

Report to Community Overview and Scrutiny Panel

Agenda
Item:
A.3

Meeting Date: 25th June 2015
Portfolio: Environment and Transport
Key Decision: Yes: Recorded in the Notice Ref: KD 13/15
Within Policy and
Budget Framework NO
Public / Private Public

Title: CONTAMINATED LAND STRATEGY (COST RECOVERY & HARSHIP POLICY)
Report of: The Director of Local Environment
Report Number: LE14/15

Purpose / Summary: This report presents the revised 2015 Contaminated Land Strategy. The strategy incorporates the Hardship Policy (Appendix 1 of the Strategy) in relation to contaminated land.

Recommendations:

That the Overview and Scrutiny panel:-

1. Agree the general priorities of the Contaminated Land Strategy 2015
2. Review the Cost Recovery and Hardship Policy (Appendix .1 pages 52 to 61) and suggest any amendments
3. Agree that the Contaminated Land Policy and its Cost Recovery Policy is circulated for consultation before being re submitted to Executive for approval.

Tracking

Executive:	1 st June 2015 & 27 th July 2015
Overview and Scrutiny:	25 th June 2015
Council:	

1. BACKGROUND

- 1.1 Under Part 2A of the Environmental Protection Act 1990 Carlisle City Council has a duty to inspect and identify contaminated land within the City Council area. When land has been identified as contaminated it is legally called “determined.” Once determined, Carlisle City Council has a duty to serve a Remediation Notice on the person responsible for the contamination or, where they cannot be found, on the land owner. The law describes these persons as appropriate person(s). The Notice will describe what they are to do by way of remediation. Statutory Guidance requires Carlisle City Council to adopt a formal Cost Recovery and Hardship Policy. The Policy will provide a framework for Carlisle City Council to apply when recovering costs for the remediation of land that the City Council have carried out on behalf of the land owner or other responsible person. Carlisle City Council should seek to promote fairness, transparency and consistency when determining financial responsibility for remediation of contaminated land and prevent any hardship on any decision Carlisle City Council makes in future.
- 1.2 Part 2A of the Environmental Protection Act 1990 came into force on 1 April 2000. It established a structure for the identification, investigation and remediation of contaminated land. The legislation requires Carlisle City Council to prepare, adopt and publish a Strategy on how it will identify, investigate and remediate contaminated land in the District. Carlisle City Council published its first Contaminated Land Inspection Strategy in July 2001, with a revision in 2009. Following new guidance the Strategy has been updated in 2015 and is provided in the Appendix to this report.
- 1.3 The objectives of the contaminated land regime are:
- To identify and remove unacceptable risks to human health and the environment
 - To seek to ensure that contaminated land is made suitable for its current use
 - 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
- Under Part 2A, the starting point should always be that land is not contaminated unless there is reason to consider otherwise. For a level of risk to exist a relationship must be identified between a contaminant, a pathway and a receptor.

2. PROPOSALS

- 2.1 The Contaminated Land Strategy is required to set out a plan for how Carlisle City Council will approach land contamination, including the adoption of a Cost Recovery and Hardship Policy.

2.2 The Strategy ensures a rational, ordered, timely, efficient and consistent approach to dealing with potentially contaminated sites. It is also a point of reference for developers and land owners.

2.3 The draft Strategy proposes the following priorities for Carlisle City Council:

1. To update, and adopt (after consultation) the revised Contaminated Land Strategy, and the Cost Recovery and Hardship Policy which details how Carlisle City Council, will deal with landowners who do not have sufficient funds.
2. To ensure that investigations are concentrated on areas of land where there is the greatest risk of a contaminant linkage (contaminant , pathway, receptor) being present.
3. To determine whether any land identified as potentially contaminated land falls within the definition of a 'special site' and, if so, refer it to the Environment Agency (EA) as the enforcing authority for 'special sites'. A special site is one where the contamination is significantly affecting a water body.
4. To ensure that all new development is appropriate for its location and potential land contamination issues are considered in strategic planning and development control decisions.
5. To encourage, where practicable, redevelopment of brown field sites within Carlisle City Councils area.
6. To ensure that procedures are in place for the open provision of information to the public, developers and any other interested parties.
7. To prevent, as far as is reasonably practicable, any further contamination of land within the city, including land owned or leased by Carlisle City Council.
8. To encourage voluntary remediation of contaminated land, either through Part 2A or the planning system.

3. CONSULTATION

3.1 It is proposed to consult internally with Planning and Economic Development, Legal, Finance and any other interested parties, as recommended by Overview and Scrutiny or the Executive. There is no legal requirement for public consultation.

4. CONCLUSION AND REASONS FOR RECOMMENDATIONS

- 4.1 The reason why the Overview and Scrutiny Panel are asked to agree the general priorities of the Contaminated Land Strategy 2015, is so that the public and developers are satisfied that the City Council will treat everyone equally when it comes to decisions regarding inspection and enforcement, of land that maybe contaminated.

In light of fairness and equality the Cost Recovery and Hardship Policy needs to be carefully considered and scrutinized to ensure that the policy is not only equitable but also deliverable.

It is therefore essential that all parties who require an input into the policy are consulted and this is the reason why approval is given for the Contaminated Land Policy and the Cost Recovery Policy to be circulated for consultation before being re submitted to Executive for approval.

5. CONTRIBUTION TO THE CARLISLE PLAN PRIORITIES

- 5.1 **Priority 1:** Fostering more, high quality and sustainable business and employment opportunities, through growing existing enterprises and bring new ones in. The Contaminated Land Strategy identifies previous industrial land and development opportunities.

Priority 3: Working more effectively through partnerships

The Strategy requires partnership working with other Government Agencies and developers.

Priority 5: Making Carlisle clean and tidy together

By remediating potentially contaminated sites the Strategy contributes to a cleaner Carlisle.

Contact Officer: Angela Culleton

Ext: 7325

**Appendices
attached to report:**

Note: in compliance with section 100d of the Local Government (Access to Information) Act 1985 the report has been prepared in part from the following papers:

- LE04/15 + Appendix

CORPORATE IMPLICATIONS/RISKS:

Chief Executive's -

Deputy Chief Executive –

Economic Development –

Governance – Governance – Sections 78A-78YC of Part IIA of the Environmental Protection Act 1990 places a duty on the Council to deal with contaminated land in its area. The obligation requires that the Authority inspect its area to determine whether land meets the definition of contaminated land. The first stage is to produce a strategy document detailing how the work will be carried out. This is to be reviewed and periodically updated where there are any changes in the implementation of the strategy.

When the policy is reported back to the Executive, officers will be recommending that the document should include clear terms of reference for the Hardship Panel to include membership and the parameters of decision making.

Local Environment –

Resources - The financial implications arising from the Cost Recovery and Hardship Policy cannot be quantified as yet; however having a robust methodology and approval process to deal with any hardship applications is essential. This is set out at Appendix 1 of the Strategy document. Any use of public funds to remediate contaminated land would be subject to the Council's standard reporting and monitoring procedures.

Contaminated Land Strategy



Carlisle City Council
April 2015

Version 1.0

CONTAMINATED LAND STRATEGY

Contents	Page
Executive Summary	3
1.0 Introduction	5
1.1 Definition of contaminated land	5
1.2 Government policy	5
1.3 Aims, objectives and priorities	6
1.4 Carlisle City Council's 'Contaminated Land Inspection Strategy 2014' overview	6
2.0 Character of Carlisle City Council	7
2.1 Introduction	7
2.2 Local Character and distinctiveness	7
2.3 Social Characteristics	8
2.4 Movement patterns	8
2.5 Housing	8
2.6 Economy	9
2.7 Health	12
2.8 Flooding and Climate change	12
2.9 Industrial Heritage	12
2.10 Land owned by the Carlisle City Council	14
2.11 Protected locations	14
2.12 Geology	15
2.13 Key water resource/ protection issues	16
3.0 Regulation of Part 2A	19
3.1 Legislation	19
3.2 Roles and responsibilities	19
4.0 Underlying principles of Part 2A	21
4.1 Contaminant linkages	21
4.2 Risk Assessment	22
4.3 Using external expertise during risk assessment	23
4.4 Normal background concentrations of contaminants	23
4.5 Generic assessment criteria	23
4.6 Risk Categories	24
4.7 SPOSP	30
4.8 Special sites	31
4.9 Radioactivity	31
5.0 Identification and Prioritisation	35
5.1 Information on the possible presence of contamination	35
6.0 Detailed inspection of contaminated land	38
6.1 Overview of procedures	39
6.2 Powers of entry	39

7.0	Determination and Remediation of contaminated land	40
7.1	Determination	40
7.2	Informing interested parties	40
7.3	Deciding that land is not contaminated	41
7.4	Risk Summaries	41
7.5	Reconsideration, revocation and variation of determinations	42
7.6	Determining liability for remediation	42
7.7	Orphan linkages	42
7.8	Remediation	43
7.9	Verification	43
7.10	Remediation notices	43
7.11	Cost recovery / hardship policy	44
8.0	Potential sources of funding	45
9.0	Communication and information management	45
9.1	Liaison and consultation with other Parties	45
9.2	Part IIA Public register	46
9.3	Requests for information	46
9.4	Enquiries	47
10.0	Local Authority interests in land	48
10.1	Carlisle City Council's interest in land	48
10.2	Council leased property	48
10.3	Selling council owned land	48
11.0	Action to date	49
12.0	References	50
13.0	Glossary of terms	51
Appendix 1	Cost recovery and hardship policy	54
Appendix 2	An Essential guide for developers	64
Appendix 3	Statement of decision	81

EXECUTIVE SUMMARY

Part 2A of the Environmental Protection Act 1990 came into force on 1 April 2000. It established a new, statutory regime for the identification, investigation and remediation of contaminated land.

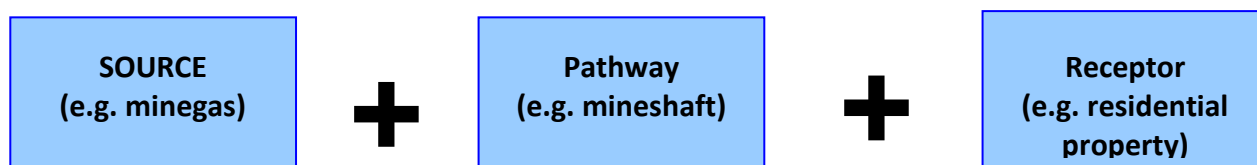
Under Part 2A, each Local Authority must prepare, adopt and publish a strategy which explains how it carries out this duty. Carlisle City Council published its first Contaminated Land Inspection Strategy in July 2001, with a revision in 2009. In April 2012, new Statutory Guidance on contaminated land was issued by Department for Environment Food and Rural Affairs and Carlisle City Council's inspection strategy has been updated again to reflect this.

The objectives of the contaminated land regime are:

- To identify and remove unacceptable risks to human health and the environment
- To seek to ensure that contaminated land is made suitable for its current use
- 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

Under Part 2A, the starting point should always be that land is not contaminated unless there is reason to consider otherwise. For a relevant risk to exist, at least one '[contaminant linkage](#)' must be present. This is the term used to identify the relationship between a contaminant, a pathway and a receptor.

- A '[contaminant](#)' is a substance which is in, on or under the land, and which has a potential to cause significant harm to a relevant receptor, or to cause significant pollution of controlled waters
- A '[receptor](#)' is something that could be adversely affected by a contaminant; for example a person, an organism, an ecosystem, property, or controlled waters.
- A '[pathway](#)' is a route by which a receptor is or might be affected by a contaminant



All three elements of a contaminant linkage must exist in relation to a particular site before the land can be determined as 'contaminated land'.

The overall aim of this strategy is to ensure a rational, ordered, timely, efficient and consistent approach to dealing with potentially contaminated sites throughout the area.

The following actions are considered a priority for Carlisle City Council:

- To update, consult and adopt a revised contaminated land strategy which details how Carlisle City Council will fulfil all of its ongoing statutory duties.
- To ensure that investigations are concentrated on areas of land where there is the greatest risk of a contaminant linkage being present.

- To determine whether any land identified as potentially contaminated land falls within the definition of a 'special site' and, if so, refer it to the Environment Agency (EA) as the enforcing authority for 'special sites'.
- To ensure that all new development is appropriate for its location potential land contamination issues should be considered in strategic planning and development control decisions.
- To encourage, where practicable, redevelopment of brownfield sites within Carlisle City Council's area. Under the planning system, where land is affected by contamination it is the developers' responsibility for securing safe development. As a minimum following remediation, land should not be capable of being determined as contaminated land under Part 2A.
- To ensure that procedures are in place for the open provision of information to the public, developers and any other interested parties.
- To prevent, as far as is reasonably practicable, any further contamination of land within the city, including land owned or leased by Carlisle City Council.
- To encourage voluntary remediation of contaminated land, either through Part 2A or the planning system.

Carlisle City Council recognizes that the expectations of some parties will not be met by the powers provided to the LA under Part 2A.

1.0 INTRODUCTION

Part 2A of the Environmental Protection Act 1990 came into force on 1 April 2000. It established a new statutory regime for the identification, investigation and remediation of contaminated land.

The new regime was introduced in DETR Circular 02/2000. This statutory guidance provided advice to Regulators (both Local Authority (LA) and the EA) on how Part 2A should be implemented in line with the Contaminated Land (England) Regulations 2000. The latter legislation was subsequently replaced by the Contaminated Land (England) Regulations 2006.

Under Part 2A, each LA must prepare, adopt and publish a strategy which explains how it intends to carry out this duty. Carlisle City Council published its first Contaminated Land Inspection Strategy in 2001, with a revision in 2009. In April 2012 new Statutory Guidance on contaminated land was issued by DEFRA and Carlisle City Council's inspection strategy has been updated again to reflect this Guidance.

1.1 Definition of Contaminated Land

Part 2A provides a statutory definition of 'Contaminated Land':

"Any land which appears to the LA in whose area it is situated to be in such a condition, by reason of substances in, on, or under the land that;

- *Significant harm is being caused, or there is significant possibility of such harm being caused;*
- or*
- *Significant pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused."*

1.2 Government Policy

England has a considerable legacy of historical contamination involving a wide range of substances.

On all land there are background levels of substances, including substances that are naturally present as a result of our geology or those resulting from previous human activity (including industrial use and waste disposal). In a minority of cases there may be sufficient risk to health or the environment for a LA to consider such land as contaminated land.

The key objectives driving the Government's policy on contaminated land and the Part 2A regime are:

- To identify and remove unacceptable risks to human health and the environment
- To seek to ensure that contaminated land is made suitable for its current use
- 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

1.3 Aims, objectives and priorities

The overall aim of this strategy is to ensure a rational, ordered, timely, efficient and consistent approach to dealing with potentially contaminated sites throughout the Carlisle City Council's area.

The following actions are therefore considered a priority for Carlisle City Council:

- To update, consult and adopt a revised contaminated land strategy which details how Carlisle City Council will fulfil all of its ongoing statutory duties.
- To ensure that investigations are concentrated on areas of land where there is the greatest risk of a contaminant linkage being present.
- To determine whether any land identified as potentially contaminated land falls within the definition of a 'special site' and, if so, refer it to the EA as the enforcing authority for 'special sites'.
- To ensure that all new development is appropriate for its location, Potential land contamination issues should be considered in strategic planning and development control decisions.
- To encourage, where practicable, redevelopment of brownfield sites within the Carlisle City Council's area. Under the planning system, where land is affected by contamination, it is the developers' responsibility for securing safe development. As a minimum, following remediation, land should not be capable of being determined as contaminated land under Part 2A.
- To ensure that procedures are in place for the open provision of information to the public, developers and any other interested parties.
- To prevent, as far as is reasonably practicable, any further contamination of land within the Carlisle City Council's area, including land owned or leased by the Carlisle City Council.
- To encourage voluntary remediation of contaminated land, either through Part 2A or the planning system.

