance with the advice on risk assessment.

The term “possibility of significant harm” as it applies to human health, for the purposes of this guidance, means the risk posed by one or more relevant contaminant linkage(s) relating to the land. It comprises:

- (a) The estimated likelihood that significant harm might occur to an identified receptor, taking into account the current use of the land in question.
- (b) The estimated impact if the significant harm did occur i.e. the nature of the harm, the seriousness of the harm to any person who might suffer it, and (where relevant) the extent of the harm in terms of how many people might suffer it.

In estimating the likelihood that a specific form of significant harm, might occur the local authority should, among other things, consider:

- (a) The estimated probability that the significant harm might occur: (i) if the land continues to be used as it is currently used; and (ii) where relevant, if the land were to be used in a different way (or ways) in the future having regard to the guidance on “current use”.
- (b) The strength of evidence underlying the risk estimate. It should also consider the key assumptions on which the estimate of likelihood is based, and the level of uncertainty underlying the estimate.

In some cases the local authority’s assessment of possibility of significant harm may be based, solely or partially on a possible risk that may exist if circumstances were to change in the future within the bounds of the current use of the land. For example, an assessment may be based on a possible risk if a more sensitive receptor were to move onto the land at some point in the future. In such cases the authority should ensure that the possibility of the future circumstance is occurring is taken into account in estimating the overall possibility of significant harm.

The local authority should estimate the timescale over which the significant harm might become manifest, to the extent that this is possible and practicable (and recognizing that often it may only be possible and practicable to give a broad indication of the estimated timescale).

Having completed its estimation of the possibility of significant harm, the local authority should produce a risk summary.

Deciding whether a possibility of significant harm is significant (human health)

The decision on whether the possibility of significant harm being caused is significant is a regulatory decision to be taken by the relevant local authority. In deciding whether the possibility of significant harm being caused is significant, the authority is deciding whether the possibility of significant harm posed by contamination, in on or under the land is sufficiently high that regulatory action should be taken to reduce it, with all that

would entail. In taking such decisions, the local authority should take account of the broad aims of the regime.

In deciding whether or not land is contaminated land on grounds of significant possibility of significant harm to human health, the local authority should use the categorisations described below. Categories 1 and 2 would encompass land which is capable of being determined as contaminated land which is not capable of being determined on such grounds.

In considering whether a significant possibility of significant harm exists, the local authority should consider the number of people who might be exposed to the risk in question and/or the number of people it estimates would be likely to suffer harm. In some cases, the authority may decide that this is not a particularly relevant consideration: it is quite possible that land could be determined as contaminated land on the basis of a significant possibility of significant harm to an individual or a small number of people. However in other cases the authority may consider that the number of people affected is an important consideration, for example if the number of people at risk substantially alters the authority's view of the likelihood of significant harm or the scale and seriousness of such harm if it did occur.

Category 1: Human Health

The local authority should assume that a significant possibility of significant harm exists in any case where it considers there is an unacceptably high probability, supported by robust science based evidence that significant harm would occur if no action is taken to stop it. For the purposes of this guidance, these are referred to as "Category 1: Human Health case where:

- (a) The authority is aware that similar land or situations are known, or are strongly suspected on the basis of robust evidence, to have caused such harm before in the United Kingdom or elsewhere: or
- (b) The authority is aware that similar degrees of exposure (via any medium) to the contaminant(s) in question are known, or strongly suspected on the basis of robust evidence, to have caused such harm before in the United Kingdom or elsewhere;
- (c) The authority considers that significant harm may already have been caused by contaminants in, on or under the land, and that there is an unacceptable risk that it might continue or occur again if no action is taken. Among other things, the authority may decide to determine the land on these grounds if it considers either:
 - (i) that there is insufficient evidence to be sure of meeting the "balance of probability" test for demonstrating that significant harm is being caused; or
 - (ii) that the time needed to demonstrate such a level of probability would cause unreasonable delay, cost or disruption and stress to affected people particularly in cases involving residential properties.

