

Bolsover District Council

THE ENVIRONMENTAL PROTECTION ACT 1990 PART IIA

CONTAMINATED LAND INSPECTION STRATEGY

Dan Atkinson
Environmental Health Technical Officer

Steven Holmes
Principal Environmental Health Officer
(Commercial)

Bolsover District Council
Sherwood Lodge
Bolsover
Derbyshire
S44 6NF

June 2001

CONTENTS

Section		Page No
1	Introduction	3
1.1	General Policy of the Bolsover District Council	4
1.2	Regulatory Context	4
1.2.1	Regulatory Role of the District Council and the Environment Agency	5
1.2.2	Defining Contaminated Land	6
1.2.3	Principles of Risk Assessment	7
1.2.4	Requirements for a Strategic Approach	7
1.3	Development of the Strategy	8
1.4	Aims of the Strategy	8
2	Characteristics of the District of Bolsover	9
2.1	Geographical Location	9
2.2	Brief Description and History	9
2.3	District Area	9
2.4	Population Distribution	9
2.5	Current Land Use Characteristics	10
2.6	Details of Authority Ownership of Land	10
2.7	Protected Locations	10
2.8	Key Property Types	10
2.9	Broad Geological/Hydrogeological Features	10
2.10	Key Water Resource/Protection Issues	11
2.11	Current and Past Industrial History	11
3	Aims of the Strategy	13
4	Priority Actions and Timescales	15
4.1	Priorities	15
4.1.1	Stage 1 Production of the Strategy document	15
4.1.2	Stage 2 Formation of a Data Management System	15
4.1.3	Stage 3 Prioritisation of Sites for Detailed Inspection	15
4.1.4	Stage 4 Detailed Inspection of Sites	15
4.2	Timescales	16
5	Procedures	17
5.1	Internal Management arrangements for inspection	17
5.2	Land owned or previously owned by Bolsover District Council	17
5.3	Information Collection	17
5.4	Information Evaluation Management	19
5.5	Information and Complaints	19
5.5.1	General Complaints & Enquires	19
5.5.2	Confidentiality	20
5.5.3	Anonymously supplied information	20
5.5.4	Voluntary Provision of information	20

5.5.5	Anecdotal Evidence	20
5.5.6	Access to Environmental Information	21
5.6	Risk Assessment	21
5.6.1	CLEA and ICRCCL guidelines	21
5.6.2	Risk Assessment for other substances	22
5.6.3	Risk Assessment Models	22
5.6.4	Risk Assessment and Communication	22
6	General Liaison and Communication	23
6.1	Consultees	23
6.2	Communicating with owners, occupiers, and other stakeholders	23
6.3	Powers of entry	24
6.4	The Public Register	24
6.5	Provision of information to interested parties	25
6.6	Provision of information to the Environment Agency	25
7	Review Mechanisms	26
7.1	Triggers for undertaking inspection	26
7.2	Triggers for reviewing inspection decisions	26
7.3	Reviewing the strategy	26
8	Appendix	28
	Figure 1: Schematic representation of the geographical location of the District of Bolsover	28
	Figure 2: Map of the District of Bolsover indicating the major urban areas	29
	Figure 3: Population distribution of the District of Bolsover	30
	Figure 4: Major watercourses and aquifer protection zones	31
	Table 1: Potential high risk contaminative uses	32
	Table 2: Potential medium risk contaminative uses	32
	Table 3: Potential low risk contaminative uses	33
	Table 4: Work programme for the implementation of Part IIA	34
	Details of statutory consultees	35

CHAPTER 1 INTRODUCTION

Part IIA of the Environmental Protection Act 1990, which was inserted into that Act by section 57 of the Environment Act 1995, came into force in April 2000. This legislation provides a new regulatory regime for the identification and remediation of contaminated land, as a result of its previous use, where contamination is causing unacceptable risks to human health or the wider environment, as assessed in context of the current use and circumstances of the land.

In addition to providing a more secure basis for direct regulatory action, the improved clarity and consistency of the new regime is also likely to encourage voluntary remediation.

It is expected that the Part IIA regime will assist in the recycling of brownfield sites, although it cannot be used directly to require redevelopment of land, only its remediation. Any potentially contaminated land being redeveloped will continue to be regulated by the existing planning and development controls. However, the regime and associated guidance is expected to assist in providing a transparent, consistent, and “suitable for use” approach for contaminated land.

The Part IIA regime is expected to overlap with other regimes including, The Food and Environment Protection Act 1985, The Health and Safety at Work etc Act 1974, and The Finance Act 1996.

The Government’s objectives with respect to contaminated land are:

- *To identify and remove unacceptable risks to human health and the environment;*
- *To seek to bring damaged land back into beneficial use;*
- *To seek to ensure that the cost burdens faced by individuals, companies and society as a whole are proportionate, manageable and economically viable.*

The primary objectives for the introduction of this regime are:

- *To improve the focus and transparency of the controls, ensuring authorities take a strategic approach to problems of land contamination;*
- *To enable all problems resulting from contamination to be handled as part of the same process;*
- *To increase consistency of approach taken by different authorities; and*
- *To provide a more tailored regulatory mechanism, including liability rules, better able to reflect the complexity and range of circumstances found on individual sites.*

The responsibility for enforcing the provisions of the Part IIA regime lies with the local authority and the Environment Agency. The primary regulators are

local authorities, which are responsible for the identification of contaminated land and for the regulation of all such land that is not deemed a “Special Site”.

1.1 General Policy of the District of Bolsover

The Council’s corporate objectives identify five main goals:

- 1) Contributing to the social, economic and environmental revival of local former mining communities.**
- 2) Addressing issues of poverty, inequality and social exclusion.**
- 3) Caring for the environment.**
- 4) Providing good quality and efficient services which reflect the needs of local people.**
- 5) Tackling crime and disorder and making communities safer.**

The corporate objectives 2, and 5 are, in the main, beyond the scope of this regime. However, with respect to objectives 1, 3, and 4 the Council aims to revive the former mining communities, care for the environment, and provide good quality and efficient services. It is anticipated that this regime will ensure that human health, controlled waters, ecological systems, animals, crops, and buildings will be protected from any potential risks posed by contaminated land and, as such, make a contribution towards fulfilling those corporate objectives.