1.4 Carlisle City Council's 'Contaminated Land Inspection Strategy 2015': Overview

The revised strategy includes:

- Carlisle City Council's aims, objectives and priorities (taking into account the characteristics of our area)
- A description of the relevant aspects of our area
- Our approach to strategic inspection of our area (or parts of it)
- Our approach to the prioritisation of detailed inspection and remediation activity
- How our approach under Part 2A links to the wider regulatory framework designed to protect human health and the environment, including the planning system, Environmental Permitting Regulations and the Environmental Damage (Prevention and Remediation) Regulations 2009, etc

2.0 Character of Carlisle City Council

2.1 Introduction

2.1.1 This introduction aims to describe the District's geography, environment, economy, social and cultural characteristics and movement patterns i.e. a snapshot of the district as it is now. It also highlights the key issues associated with the district as a whole.

2.1.2 Carlisle's identity is largely shaped by its extensive rural hinterland. It has an important agricultural economy, its setting in an area of high landscape value, including a coastal and upland landscape recognised as being of national importance. The historic core of the city traversed by rivers that are internationally important for biodiversity and a WHS which strides across the district.

The district of Carlisle covers an area of approximately 1042km² and is situated in the far north of the county of Cumbria, bounded by the Scottish border to the north, Northumberland to the east, Carlisle to the west and Eden to the South. The City of Carlisle forms the principal urban area and lies within the south western part of the district. The remainder of the district is predominantly rural in nature, with the exception of Longtown to the north, Brampton to the east and a number of smaller villages which are scattered predominantly to the west and east of the city.

2.2 Local Character and Distinctiveness

2.2.1 Carlisle has an attractive and varied landscape. The District includes two Areas of Outstanding Natural Beauty (AONB), The Solway Coast and the North Pennines as well as five main rivers: the Eden, Esk, Caldew, Petteril and Lyne, and many becks and burns. The North Pennines (AONB) is also a European Geopark. The River Eden and its tributaries are of international importance for their biodiversity, being designated as both a Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC). Carlisle has a range of other sites of European nature conservation importance including the Upper Solway Flats and Marshes Ramsar site and Special Protection Area (SPA), the Solway Firth (SAC), the Irthinghead Ramsar site and the North Pennine Moors (SPA). These form part of a network of internationally important wildlife sites within the EU known as Natura 2000.

2.2.2 In addition, the District is home to many rare and endangered species such as the red squirrel, great crested newt and otters, as well as habitats such as lowland raised bogs, blanket bogs and upland hay meadows.

2.2.3 The landscape and wildlife in Carlisle and surrounding districts underpins the economy of the area, through people's work and leisure activities, and their sense of local identity. Delivery of targeted biodiversity and landscape enhancements, therefore, has a significant contribution to make towards social inclusion and sustainable economic development.

2.2.4 The District has approximately 455 ha of public open space, which ranges from amenity open space (land which is recognised as making a contribution to the visual amenity and enjoyment of an area), to natural/semi-natural greenspace, parks/gardens, allotments, play areas and outdoor sports facilities. Within the centre of the city, and located immediately next to the River Eden, are two linked and important urban parks: Rickerby Park and Bitts Park. Rickerby Park is a natural park with mature trees and grazed by sheep and cattle. Bitts Park has a more formal layout with landscaped beds and trees, together with playing pitches, children's play area and tennis courts, etc.

2.2.5 The District is rich in heritage ranging from Hadrian's Wall (World Heritage site) which crosses the district from Gilsland in the East to Burgh by Sands in the West, to the City walls, Carlisle Cathedral and Tullie House which are all Grade I Listed Buildings. In addition to these, there are approximately another 1550 Listed Buildings and 19 Conservation Areas, including areas within the City, Brampton, Longtown and Dalston as well as some of the smaller villages.

2.3 Social Characteristics

2.3.1 Population data collated from the 2011 Census, released in July 2012, showed that the usual resident population of the District had risen by 6.7% since 2001 to 107,500. Whilst the rate was slower than the average for England and Wales it was the highest in Cumbria.

2.3.2 In line with national trends, growth in Carlisle will most notably be seen in the number of older people living in the District, where it is predicted that there will be a 57% increase by 2032. Approximately 68% of the population currently live within the urban area of Carlisle. In the rural areas a key feature is the sparse distribution of residents; on average there are 97 people per hectare in Carlisle's rural areas.

2.4 Movement Patterns

2.4.1 The M6 motorway runs through the District linking the City of Carlisle to southwest Scotland, Northwest England and beyond. Carlisle benefits from three motorway junctions at Carleton (J42), Rosehill (J43) and Kingstown (J44). Additionally the Carlisle Northern Development Route (CNDR) provides a western link from the A595 to the M6 at junction 44. It also provides a combined pedestrian and cycle route along its 8.25km length.

2.4.2 From Carlisle City there is a network of 'A' roads including the A69 which links the District to Newcastle in the North East, the A7 to the Scottish Borders to Edinburgh and the A595 to Workington and Cockermouth on the West Coast of Cumbria.

2.4.3 In terms of rail travel, the West Coast Main Line provides the only north/south high speed rail link serving the City, as well as links via Northern Rail to Manchester Airport. There are rail links to Newcastle and the west coast and also the historic Carlisle/Settle line which is important for tourists, commuters and freight.

2.4.4 Travel to work is heavily dependent on private car usage with 54.3 % people working in Carlisle District choosing to drive to work (Source: Office of National Statistics (ONS) Census 2001) despite the fact that nearly 55% of people travel less than 5km to their place of work. This level of car usage is partly due to accessibility to public transport across the District which varies considerably outside the urban area, with a number of areas having a very limited service or no service at all.

2.5 Housing

2.5.1 Housing Stock, as of 31 March 2010, was 48,120. Nearly 85% belong to the private sector at 40,694, with the Housing Associations holding a stock of 7,402 as the LA housing was transferred to a Housing Association in December 2002, the LA now only owns 24 properties.

2.5.2 From the 2001 census, owner occupation within the district was 71%. This was slightly below the Cumbrian percentage of 72%, but higher than that of the North West which was

69%. The percentage living in social rented properties were 18%, 16% and 20% with the private rented sector accounting for 8%, 12% and 8% respectively.

2.5.3 A house condition survey undertaken in 2005 and RSL data from 2009, identified 27% of the private sector and 12% of the social sector dwellings failed the decency standard in the urban area and 43% and 10% respectively in the rural area.

2.5.4 Housing in Carlisle is generally more affordable in respect of house price/earning ratio at 5% than is the case nationally (6.5%). However, variations in average house prices across the District identify parts of the rural area where average house prices are in excess of ten times the annual income, creating problems of housing need due to affordability.

2.5.5 The average household, as determined from the 2001 census, consisted of 2.3 persons within the district, this is the same as the rest of Cumbria.

2.6 Economy

2.6.1 Carlisle is a free standing city which is not directly influenced by a major conurbation. It acts as a significant employment base and the main professional centre for Cumbria, as well as parts of south west Scotland.

2.6.2 Historically, the economy of Carlisle was based around easy access to a railway network, engineering as well as the textile industry which has over time declined and been replaced by other forms of manufacturing. A large proportion of Carlisle's working population are still employed in the manufacturing sector. However, the wholesale/ retail trade provides employment for the largest proportion of the workforce. Employment in non-service industries, such as agriculture, manufacturing and construction are all higher than the national average. Carlisle is an important centre for agricultural services. Carlisle lies at the centre of a large rural livestock market. Within the rural area, Brampton and Longtown act as employment hubs along with Dalston (to a lesser extent). All three settlements have industrial estates which provide employment opportunities for people within their locality, as well as the wider area.

2.6.3 Whilst Carlisle benefits from good connections to the M6, as well as being situated on the West Coast Main Line, there can still be a perception by businesses from outside the area of remoteness and isolation which may detract from Carlisle's attractiveness as a business location. This is further compounded by a gap in skills partially as a result of underperformance in education and low aspirations as well as a poor level of retention of graduates.

Figure 1

Carlisle City Council Boundary

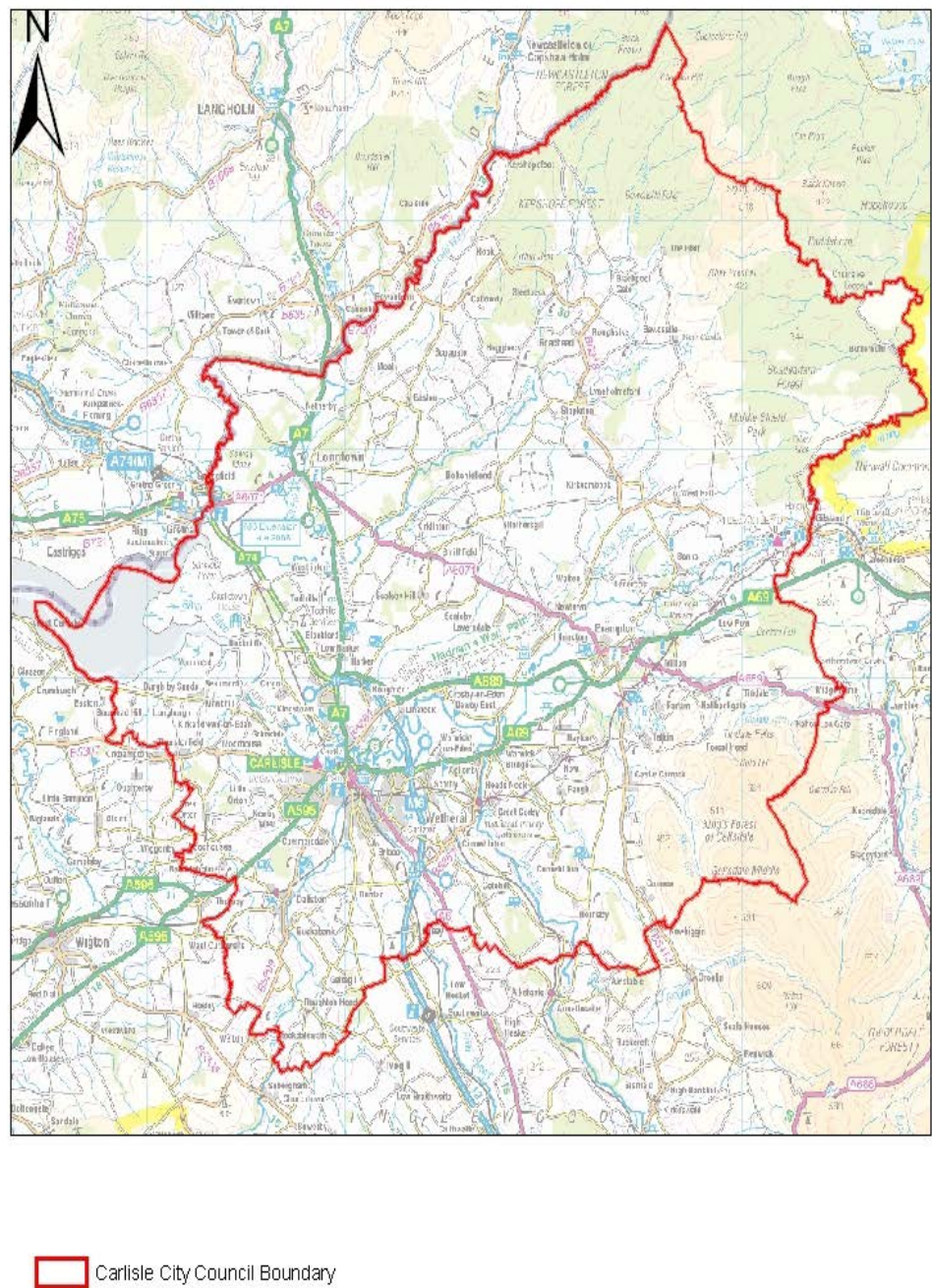
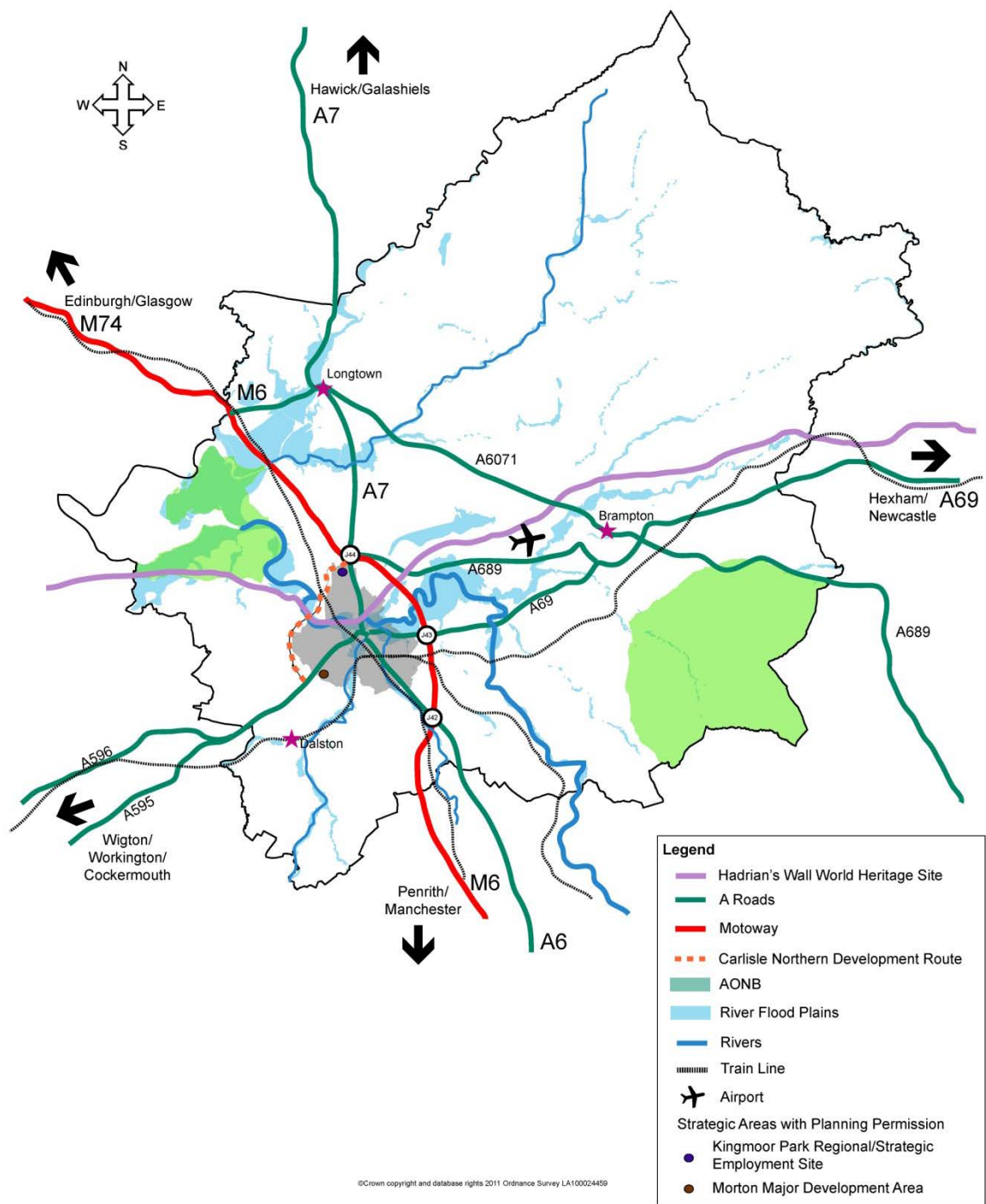


Figure 2

Carlisle City Council road links



2.7 Health

2.7.1 Carlisle became a World Health Organisation (WHO) Healthy City in 2009. Since then, Carlisle City Council has worked closely with organisations such as the National Health Service (NHS) Riverside housing and Carlisle Leisure, and has gained from the Healthy City approach and network. A healthy city is one that continually creates and improves its physical and social environments and expands the community resources that enable people to mutually support each other in performing all the functions of life and developing to their maximum potential.

2.8 Flooding and Climate Change

2.8.1 The position of Carlisle at the meeting point of three rivers makes it vulnerable to the risk of flooding. In 2005, the District experienced the worst floods since 1822 which resulted in the death of 3 people and severely affected many homes and businesses. Flood defences have recently been completed, offering a good level of defence against future flood risk. However, caution must still be taken when considering proposals for development in high risk areas benefitting from defences.