Category 4: Human Health

The local authority should not assume that land poses a significant possibility of significant harm if it considers that there is no risk or that the level of risk posed is low. For the purposes of this guidance, such land is referred to as a "Category 4: Human Health" case. The authority may decide that the land is a Category 4: Human Health case as soon as it considers it has evidence to this effect, and this may happen at any stage during risk assessment including the early stages.

The local authority should consider that the following types of land should be placed into Category 4: Human Health:

- (a) Land where no relevant contaminant linkage has been established.
- (b) Land where there are only normal levels of contaminants in soil, as explained in Section 3 of this Guidance.
- (c) Land that has been excluded from the need for further inspection and assessment because contaminant levels do not exceed relevant generic assessment criteria in accordance with this Guidance.
- (d) Land where estimated levels of exposure to contaminants in soil are likely to form only a small proportion of what a receptor might be exposed to anyway through other sources of environmental exposure (e.g. in relation to average estimated national levels of exposure to substances commonly found in the environment, to which receptors are likely to be exposed in the normal course of their lives).

The local authority may consider that land other than the types described in the paragraph above should be placed into Category 4: Human Health if following a detailed quantitative risk assessment it is satisfied that the level of risk posed is sufficiently low.

Local authorities may decide that particular land apparently matching the descriptions of paragraph 4.21 (b) or (d) immediately above poses sufficient risk to human health to fall into the categories other than Category 4. However, such cases are likely to be very unusual and the authority should take particular care to explain why the decision has been taken, and to ensure that it is supported by robust evidence.

Categories 2 and 3: Human Health

For land that cannot be placed into Categories 1 or 4, the local authority should decide whether the land should be placed into either: (a) Category 2: Human Health, in which case the land would be capable of being determined as contaminated land on grounds of significant possibility harm to human health: or (b) Category 3: Human Health, in which case the land would not be capable of being of being determined on such grounds.

The local authority should consider this decision in the context of the broad objectives of the regime and of the Government's policy. It should also be mindful of the fact that the decision is a positive legal test, meaning that the starting assumption should be that land does not pose a significant possibility of significant harm unless there is a reason to consider otherwise. The authority should then, in accordance with paragraphs below, decide which of the following two categories the land falls into:

- (a) Category 2: Human Health. Land should be placed into Category 2 if the authority concludes, on the basis that there is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm, with all that this might involve and having regard to Section 1. Category 2 may include land where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but nonetheless the authority considers on the basis of the available evidence, including expert opinion, that there is a strong case for taking action under Part 2A on a precautionary basis.
- (b) Category 3: Human Health. Land should be placed into Category 3 if the authority concludes that the strong case described above does not exist, and therefore the legal test for significant possibility of significant harm is not met. Category 3 may include land where the risks are not low, but nonetheless the authority considers

that regulatory intervention under Part 2A is not warranted. This recognizes that placing land in Category 3 would not stop others, such as the owner or occupier of land, from taking action to reduce risks outside of the Part2A regime if they choose. The authority should consider making available the results of its inspection and risk assessment to the owner/ occupiers of Category 3 land.

In making its decision on whether land falls into Category 2 or Category 3, the local authority should first consider its assessment of the possibility of significant harm to human health, including the estimated likelihood of such harm, the estimated impact if it did occur, the timescale over which it might occur, and the levels of certainty attached to these estimates. If the authority considers, on the basis of this consideration alone, that the strong case described above does not exist, the authority should make its decision on whether the land falls into Category 2 or Category 3 on this basis regardless of the other factors discussed in the paragraph below.

If the authority considers that it cannot make a decision in line with paragraph 4.26, it should consider other factors which considers are relevant to achieving the objectives set out in Section 1. This should include consideration of:

- (a) The likely direct and indirect health benefits and impacts of regulatory intervention. This would include benefits of reducing or removing the risk posed by contamination. It would also include any risks from contaminants being mobilized during remediation (which would in any case have to be considered under other relevant legislation); and any indirect impacts such as stress-related health effects that may be experienced by affected people, particularly local residents. If it is not clear to the authority that the health benefits of remediation would outweigh the health impacts, the authority should presume the land falls into Category 3 unless there is strong reason to consider otherwise.
- (b) The authority's initial estimate of what remediation would involve; how long it would take; what benefit it would be likely to bring; whether the benefits would outweigh the financial and economic costs; and any impacts on local society or the environment from taking action that the authority considers to be relevant .