1.2 Regulatory Context

Part IIA of the Environmental Protection Act 1990 and the associated statutory guidance came into force in April 2000. The main objective underlying the introduction of the Part IIA Contaminated Land regime is to provide an improved system for the identification and remediation of land where contamination is causing unacceptable risks to human health or the environment. A risk-based “suitable for use” approach to remediation is to be implemented and applies the “polluter pays” principle to the apportionment of liability.

The Government objectives for the implementation of this regime are:

- *To identify and remove unacceptable risks to human health and the environment;*
- *To seek to bring damaged land back into beneficial use; and*
- *To seek to ensure that the cost burdens faced by individuals, companies and society as a whole are proportionate, manageable and economically sustainable.*

It is therefore the purpose of this document to detail a strategic approach for the inspection of the District, which must be formally adopted and published by 1st July 2001.

1.2.1 Regulatory Role of the District Council and the Environment Agency

Local Authorities have been given the primary regulatory role under the Part IIA regime. This reflects the previous functions under the statutory nuisance regime for dealing with contaminated land and complements the Council's role as a planning and land use authority.

In general the Council has a duty to:

- *Cause the District to be inspected to identify contaminated land*
- *Determine whether any particular site is deemed as contaminated land (as defined in the legislation)*
- *Act as the enforcing authority for all contaminated land other than land deemed as a "special site".*

Where the presence of contaminated land has been confirmed, the enforcing authority must:

- *Establish who should bear responsibility for remediation.*
- *Decide after consultation what must be done in the form of remediation and ensure it is effectively carried out.*
- *Determine liability for the costs of remediation.*
- *Maintain a public register of all sites deemed to be contaminated land and subsequent regulatory action taken.*
- *Determine whether any site is deemed a 'special site' as defined within the Contaminated Land Regulations (Statutory Instrument 2000 No.227)*

The Environment Agency has a regulatory role in dealing with any land deemed as a "special site", in addition to assisting local authorities by providing site-specific guidance, and publishing periodic reports on contaminated land nationally.

For an exact definition of whether land could be deemed a "special site" the legislation should be consulted. However, in simple terms a special site includes land:

- *Polluting controlled waters (in certain circumstances)*
- *On sites subject to Integrated Pollution Control*
- *Which contains waste sulphuric acid tar lagoons*
- *Used as an oil refinery*
- *Used to manufacture or process explosives*
- *Used to manufacture or dispose of atomic, chemical or biological weapons*

- *Used for other nuclear purposes*
- *Owned or occupied by a defence organisation for naval, military or air force purposes*
- *Held for the benefit of Greenwich Hospital*

1.2.2 Defining Contaminated Land

The legal definition on contaminated land, as given in Section 78A(2) of Part IIA of the Environmental Protection Act 1990, is defined as follows.

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

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

However, for a specific site to be deemed as contaminated land it is essential to establish the existence of a pollutant linkage. A pollutant linkage will comprise three component parts, these being;

- (a) A source of contamination in, on or under the ground.*
- (b) A pathway or pathways by which the contaminant(s) is resulting in significant harm or presents the significant possibility of significant harm being caused.*
- (c) A receptor of a type specified within the regulations.*



The possible receptors, in addition to controlled waters, that may be affected by contaminated land as defined within the Regulations are detailed below.

- *Human Beings*
- *Property in the form of;*
 - Crops*
 - Produce grown domestically or on allotments*
 - Livestock*
 - Other owned or domesticated animals*
 - Wild animals that are the subject of shooting or fishing rights*
- *Property in the form of buildings*
- *Any ecological system or living organism forming part of such a system, within a location which is;*
 - Site of Special Scientific Interest (SSSI)*
 - Nature Reserve*
 - Marine Nature Reserve*
 - Area of Special Protection for Birds*
 - Special Areas of Conservation (SAC)*
 - Special Protection Areas (SPA)*
 - RAMSAR sites*
 - Candidate SACs*

1.2.3 Principles of Risk Assessment

A risk assessment is carried out to identify the actual or potential risks that a source may pose to any given receptor. The assessment would detail the contaminants present, the pathways or likely pathways by which the receptors are being affected and assess the impact on those receptors. The information is needed so that an informed, rational and structured decision may be made such that any necessary action is proportionate to the risk.

1.2.4 Requirements for a Strategic Approach

It is a requirement of the Part IIA legislation that a strategic approach is implemented to investigate potentially contaminated sites. The statutory guidance requires that the approach should fulfil the following criteria.

- *Be rational, ordered and efficient;*
- *Proportionate to the seriousness of any actual or potential risk;*
- *Seek to ensure that the most pressing and serious problems are located first;*
- *Ensure that resources are concentrated on investigating in areas where the activity is most likely to identify contaminated land;*
and
- *Ensure that the local authority efficiently identifies requirements for the detailed inspection of particular areas of land.*

In the development of the strategy it is necessary to have regard to:

- *Any available evidence that significant harm or pollution of controlled waters is actually being caused;*
- *The extent to which any receptor is likely to be found in any of the different parts of the authorities area;*
- *The extent to which any of those receptors is likely to be exposed to a contaminant, for example as a result of the use of the land or of the geological and hydrogeological features of the area;*
- *The extent to which information on land contamination is already available;*
- *The history, scale and nature of industrial or other activities which may have contaminated the land in different parts of its area;*
- *The nature and timing of past redevelopment in different parts of its area;*
- *The extent to which remedial action has already been taken by the authority or others to deal with land-contamination problems or is likely to be taken as part of an impending redevelopment;*
and
- *The extent to which other regulatory authorities are likely to be considering the possibility of harm being caused to particular*

receptors or the likelihood of any pollution of controlled waters being caused in particular areas of the local authority's area.