2.8.2 Specific data for the impacts of climate change on Carlisle are not readily available, but information is available on a regional basis that gives a good indication of the potential impacts. Between now and 2080, if we continue to discharge high amounts of greenhouse gases, the District could expect the followings:

- more extreme weather conditions causing disruption to front line services like refuse/recycling collections;
- higher energy costs for buildings and transport as climate change impacts on markets and trade;
- health related problems e.g. waterborne diseases linked to warm weather impacting on health services;
- drier summers could lead to droughts affecting parks, allotments and nature reserves, putting pressure on water resources and local biodiversity;
- drier weather patterns in the summer affecting the agricultural economy through impact on crop and grass growth.

2.9 INDUSTRIAL HERITAGE

2.9.1 The area remained essentially agricultural until the 18th century when the industrial revolution created significant changes, particularly to the then small border garrison market town of Carlisle. The presence of abundant water power from the Cities three rivers and coal from the South Eastern fells above Castle Carrock and Hallbankgate led to rapid industrial development and population growth, with the subsequent creation of a canal system which was eventually infilled. A large proportion of this land was used for the construction of a railway network. This network established Carlisle as a route centre, which encouraged the migration of workers into the area.

2.9.2 The Industrial Revolution in Carlisle

The industrial revolution of the late 18th and the first half of the 19th centuries were arguably the most significant period in Carlisle's history.

Carlisle's textile industry began to develop in the 18th century. The first factory was part of the woollen industry and was set up in December 1724.

Wool as a material was not suitable initially for large-scale mechanisation of processing and became uncompetitive when America's plantations started to pour out cheap cotton. In 1750, manufacture of a coarse linen cloth was started. Some year's later, fustian (a mixture of linen and cotton yarns) was made in Caldewgate. The soft waters of the River Caldew were suitable for bleaching, this process prepared cloth for printing; cloth was exposed to sun and rain, and steeped in alkaline solutions. Much land was occupied around the city by printfields, in which the cloth was laid out. In 1794 there were four of them that provided employment for about a thousand people. The development of bleaching powder (c.1800) made the printfields obsolete, and on Jollies map of 1811 there are no references to them.

From 1758, Carlisle received an influx of wealth encouraging the development of industry which included breweries and an iron foundry, as well as the burgeoning textile industry.

2.9.3 Twentieth-Century Carlisle infrastructure

The Electric Light and Power Station was opened in 1899. In 1927, a new power station was erected at Willow Holme, and was connected to the national grid. The oldest municipal department, the gas-works adjoining Victoria Viaduct was purchased by the corporation in 1850 and was superseded by a new works at Boustead Grassing in 1922. Electric trams started operating in 1900 and tram sheds were developed on London Road.

Carlisle's industry was drastically transformed after World War Two, with the disappearance of major firms and changing ownership of others.

The Railway industry is still a large employer, but has been slimmed down drastically since pre-war days. Losses in Carlisle's older industries have been counteracted to some extent by the growth of several new firms. These include Crown Bevcan, Pirelli and Nestle. Other employers are connected to the haulage or services industries.

Carlisle was in many ways a railway town. The 1921 Railway Act, which amalgamated the multitude of railway companies into four main groups, and the 1947 Transport Act, which nationalised the railway system. This affected Carlisle as it resulted in the closure of two unprofitable lines.

A large area of land to the North of the City has been utilised by the Ministry of Defence (MOD) for ordinance, residential and training purposes. Past activities on the site has resulted in areas of land contamination. Large areas of this land have been remediated and sold for residential development or commercial use.

2.10 Land owned by Carlisle City Council

Carlisle City Council owns land and non-housing based property assets with a current capital value of £127,094,000 million.

The Property Services section of the Carlisle City Council has developed an Asset Management Plan which is updated annually and information contained therein is available for use in the process of examination of council holdings in the contaminated land survey and inspection process.

In addition to current ownership there is also the potential liability arising from historical ownership by Carlisle City Council and predecessor authorities. Where Carlisle City Council are shown to be the polluter of a piece of contaminated land, they will undertake the measures necessary to ensure the source, pathway receptor linkage is broken.

2.11 PROTECTED LOCATIONS

Within Carlisle District there are two designated Areas of Outstanding Natural Beauty (AONB). The landscape of the North Pennines Area of Outstanding Natural Beauty (AONB) is characterised by heather moorland, with remote river valleys. In the west, the Solway Coast AONB extends into the District and here the landscape is characterised by open salt marsh, dissected by river channels subject to frequent tidal inundations.

There are 34 Sites of Special Scientific Interest SSSI's in the District which are nationally important conservation sites. They range from large sites of international importance, such as the Upper Solway Flats and Marshes, and Butterburn Flow, the most important blanket bog in England, to small sites designated for their geological interest.

The Upper Solway is also designated under the RAMSAR Convention as a wetland of international importance, under the terms of the European Community Directive on the Conservation of Wild Birds as a Special Protection Area (SPA) and under the European Habitats Directive as a candidate Special Area of Conservation (SAC). These latter two designations are of European importance and together will form part of a network of internationally important wildlife sites within the EU which will be known as Natura 2000.

In addition to SSSI's are a large number of other important nature conservation sites in the District known as Wildlife Sites. These sites range from roadside verges to areas of woodland. The Cumbria Wildlife Trust designates these local sites. Carlisle has a rich biodiversity, not all areas of which are found in protected sites.

A further designation and a growing initiative are the Regionally Important Geologically/Geomorphologic Sites (RIGS) which aim to maintain and enhance specific features of rock and landform and the dynamic natural processes which create them. These sites range from quarries to river courses.

Within Carlisle District are two Local Nature Reserves – Kingmoor Nature Reserve and Kingmoor Sidings.

2.12 GEOLOGY

2.12.1 Solid Geology

Figure 3 details the major divisions, which form the Carlisle Basin and surrounding area. As can be seen the area around Carlisle comprises sandstones and mudstones deposits. Interspersed amongst these deposits to the South and West of the district are older Permian sandstones and mudstones.

Figure 3 Geological map of North Cumbria

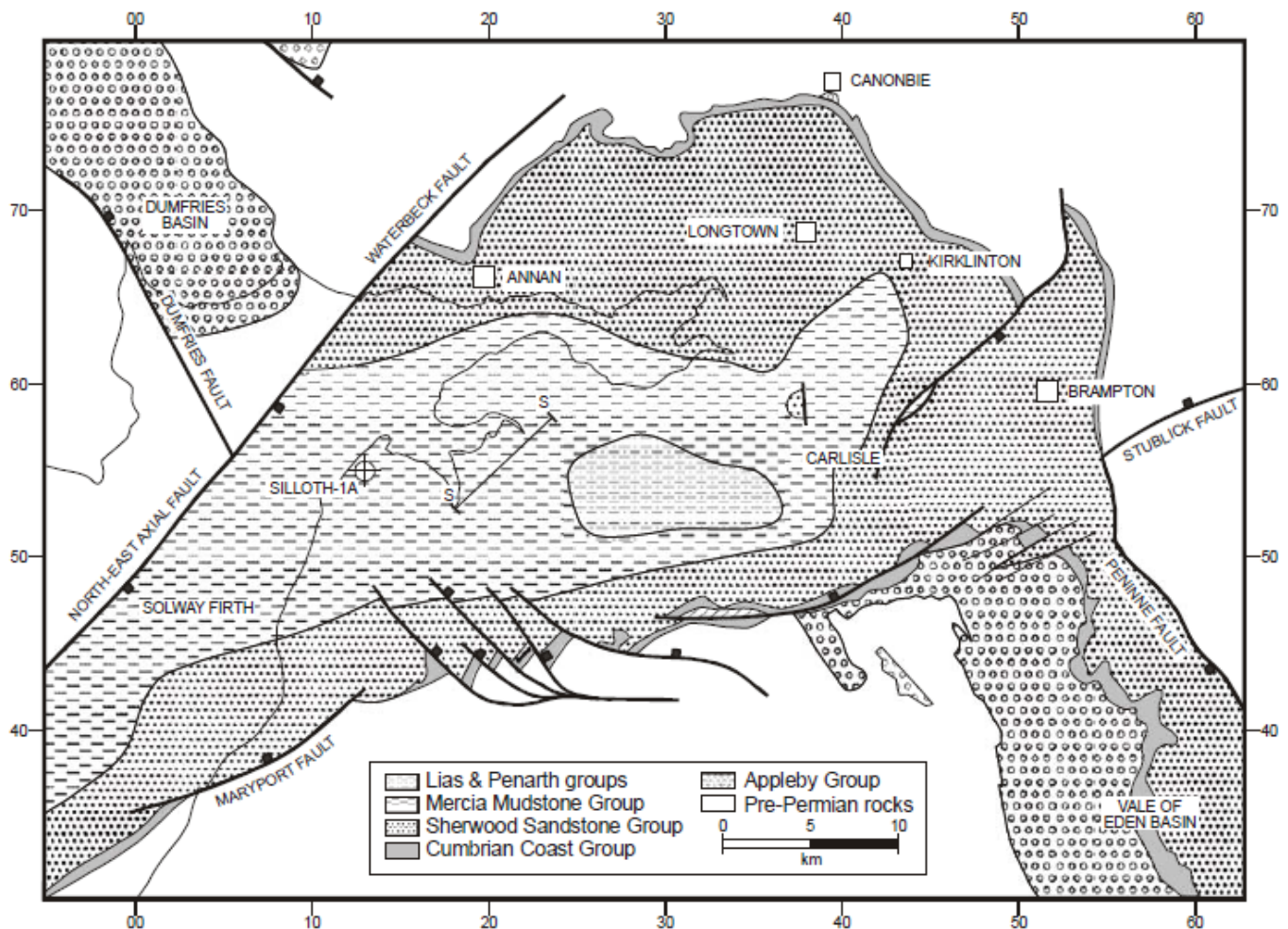


Figure 3

The Eastern part of the district's Carboniferous period ranging from 280 to 345 million years ago. Millstone grits and lower coal measures developed in the Southern portion with limestones developing in the Northern portion.

The Carboniferous period laid down the only workable coal deposits in the area, extending from South of Castle Carrock through Midgeholme.

Following on the Carboniferous period, volcanic action gave rise to small areas of igneous (lava) intrusions and dykes, to the East of the Eden Valley with one dyke cutting through the valley from North West to South East.

2.12.2 Drift Geology

The drift geology is the result of the Southern advance of the polar ice caps.

The ice movements caused tremendous erosion of the solid geology and transported a mass of ground up rock and boulders for many kilometres. This mass was thickly spread over lower ground and when the ice retreated, sands and graves together with clays were washed out of the ice by the melt waters.

Our local rivers have carved out their present valleys and gorges and laid down silt on their flood plains.

2.12.3 The Carlisle Plain

This a low lying area which extends inland from the Solway Estuary, some 12 kilometres on average, before reaching the 30 metre contour. Within this area, which contains the flood plains of all the rivers in the area, are situated some of the richest and most productive agricultural lands. Due to the past glacial action soil types are variable with regions of sand and gravel interspersed amongst the heavier clays. These clays create difficulties of drainage, which can affect both agricultural production and housing development in unsewered areas.

2.12.4 Lowland Zone

A zone of land which steadily rises from the 30 metre to the 150 metre contour. Above 150 metres, the landscape develops the characteristics of fell sides and hills.

2.12.5 Hills and Uplands

Subdivided into Bewcastle Fells in the North East and the Pennine plateau and foothills in the East. Both areas contain blanket bog, acid grassland and heather moorland.

2.12.6 Areas of Metal Enriched Soils

The British Geological Survey office has confirmed that there are no major areas of naturally occurring metal enriched soils in Carlisle. However there are some areas of metal enriched soils including the evaporate beds of Gypsum and Anhydrite in the Cotehill area and carboniferous and igneous intrusions are present to the North and East of the district.

2.13 KEY WATER RESOURCE/PROTECTION ISSUES

A significant proportion of Carlisle City Council's distant rural population, are dependent on private water supplies, and thus water resource/protection issues in rural areas are very important. Half of the Carlisle City Council's area lies over a minor aquifer and a third over a major aquifer. The major aquifer is very environmentally sensitive, as it has a large abstraction potential, and has a greater yield and more freely available water (often of a higher quality) than the minor aquifer. (See Figure 4)

The greatest risks to water resources from land contamination are found in the urban areas and source protection zones therefore need to be considered, especially with the large number of abstractions in the area. (See Figure 5). Carlisle is situated on the Permo – Triassic Sandstone Aquifer (this is a major aquifer) and it is essential that where land contamination is identified that the EA(EA) is consulted regarding possible impact on controlled waters.

The Rivers Eden, River Caldew and Petteril run through Carlisle. These are all good quality rivers with a large proportion of Carlisle’s drinking water originating from the River Eden.