In making its consideration in regard to the above, the local authority is not required to make a detailed assessment. For example, the consideration should not necessarily involve quantification of the impacts, particularly if the authority considers it is not possible or reasonable to do so, and the authority is not expected to produce a detailed cost-benefits or sustainability analysis. Rather it is expected to make a broad consideration of factors it considers relevant to achieving the aims of the regime.

If having taken the above factors into account, the local authority still cannot decide whether or not a significant possibility of significant harm exists, it should conclude that the legal test has not been met and the land shouldn't be placed in Category 3.

Significant Harm and Significant Possibility of such harm (non-human receptors)

In considering non-human receptors, the local authority should only regard receptors described in Tables 1 and 2 below, as being relevant for the purposes of Part 2A (e.g. harm to an ecological system outside the description in Table 1 should not be considered to be significant harm). Similarly, in considering whether significant harm is being caused or there is a significant possibility of such harm, the authority should only regard the forms of harm described in Tables 1 and 2 as being relevant.

Tables 1 and 2 below give guidance on how the local authority should go about deciding whether or not: (i) significant harm is being caused; or (ii) there is a significant possibility of such harm to non-human receptors. In making such decisions the authority should have close regard to Section 1 and should only consider determining land as contaminated land if it is satisfied it would be in accordance with the broad aims set out in Section 1.

In Tables 1 and 2 references to “relevant information” mean information which is: (a) scientifically-based; (b) authoritative; (c) relevant to the assessment of risks arising from the presence of contaminants in soil; and (d) appropriate to inform the determination of whether any land is contaminated land.

In considering “ecological system effects” described in Table 1, the local authority should Natural England and have regard to its comments before deciding whether or not to make a determination.

Table 1 – Ecological System Effects

Relevant Type of Receptor	Significant Harm	Significant Possibility of 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"> - a site of special scientific interest (under Section 28 of the Wildlife and Countryside Act 1981) - a national nature reserve (under S.35 of the 1981 Act) - a marine nature reserve (under S36 of the 1981 Act) - an area of special protection for birds (under. 3 of the 1981 Act) - 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 - Any nature reserve established under Section 21 of the National Parks and Access to the Countryside Act 1949. 	<p>The following types of harm should be considered to be significant harm:</p> <ul style="list-style-type: none"> - 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 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. <p>In the case of European sites, harm should also be considered to be significant harm if it endangers the favorable conservation status of natural habitats at such location 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"> - significant harm of that description is more likely than not result from the contaminant linkage in question: or - 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. <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

Relevant Types of Receptor	Significant harm	Significant Possibility of Significant harm
<p>Property in the form of:</p> <ul style="list-style-type: none"> - crops, including timber; - produce grown domestically, or on allotments, for consumption; - livestock; - other owned or domesticated animals; - wild animals which are the subject of shooting or fishing rights. 	<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 no longer fit for purpose when it fails to comply with the provision of the Food Safety Act 1990.</p> <p>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. In this guidance this description of significant harm is referred to as an “animal or crop effect”.</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 belowground level, but does not include plant or machinery comprised in a building, or a buried services such as sewers, water pipes or electricity cables.</p>	<p>Structural failure, substantial damage or substantial interference with any right of occupation.</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 contamination 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>

Significant pollution of controlled waters and significant possibility of such pollution. This sub-section give Guidance on how the local authority should go about deciding whether significant pollution of controlled waters is being caused, or whether there is a significant possibility of such pollution being caused. This sub-section deals with controlled waters as a receptor in contaminant linkages, and not as a pathway.

In establishing whether a significant pollution of controlled waters is being caused, or whether there is a significant possibility of such pollution being caused, the local authority should have regard for any technical guidance issued by the Environment Agency to support this Guidance. If the authority considers it likely that land might be contaminated land on such grounds, it should consult the Environment Agency and have strong regard to the Agency's advice.