1.3 Development of the Strategy

This strategy has been compiled to ensure compliance with the requirements of the statutory guidance. The principle driving force for the publishing of the strategy and subsequent inspection of the District of Bolsover lies with the Environmental Health & Housing Department.

The consultation draft will subsequently be posted on the Council's Internet site and copies will be available at the District Offices to enable the public and business access for comments. Parish Councils will also be consulted at this stage. The consultation draft will also be made available to the statutory consultation bodies at this time. Those bodies include the Environment Agency, Derbyshire County Council, the East Midlands Development Agency, English Nature, English Heritage and the Ministry of Agriculture Fisheries and Food.

1.4 Aims of the Strategy Document

In order to meet the requirements of the statutory guidance it is necessary for the Council to "...take a strategic approach to the identification of land which merits detailed individual inspection" and "set out its approach as a written strategy". The purpose of this document is therefore to detail the way in which the Council intends to implement the regime in a clear and concise way such that the requirements set out in paragraph 1.2.4 are fulfilled.

CHAPTER 2 CHARACTERISTICS OF THE DISTRICT OF BOLSOVER

This Chapter gives a general background to the District of Bolsover and sets the scene for the chosen approach to inspect contaminated land.

2.1 Geographical Location

The District of Bolsover is located in the Northeast corner of Derbyshire. The northern border is shared with South Yorkshire and to the east lies Nottinghamshire. To the Northwest lies the city of Sheffield and Nottingham is located to the Southeast. The M1 motorway runs through the District with Junctions 28 and 30 lying within the boundary. A schematic representation of the geographical location of the District is shown in the Appendix, Figure 1.

2.2 Brief Description and History

The District of Bolsover is predominantly a rural area containing four small towns and numerous villages. The urban areas of the District are indicated in the Appendix, Figure 2.

In the early 1900's there was an explosion of inhabitants as a result of the opening of many mines to exploit rich coal reserves. This in turn resulted in a large network of supporting railways and industries, many of which no longer remain.

The District has numerous areas where stone and minerals were once excavated on a small scale. It is also known that textiles were manufactured in the area and explosives manufacture took place during both World War I and World War II.

2.3 District Area

The District boundary encompasses an area of 61.6 square miles, which is equivalent to 16,016 hectares.

2.4 Population Distribution

In mid 1999 the population of the District was estimated as being 71,300. There are four towns in the District, these being Bolsover, Clowne, Shirebrook, and South Normanton. The parishes containing these towns have the largest population numbers. However, there are numerous villages through the District and it can be seen from the Appendix Figure 3 that there is a relatively even population distribution throughout the District albeit that most people will live within the towns indicated.

2.5 Current Land use Characteristics

The District of Bolsover is predominantly rural, with agriculture being the main land use within the area. There are numerous small and medium sized commercial and industrial business parks within the District, many of which occupy redundant colliery sites. The south of the District contains a higher proportion of larger business that utilise the M1 motorway and A38 corridor. Residential properties are predominantly located within the towns as detailed in the Appendix Figure 2.

2.6 Details of Authority Ownership of Land

The Council holds an array of assets within the District. These include 6,335 residential dwellings, two business parks, and has involvement with several others. The Council also owns a range of public open spaces, parks, recreational facilities, footpaths, and allotments.

2.7 Protected Locations

The legislation defines specific ecological systems that require consideration with respect to contaminated land and its effects, as defined in Section 1.2.2. Of these ecological systems the District of Bolsover has seven Sites of Special Scientific Interest (SSSI). These are located at:

- Dovedale Wood
- Teversal-Pleasley Railway
- Doe Lea Stream Section
- Creswell Crags
- Hollinhill and Markland Grips
- Crabtree Wood
- Ginny Spring, Whitwell Wood

In addition there are two local nature reserves established under section 21 of the National Parks and Access to the Countryside Act 1949. These are located at:

- Rowthorne Trail
- Doe Leas Nature Reserve

2.8 Key Property Types

There are 16 designated ancient monuments within the District. The most prominent of these are Bolsover Castle and Hardwick Hall, landmarks that dominate the skyline in the Bolsover area. The District also contains over 350 listed buildings.

2.9 Broad Geological/Hydrogeological Features

The geology to the East of the District of Bolsover comprises of large areas of Lower Magnesian Limestone of the Permo-Triassic period. Layers of Lower

Permian Marl and Basal Permian Sands are located beneath this Limestone and overly areas of Coal Measures. The permeable limestone located within this area overlies a major aquifer that is afforded special protection by the Environment Agency.

The remaining eastern and southern area of the District is Carboniferous comprising of Middle and Lower coal measures interspersed with sandstone.

2.10 Key Water Resource/Protection Issues

In general the river water quality within the District is fair, based on information supplied by the Environment Agency. The District does not contain any major rivers although the rivers in the North West feed into the River Rother and all other rivers feed ultimately into the River Trent.

A Zone III Source Protection Zone is identified in the North East of the District. This encompasses an area of groundwater that is afforded special protection by the Environment Agency which is considered to form the catchments to public and certain private water supplies. The zone III (total catchment) is defined as the total area to support the abstraction or discharge from the protected aquifer. The aquifer flows in an easterly direction and is known to supply public drinking water to the surrounding area. The limestone areas located in the East of the District, in general, overly a major aquifer. This aquifer is a resource that is protect by the Environment Agency.

Key watercourses and the aquifer protection zone are detailed in the Appendix Figure 4.

2.11 Current and Past Industrial History

Many of the towns and villages within the District of Bolsover have evolved around the coal mines, which previously exploited the rich coal reserves within the region. The main sources of industrial wealth originated from coal mining, and the associated engineering and fabrication industries that supported this main industry. Currently, no deep mines are operational within the District with the last mines closing at Shirebrook and Bolsover in 1993. However, high quality coal is currently recovered in the area by opencast methods.