FIGURE 4

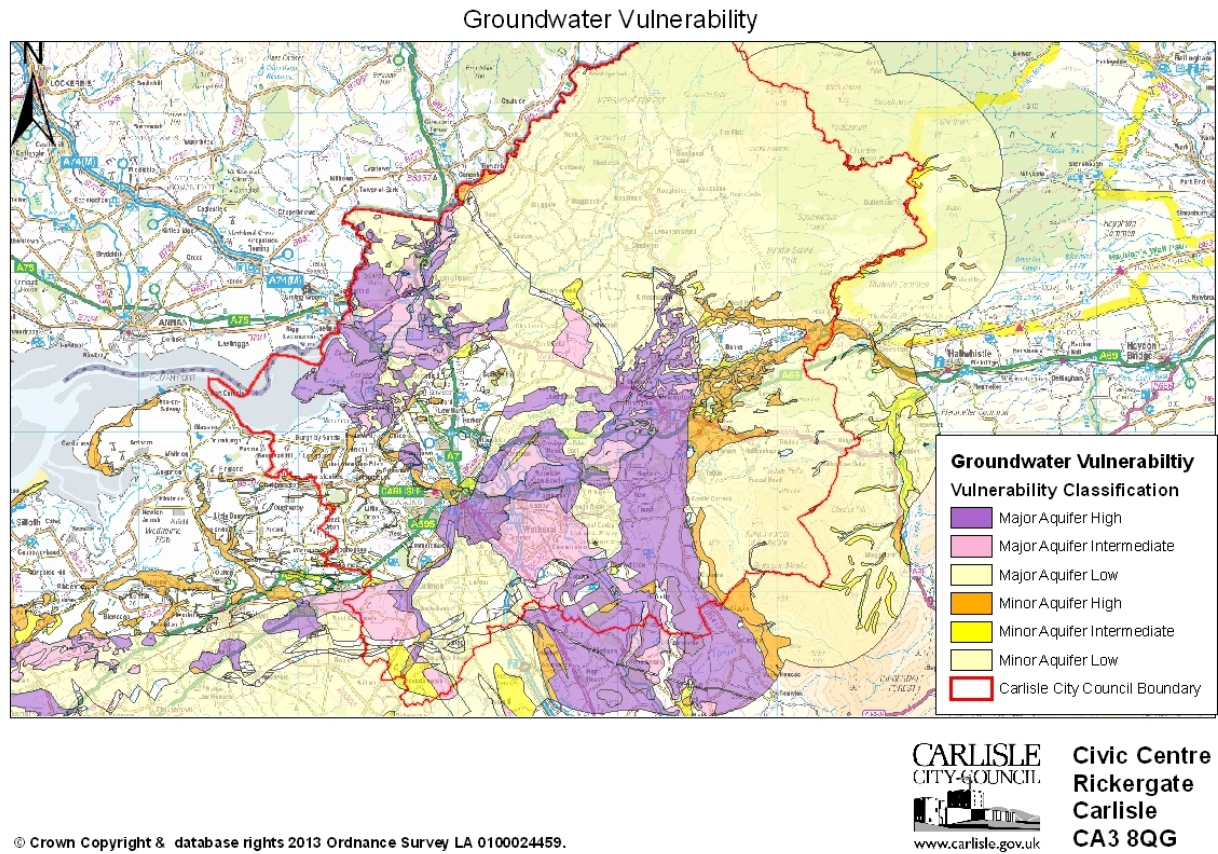
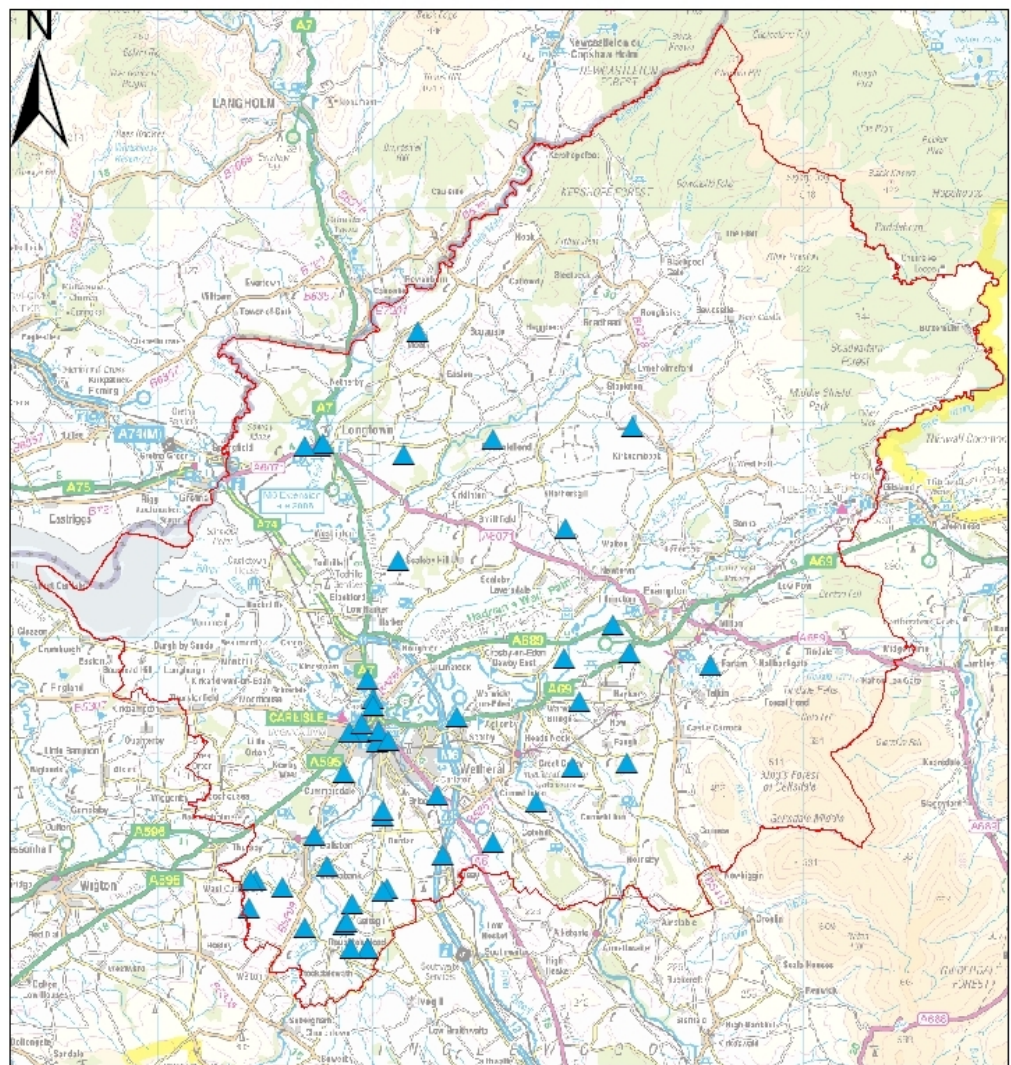


FIGURE 5

Groundwater Abstractions within Carlisle City Council Area



▲ Groundwater Abstractions



Civic Centre
Rickergate
Carlisle
CA3 8QG

© Crown Copyright & database rights 2013 Ordnance Survey LA 0100024459.

3.0 REGULATION OF PART 2A

3.1 Legislation

Sections 78A to 78YC of Part 2A of the Environmental Protection Act 1990 stipulate how Local Authorities should deal with the legacy of land contamination. This legislation is complemented by the Contaminated Land (England) Regulations 2006 (“the Regulations”) and the revised statutory guidance issued by DEFRA in April 2012, entitled “Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance.” The latter guidance is legally binding on enforcing authorities.

Radioactive contaminated land is covered by separate statutory guidance.

3.2 Roles & Responsibilities

3.2.1 Carlisle City Council

Local Authorities are still the primary regulator under Part 2A. Our main duties are to:

- Prepare, adopt and publish a Contaminated Land Inspection Strategy
- Regularly review the above strategy to ensure a rational, ordered, timely, consistent and efficient approach to dealing with potentially contaminated sites within the Carlisle City Council’s area
- Prevent the creation of new contaminated land
- Identify any land within the area of Carlisle City Council that is causing unacceptable risk to human health, controlled waters or the environment. Ensure that, where present, the most urgent sites are identified and dealt with first, taking into account the seriousness of any actual or potential risk
- Ensure that all land owned by Carlisle City Council is inspected and that any risks to human health, controlled waters or the environment are minimised.
- ‘Determine’ those sites that meet the statutory definition of contaminated land and establish whether these sites would be likely to meet one or more of the descriptions of a ‘Special Site’ set out in the Contaminated Land Regulations 2006
- Maintain a ‘public register’ of regulatory action relating to contaminated land taken from all sites determined by the Carlisle City Council
- Ensure that the effective remediation of contaminated land takes place and occurs through voluntary action where possible, only resorting to enforcement powers when all else fails
- Apportion liability for any remediation and ensure that the “Polluter Pays” principle is followed
- Devise and adopt a cost recovery/hardship policy
- Ensure that potential land contamination issues are considered in all strategic planning and development control decisions in order to reduce the number of potential Part 2A sites

3.2.2 The Environment Agency

Delivery of the strategy is based upon close partnership working, especially with the EA, who has the following responsibilities under the Part 2A regime:

- Provide site specific advice to local authorities with respect to pollution of controlled waters.
- Act as the enforcing authority on all designated “Special Sites”

- Periodically produce a report on the state of contaminated land nationally.

4.0 UNDERLYING PRINCIPLES OF PART 2A

4.1 Contaminant linkages

The guidance follows established principles of risk assessment, including the concept of a 'contaminant linkage' (i.e. a linkage between a 'contaminant' and a 'receptor' by means of a 'pathway') where:

- A 'contaminant' is a substance which is in, on or under the land and which has the potential to cause harm to a relevant receptor, or cause significant pollution of controlled waters;
- A 'receptor' is something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property or controlled waters;
- A 'pathway' is a route by which a receptor is or might be affected by a contaminant.

All three elements of a contaminant linkage must exist in relation to a particular site and a 'significant contaminant linkage' must be identified for any land to be regarded as 'Contaminated Land' on the basis that significant harm is being caused, or that there is a significant possibility of such harm being caused. The presence of a contaminant on a site will not be sufficient to determine the land as contaminated land. More than one contaminant linkage may exist on a site and each linkage will be reviewed separately to ascertain its potential to cause harm and determine who may be liable for its remediation.

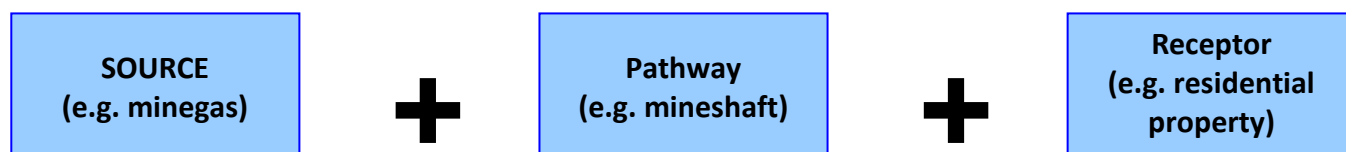
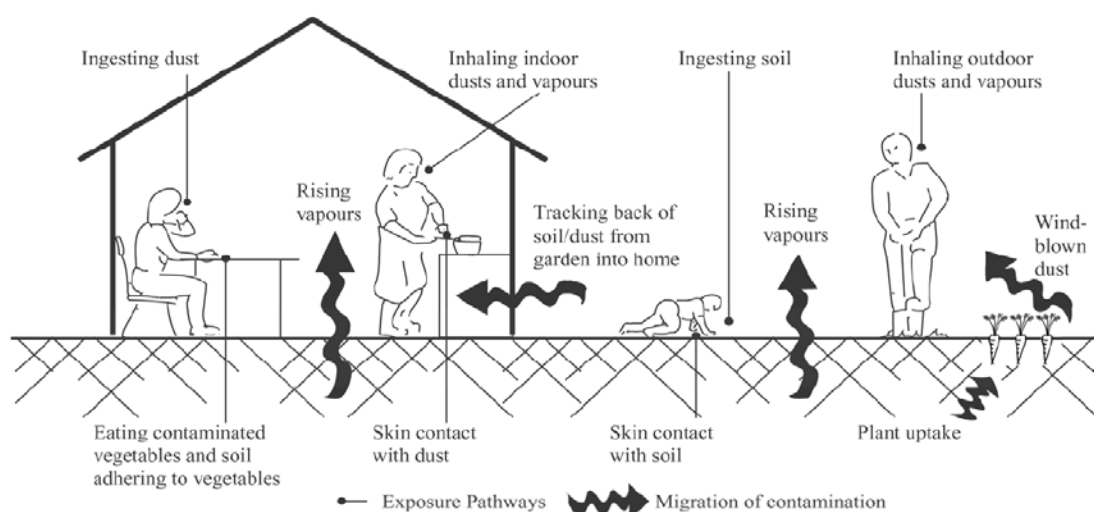


Figure 6: Illustration of Potential Exposure Pathways



Source [Environment Agency \(2009b\)](#)

4.2 Risk Assessment

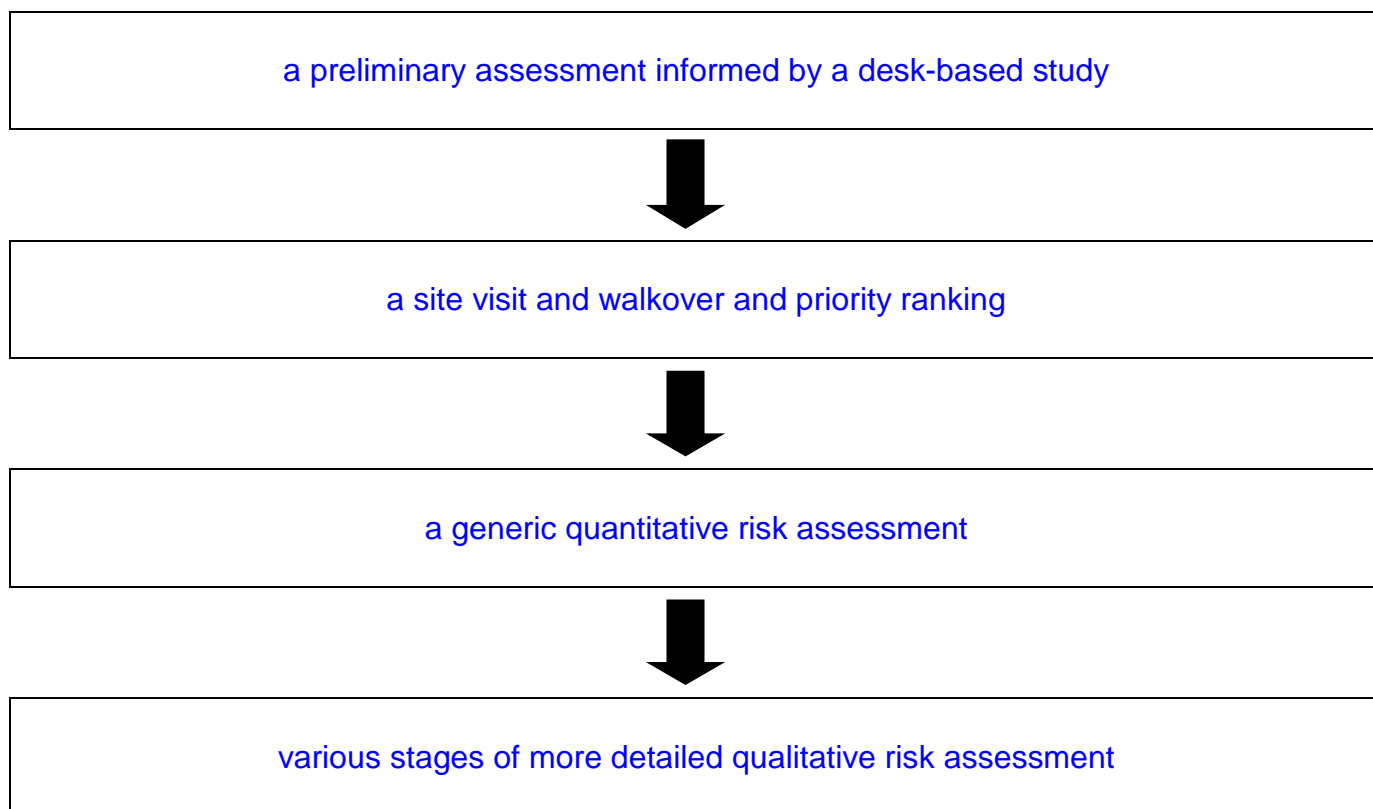
The definition of contaminated land reflects the 'suitable for use' approach and, as previously stated, is underpinned by the principles of risk assessment. Risk is taken to mean the combination of:

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

The above means that contamination must be having, or be very likely to have, a detrimental impact on humans or the environment before a site can be classed as contaminated land.

4.2.1 The Process of Risk Assessment

The process of risk assessment involves understanding the risks presented by land and the associated uncertainties. The understanding of the risks is developed through a staged approach to risk assessment, often involving:



This process should normally continue until it is possible for Carlisle City Council to decide that: (a) there is insufficient evidence that the land might be contaminated land to justify further inspection and assessment; and/or (b) whether or not the land is contaminated land.

For land to proceed to the next stage of risk assessment there should be evidence that an unacceptable risk could reasonably exist. If Carlisle City Council believes there is little reason to consider that the land might pose an unacceptable risk, inspection activities should stop at that point. This decision will be based on information that is:

- Scientifically based
- Authoritative

- Appropriate to inform regulatory decisions in accordance with Part 2A and the revised guidance

4.3 Using external expertise during risk assessment

Carlisle City Council recognises that there will be occasions where the specialist knowledge and technical expertise of consultants will be required in implementing the strategy. When choosing specialist consultants Carlisle City Council will ensure that they are appropriately qualified and competent to undertake the work.

Whilst experts may advise Carlisle City Council on regulatory decisions under the Part 2A regime, the decisions themselves remain the sole responsibility of the LA.

4.4 Normal background concentrations of contaminants:

The revised Statutory Guidance indicates that normal background concentrations (NBCs) should be taken into account when assessing the potential for a site to be considered as contaminated land under Part 2A. NBC should not be considered to cause land to qualify as contaminated land unless there is a particular reason to consider otherwise.

The Statutory Guidance states that “normal” levels of contaminants in soil may arise from:

- The natural presence of contaminants (e.g. caused by soil formation processes and underlying geology) at levels that might reasonably be considered typical in a given area and have not been shown to pose an unacceptable risk to human health or the environment
- The presence of contaminants caused by low level diffuse pollution, and common human activity other than specific industrial processes. For example, this would include the spreading of domestic ash in gardens that results in the presence of benzo(a)pyrene at levels that might reasonably be considered typical.

The British Geological Survey 2012 have published a methodology for the determination of normal background contaminant concentrations in English soils which will inform our decision making on “normal levels of contaminants”.

4.5 Generic Assessment Criteria

4.6 It is common practice in contaminated land risk assessment to use “generic assessment criteria” (GAC) as a screening tool to help assessors decide whether land can be excluded from the need for further inspection and assessment, or whether further work may be warranted. GACs represent cautious estimates of levels of contaminants in soil at which there is considered to be no risk to health or, at most, a minimal risk.