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, except that "ground waters" does not include waters contained in underground strata but above the saturation zone.

Given that the Part 2A regime seeks to identify and deal with significant pollution (rather than lesser levels of pollution), the local authority should seek to 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.

Significant pollution of controlled waters

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, but which cannot be dealt with under those Regulations.
- (b) Inputs resulting in deterioration of the quality of the 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 Environmental 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)).

In some circumstances, the local authority may consider that the following types of pollution may constitute significant pollution: (a) significant concentrations of hazardous substances in 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. The local authority should only conclude that pollution is significant if it considers that treating the land as contaminated land would be in accordance with the broad objectives of the regime. This would normally mean that the authority should conclude that less serious

forms of pollution are not significant. In such cases the authority should 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 the paragraphs 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.

Significant pollution of controlled waters is being caused

In deciding whether significant pollution of controlled waters is being caused, the local authority should consider that this test is only met where it is satisfied that the substances in question are continuing to enter controlled waters; or that they have already entered the waters and are likely to do so again in such a manner that past and likely future entry in effect constitutes on-going pollution. For these purposes, the local authority should:

- (a) Regard substances as having entered controlled waters where they are dissolved or suspended in those waters, or (if that are immiscible with water) they have direct contact with those waters on or beneath the surface of the water.
- (b) Take the term “continuing to enter” to mean any measurable entry of the substance(s) into controlled waters additional to any which has already occurred.
- (c) Take the term, “likely to do so again” to mean more likely than not to occur again.

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

Significant possibility of significant pollution of controlled waters

In deciding whether or not a significant possibility of significant pollution of controlled waters exists, the local authority should first understand the possibility of significant pollution of controlled waters posed by the land, and the levels of certainty/ uncertainty attached to that understanding, before it goes on to decide whether or not that possibility is significant. The term “possibility of significant pollution of controlled waters” means the estimated likelihood that significant pollution of controlled waters might occur. In assessing the possibility of significant pollution of controlled waters from land, the local authority should act in accordance with the advice on risk assessment in this guidance.

In deciding whether the possibility of significant pollution of controlled waters is significant the local authority should bear in mind that Part 2A makes the decision a positive legal test. In other words, for particular land to meet the test the authority needs reasonably to believe that there is a significant possibility of such pollution, rather than to demonstrate that there is not.

Before making its decision on whether a given possibility of significant pollution of controlled waters is significant, the local authority should consider:

- (a) The estimated likelihood that the potential significant pollution of controlled waters would manifest; the strength of evidence underlying the estimate; and the level of uncertainty underlying the estimate.
- (b) The estimated impact of the potential significant pollution if it did occur. This should include consideration of whether the pollution would be likely to cause a breach of European water legislation, or make a major contribution to such a breach.
- (c) The estimated timescale over which the significant pollution might become manifest.
- (d) The authority's initial estimate of whether remediation is feasible, and if so what it would involve and the extent to which it might provide a solution to the problem; how long it would take; what benefit it would be likely to bring; and whether the benefits would outweigh the costs and any impacts on local society or the environment from taking action.

The local authority should also consider these factors in the context of the broad objectives of the regime. It should also consider how the factors interrelate (e.g. likelihood relative to impact). The authority should then decide which of the following categories the land falls into. Categories 1 and 2 would comprise cases where the authority considers that a significant possibility of significant pollution of controlled waters exists. Categories 3 and 4 would comprise cases where the authority considers that a significant possibility of such pollution does not exist.

Category 1 (Water): This covers land where the authority considers that there is a strong and compelling case for considering that a significant possibility of significant pollution of controlled water exists. In particular this would include cases where there is a robust science based evidence for considering that it is likely that a high impact pollution would occur if nothing were done to stop it.

Category 2 (Water): This covers land where: (i) the authority considers that the strength of evidence to put the land into Category 1 does not exist; but (iii) nonetheless, on the basis of available scientific evidence and expert opinion, the authority considers that the risks posed by the land are of sufficient concern that the land should be considered to pose a significant possibility of significant pollution of controlled waters on a precautionary basis, with all that this might involve (e.g. likely remediation requirements, and the benefits, costs and other impacts of regulatory intervention). Among other things, this category might include land where there is a relatively low likelihood that the most serious types of significant pollution might occur.