The District also has numerous former railways and mineral railways used for transportation and the movement of coal. Many of these former railways no longer remain and it is evident that many of the railway cuttings have since been infilled with material.

There is a major coal carbonisation and associated chemical works located at Bolsover. This business is long established and previously used the coal mined in the surrounding area as raw material for the coal carbonisation plant. By-products from this process are used in the neighbouring chemical works for the production of a range of chemicals.

It is known that military explosives and munitions manufacture took place within the District at several sites during both the World Wars. At the present time there is one company that operates within the District that manufactures commercial explosives.

Derbyshire and neighbouring Nottinghamshire were renowned for the production of textiles in past years. Within the District of Bolsover there are several sites of former textile mills.

Business and industry within the District of Bolsover has diversified over recent years as a result of the cessation of the coal mining industry. However, much of the current industry is based on traditional manufacturing and fabrication activities, engineering, and chemicals.

Specific details of the industries currently identified as having once operated within the District are detailed in the Appendix Tables 1 to 3.

CHAPTER 3 AIMS OF THE STRATEGY

It is necessary for the Council to be open and accountable for its actions. This document draft has therefore been made available to all interested parties for comment before being formally adopted.

The specific aims of the strategy are to;

- Ensure compliance and the effective enforcement of Part IIA of the Environmental Protection Act 1990.
- Ensure that any contaminated land issues dealt with through the planning process are consistent with the requirements and guidance set out under Part IIA such that the land is suitable for use, as assessed by current standards.
- To address any liability associated with the Council's existing and former land holdings and address any potential liabilities posed by new land transactions.
- To encourage voluntary remediation, wherever this is considered practicable.
- To meet the corporate objectives of reviving former mining communities, caring for the environment, and providing good quality and efficient services.

The Council's aims with respect to dealing with the potential problems need to ensure that the criteria, as detailed in paragraph 1.2.4, are fulfilled. It is therefore envisaged that the particular strategic approach to be adopted by Bolsover District Council will rely upon a preliminary categorisation of sites. A more detailed inspection of sites will then take place ensuring that resources are first concentrated on those sites that present the greatest risk. There will be three main factors that will require consideration at the categorisation stage, these being the source, pathway and receptor.

The nature of the previous land use will be assessed, and it is anticipated that a number of factors will require consideration. Each potentially contaminated land site will require an assessment of;

- The probability of contamination being present;
- The likely scale of any resulting contamination;
- The toxicity of any such contaminants; and
- The likelihood of natural attenuation of contaminant concentrations.

It is then necessary to consider each site and identify all possible receptors. For each receptor all possible pathways will require consideration to allow the ranking of all the sites into an order for further detailed inspection. The likely issues that will require consideration may include the following;

- The type and sensitivity of any receptor to each likely contaminant;
- The potential mobility of any contaminant via each possible pathway;

- The seriousness of the effects that any contaminant may cause.

In order to categorise every potentially contaminated site within the District a suitable risk assessment package will be required. As yet, no decision has been taken on which risk assessment package is suitable to prioritise the potentially contaminated sites, although several are being assessed.

The above method is anticipated to prioritise all of the potentially contaminated sites into a suitable order based on the potential risks posed. In the event that several sites fall within the same risk grouping it is anticipated that a sub prioritisation process may be required. In this case the type of receptor(s) affected will be used to further prioritise the sites into an inspection order. Therefore the Council's priorities with respect to sites posing the same, or very similar risks, will be to;

1. Protect human health
2. Protect controlled waters and designated ecosystems
3. Prevent damage to property

CHAPTER 4 PRIORITY ACTIONS AND TIMESCALES

4.1 Priorities

4.1.1 Stage 1 Production of the Strategy Document

The strategy document has been produced to incorporate the following stages:

1. Production of the draft strategy document
2. Consultation period for statutory and non statutory consultees
3. Consideration of comments and amendment of the draft strategy
4. Formally adopt and publish the strategy
5. Issues copies of the strategy to all statutory consultees

4.1.2 Stage 2 Formation of a Data Management System

The Council has a Geographic Information System (GIS) which is ideally suited for the collation of data pertaining to land contamination. There is an amount of existing data on the system but it is intended that additional data will be inputted. It is also intended to tailor the existing package such that all information relating to land contamination, prioritisation details, site inspection details, and details of all receptors and decisions made can be held centrally on the computer system.

4.1.3 Stage 3 Prioritisation of sites for Detailed Inspection

The Council currently has details of 958 potentially contaminated sites as a result of examining historic maps. However, there are several other sources of information including internal Council records that have yet to be assessed. It is therefore anticipated that the number of potentially contaminated sites may well be in excess of 1,000 for the District.

The number of potentially contaminated sites based upon the previous land use have been categorised on the basis of the likelihood and severity of contamination being present, the details are given in the Appendix Table 1.

It is anticipated that the prioritisation process will, to a great extent, be a desktop exercise relying on all available information. However, it is acknowledged that a site walkover may be required in circumstances where there is insufficient information on a particular site to make a suitable judgement.

4.1.4 Stage 4 Detailed Inspection of Sites

Once all of the potentially contaminated sites have been prioritised into an order, the detailed site inspection process will commence. The sites will be

inspected in order of the potential risk as a result of the prioritisation stage. The detailed inspection stage may include one or more of the following;

- site walkover
- limited sampling, or
- intrusive site investigation

Sites that are found to be in a contaminated state but do not fall under the legal definition of contaminated land may require further inspection if new information comes to light or circumstances change in the locality, i.e. the introduction of a new receptor.