Carlisle City Council may use GACs, and other technical tools to inform our decisions under Part 2A only where:

- They have been appropriately derived and used
- They have been produced in an objective, scientifically robust and expert manner by a reputable organisation
- They are used in a manner that is in accordance with Part 2A and the revised Statutory Guidance (April 2012)

However, GACs should not be used as:

- direct indicators of whether Significant Possibility of Significant Harm (SPOSH) to human health exists (see S4.6)
- screening levels to decide whether land would be classified as Category 3 or 4 (see S4.6)
- indicators of levels of contamination above which detailed risk assessment would automatically be required under Part 2A
- generic remediation targets, under Part 2A or the planning system

Where possible Carlisle City Council will utilize the Soil Guideline Values (SGVs) generated by the EA using the most up-to-date version of CLEA UK (Contaminated Land Exposure Assessment). Other published GACs produced on a similar basis by LQM/CIEH, utilizing CLEA methodology, may also be used if no SGVs are available. Other GACs, derived by reputable organisations and competent practitioners in the contaminated land sector, are also available for the most commonly occurring contaminants in soil.

4.6 Risk Categories

4.6.1 Significant Harm and Significant Possibility of Significant Harm to Human Health

Section 78A(4) defines harm as meaning harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property. The following health effects should always be considered to constitute significant harm to human health:

- Death
- Life threatening diseases (e.g. cancers)
- Other diseases likely to have serious impacts on health
- Serious injury
- Birth defects
- Impairment of reproductive functions

If the LA decides that harm is occurring but it is not 'Significant Harm', it should decide whether the land poses a (SPOSH). These terms are defined further in Section 4 of the 2012 Statutory Guidance.

The revised Statutory Guidance also subdivides sites into four categories based upon the likelihood of SPOSH.

4.6.2 Category 1: Human Health

Includes sites where the LA considers there is an unacceptably high probability, supported by robust scientific based evidence, that Significant Harm would occur if no action is taken to stop it.

4.6.3 Category 2: Human Health

These are sites where the land would be capable of being determined as contaminated land on the grounds of SPOSH to human health. 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 nevertheless 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.

4.6.4 Category 3: Human Health

These are sites where the strong case as described in Category 2 does not exist, and therefore the legal test for Significant Possibility of Significant Harm is not met. Includes land where the risks are not low, but nevertheless 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 the land, from taking action to reduce the risks outside of the Part 2A regime if they choose.

4.6.5 Category 4: Human Health

Sites where there is no risk, or that the level of risk is low, that the land poses a SPOSH fall into Category 4. This includes sites where: no relevant contaminant linkage has been established; there are only normal levels of contaminants in soil; contaminant levels do not exceed relevant Generic Assessment Criteria (GACs) etc; or where 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.

‘Generic Assessment Criteria, as referred to above, are an integral part of the risk assessment process for land affected by contamination and are a useful starting point for assessing unacceptable intake of contaminants in the context of Part 2A.

For land that cannot be placed in either Categories 1 or 4, the LA should consider whether the land should be placed in Category 2 (i.e. where SPOSH exists), or Category 3 (in which case the land would not be capable of being determined as contaminated land). The LA must consider a number of factors when making this decision, including: the estimated likelihood of such harm; the estimated impact if it did occur; the timescales over which it might occur; and the levels of certainty attached to these estimates. If there is not a strong case for SPOSH, it should also consider other factors including: the likely direct and indirect health benefits and impact of regulatory intervention; an 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.

If, having taken the above factors into account, the LA still cannot decide whether or not SPOSH exists, it should conclude that the legal test has not been met and the land should be placed in Category 3.

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

In considering non-human receptors, the LA should only regard receptors described in Tables 1 and 2 as being relevant for the purposes of Part 2A (i.e. ecological systems and property)

Table 1: Ecological system effects

Relevant types of receptor	Significant harm	Significant possibility of significant harm
<p>Any ecological system, or living organism forming part of such a system, within a location which is:</p> <ul style="list-style-type: none"> • A site of Special Scientific Interest (under s.28 of the Wildlife and Countryside Act 1981) • A National Nature Reserve (under s.35 of the 1981 Act) • A Marine Nature Reserve (under s.36 of the 1981 Act) • An area of special protection for birds (under s.3 of the 1981 Act) • A “European site” within the meaning of regulation 8 of the Conservation of Habitats and Special Regulations 2010 • Any habitat or site afforded policy protection under paragraph 6 of Planning Policy Statement (PPS9) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar sites); or any nature reserve established under s.21 of the National Parks and Access to the Countryside Act 1949 	<p>The following types of harm should be considered as 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 favourable conservation status of natural habitats at such locations or species typically found there. In deciding what constitutes such harm, the LA should have regard to the advice of Natural England and the requirements of the Conservation of Habitats and Species Regulations 2010</p>	<p>Conditions would exist for considering that significant possibility of significant harm exists to a relevant ecological receptor where the LA considers that;</p> <ul style="list-style-type: none"> • Significant harm of that description is more likely than not to 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>

The LA will always consult with Natural England when considering the “ecological system effects” described in Table 1 and will have regard to its comments before deciding whether or not to make a determination.

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 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 on this category, a substantial loss in its value resulting from death, disease or other serious physical damage.</p> <p>The LA should regard substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer for their intended purpose. Food should be regarded as no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a contaminant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes substantial diminution or loss.</p> <p>Referred to in the revised statutory guidance as “animal or crop effect”</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant type of receptor where the LA considers that significant harm is more likely than not to result from the contaminant linkage in question, taking into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>
<p>Property in the form of buildings. For this purpose, “building” means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery</p>	<p>Structural failure, substantial damage or substantial interference with any right of occupation. The LA should regard substantial damage or substantial</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the LA considers that significant harm is more likely than not</p>

<p>comprised in a building, or buried services such as sewers, water pipes or electricity cables</p>	<p>interference as occurring when any part of the building ceases to be capable of being used for the purpose for which it is or was intended.</p> <p>In the case of a scheduled Ancient Monument, substantial damage should also be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.</p> <p>Referred to in the revised statutory guidance as “building effect” .</p>	<p>to result from the contaminant linkage in question during the expected economic life of the building (or in the case of a scheduled Ancient Monument the foreseeable future), taking into account relevant information for that type of contaminant linkage.</p>
--	---	---

4.7 Significant Pollution of controlled waters and Significant Possibility of Significant Pollution of controlled waters (SPOSP)

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

- 5 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;
- 6 Inputs resulting in deterioration of the quality of water abstracted, or intended to be used in the future, for human consumption such that additional treatment would be required to enable its use
- 7 A breach of the statutory surface water Environmental Quality Standards, either directly or via a groundwater pathway
- 8 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))

If the Carlisle City Council considers it likely that contamination, such as that listed above, is occurring we will consult with the EA and have strong regard to their advice.

The revised Statutory Guidance also subdivides controlled waters into four categories based upon the likelihood of SPOSH of controlled waters existing:

4.7.1 Category 1:

This covers land where the LA considers that there is a strong and compelling case for considering that a SPOSH of controlled waters exists. In particular, this would include cases where there is robust science-based evidence for considering that it is likely that high impact pollution, such as that mentioned above, would occur if nothing were done to stop it.

4.7.2 Category 2:

This covers land where: (i) the LA considers that the strength of evidence to put the land into Category 1 does not exist; but (ii) nevertheless, on the basis of the available scientific evidence and expert opinion, the authority considers the risks posed by the land are of sufficient concern that the land should be considered to pose a SPOSH of controlled waters on a precautionary basis. This category may include land where there is a relatively low likelihood that the most serious types of significant pollution might occur.

4.7.3 Category 3:

This covers land where the tests set out in Categories 1 and 2 are not met, and therefore regulatory intervention under Part 2A is not required. 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.

4.7.4 Category 4:

This covers land where the authority considers that there is no risk, or that the level of risk is very low. Examples include where: no contaminant linkage has been established in which controlled waters is the ‘receptor’; the type of pollution occurring is not considered to be Significant Pollution; or the possibility of water pollution is similar to that which might be caused by ‘background’ contamination.

4.8 Special Sites

Special Sites are defined within the Contaminated Land (England) Regulations 2006. These are sites which meet the definition of 'Contaminated Land', but also fall within one of the other descriptions in the Regulations, including:

- Certain water pollution cases
- Industrial cases (nuclear sites, certain IPPC sites, etc)
- Land owned by the Ministry of Defence
- All radioactive Contaminated Land

4.9 Radioactivity

The historical use of radioactive materials in a wide variety of industries has led to a legacy of contamination by radioactive substances, primarily due to a lack of effective regulation or understanding of the hazards. The Part 2A regime was therefore extended in 2006 to include contamination of land by radioactivity. As stated above, such sites fall under the definition of a 'Special Site' and are regulated by the EA.

However, the 2012 revised statutory guidance does not apply to radioactive contamination of land and it is therefore covered by separate guidance. In the event that land is affected by both radioactive & non-radioactive contaminants both sets of guidance will apply and Carlisle City Council should decide what is a reasonable course of action, having due regard to both the relevant primary legislation and advice from the EA.

4.10 Interaction with other regulatory regimes

In addition to its Part 2A powers, Carlisle City Council may also deal with contaminated land using other regulatory regimes:

4.10.1 Contaminated Land & the Planning Process

It is Carlisle City Council's policy to encourage, where practicable, redevelopment of brownfield sites within the Carlisle City Council's area.

The National Planning Policy Framework (NPPF) (DCLG, 2012) seeks to prevent unacceptable risks from pollution. Planning decisions should ensure that all new development is appropriate for its location and that potential land contamination issues are considered in strategic planning and development control decisions.

Paragraph 121 of the NPPF states that planning decisions should ensure that:

- The site is suitable for its new use taking account of ground conditions, including from natural hazards or former activities such as mining, pollution arising from previous uses and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation;
- After remediation, as a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990; and
- Adequate site investigation information, prepared by a competent person, is presented.

Unlike Part 2A, where a site is affected by contamination, responsibility for securing a safe development rests with the developer and/or landowner and not the original polluter

See Developers Guide (Appendix 2) for more details

4.10.2 Building Regulations

Compliance with Building Regulations is a separate issue from the planning regime and approval may also be required. The developer/applicant must therefore ensure that the Building Control Officer is aware of any contamination issues and that the appropriate requirements are met under 'Approved Document C - Site preparation and resistance to contaminants and moisture'. The aforementioned document provides practical guidance for ensuring that new buildings are protected from contaminants.

Requirements under C1 include:

- The ground to be covered by the building shall be reasonably free from any material that might damage the building or affect its stability, including vegetable matter, topsoil and pre-existing foundations
- Adequate subsoil drainage shall be provided if it is needed to avoid:
 - (a) the passage of ground moisture to the interior of the building;
 - (b) damage to the building, including damage through the transport of water-borne contaminants to the foundations of the building
- For the purpose of this requirement, 'contaminant' means any substance which is or may become harmful to persons or buildings including substances which are corrosive, explosive, flammable, radioactive or toxic.

Approved Document C has recently been revised to reflect changes arising as a result of the Building Regulations 2010 and the revisions came into force in 2013.

4.10.3 Environmental Permitting

Some industrial installations have the potential to cause pollution. Since 1990 many of these installations have required an 'authorisation' from the LA or the EA to operate.

The Environmental Permitting Regulations (England and Wales) 2010 prescribe which industrial installations need to hold permits. The Regulations are designed to minimize the impact from potentially polluting activities and combine the previous Pollution Prevention and Control (PPC) and Waste management Licensing (WML) Regulations. They also include water discharge and groundwater activities, radioactive substances and provision for a number of Directives, including the Mining Waste Directive

There are currently three types of installation classification:

- Part A1: All environmental emissions and impacts considered, including air pollution, water pollution, noise, land contamination, energy consumption, waste minimization and environmental accident prevention. A1 installations are regulated by the EA
- Part A2: As above but regulated by the LA
- Part B: Required to control air pollution and are regulated by the LA

Prior to commencing an operation of a prescribed installation the operator must submit an application to the LA or Environment Agency. The relevant regulatory authority will then consult with statutory bodies for any comments on the application. A permit, containing numerous operating conditions in accordance with government guidance must then be issued

or refused. The operator of the prescribed installation must comply with the conditions of the permit or the relevant regulatory authority may take action against them. Operators are also subject to routine inspections to check compliance with conditions.

4.10.4 Water Resources

The EA deals with possible pollution of controlled waters from historical contamination. They have powers under s161A of the Water Resources Act 1991 and the Anti-pollution Works Regulations 1999 to ensure action is taken to prevent or remedy pollution of controlled waters. The EA also have powers under the Groundwater Regulations 1998 to prevent pollution of groundwater.

Under the Water Framework Directive, the EA must characterise each of the eleven River Basin Districts in England and Wales and assess the impact of human activity on the water bodies within those districts, including rivers, lakes, estuaries, coastal waters and groundwater. The provisions of the Directive have implications for contaminated land as it may affect the levels of certain pollutants that are likely to be considered as harmful to controlled waters.

4.10.5 The Environmental Damage (Prevention and Remediation) Regulations 2009

The Environmental Damage (Prevention and Remediation) Regulations 2009 were introduced on 1 March 2009 to implement the provisions of the European Commission's Environmental Liability Directive into law in England.

The Regulations aim to prevent and remedy damage to land, water and biodiversity. They are based on the 'polluter pays principle', i.e. those responsible for environmental damage are required to prevent or remedy damage, rather than the taxpayer. Obligations are placed on businesses (or 'operators' of commercial 'activities' in the words of the Regulations) to put in place precautionary measures to avoid environmental damage and to take remedial action if it occurs.

The Regulations aim to create an incentive to operators of activities that are likely to cause environmental damage to take steps to avoid environmental damage, and to possess adequate funds (e.g. insurance) to pay for the remediation or clean up of any environmental damage they cause. 'Environmental damage' has a specific meaning in the Regulations, and covers only the most severe cases. Existing legislation with provisions for environmental liability remains in place.



5.0 IDENTIFICATION AND PRIORITISATION

5.1 Information on the possible presence of contamination

In carrying out its Part 2A duties in a strategic manner, Carlisle City Council has paid due regard to: its own local circumstances; the level of detailed information on Carlisle City Councils area currently available; and the accessibility of internal/external funding. This has enabled us to take a rational, ordered, efficient and consistent approach to Part 2A, as specified within the Statutory Guidance.