Category 3 (Water): This covers land where the authority concludes that the risks are such that (whilst the authority and others might prefer they did not exist) the tests set out in Categories 1 and 2 above are not met, and therefore regulatory intervention under Part 2A is not warranted. This category should include land where the authority considers that it is very unlikely that serious pollution would occur; or where there is a low likelihood that less serious types of significant pollution might occur.

Category 4 (Water): This covers land where the authority concludes that there is no risk, or that the level of risk posed is low. In particular, the authority should consider that this is the case where: (a) no contaminant linkage has been established in which controlled waters are the receptor in the linkage; or (b) the possibility only relates to types of pollution described in the paragraph above (i.e. types of pollution that should not be

considered to be significant pollution): or (c) the possibility of water pollution similar to that which might be caused by “background” contamination as explained in section in Section 3.

APPENDIX 9

Sources of Information used in Identifying Contaminated Land

Resource	Borough Specific	Use
Historic map epochs (time periods) of the Borough	Digital maps from Landmark Limited Scale 1:2500 Epochs 1) 1879 – 1885 2) 1900 – 1902 3) 1914 – 1921 4) 1937 – 1938 Incomplete 5) 1955 –1956 6) 1966 –1969 Incomplete 7) 1971 – 1982 8) 1983 – 1987 9) 1977 – 1995 1:250.00	To identify sources
Historic land use database	A suitable database has been purchased that is compatible with the Council's GIS, enabling identification of contaminated land	To identify sources
Geological maps	1:50 000 solid and drift geological paper maps have been purchased. This may be purchased in a digitised format. In addition we will seek to obtain borehole data, natural contamination maps and soil maps. Digital maps, scale 1:10000 has also been purchased	To characterise sources and pathways
Hydrogeological maps	Groundwater Vulnerability Maps covering the Borough in digitised format have been purchased	To identify receptors (controlled waters)
Industrial Archaeology Map	The Local History Museum's map of past industrial activity within the Borough has been obtained	To identify potential sources of contamination
Source Protection Zones	Areas of groundwater that receive special protection by the Environment Agency are identified on the EA website. These have been downloaded and will be used in conjunction with the Council's GIS	To characterise receptors (controlled waters)
Environmental Health Division Records	The Council maintains a computer database of complaints. It is anticipated that this system will interface with the GIS to help identify sites	To identify known information on contamination
Planning Records	Includes all digitised information on SSSI's, World Heritage Sites, Historic Parks & Gardens, Nature Reserves, Wildlife Sites, Geological Sites, Reservoirs, Listed Buildings, Scheduled Ancient Monuments and Other Archaeological Sites	To identify known information on contamination and potential receptors
Register of Prescribed Processes authorised under Part I Environmental Protection Act 1990	The Council maintains a public register containing details of authorised industrial processes	To identify sources of contamination

APPENDIX 9 continued.....