4.2 Timescales

Bolsover District Council has half of one post to deal with the issue of contaminated land. That post is also involved with providing a complete noise service for the District. Therefore, owing to the seasonal effective of noise complaints (being at the highest during the summer months) it is anticipated that the majority of the contaminated land work will be undertaken during the winter months.

Anticipated timescales involved in completing each of the stages are given in the Appendix Table 4. The anticipated timescales involving each stage are predicted from the limited information that is currently to hand. Once significant work is undertaken on implementing this regime it is expected that some of the timescales may vary as the full scale of the number of contaminated land sites, or lack of them, becomes apparent. Therefore, a review of the work programme will be undertaken on a suitably regular basis to highlight any significant deviations. From Appendix Table 4 it is seen that a 6 year programme is anticipated, however alterations to the work programme may be necessary.

CHAPTER 5 PROCEDURES

5.1 Internal Management arrangements for inspection

Within Bolsover District Council the Environmental Health and Housing Department have the responsibility for the implementation and enforcement of the Part IIA regime.

The Contaminated Land Officer works as part of the Pollution Team which reports to the Principal Officer of the Commercial Section within Environmental Health and Housing Department.

Contact details for the Contaminated Land Officer are as follows.

Dan Atkinson
Environmental Health and Housing Department
Bolsover District Council
Sherwood Lodge
Bolsover
Chesterfield
Derbyshire
S44 6NF

Tel: 01246 242291

Fax: 01246 242424

E-mail: dan.atkinson@bolsover.gov.uk

5.2 Land owned or previously owned by Bolsover District Council

The Council currently holds all of the location details of land owned and formerly owned on a paper based mapping system. It is expected that this information will be inputted onto a digital mapping system to allow easy comparison with existing land contamination information.

It is anticipated that this will be undertaken at Stage 2, as detailed in Chapter 4. All potentially contaminated sites within the District will be assessed on the potential risks that they pose. At the initial prioritisation stage any sites that may have become contaminated will be identified, where the Council may be the appropriate person. No prioritisation will be given to sites where the Council is the appropriate person relative to any other site other than on the risks posed by each site to human health and the environment.

5.3 Information Collection

It is anticipated that a great deal of information sources will require consultation in order to build up a comprehensive picture of previous land use

within the District. This will also need to include sufficient information to identify all possible pathways and receptors that may be exposed by any particular site.

The Council has purchased a set of historic ordnance survey maps in digital format from Landmark Information Group Ltd. These maps can be used in conjunction with the Geographical Information System (GIS). The digital historic maps purchased from Landmark include the following epochs;

- Epoch 1 (1875 – 1893)
- Epoch 2 (1898 – 1902)
- Epoch 3 (1916 – 1923)
- Epoch 4 (1937 – 1946)

In addition to the historic maps, digital data has also been acquired from Landmark that has been derived from the systematic analysis of 1:10 560 scale County Series mapping and 1:10 000 scale National Grid mapping. This information details a great deal of the previous historic land use and identifies the location of operations that may have left the land in a contaminated state.

Details of the resources that may require consideration are detailed below.

Resource	District Specific	Use
Pre war historic maps	Digital maps purchased from Ordnance Survey through Landmark	To identify sources
Historic landuse database	Landmark GIS format for the identification of potentially contaminative landuses	To identify sources
Geological maps	1:10,560 solid and drift geology maps	To characterise potential pathways
Hydrogeological maps	Environment Agency GIS data indicating source protection zones	To identify receptors
Ordnance survey maps	Current landline maps used in conjunction with CAPS solutions database	To identify sources, pathways, and receptors
District Local Plan	Up to date information on current landuse within the District, in particular SSSI's, ancient monuments, & listed buildings	To identify receptors
Environmental Health Records	The Council maintains records of complaints and investigations	To identify sources
Planning Records	The Council maintains detailed planning records, including information on ground condition as a result of any survey	To identify known information on contaminated land
Integrated Pollution Control Register	The Council maintains a public register detailing authorised industrial processes within the District	To identify sources of contamination

Register of landfill sites	The Environment Agency has provided details of closed and operational landfill sites within the District	To identify sources
Derbyshire County Council	The County Council hold information on contaminated sites and details of past remedial works.	To identify known information on contaminated land

5.4 Information Evaluation Management

The Council's Geographical Information System (GIS) will be used to manage contaminated land information. It is expected that this system will be used, possibly in conjunction with a linked database, to hold all relevant information and decisions made on potentially contaminated sites. The versatility of this system will allow rapid correlation and comparison of all the data sets held on the system.

It is also anticipated that information may be stored centrally, allowing access by other Council Departments.

5.5 Information and Complaints

The Council may receive complaints regarding contaminated land from a member of the public, business, community group, or other body. Interested parties may also volunteer information relating to land contamination that is not directly affecting themselves, their families or their property. Complaints or acts of information provision may have an impact on the approach to inspection and so the procedures to be adopted are detailed as follows.

5.5.1 General Complaints & Enquires

Any complaint or enquiry regarding contaminated land shall be dealt with using the current Environmental Health & Housing Department procedure used to deal with statutory nuisance complaints.

All complainants may expect:

- The complaint to be logged and recorded.
- A response from the relevant Officer regarding their complaint, where 90% of responses are to be made within 5 working days, and 100% within 10 working days.
- To be kept informed of the progress towards resolution of the problem.

Every effort will be made to resolve complaints quickly and efficiently. However, the legislative framework does present a number of obstacles as does the possible detailed investigation that is required. The legislation requires that:

1. Proof of a viable pollutant linkage before any formal designation as contaminated land is permissible which might only be possible with detailed and/or intrusive investigation.
2. Prior consultation with interested parties before designation as contaminated land.
3. A minimum of a three month period between designation and service of a remediation notice.
4. The requirement for the enforcing authority to make every effort to identify the original polluter of the land (or "Class A" person).

The Regulations do allow conditions 2 and 3 to be waived in extreme cases, but not conditions 1 and 4.