The following aspects have all been considered during implementation of the Part 2A regime:

- Available evidence that significant harm/significant possibility of significant harm or pollution of controlled waters is occurring
- The extent to which human receptors, ecological receptors and controlled waters are distributed across the Carlisle City Councils area
- The history, scale and nature of previous industrial activity within the Carlisle City Councils area which may have given rise to potential contamination
- The extent to which the above receptors are likely to be exposed to a contaminant as a result of previous/current use of the land or its geology/hydrogeology

5.1.1 Development of Key Datasets

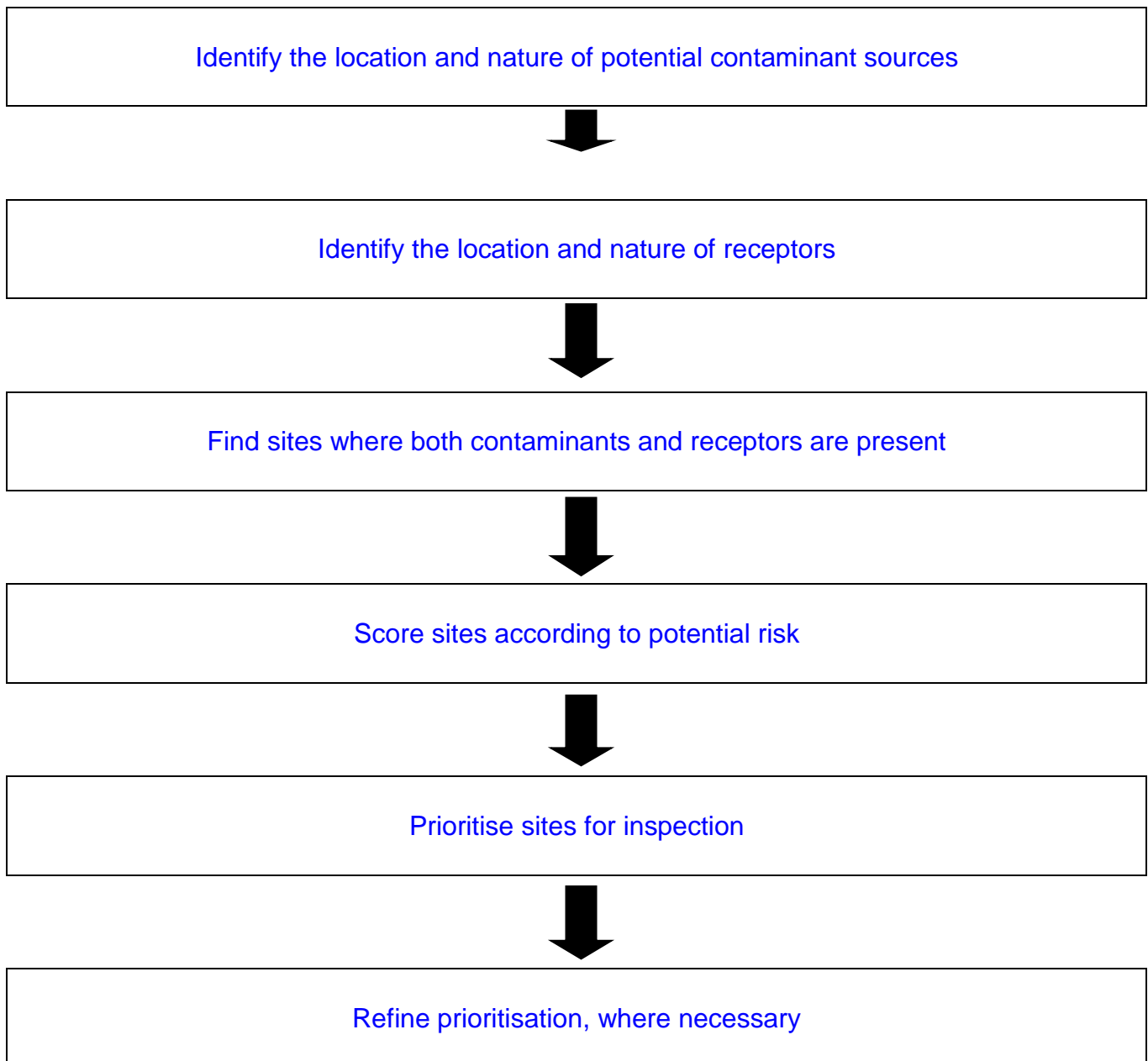
Carlisle City Council has used various sources of information in order to identify potentially contaminated land within the Carlisle City Councils area:

- 'Historical land uses' were initially identified from historical maps from county archives and trade directories. The aforementioned information was further supplemented with datasets from the Environment Agency, County Council and the Coal Authority. This information has been placed on Carlisle City Council's GIS. These sites are being ranked according to a risk rating system, which takes into account potential seriousness of the contamination receptors present and the likelihood of path ways.



5.1.2 Prioritisation of detailed inspection activity

Carlisle City Council has adopted the following approach to prioritizing sites for detailed inspection:



A wide range of industries may historically have contaminated, or have the potential to contaminate, the land they are sited upon (and neighbouring land). The DOE Industry Profiles provide further details.

Table 3: Potentially contaminating land uses

- Smelters, foundries, steel works, metal processing & finishing works
- Coal & mineral mining & processing, both deep mines and opencast
- Heavy engineering & engineering works, e.g. car manufacture & shipbuilding
- Military/defence related activities
- Electrical , electronic equipment manufacture & repair
- Gasworks, coal carbonization plants & power stations
- Oil refineries, petroleum storage & distribution sites
- Manufacture use of asbestos, cement, lime & gypsum
- Manufacture of organic, inorganic chemicals, including pesticides, acids/alkalis, pharmaceuticals, solvents, paints, detergents & cosmetics
- Rubber industry, including tyre manufacture
- Munitions, explosives production, testing & storage sites
- Glass making & ceramics manufacture
- Textile industry, including tanning & dyestuffs
- Paper, pulp manufacture, printing works & photographic processing
- Timber treatment
- Food processing industry & catering establishments
- Railway depots, dockyards (including filled dock basins), garages, road haulage depots, airports
- Landfill, storage & incineration of waste
- Sewage works, farms, stables & kennels
- Abattoirs, animal waste processing & burial of diseased livestock
- Scrap yards
- Dry cleaning premises
- All types of laboratories

Other uses and types of land that might be contaminated include:

- Radioactive substances used in industrial activities not mentioned above (e.g. gas mantle production, luminising works)
- Burial sites & graveyards
- Agricultural (excessive use or spills of pesticides, herbicides, fungicides, sewage sludge & farm waste disposal)
- Naturally occurring radioactivity, including radon
- Naturally occurring elevated concentrations of metals & other substances
- Methane, carbon dioxide production & emissions in coal mining areas, wetlands, peat moors or former wetlands

The sites identified from the preliminary screening are being ranked according to potential risk and given a prioritisation score in order to determine their priority for inspection. In theory, the sites with the top scores following the preliminary screening will be subject the detailed inspection first. However, from time to time other sites may also come to Carlisle City Council's attention that may need priority attention. This can occur at any stage during detailed inspection as further information is acquired and evaluated.

6.0 DETAILED INSPECTION OF CONTAMINATED LAND

Detailed inspection initially involves the collation and assessment of further information through desk study and site reconnaissance. If this preliminary risk assessment identifies that a potentially unacceptable risk from contamination is present, further intrusive field investigation will be required to determine the existence of contaminant linkages and to ultimately decide whether or not the site meets the definition of contaminated land.

6.1 Overview of Procedures

The Model Procedures for the Management of Contaminated Land (CLR 11) explains the risk assessment procedure when dealing with potentially contaminated land; it is recommended that a tiered approach be adopted and investigations undertaken in accordance with 'BS10175 (2011) Investigations of Potentially Contaminated Sites – Code of Practice'. The main stages involved in assessment, determination and remediation of contaminated land under Part 2A are outlined in s5.1.2. Further information on each relevant stage is also provided below:

Stage 1: Preliminary Investigation

(desk study, site reconnaissance and preliminary risk assessment)
Consider whether Special Site (if so, contact EA)



Stage 2: Field Investigation and Risk Assessment

(including collection of soil, water and leachate samples etc)

Following robust, appropriate, scientific and technical assessment, if evidence suggests that the site poses an unacceptable risk from contamination the site should be determined as 'Contaminated Land'. Where there is little or no evidence to suggest that it is contaminated land Carlisle City Council should issue a written statement to that effect to minimize unwarranted blight.



Stage 3: Determination

Identify all Appropriate Persons of Carlisle City Council's intention to determine the land unless the authority considers there is an overriding reason for not doing so.
Provide the aforementioned parties, and the Environment Agency, with a written copy of the 'Record of Determination'



Stage 4: Identification of Liable Persons

Carlisle City Council should make an initial identification of persons who may be responsible for paying for the remediation actions



Stage 5: Establish Remediation Actions

Identify Appropriate remediation
Apportion liability between liability groups
Serve Remediation Notices where works haven't been carried out voluntarily



Stage 6: Remediation & Verification

Secure compliance and verify remedial works
Where Carlisle City Council has remediated the land seek to recover costs

Further information on the desk studies, intrusive field investigations and Risk Assessment can be found in the Developers Guide (Appendix 2).

6.2 Powers of Entry

Under Section 108 of the Environment Act 1995, Carlisle City Council has been granted statutory powers of entry to gain access to any land for the purpose of implementing their duties under Part 2A. At least seven days notice of proposed entry will be given to the owner/occupier, unless there is an immediate risk to human health.

Carlisle City Council can only exercise these powers if it is already satisfied that;

- There is a reasonable possibility that a contaminant linkage exists; and
- For cases involving intrusive site investigation, it is likely that a contaminant is actually present and a receptor exists (or is likely to exist) given the current land use

Section 108 powers cannot be exercised for intrusive site investigation:

- when Carlisle City Council already has the information it needs to decide whether or not the site appears to be contaminated land
- if a person provides the necessary information within a reasonable and specified timescale.

7.0 DETERMINATION AND REMEDIATION OF CONTAMINATED LAND

7.1 Determination

There are four possible grounds for the determination of land as contaminated land:

- Significant harm is being caused to a human, or relevant non-human , receptor
- There is a significant possibility of significant harm being caused to a human, or relevant non-human, receptor
- Significant pollution of controlled waters is being caused
- There is a significant possibility of significant pollution of controlled waters being caused

7.2 Informing interested parties

Before making a determination Carlisle City Council will inform the owners and occupiers of the land, and any other person who appears to the authority to be liable to pay for remediation, of its intention to determine the land (to the extent that we are aware of these parties at the time) unless there is an overriding reason for not doing so.

Carlisle City Council will also consider whether to give the aforementioned persons time to make representations or to propose solutions that might avoid the need for formal determination. In the spirit of the Part 2A regime, Carlisle City Council may decide to postpone determination if voluntary remediation is agreed and Carlisle City Council is satisfied with the measures and timescales proposed. Carlisle City Council may also decide to keep the status of any land under review, in the event that a change of circumstances in the future may cause the land to be determined as contaminated land.

Once determination as contaminated land has occurred Carlisle City Council is legally required to give notice of that fact to: the Environment Agency; the owner of the land; any person who appears to the LA to be in occupation of the whole or any part of the land; and each person who appears to the authority to be an appropriate person.

Carlisle City Council will prepare a written 'Record of Determination of Contaminated Land' (see also S7.4 on Risk Summaries). As a minimum the document will include: a brief description of the site history; details on all 'contaminant linkages' identified on the site; a summary of the works carried out to date; and confirmation that the requirements of the statutory guidance have been satisfied. This record will also be available to the public.

The 'Determination' process will involve a formal three month consultation period, during which time Carlisle City Council will discuss with all of the Appropriate Person how the site can be remediated.

There are a number of possible outcomes to the consultation:

1. the Appropriate Persons may agree to undertake remediation themselves (in full consultation with Carlisle City Council) and issue a remediation statement
2. where remediation is not voluntarily undertaken Carlisle City Council will serve a remediation notice on the relevant Appropriate Person/s.
3. If no action is taken Carlisle City Council may use its powers to undertake remediation itself and issue a remediation statement.

7.3 Deciding that land is not contaminated land

In carrying out its Part 2A duties, Carlisle City Council is likely to inspect land that it then considers is not contaminated land (e.g. because there is little or no evidence following inspection and assessment). In such cases Carlisle City Council will issue a written statement to that effect, thereby minimizing unwarranted blight. The statement will make clear why the land does not meet the definition of contaminated land under Part 2A. Carlisle City Council may choose to qualify its statement (e.g. given that its Part 2A risk assessment may only be relevant to the current use of the land). (See Appendix 3).

It is appreciated that, given the nature of soil contamination and that scientific understanding of risks may evolve over time, it is never possible to know the exact contamination status of any land with absolute certainty. However, as previously stated, the starting assumption of Part 2A is that land is not contaminated land unless there is reason to consider otherwise.

A record of Carlisle City Council's decision, including the reasons for it, will be kept within the Environmental Health Service. Carlisle City Council will also notify the owners of the land and provide them with a copy of the written statement. If appropriate, other interested parties may also be notified of our decision.

7.4 Risk Summaries

For those sites which are likely to be determined as contaminated land, following full detailed inspection and assessment, Carlisle City Council will produce a 'risk summary', in a simple and easy format, which will form part of the 'Record of Determination'. This will include:

- A summary of Carlisle City Council's understanding of the risks posed by the site, including all identified contaminant linkages, the potential impacts and the timescale over which the risk may manifest itself
- A description of the uncertainties behind the risk assessment
- A description of the local and/or national context. This must be done in such a way so as to be understandable and relevant to the layperson
- Initial views on possible remediation options, including a brief description of what the remediation might entail, how long it will take, the likely effects on local people/businesses and the net benefits
- Any other factors which may be relevant and support Carlisle City Council's decision making process
- Where the land is likely to be a 'Special Site', Carlisle City Council will seek the views of the EA and take them into account.

Local Authorities will not produce risk summaries:

- For land which will not be determined as contaminated land (e.g. Categories 3 and 4)
- For land which has been prioritised for detailed inspection but which has not yet been subject to risk assessment
- For land determined as contaminated prior to publication of the revised guidance

7.5 Reconsideration, revocation and variation of determinations

If Carlisle City Council becomes aware of further information which it considers significantly alters the basis for its original decision, it may decide to retain, vary or revoke the determination. This may include situations where:

- New information about the land has come to light
- There has been significant changes in legislation
- The establishment of significant case law or precedent
- Revision of guideline values for contaminants

Carlisle City Council will record its reasons for varying or revoking its determination, alongside the original determination. It will also issue a written statement if remedial action has been taken which stops the land being contaminated land and a copy of this will be kept with the public register (see Section 9.2)

7.6 Determining liability for remediation

Carlisle City Council should make an initial identification of persons who may be responsible for paying for the remediation actions.

The strategic policy in respect of environmental damage is that the polluter should pay. The authority will therefore first look for the persons who caused or knowingly permitted each linkage (i.e. a "Class A Persons").

However, if the pollution incident is historical, the original polluter may no longer be in existence. If no Class A persons can be found, Carlisle City Council will usually seek to identify the owners or occupiers of the land (i.e. "Class B Persons"), although this step does not apply to linkages that relate solely to pollution of controlled waters.

The persons responsible for each linkage make up a 'Liability Group'

Each significant contaminant linkage is treated separately unless it is reasonable to treat more than one linkage together because the same parties are liable. If there is more than one polluter of a site, (e.g. if the site has a long history of different contaminative uses) then Carlisle City Council must decide what apportionment each appropriate person should pay for the remediation works

7.7 Orphan Linkages

An 'orphan linkage' may arise where:

- a) the significant contaminant linkage relates solely to the significant pollution of controlled waters (and not to human health) and no Class A person can be found
- b) no Class A or B persons can be found
- c) those who would otherwise be liable are exempted

Liability for remediating an orphan linkage will be determined by Carlisle City Council according to the statutory guidance (s7.92 to s7.98)

7.8 Remediation

Once land has been determined as contaminated land, Carlisle City Council must consider how it should be remediated and, where appropriate, it must issue a remediation notice to require such remediation. The aim of the remedial work will be to remove the contaminant linkage(s), either by breaking the pathway or by removing the receptor. The standard of remediation should be such that SPOSH will no longer be caused.

Part 2A states that the enforcing authority may only require remedial actions which are reasonable in terms of costs and the seriousness of the pollution or harm. An appropriate person, or some other person, might choose to carry out remediation to a higher standard (e.g. to increase the value of the land or to prepare it for redevelopment) but this will not be required by Carlisle City Council.

In deciding what is reasonable, Carlisle City Council must take into account a number of factors:

- The practicability, effectiveness and durability of the remediation
- The health and environmental impacts of the chosen remedial options
- The financial cost which is likely to be involved
- The benefits of the remediation with regard to seriousness of the harm or pollution of controlled waters.

The remedial action will be deemed reasonable if the benefits of the remediation are likely to outweigh the costs of remediation. Where more than one potential approach is available Carlisle City Council will choose what it considers to be the “best practicable technique”. This is likely to be the technique which achieves the required standards, to appropriate timescales, whilst imposing the least cost on the persons liable for the remediation costs.

7.9 Verification

For the purposes of remediation, CLR11 defines verification as “the process of demonstrating that the risks have been reduced to meet remediation criteria and objectives based on a quantitative assessment of remediation performance” (EA, 2010)

The Statutory Guidance states that all remedial works carried out must be verified by a suitably qualified experienced practitioner.

Further details on ‘verification reporting & monitoring’ are contained within the ‘Developers Guide’ (Appendix 2).