Sources of Information used in Identifying Contaminated Land

Resource	Borough Specific	Use
Erewash Borough Saved Policy Document July 2008	Provides detailed planning proposals for the Borough and up to date information on land use	To identify receptors (particularly protected areas of the environment)
Licensed Petroleum Officer Records	Details relating to former petroleum storage within the Borough	To identify sources of contamination
Waste Management Licences	Environment Agency public register of sites licensed for waste management activities provided relevant information relating to sites in the Borough	To identify sources of contamination
Minerals Planning Information	Minerals Planning Section, Matlock, may hold geological information pertaining to the area	To identify sources of contamination
Erewash Borough Council Development Services Information	Site investigation reports and remediation strategies undertaken on land which has been subject to development control	Establishing the current status of land use
Aerial Photography	Erewash Borough Council has purchased digital aerial photography for 2001 and a collection of RAF air photographs covering the entire borough from 1948-1952	To identify sources of contamination
Nitrate Vulnerable Zones	Defra information on sensitive receptors	To identify potential receptors
Trade Directories Information etc	Kelly Directories and The Yellow Pages	To identify sources
Schools/Colleges/ Nurseries etc	Erewash Borough Council's and Derbyshire County Council's own records – available as a MapInfo layer.	To identify potential receptors
Recreation Ground/Park Land	Erewash Borough Council's own records	To identify potential receptors
Allotments	Erewash Borough Council's own records	To identify potential receptors
Local Plan	Erewash Borough Council's plans showing new developments	To identify potential receptors
Electrical Sub Stations	Past and present sub stations have been identified from modern and historic maps. Surveys have been initiated to identify which ones are labelled by Eon as having once contained PCBs.	To identify potential sources.
Scheduled Ancient Monuments	Erewash Borough Council's own records	To identify potential receptors
Tree Preservation Orders	Erewash Borough Council's own records	To identify potential receptors
The Sites and Monuments Record	Made available Derbyshire County Council	To identify potential receptors
Water courses	Rivers, streams, ponds and lakes. River quality data from The Environment Agency	To identify receptors (controlled waters)
Ancient Woodland	Erewash Borough Council's own records	To identify potential receptors

APPENDIX 10

Glossary of Terms

This Strategy uses a number of terms which are defined in Part IIA of the 1990 Act, other Acts or in the guidance itself. The meanings of the most important of these are set out below, along with a reference to the section in the Act or the paragraph in which the relevant term is defined. For ease of reading by the lay person some interpretation of terms has been incorporated into this glossary.

Ancient Wood and Grassland: Land that has had continuous woodland cover since at least 1600AD and may be:

- Ancient semi-natural woodland.
- Ancient woodland sites which have retained the native tree and shrub cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally.
- Ancient Replanted Woodland.
- Ancient woodland sites where the original native tree cover has been felled and replaced by planting, usually with conifers and usually this century.

Apportionment: any determination by the enforcing authority (Erewash Borough Council, Environment Agency) under section 78F(7) (that is, a division of the costs of carrying out any remediation action between two or more persons). Paragraph D.5(e)

Appropriate person(s): defined in section 78A(9) as:

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

Brownfield site: A site that has been generally abandoned or underused where redevelopment is complicated by actual or perceived environmental contamination. Only a small number of Brownfield sites will meet the definition of contaminated land. A full formal definition of previously developed land is given in Planning Policy Guidance Note No.3: Housing [PPG 3], a copy of which can be viewed on the Internet at www.planning.detr.gov.uk/ppg3/9.htm

Caused or knowingly permitted: test for establishing responsibility for remediation, under section 78F(2).

CLEA: Contaminated Land Exposure Assessment, a methodology for carrying out a risk assessment.

Contaminated land: Section 78A(2) defines contaminated land for the purposes of Part 2A as:

“any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that:

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

Conceptual Model: A conceptual model represents the characteristics of the site in a diagrammatic or written form that shows the possible relationships between contaminants, pathways and receptors.

Controlled Waters: defined in section 78A(9) by reference to Part III (section 104) of the Water Resources Act 1991. These include:

- a. Inland waters (rivers, streams, underground streams, canals, lakes and reservoirs)
- b. Ground waters (any water contained in underground strata, wells or boreholes)
- c. Territorial waters
- d. Coastal waters

Detailed Quantitative Risk Assessment: It is a level of risk assessment is used decide whether there are unacceptable risks which uses more detailed site specific information and criteria. It may be used to refine earlier assessments using generic risk assessment. Uses exposure models and toxicological reference values taken from short-term exposure studies to assess risk

Deterministic risk assessment: A deterministic model is one such that if the various parameters are specified exactly, then an exact prediction for the lifetime is obtained.

DETR: Department of the Environment Transport and the Regions.

Defra: Department for Environment, Food and Rural Affairs.

EA: The Environment Agency

Eco-system: A biological system of interacting organisms and their physical environment.

Geographical Information System (GIS): A data-handling and analysis system based on sets of data distributed spatially in two dimensions. Data sets may be map-orientated.