5.5.2 Confidentiality

All complainants will be asked to supply their names and addresses and, if appropriate, the address giving rise to the complaint. The identity of the complainant will remain confidential. The only circumstance in which this information may be required to be made public would be in the event of a remediation notice being appealed in a court of law and the complainant's health was suffering as a result of the contaminated land.

5.5.3 Anonymously supplied information

The Council does not normally undertake any investigation based on anonymously supplied information, and this general policy will be adopted for contaminated land issues. This policy does not preclude an investigation in exceptional circumstances.

5.5.4 Voluntary provision of information

If a person or organisation provides information relating to contaminated land that is not directly affecting their own health, the health of their families or their property, this will not be treated as a complaint. Any relevant information will be recorded any may be acted upon.

5.5.5 Anecdotal Evidence

All anecdotal evidence provided to the Council in relation to contaminated land will be noted, however no designation of contaminated land will occur without robust scientific evidence. In all cases the Principal Environmental Health Officer (Commercial Section) will determine whether further investigation is required following a complaint or provision of information.

5.5.6 Access to Environmental Information

All information contained within the Public Register will be available for inspection at the Environmental Health & Housing Department, Sherwood Lodge Offices, Bolsover during normal office hours. If copies are required of any information contained within the register the current general charges are as follows;

A4 copies	£1.00 per page for the first five pages Additional pages charges at 10p each
A3 copies	£1.50 per page for the first five pages Additional pages charges at 15p each

Access to other environmental information should be made in writing to;

Bolsover District Council
Environmental Health & Housing Department
Sherwood Lodge
Bolsover
Chesterfield
Derbyshire
S44 6NF

The application should include a map detailing the site in question and include specific details of the type of information that is sought.

Currently a charge of £25 per hour, or part thereof, is made for this service.

5.6 Risk Assessment

The risk assessment of potentially contaminated sites will be a two stage process. The first stage will be to categorise all of the sites into a suitable order for more detailed inspection. This will allow resources to be focused on the most serious and pressing sites first. The second stage will be implemented when a more detailed investigation on a site specific basis is required. This will involve assessing the risks posed by each individual site and will need to consider a multitude of potential factors. It is expected that all information on contaminants will, initially, be evaluated against current governmental generic guidelines or by use of prescribed risk assessment models.

5.6.1 CLEA and ICRL guidelines

A new set of generic guidelines, and a risk assessment model – the Contaminated Land Exposure Assessment or CLEA - are expected from the DETR shortly. Until these are available the Council will evaluate all information, initially, against the generic guidelines issued by the Interdepartmental Committee on Redevelopment of Contaminated Land (ICRCL). ICRCL 59/83 (2nd Edition, July 1987) *'Guidance on the assessment*

and redevelopment of contaminated land' gives the most widely used set of trigger and action levels for a range of contaminants within soils. These relate to the analytically determined soil contaminant concentrations resulting from a site inspection and assess the suitability of the current landuse with respect to the level and type of contamination.

5.6.2 Risk assessment for other substances

Risk assessments may also be required for specific substances not covered by ICRCCL or CLEA generic guidelines, or for the impact of contaminants on controlled waters. In these cases, reference may be made to authoritative sources of information, such as generic guidelines adopted in other countries or scientific papers. However, if guidelines from other countries are referred to, it is important to bear in mind the significant difference in remediation standards that may exist between the UK and other countries, and also what assumptions or reference standards may have been made or used in developing these standards.

5.6.3 Risk assessment models

Whilst generic guidelines will be used in the first instance, it may be necessary to further define the risk. To achieve this, a risk assessment model may be used. CLEA will be the preferred option when it becomes available, however, other risk assessment models that adopt either deterministic or probabilistic methods of deriving the risk may also be considered.

5.6.4 Risk assessment for controlled waters

Advice will be sought from the Environment Agency on risk assessment if controlled waters are the receptor in a particular pollutant linkage. It is anticipated that risk assessments and remediation will be carried out in accordance with Environment Agency guidance as laid down in "*Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources*" (EA R&D Publication 20, 1999).

CHAPTER 6 GENERAL LIAISON AND COMMUNICATION

6.1 Consultees

A great deal of the work detailed within the strategy is expected to require effective collaboration and liaison with other bodies.

All statutory consultees for the contaminated land inspection strategy will be invited to comment on the consultation draft. A list of the statutory consultees is detailed below:

- Environment Agency
- English Nature
- English Heritage
- Ministry of Agriculture, Fisheries and Food
- Food Standards Agency
- East Midlands Development Agency
- Derbyshire County Council

Owing to the Environment Agency operational boundaries being defined by river catchments, the District of Bolsover has parts of its area in both the Midlands and North East regions. Copies of the consultation draft will be forwarded to both regional offices.

Copies of the consultation draft are to be made available to the general public, parish councils, local businesses, and all other interested parties.

6.2 Communicating with owners, occupiers and other stakeholders

The Council's approach to its regulatory duties is, in the main, to seek voluntary action before taking enforcement action. This approach will be adopted for issues of land contamination, recognising that in many cases more effective remediation can be achieved by agreement than by enforcement.

This regime provides two incentives to undertake voluntary action. Firstly, any materials that require disposal as a result of voluntary remediation will be exempt from landfill taxes.

This exemption does not apply to materials generated as a result of a remediation notice having been served. Secondly, contaminated land (except for Special Sites) will not be entered on the Public Register unless a remediation notice has to be served, thus avoiding the issue of 'blight'.

Where a formal determination of contaminated land is required, the Council will take the following action:

- 1) Write to the owners and/or the occupiers and/or the appropriate persons of the contaminated land at least 5 working days prior to determination of that land, explaining the Council's intention and summarising the reason for the determination.
- 2) Write to the owners and/or the occupiers and/or the appropriate persons explaining that the land has been formally determined as contaminated land and that, initially, the Council is seeking appropriate remediation without the service of a remediation notice.
- 3) In conjunction with step 2 notify the Environment Agency of the formal determination.
- 4) If requested by one of the Stakeholders, dispatch a copy of the formal determination document within 5 working days of receipt of the request.