7.10 Remediation Notices

Wherever possible, Carlisle City Council will encourage the voluntary remediation of contaminated land. However, if appropriate remediation cannot be secured by informal agreement Carlisle City Council has powers to serve a remediation notice on appropriate persons. The notice will state what measures need to be carried out to remediate the land in question and the timescales for the work to be done. For sites where there are multiple appropriate persons the notice shall state what proportion of the costs each one is liable to pay. As previously stated, a remediation notice cannot be served within 3 months of that person being notified of the determination as contaminated land

It is an offence under Part 2A not to comply with a remediation notice without a reasonable excuse. However, any person who receives a remediation notice has 21 days from the first day of its service to appeal to the Magistrates Court. The grounds for such as appeal are set

out in the contaminated land regulations. Where an appeal has been made, the Notice is suspended until the Court determines the outcome of the appeal, or the appeal is abandoned

7.11 Cost Recovery/Hardship Policy

There are a number of situations where an appropriate person is exempt from paying full costs of remediation, for example where 'hardship' would result from meeting the costs involved. Carlisle City Council may decide in such cases to waive or reduce the recovery of its costs. There is also provision to place a charge on the land, to secure payment at a later date or in installments.

Carlisle City Council has devised a 'Cost Recovery and Hardship Policy' which takes individual circumstances into account (Appendix 1).

8.0 Potential of sourcing and funding

The EA now runs the Capital Projects Programme (CPP) on behalf of DEFRA. Funding bids for site investigation and remediation are submitted by Carlisle City Council and are granted/rejected on a case-by-case basis. The amount of central funding available has been significantly reduced in recent years. Carlisle City Council can only bid for funding to remediate sites where land has been determined. Funding is not available through the CPP to carry out preliminary investigations (desk studies etc). Carlisle City Council keeps reserves for emergencies, which would be used to remediate contaminated land if required.

9.0 COMMUNICATION AND INFORMATION MANAGEMENT

9.1 Liaison and Consultation with other Parties

Carlisle City Council recognizes that the issues relating to contaminated land are both wide ranging and complex, requiring the identification and engagement with a wide range of stakeholders. The strategy recognizes the need to liaise and communicate with both internal departments (including Development Control, Property Services etc) and external bodies (including statutory bodies, landowners and the wider general public).

Since implementation of the initial Contaminated Land Inspection Strategy in 2001, Carlisle City Council has established strong formal links with the following external statutory bodies:

- EA
- Health Protection Agency (Public Health England)
- English Nature
- English Heritage
- Food Standards Agency
- DEFRA

Consultation with some/all of the above parties is essential prior to detailed investigation, either because they may have some responsibility for a site (as a regulator, owner or occupier) or involvement (e.g. because they have designated the site as a protected area). Experience has shown that early liaison ensures the avoidance of unnecessary duplication of investigation or overlaps in regulatory activity.

Carlisle City Council recognises that there is significant scope for members of the public, businesses and voluntary organisations to make a valuable contribution toward the identification of contaminated land within Carlisle City Councils area. A copy of the revised strategy will therefore be available to download from Carlisle City Councils website.

As previously mentioned in s3.2.2 Part 2A requires the EA to provide information and advice to Local Authorities. Where the Significant Contaminant Linkages involves controlled waters the EA will be asked to provide site specific guidance and may become the enforcing authority if the site meets the criteria for designation as a Special Site.

Carlisle City Council also regularly liaises with the other Cumbrian Local Authorities via the 'Cumbria Contaminated Land Officer Group', (an off shoot of the Chief Officers/Pollution Group). Representatives from each authority, together with the EA and Health Protection Agency, meet approximately 4 times a year. The group has produced a guide to assist developers and site owners involved in the management and assessment of contaminated land and/or where development proposals include sensitive end uses, such as housing.

Adherence to the recommendations within the guide, (a copy of which is included in Appendix 2), ensures that a consistent approach is adopted throughout the County.

9.2 Part IIA Public Register

In accordance with Part 2A and the Contaminated Land (England) Regulations 2006, Carlisle City Council is required to maintain a Public Register.

This Part 2A Public Register serves as a permanent record of all regulatory action carried out to ensure the remediation of any site which has been determined as Contaminated Land and had enforcement notices served. These sites which have been determined as Contaminated Land but where voluntary remediation takes place, and no consequent action has yet been taken, will not appear on the Register.

It is important to note that the Part 2A Public Register is **not** a register of

- All sites determined as Contaminated Land
- Sites which may be Contaminated Land
- Sites which are potentially contaminated, or
- Sites which Carlisle City Council has investigated as part of a detailed Inspection

The Part 2A Public Register will be kept at the Environmental Health Section of the Local Environment Department and is available at www.carlisle.gov.uk . The register can be viewed free of charge by visitors in the Customer Contact Centre of the Civic centre, the address of which is provided below.

9.3 Requests for Information

If a member of the public requests environmental information it will be considered under the Environmental Information Regulations (EIR). Whilst Carlisle City Council is expected to make environmental information proactively available, there are certain exceptions to disclosure. The regulations are similar to the Freedom of Information Act (FOIA), however some of the main differences are:

- A request can be made verbally or in writing
- The EIRs allow for a 20 working-day extension to consider a large request, whereas the FOIA only allows an extension to consider the public interest test.
- The EIRs have a different set of exceptions with regard to the non-disclosure of information, though many share elements with the FOIA.
- Under the EIRs Carlisle City Council can make a reasonable charge for providing the information.

You do not need to worry about which regime your request comes under. If you are unsure make it under the one you think is correct, and we shall reply according to our interpretation of the request.

9.4 Enquiries:

All information on contaminated land and potentially contaminated land is held within the Environmental Health section of Local Environment. All enquiries regarding contaminated land or the revised inspection strategy should initially be directed to:

All enquiries should be addressed to:

Environmental Health

Local Environment Directorate

Civic Centre

Carlisle

CA3 9EQ

Tel: 01228 817559

Email: environmentalhealth@carlisle.gov.uk

10.0 LA INTERESTS IN LAND

10.1 Carlisle City Council's interests in land

It is recognised that some of Carlisle City Council's landholdings may be contaminated due to their past industrial history. These sites will be risk assessed in accordance with the prioritisation procedure detailed in s5.1.2 and shall be treated in the same manner as any other potentially contaminated land site within the Carlisle City Council's area.

10.2 Council Leased Property

Carlisle City Council lease sites to organisations who may undertake potentially contaminative activities, including some of those listed in Table 3. In view of this Carlisle City Council must take steps as landowner to ensure that any land which is leased does not become contaminated during the term of the agreement.

To protect Carlisle City Council's interests there should be appropriate conditions included in any lease or tenancy agreements whereby:

- The occupier shall not carry out any activities which may give rise to contamination of land
- Any contamination that does occur on site during the term of the agreement, shall be dealt with in accordance with current environmental legislation
- There are provisions of indemnity by the lessee or tenant or other occupier
- Where there is a known polluting activity taking place, Carlisle City Council shall require a site investigation to be carried out prior to the termination of the lease

The above conditions should safeguard against the potential for future contamination and place responsibility on the tenant, lessee or other occupier to clean up any pollution which occurred during their occupation.

10.3 Selling Council Owned Land

In the event of Carlisle City Council selling land which has the potential to be contaminated, the LA will provide all known information to the prospective purchaser. This information may include, but not be limited to, Stage 1: Preliminary Investigations and Stage 2: Field Investigations and Risk Assessments carried out on Carlisle City Councils behalf. If the land has been determined by Carlisle City Council as contaminated land, all reports pertinent to the site will be submitted to the purchaser.

11.0 ACTION TO DATE

Carlisle City Council must focus its resources on identifying and securing remediation of those sites with the greatest potential risk to human health or the environment. As a consequence, the Part 2A approach to securing remediation should only be applied where no other alternative solution exists.

To date (May 2013), detailed investigations have been carried out on a number of sites within Carlisle under Part 2A:

- Three were voluntarily remediated prior to determination
- Two sites have been determined as contaminated land and were voluntary remediated, without notices

Currently out of 1200 sites of interest approximately half have been risk rated, and a number of other sites have been remediated under the planning regime.

It has become increasingly difficult to estimate when all sites will be prioritized. This is due to variable unknown workload, for example, where Part IIA resource is redirected to consultation regarding the remediation of land under the planning regime. Progress is also dependent on available staff and financial resources.

Sites which pose a risk will be inspected as and when they are brought to our attention, and action taken as necessary.

12.0 REFERENCES

British Standards Institution (2011) BS 10175:2011: Investigation of Potentially Contaminated Sites – Code of Practice. London: BSI

British Standards Institution (2004) BS EN 1997-1:2004 Geotechnical design. General rules. London: BSI

British Standards Institution (2007) BS EN 1997-2:2007 Eurocode 7. Geotechnical design. Ground investigation and testing. London: BSI

CIRIA (2007) C665 Assessing risks posed by hazardous ground gases to buildings. London: Ciria

Cumbria Contaminated Land Officers Group (January 2013) Development of Potentially Contaminated Land and Sensitive End Uses: An essential guide for developers

DEFRA (2012) Contaminated Land Statutory Guidance. London: HM Government

Department for Communities and Local Government (DCLG) (2012) National Planning Policy Framework. London: DCLG

Department of the Environment (1995) DoE Industry Profiles. EA.
EA(2010) Verification of remediation of land Contamination. EA

EA(2010) Guiding Principles on Land Contamination

13.0 GLOSSARY OF TERMS

The Act	Environmental Protection Act 1990
The Regulations	The Contaminated Land (England) Regulations 2006 The Contaminated Land (England) (Amendment) Regulations 2012
The Guidance	Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance April 2012
Apportionment	A decision by the authority dividing the costs of carrying out any remediation action between two or more appropriate persons in accordance with section 78F(7) of Part 2A.
Appropriate Person	Any person who is an appropriate person, determined in accordance with section 78F of the Act, to bear responsibility for anything which is to be done by way of remediation in any particular case
Contaminant	A substance relevant to the Part 2A regime which is in, on or under the land and which has the potential to cause significant harm or to cause significant pollution of controlled waters for non-radioactive contamination (or harm for radioactive contamination). A contaminant forms part of a 'contaminant linkage'
Contaminant Linkage	The relationship between a contaminant, a pathway and a receptor
Contaminated Land	"Any land which appears to the LA in whose area it is situated to be in such a condition, by reason of substances in, on, or under the land that; <ul style="list-style-type: none"> • Significant harm is being caused, or there is significant possibility of such harm being caused; or • Significant pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused."
Controlled Waters	In relation to England has the same meaning as in Part 3 of the Water Resources Act 1991 (includes territorial and coastal waters, inland fresh waters and ground waters), except that "ground waters" does not include waters contained in underground strata but above the saturation zone.
Current Use	<ul style="list-style-type: none"> • the use which is being made of the land currently • Reasonably likely future uses of the land that would not require a new or amended grant of planning permission • Any temporary use to which the land is put, or is likely to be put, from time to time, within the bounds of the current planning permission • Likely informal use of the land (e.g. children playing on a site), whether authorized by the owners/occupiers or not • In the case of agricultural land, the current use does not extend beyond the growing or rearing of crops and animals which are habitually grown or

	reared on the land
Orphan Linkage	Is a significant contaminant linkage for which no appropriate person can be found (Class A & B in relation to human health, Class B only in terms of controlled waters), or where those who would otherwise be liable are exempted by one of the relevant statutory provisions
Harm	harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property.
Pathway	a route by which a receptor is or might be affected by a contaminant
Pollution of controlled waters	the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter
Receptor	a route by which a receptor is or might be affected by a contaminant
Register	The public register, maintained by Carlisle City Council under section 78R of the Environmental Protection Act 1990
Remediation	As defined by section 78A(7) of the Act as: <ul style="list-style-type: none"> the doing of anything for the purpose of assessing the condition of – (i) the contaminated land in question; or (ii) any controlled waters affected by that land; or (iii) any land adjoining or adjacent to that land; the doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land for the purpose – (i) of preventing or minimising, or remedying or mitigating the effects of, any significant harm (or significant 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 the making of subsequent inspections from time to time for the purpose of keeping under review the condition of the land or waters
Remediation Statement	Defined in Section 78H(7) as 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 being done.
Risk	A combination of: <ul style="list-style-type: none"> 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 harm or pollution if it did occur
Significant Harm	Any harm which is determined to be significant in accordance with the Contaminated Land Statutory Guidance
Significant Contaminant	a contaminant linkage which gives rise to a level of risk sufficient to justify a piece of land being determined as

Linkage	contaminated land
Substance	Has the same meaning as 'pollutant' and 'contaminant'. For non-radioactive contamination, includes any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour
Sustainable Development	Development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs
Unacceptable risk	A risk of such a nature it would give grounds for land to be considered as Contaminated Land under Part 2A.

Appendix 1

Carlisle City Council Cost Recovery and Hardship Policy

(associated with the remediation of Contaminated Land under Part 2A of the Environmental Protection Act 1990)

1. Introduction

Under Part 2A of the Environmental Protection Act 1990 Carlisle City Council has a duty to inspect and identify Contaminated land within the city council area. Once sites have been investigated and determined as Contaminated land, Carlisle City Council has a duty to serve a remediation notice on the appropriate person(s) specifying what they are to do by way of remediation. Before serving a remediation notice, Statutory Guidance requires Carlisle City Council to adopt a formal Cost Recovery and Hardship Policy. The Policy will provide a framework for Carlisle City Council to apply when recovering costs for remediation. Carlisle City Council should seek to promote fairness, transparency and consistency when determining financial responsibility for remediation of contaminated land and prevent any hardship on any decision Carlisle City Council makes in future.

2. Statutory Context

2.1 Part 2A of the Environmental Protection Act 1990 (the Act) gives Carlisle City Council a number of duties and powers in the identification of Contaminated Land. These powers are:

- A duty to require remediation of land that has been determined as Contaminated Land (section.78E)
- Allocation of liabilities. (section.78F)
- Restrictions and prohibitions on the service of a Remediation Notice (section.78H)
- Power for the LA to carry out remediation (section.78N)
- Power for the LA to recover costs of remediation (section.78P)

2.2 Reference to 'Statutory Guidance' in this policy means the following two documents:

- Environmental Protection Act 1990: Part 2A. Contaminated Land Statutory Guidance. Department for Environment, Food and Rural Affairs. 2012.
- Environmental Protection Act 1990: Part IIA. Contaminated Land. Radioactive Contaminated Land Statutory Guidance. Department of Energy and Climate Change. 2012.

2.3 Section 78P Provides that:

"(1) Where, by virtue of section 78N(3)(a), (c), (e) or (f) & the enforcing authority does any particular thing by way of remediation, it shall be entitled, subject to sections 78J(7) and 78K(6) to recover the reasonable cost incurred in doing it from the appropriate person or, if there are two or more appropriate persons in relation to the thing in question, from those persons in proportions determined pursuant to section 78F(7) &

"(2) In deciding whether to recover the cost, and, if so, how much of the cost, which it is entitled to recover under subsection (1) above, the enforcing authority shall have regard –

"(a) to any hardship which the recovery may cause to the person from whom the cost is recoverable; and

"(b) to any guidance issued by the Secretary of State for the purposes of this subsection."

2.4 Subsection 78H(5) provides that:

"(5) The enforcing authority shall not serve a remediation notice on a person if and so long as

"(d) the authority is satisfied that the powers conferred on it by section 78N below to do what is appropriate by way of remediation are exercisable..."

2.5 Section 78N(3) provides that the enforcing authority has the power to carry out remediation:

This section applies in each of the following cases, that is to say—

(a) where the enforcing authority considers it necessary to do anything itself by way of remediation for the purpose of preventing the occurrence of any serious harm, or serious pollution of controlled waters, of which there is imminent danger;

(b) where an appropriate person has entered into a written agreement with the enforcing authority for that authority to do, at the cost of that person, that which he would otherwise be required to do under this Part by way of remediation;

(c) where a person on whom the enforcing authority serves a remediation notice fails to comply with any of the requirements of the notice;

(d) where the enforcing authority is precluded by section 78J or 78K above from including something by way of remediation in a remediation notice;

(e) where the enforcing authority considers that, were it to do some particular thing by way of remediation, it would decide, by virtue of subsection (2) of section 78P below or any guidance issued under that subsection,—

(i) not to seek to recover under subsection (1) of that section any of the reasonable cost incurred by it in doing that thing; or

(ii) to seek so to recover only a portion of that cost;

(f) where no person has, after reasonable inquiry, been found who is an appropriate person in relation to any particular thing.