Generic Assessment/ Generic Quantitative risk Assessment: this stage of assessment usually follows preliminary risk assessment. Based on the conceptual model developed as part of preliminary risk assessment, further information is collected about the site and its surrounds through intrusive site investigative techniques (which can include staged intrusive investigations). This includes information on the actual presence and extent of contaminants, pathways and receptors that may form pollutant linkages and give rise to unacceptable risks. The initial conceptual model is refined as a result of the investigations.

ICRCL: Interdepartmental Committee on Remediation of Contaminated Land.

Listed Buildings: Buildings placed on statutory lists of buildings of 'special architectural or historic interest' compiled by the Secretary of State for Culture, Media and Sport under the Planning (Listed Buildings and Conservation areas) Act 1990, on advice from English Heritage.

National Nature Reserves (NNR): Land declared under the National Parks and Access to the countryside Act 1949 or Wildlife and Countryside Act (1981) as amended. National Nature Reserves protect the most important areas of wildlife habitat and geological

formations in Britain, and act as places for scientific research.

Owner: defined in section 78A(9) as:

“A person (other than a mortgagee not in possession) who, whether in his own right or as trustee for any other person is entitled to receive the rack rent of the land, or where the land is not let at a rack rent, would be so entitled if it were so let.”

Pathway: one or more routes or means by, or through, which a receptor:

- (a) is being exposed to, or affected by a contaminant, or
- (b) could be so exposed or affected.

Pollutant linkage/ Contaminant linkage: the relationship between a contaminant, a pathway and a receptor.

Preliminary Risk Assessment: the purpose of preliminary risk assessment is to develop an initial conceptual model and establish whether or not there are potentially unacceptable risks. The assessor undertaking the assessment collects and reviews largely desk based information to prepare a conceptual model to identify possible pollutant linkages. This stage of assessment can include some exploratory site investigation. Information collection usually includes desk study information and site reconnaissance information

Probabilistic risk assessment: can basically be thought of as a thorough process which develops integrated, systematic, and quantitative information suitable for aiding risk management decision-making in the face of uncertainties.

Ramsar: A ‘Ramsar site’ is the land listed as a Wetland of International Importance under the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (the Ramsar Convention) 1973.

Remediation: defined in section 78A(7) as

- (a) the doing of anything for the purpose of assessing the condition of
 - (i) the contaminated land in question;
 - (ii) any controlled waters affected by that land; or
 - (iii) any land adjoining or adjacent to that land;
- (b) the doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land or waters for the purpose
 - (i) of preventing or minimising, or remedying or mitigating the effects of any significant harm, or any pollution of controlled waters, by reason of which the contaminated land is such land; or
 - (ii) of restoring the land or waters to their former state: or
- (c) the making of subsequent inspections from time to time for the purposes of keeping under review the condition of the land or waters.”

Remediation declaration: defined in section 78H(6). It is a document prepared and published by the enforcing authority recording remediation actions which would have been specified in a remediation notice, but which it is prevented from specifying by virtue of sections 78E(4) or (5), the reasons why it would have specified those actions and the

grounds on which it is satisfied that it is prevented from specifying them in a notice.

Remediation notice: defined in section 78E(1) as a notice specifying what an appropriate person(s) is to do by way of remediation and the periods within which the person(s) is required to do each of the things so specified.

Remediation statement: defined in section 78H(7). It is a statement prepared and published by the responsible person detailing the remediation actions which are being, have been or are expected to be, done as well as the periods within which these things are to be done.

Risk assessment: Risk can be defined as the combination of:

- a. The probability of frequency of occurrence of a defined hazard (for example, exposure to a property of a substance with the potential to cause harm).
- b. The magnitude (including the seriousness) of the consequences.

Semi-quantitative risk assessment: is a mixture of descriptive and numerical risk estimation. Useful if you have relatively low confidence limits on the available data coupled with a large number of unknowns e.g. spatial distribution of contaminants

Significant harm: defined in section 78(5). It means any harm which is determined to be significant in accordance with the statutory guidance in Chapter A

Significant pollutant: a pollutant which forms part of a significant pollutant linkage.

Significant pollutant linkage: a pollutant linkage which forms the basis for a determination that a piece of land is contaminated land.