These procedures will form the basis of an enforcement policy in relation to contaminated land.

Serving a remediation notice

If voluntary remediation is not undertaken, a remediation notice will be served on the owners/occupiers and or appropriate persons, as required, specifying the action required.

6.3 Powers of Entry

Under Section 108(6) and Schedule 18 of the Environment Act 1995, the Council has been granted powers of entry to carry out investigation. At least seven days' notice will be given of proposed entry onto any premises, unless there is an immediate risk of serious pollution of the environment or serious harm to health or that circumstances exist that are likely to endanger life or health.

Where the site involved is likely to be a Special Site, the Council will consider authorising a person nominated by the Environment Agency to exercise the above powers on behalf of the Council.

6.4 The Public Register

Under the Regulations, the Council is required to maintain a register for contaminated land. The register will be held by the Environmental Health & Housing Department, at Bolsover District Council Offices, Sherwood Lodge, Bolsover and will be accessible, on request, during normal office hours, Monday to Friday.

The Regulations clearly specify the information that can be recorded on this register. This register will therefore include:

- remediation notices
- details of site reports obtained by the authority in relation to remediation notices
- remediation declarations
- remediation statements
- notifications of claimed remediation
- determination of sites as “special sites”
- any appeals lodged against remediation and charging notices convictions

The public register will **not** include details of historic land use and other records used in the investigation of potentially contaminated land. These are research documents and as such will not be made available to the public.

6.5 Provision of information to interested parties

The information relating to historical land uses, which is held on the GIS within Environmental Health & Housing Department, is available to the public and can be obtained by writing to the department and enclosing a plan of the site of interest.

The cost for such information is charged at an hourly rate of £25 per hour in addition to any copyright or reproduction charges that may be incurred.

6.6 Provision of information to the Environment Agency

The Environment Agency is required to prepare an Annual Report for the Secretary of State on the state of contaminated land in England and Wales. This report will include:

- A summary of local authority inspection strategies, including progress against the strategy and its effectiveness
- The amount of contaminated land and the nature of the contamination
- Measures taken to remediate land

As local authorities are the lead regulators on contaminated land, the national survey will clearly be reliant on information provided by local authorities. A memorandum of understanding has been drawn up between the Environment Agency and the Local Government Association that describes how information will be exchanged between local authorities and the Environment Agency.

The Council will therefore provide information to the Environment Agency following the guidelines agreed through this national forum. The local authority must also provide information to the Environment Agency whenever a site is determined as contaminated land, and whenever a remediation notice, statement or declaration is issued or agreed. The Environment Agency has supplied standard forms so that this information can be provided in a consistent format, and the Council will adopt these to fulfil its reporting requirements.

CHAPTER 7 REVIEW MECHANISMS

The strategy details the general approach to be taken in inspecting potentially contaminated land within the District. However, there may be instances whereby inspections occur outside of this framework. It will also be necessary to review previous inspection decisions and ensure that the strategy remains up-to-date and effective.

7.1 Triggers for undertaking inspection

The trigger for undertaking non-routine inspection may include:

- Unplanned events, e.g. where a pollution incident has occurred.
- Introduction of new receptors, e.g. where a new protected ecosystem is designated, or persistent trespass occurs on a site which otherwise has no sensitive receptors.
- Identification of localised health effects that appear to relate to a particular area of land.
- Responding to information from other statutory bodies, stakeholders, or other interested parties, which reveal that urgent action is necessary.

Whilst these occurrences may trigger non-routine inspections they will not be allowed to significantly interfere with the targets laid down in the general strategic framework.

7.2 Triggers for reviewing inspection decisions

There may be occasions when the findings of previous inspection decisions should be reviewed. This may occur in the following circumstances:

- Significant changes in legislation and/or guidance
- Establishment of significant case law or other legal precedent

Therefore it is important that all decisions are made and recorded in such a manner that will allow an efficient review to take place, should this be necessary.

7.3 Reviewing the strategy

Once the strategy has been formally adopted and published, local authorities have a duty to keep it under a periodic review. It is considered appropriate that a review of the strategy is undertaken after the first full year of implementation. Therefore, it is expected that the first review will be undertaken around July 2002.

In the event that changes to the strategy are required, it may be necessary to undertake subsequent reviews after a suitable period of time. If no major

changes are deemed necessary the strategy will remain in place for the whole 6 year work plan.