Significant possibility of significant harm: a possibility of significant harm being caused which, by virtue of section 78A(5), is determined to be significant in accordance with the statutory guidance in Chapter A.

Sites of Special Scientific Interest (SSSI): A site of Special Scientific Interest (SSSI) is the land notified as an SSSI under the Wildlife and Countryside Act (1981), amended.

Source protection zone: Protection zone around certain sources of ground water used for public water supply. Within these zones, certain activities and processes are prohibited or restricted.

Special Area of Conservation (SAC): Land designated under Directive (92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

Special Protection Area (SPA): Land classified under Directive 79/409 on the Conservation of Wild Birds.

Special site: defined by section 78A(3) in the Environment Act 1995 as:

Any contaminated land

(a) which has been designated as such a site by virtue of section 78C(7), 78D(6) and whose designation as such has not been terminated by the appropriate Agency under section 78Q(4)... ..”

Moreover, Contaminated Land (England) Regulations 2000 define ‘Special Sites’, which includes land associated with the following situations:

- pollution of controlled waters as defined in the Regulations;

- contamination by certain chemicals used as pesticides;
- contamination by waste acid tar;
- oil refining;
- manufacture of explosives;
- integrated pollution control sites, i.e., land on which prescribed processes designated for central control have been carried out;
- nuclear sites; and
- land owned by the Ministry of Defence.

Substance: defined in section 78A(9) as any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour

Triassic: a geological time period spanning 245.0 - 209.0 million years before present.

APPENDIX 11: Higher Priority Sites Requiring Intrusive Site Investigation

Database Reference	Historic Use of land	Current Use of Land	Number of residential properties on footprint of site
CL280 & CL503	Former brickworks with clay pits and coal mining. (pits infilled by 1930's)	Residential with gardens & Recreation Ground	102
CL226	Former large brickworks and associated clay pit	Residential with gardens	78
CL262	Former brickworks and associated clay pit	Residential with gardens & commercial	60
CL0258	Former brickworks with kiln and former coal mine.	Residential with gardens	47
CL164	Infilled ground, brick and tile works (until approx 1910)	Residential (flats)	56
CL260	Infilled Claypit and Brickworks and Lace Factory	Residential with gardens	41
CL108	Former infilled gravel pit	Residential with gardens	35
CL224	Mining and evidence of open cast (infilled ground)	Residential with gardens	23
CL1344	Former elastics factory	Residential with gardens	24
CL45	Former gasometer and infilled clay pits	Residential with gardens & Flats	31 houses & 44 flats
CL1953	Former colliery and allotment gardens.	Residential with gardens	24
CL0264	Former infilled Clay pit and brickworks (infilled by 1920)	Residential with gardens	18
CL1359	Former road haulage	Residential with gardens	13
CL342	Infilled sand Pit	Residential with gardens	14
CL150	Former textile / lace factory	Residential with gardens	18
CL2110	Former unlicensed landfill/ infilled ground (infilled by 1914)	Residential with gardens	8
CL152	Former lime kiln pottery (until approximately 1910)	Residential with gardens	4
CL1990	Former brickyard	Residential with gardens	11
CL1965	Former gasometer	Residential	1
CL250	Former quarry now infilled (evidence of domestic refuse)	Residential with gardens & Recreation ground	2
CL1920	Former mill	Residential with gardens & commercial	1

CL561	Former gasometer and infilled clay pits	Residential with gardens	5
CL0273	Former coal mine and infilled clay pit		
CL644	Former Laundry / dry cleaning facility	Residential with gardens	4
CL1345	Former factory/ works	Residential with gardens	10
CL1929	Former garage with petrol pumps and tanks	Residential with garden	1
CL1910	Former lace factory	Residential (flats)	30 flats
CL1996	Former motor garage	Residential with gardens	16
CL0424	Former foundry	Nursing Home	NA
CL154	Infilled quarry	Residential with gardens & Recreational	7

NB These are the higher priority sites identified to date from the prioritised Part 2A data base of sites which require intrusive site investigation. It should be noted however that detailed inspection of the remaining sites on the prioritised list may result in further sites being identified for intrusive site investigation.