CHAPTER 8 APPENDIX

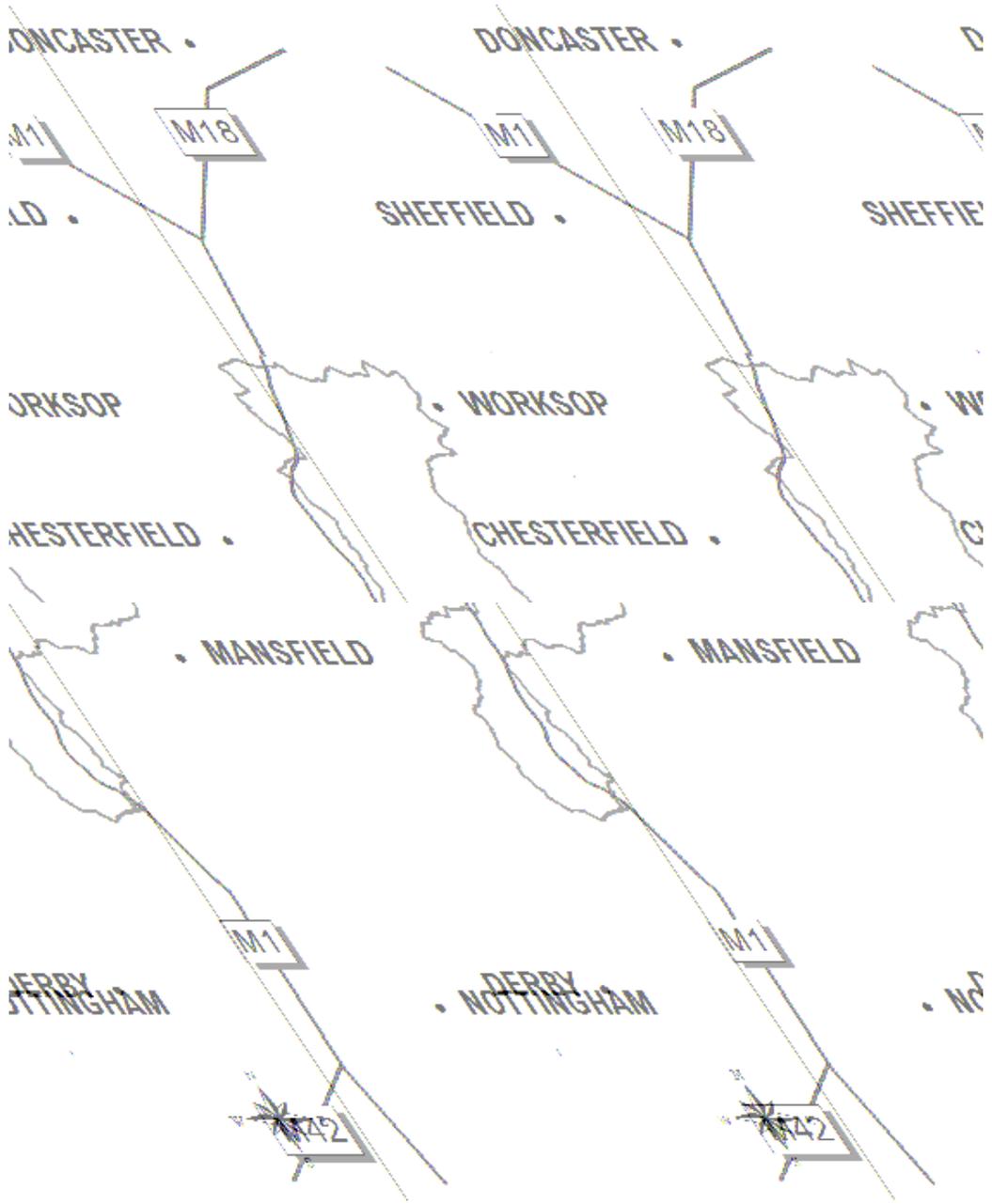


Figure 1: Schematic representation of the geographical location of the District of Bolsover



Figure 2: Map of the District of Bolsover indicating the major urban areas



Figure 3: Population distribution of the District of Bolsover



Figure 4: Major watercourses and aquifer protection zones

**Table 1
Potential High Risk Contaminative Uses**

Landuse	Number of sites within Bolsover
Gas manufacture and distribution	6
Oil petroleum, gas refining and storage	5
Weapons and ammunition manufacture and storage	3
General chemical manufacture	1

**Table 2
Potential Medium Risk Contaminative Uses**

Landuse	Number of sites within Bolsover
Coal storage and depot	5
Disturbed ground	1
Electricity production and distribution, including transformers	3
Factory or works, use currently unknown	34
Former marsh areas	4
Heap of unknown constituents	30
Hospitals	3
Metal casting / foundaries	1
Mineral railways	68
Mining and quarrying (general)	14
Garages: motor vehicle maintenance and repair	8
Natural and man made textile manufacture and products	3
Pipelines: transport via	1
Railways	84
Recycling of metal waste and scrap metal	1
Road haulage	25
Sawmilling, planing and timber treatment	2
Sewage	57
Transport manufacturing and repair	1
Unknown filled ground (pit, quarry, etc)	183
Unknown filled ground (pond, marsh, stream, etc)	164

Table 3
Potential Low Risk Contaminative Uses

Air shafts	18
Brewing and malting	1
Manufacture of cement, lime and plaster products	14
Cemetery or graveyard	11
Manufacture of clay bricks and tiles	22
General quarrying	98
Mining of coal and lignite	71
Quarrying of sand and clay, operation of sand and gravel pits	16

**Appendix Table 4
Work Programme for the Implementation of Part IIA**

	2001			2002			2003			2004			2005			2006											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Stage 1 Production of the Strategy Document, Consultation Period and Publication																											
Stage 2 Formation of a Data Management System and Data Input																											
Stage 3 Prioritisation of Sites for Detailed Inspection																											
Stage 4 Detailed Inspection of Sites, Including Sampling and Appropriate Action																											

Key

 Action timetable during this period
 Action may occur during this period

Details of Statutory Consultees

<u>Organisation</u>	<u>Contact name and details</u>
Environment Agency Midlands Region	Clare Bates & Andrew Barker Area Contaminated Land Officer Trentside Offices Scarrington Road West Bridgford Nottingham NG2 5FA
North East Region	Dave Walmsley Area Contaminated Land Officer Phoenix House Global Avenue Leeds LS11 8PG
East Midlands Development Agency	Chris Blankley Apex Court City Link East Midlands Nottingham NG2 4LA
Ministry of Agriculture Fisheries and Food	M R M Stephen MAFF Rural Development Service National Land Management Team Southgate Street Bury St Edmunds Suffolk IP33 2BD
English Nature	Dr R Catchpole English Nature Peak District and Derbyshire Manor Barn Overhaddon DE45 1JE
English Heritage	Ann Plackett East Midlands Region 44 Dergate Northampton NG2 4LA
Derbyshire County Council	David Harvey Director of Environmental Services Derbyshire County Council County Hall Matlock Derbyshire DE4 3AG
Food Standards Agency	Dr Patrick Miller Room 707c Aviation House 125 Kingsway London WC2B 6NH