2.6 These powers and duties are clarified in the Statutory Guidance providing details on the administration of Part 2A. Section 8 of the Statutory Guidance provides guidance on the recovery of the costs of remediation.

2.7 Section 8 of the Statutory Guidance gives further information on the

treatment of persons or bodies which may be subject to cost recovery by Carlisle City Council.

- 2.8 This policy details the manner in which Carlisle City Council will exercise the power in s.78P of the Act with respect to persons found by them to bear a liability for remediation. In particular it details the manner in which it deals with issues of hardship.

3. Cost recovery decisions

3.1 When making any decisions on cost recovery, Carlisle City Council should have regard to the following general principles:

- 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.
- Carlisle City Council should seek to recover all of its reasonable costs without causing any undue hardship which the recovery may cause to the appropriate person(s).
- Wherever possible, apply the "polluter pays" principle, whereby the costs of remediating pollution are borne by the polluter.
- Where this is not possible Carlisle City Council will always consider obtaining external funding in the first instance in all cases for remediation.

All of the above issues will be considered alongside issues of hardship. There is no definition within the Statutory Guidance for "Hardship" therefore in terms of the policy it is defined using its ordinary meaning, namely to cause severe suffering or privation to an appropriate person as detailed in section 3.3.

3.2 Overall, Carlisle City Council should consider the degree and nature of responsibility of the relevant appropriate person(s) for the creation, or continued existence, of the circumstances that led to the land in question being identified as Contaminated Land.

3.3 An appropriate person is a person who is determined in accordance with s78F of Part 2A of the Environmental Protection Act 1990 to bear responsibility for any thing which is to be done by way of remediation in any particular case. A Class A appropriate person is defined as someone who caused or knowingly permitted the presence of the substance (which forms part of the linkage) in, on or under the land. A Class B appropriate person is defined as someone who owns or occupies the land in circumstances where no Class A person can be found with respect to a particular remediation action.

3.4 When deciding how much of Carlisle City Council's cost should be recovered, consideration can be given to whether more costs are recovered by deferring recovery and securing them by a charge on the land in question under section 78P of the Environmental Protection Act 1990. Such deferral may lead to payment from the appropriate person either in installments (see section 78P(12)) or when the land is next sold.

4. Information for Making Decisions

4.1 Any appropriate person(s) who are seeking a waiver or reduction in the recovery of remediation costs are required to submit any relevant information to support this request within a reasonable timescale as agreed by Carlisle City Council.

When making decisions on cost recovery, Carlisle City Council should consider all relevant information provided by appropriate person(s). In addition Carlisle City Council must also seek to obtain such information as is reasonable, having regard to:

- Accessibility of the information
- the cost, for any of the parties involved, of obtaining the information
- the likely significance of the information for any decision.

5. Criteria against which hardship will be assessed

5.1 There is no definition within the Statutory Guidance therefore in terms of the policy “hardship” is defined using its ordinary meaning, namely to cause severe suffering or privation.

Where the cost of remediation attributable to an appropriate person would cause serious difficulties to that person then Carlisle City Council is likely to consider waiving or reducing the amount of costs it would seek to recover.

Considerations Applying both to Class A & Class B Persons

6. Commercial Enterprises

6.1 Carlisle City Council will adopt the same approach to all types of commercial or industrial enterprises which are identified as appropriate persons. This applies whether the appropriate person is a public corporation, a limited company (whether public or private), a partnership (whether limited or not) or an individual operating as a sole trader.

7. Threat of Business Closure or Insolvency

7.1 In the case of a small or medium-sized enterprise being the appropriate person, or which is run by the appropriate person, Carlisle City Council will consider:

- 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
- if so, the cost to the local economy of such a closure.

For these purposes, a “small or medium-sized enterprise” should be taken to mean an independent enterprise which matches the definition of a “micro, small and medium-sized enterprise” as established by the European Commission recommendation of 6 May 2003, and any updates of that definition as may happen in future. (Under the 2003 definition this would cover any such enterprise with fewer than 250 employees, and either an annual turnover less than or equal to €50 million, or an annual balance sheet total less than or equal to €43 million).

7.2 Where the cost of closure appears to be greater than the costs of remediation which Carlisle City Council would have to bear themselves, the Authority should consider waiving or reducing its costs recovery to the extent needed to avoid making the enterprise insolvent.

7.3 The Authority will not normally waive or reduce its costs recovery where:

- it is satisfied that an enterprise has deliberately arranged matters so

- as to avoid responsibility for the costs of remediation;
- it appears that the enterprise would be likely to become insolvent whether or not recovery of the full cost takes place; or
- it appears that the enterprise could be kept in, or returned to, business even if it does become insolvent under its current ownership.

8. Trusts

8.1 Where the appropriate persons include persons acting as trustees, the 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. The Authority 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.

8.2 The Authority will not usually waive or reduce its costs recovery:

- where it is satisfied that the trust was formed for the purpose of avoiding paying the costs of remediation; or
- to the extent that trustees have personally benefited, or will personally benefit, from the trust.

9. Charities

9.1 Carlisle City Council will consider the extent to which any recovery of costs from a charity would detrimentally impact that charity's activities. Where this is the case, the Authority 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.

10. Social Housing Landlords

10.1 Carlisle City Council should consider waiving or reducing its costs recovery if:

- the appropriate person is a body eligible for registration as a social housing landlord under section 2 of the Housing Act 1996 (for example, a housing association);
- its liability relates to land used for social housing; and
- full recovery would lead to significant financial difficulties for the appropriate person, such that the provision or upkeep of the social housing would be jeopardized significantly. The extent of the waiver or reduction will normally be sufficient to avoid any such financial difficulties.

Specific Considerations Applying to Class A Persons

11. General

11.1 Carlisle City Council will not normally waive or reduce its costs recovery where it was in the course of carrying on a business that the Class A person caused or knowingly permitted the presence of the significant contaminants rather than were he was not carrying on a

business. This is because in the former case he is likely to have earned profits from the activity which created or permitted the presence of those contaminants.

12 Where Other Potentially Appropriate Persons have not been found

12.1 In some cases where a Class A person has been found, it may be possible to identify another person who caused or knowingly permitted the presence of the significant contaminant in question, but who cannot now be found for the purposes of treating him as an appropriate person. For example, this might apply where a company has been dissolved.

12.2 The Authority will consider waiving or reducing its costs recovery from a Class A person if that person demonstrates to the satisfaction of Carlisle City Council that:

- another identified person, who cannot now be found, also caused or knowingly permitted the significant contaminant to be in, on or under the land; and
- if that other person could be found, the Class A person seeking the waiver or reduction of the Authority's costs recovery would either:

be excluded from liability by virtue of one or more of the exclusion tests set out in Section 7 of the Statutory Guidance, or

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 Section 7 of the Statutory Guidance.

12.3 Where an appropriate person is making a case for Carlisle City Council's cost recovery to be waived or reduced by virtue of this section, Carlisle City Council will expect that person to provide evidence that a particular person, who cannot now be found, caused or knowingly permitted the significant contaminant to be in, on or under the land. Carlisle City Council will not normally regard it as sufficient for the appropriate person concerned merely to state that such a person must have existed.

Specific Considerations Applying to Class B Persons

13. General

13.1 Where a Class A person cannot be found or for any other reason costs cannot be recovered from a Class A person, financial responsibility transfers to the Class B person.

14 Costs relative to land values

14.1 In some cases, the costs of remediation may exceed the value of the land in its current use (as defined in Section 3 of the Statutory Guidance) after the required remediation has been carried out. In such circumstances, Carlisle City Council will consider waiving or reducing its costs recovery from a Class B person if that person demonstrates to the satisfaction of the Authority that the costs of remediation are likely to exceed the value of the land. In this context, the "value" will 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

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

15. Precautions Taken before Acquiring a Freehold or a Leasehold Interest

- 15.1 In some cases, the appropriate person may have been unaware that the land in question may be Contaminated Land when they acquired it, or he may have decided to take a risk that the land was not contaminated. Conversely, precautions may have been taken to ensure that he did not acquire land which is contaminated.
- 15.2 The Authority will consider reducing its costs recovery where a Class B person who is the owner of the land demonstrates to the satisfaction of the Authority that:
- the person took such steps prior to acquiring the freehold, or accepting the grant of assignment of a leasehold, as would have been reasonable at that time to establish the presence of any contaminants;
 - when he acquired the land, or accepted the grant of assignment of the leasehold, he was nonetheless unaware of the presence of the significant contaminant now identified and could not reasonably have been expected to have been aware of its presence; and
 - It would be fair and reasonable, taking into account the interests of national and local taxpayers, that he will not bear the whole cost of remediation.
- 15.3 Carlisle City Council should 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 e.g. private individuals as compared with major commercial undertakings.

16. Owner-occupiers of Dwellings

- 16.1 Where a Class B person owns and occupies a dwelling on the contaminated land in question, Carlisle City Council should consider waiving or reducing its costs recovery if the person satisfies Carlisle City Council that, at the time the person purchased the dwelling, the person did not know, and could not reasonably be expected to have known, that the land was adversely affected by presence of the contaminant(s) in question. Any such waiver or reduction should 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 the person's income, capital and outgoings. Where the person has inherited the dwelling or has received it as a gift, Carlisle City Council should consider the situation at the time when the person received the property. When the contaminated land in question extends beyond the dwelling and its curtilage, and is owned or occupied by the same appropriate person the approach above should be applied only to the dwelling and its curtilage.

17. Payment of Carlisle City Council's costs

- 17.1 In each case where Carlisle City Council has used public funds to remediate land in its area a decision will be taken by Carlisle City Council - taking account of all circumstances appertaining to the matter - whether to recover any or all of the funds expended on a property in order to make it suitable for use.
- 17.2 Carlisle City Council will also consider how payment to Carlisle City Council should be made. This could for example take the form of payment within a fixed period of the full amount, payment by installment or by attaching a charge to the property so that it is recovered when the property is first sold. In the latter case, Carlisle City Council will consider whether it could recover more of the costs by deferring recovery and securing them by a charge on the land in question.

18. Hardship Panel

Hardship Panel will be created by Carlisle City Council to consider cost recovery associated with remediation of contaminated land.

- 18.1 The Hardship Panel will consist of:

- The Head of Local Environment
- The portfolio holder of Local Environment
- Head of Finance
- Portfolio holder of Finance
- Section 151 officer

In addition to the above Ward members may also make representations. Panel can receive technical support and advice from the Environmental Health Service.

- 18.2 In the situation where the land in question is within the portfolio holder's ward then he/she should not be part of the panel but can still make representations. In this circumstance another Executive member could take then sit on the Panel.
- 18.3 The Panel will agree on the information required in order to assess the hardship of the responsible person(s). The Panel before making a decision will have regard to:
- the guidance in this Policy and the Revised Statutory Guidance(April 2012)
 - the report of the officer in the Environmental Health Service
 - any representations from the persons concerns
 - any reports of experts
 - any representation from the relevant Ward member

Below is a non-exhaustive list of examples of information Carlisle City Council may ask for:

- The value of the land on the open market [(Carlisle City Council would expect at least three valuations to be obtained from estate agents/surveyors)];
- The value of the land disregarding the fact that it has been identified as contaminated by Carlisle City Council;

The amount of debt secured on the land, a recent mortgage statement will be required;

- Whether the land is held for investment ;
- Whether the land is held for business or purely residential purposes;
- Where the land is owned by a company the profit and loss accounts and balance sheets for a period of [3/5 years];
- Where the land is used for business purposes details of the income generated through the use of the land and the costs involved;
- Where the land is owned by an individual details of the persons other assets/savings;
- Where the land is owned by an individual details of the person's debts and income;
- Where the land is owned and occupied by an individual details of the persons incomings and outgoings;
- Where the land is owned by a company details of any insurance policies in place which cover the costs of the remediation of land;
- The amount of capital available to the person and whether there is sufficient capital to meet the cost;
- The personal needs of the individual- health and age of the individual and the existence of dependants;
- The assets of the person and the ability of the person to raise finance against the assets
- Whether the person is running a business on the land (i.e. gaining an income from the use of it by another person or carrying out a business activity on the land);
- Where the person owns the contaminated land, whether the remediation is likely to increase the value of the land by more than the cost of the remediation such that the person should be able to borrow against the land to raise the necessary finance;
- The amount the person paid for the land and whether when they bought the land the price reflected the state of contamination; or
- Any other relevant information which is applicable to the person and which may indicate that hardship would be caused.

18.4 The Hardship Panel will aim to make decisions within 3 weeks of being presented with all the relevant information. The decision of the Panel will be sent to the persons concerned with 1 week of the decision being made.

18.5 If the person is aggrieved by the decision of the panel the person concerned may appeal that decision by informing Carlisle City Council in writing within 21 days of the

date of the decision document. An Appeals Panel will consider the appeal and may confirm, vary or quash the original decision. As well as presenting any original information the appellant is entitled to present relevant new information to the panel. The Appeals Panel will be made up of different Members from the original panel who are members of Executive Panel and Scrutiny Panel who did not sit on the original Hardship Panel.

Appendix 2

Development of Potentially Contaminated Land and Sensitive End Uses

An Essential Guide for Developers



	Page
INTRODUCTION	1
OVERVIEW	2
Contaminated Land	
National Planning Policy Framework	
- Planning System	
- When to Consider Contamination	
- Developers Responsibility	
SUBMITTING AN APPLICATION	5
Full and Outline Planning Consent	
Building Regulations	
INVESTIGATION PROCEDURE	6
Summary	
Preliminary Investigation (desk study, site reconnaissance and preliminary risk assessment)	
Field Investigation and Risk Assessment	
Remediation Scheme	
Verification Reporting and Monitoring	
USEFUL INFORMATION	12
Cover Systems	
Verification of Cover Systems	
Websites	
References	

DISCLAIMER

This document is written to serve as an informative and helpful source of advice, based on guidance and legislation at the time of publication. The Cumbria Contaminated Land Officer Group has taken all reasonable precautions to ensure the information is correct and we cannot accept any liability for loss or damage caused by any person relying on this information, or for any errors or omissions in the information provided. It is the reader's responsibility to ensure that current legislation, guidance and practical methods are adhered to as they may be subject to change.

January 2013 (Rev. C)

The Government's planning guidance on contaminated land is set out in the National Planning Policy Framework (NPPF). Development of contaminated land is material planning consideration and the actual or possible presence of contamination and associated risks should be established.

Paragraph 109 of the NPPF states the Planning System should contribute to and enhance the natural and local environment by: ‘...preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil pollution or land instability; and remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate’.

The purpose of this guide is to assist developers and site owners involved in the management and assessment of contaminated land and/or where development proposals include sensitive end uses, such as housing. All investigations should be carried out in accordance with the **Investigation of Potentially Contaminated Site – Code of Practice** (British Standard 10175 (2011)) and by a competent person. **Reports may be rejected if this is not met.** The NPPF states a competent person is ‘a person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation.’

This guide has been produced by members of the Cumbria Contaminated Land Officer Group to support a consistent approach throughout the County.

Contacts

LA/Agency	Email	Telephone
Allerdale	environmental.health@allerdale.gov.uk	01900 702580
Barrow-in-Furness -Environmental Protection Officer	environment@barrowbc.gov.uk	01229 876543
Carlisle	environmentalhealth@carlisle.gov.uk	01228 817559
Copeland	envhealth@copeland.gov.uk	01946 598336
Eden -Contaminated Land Officer	pollution@eden.gov.uk	01768 212490
South Lakeland	deh@southlakeland.gov.uk	0845 050 4434
Environment Agency	penrith.planning@environment-agency.gov.uk	01768 215798
Natural England	northwest@naturalengland.org.uk	0300 060 2122

Contaminated Land

Where land is affected by contamination or land stability issues, under the planning system, it is the developers responsibility for securing safe development. As a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990.

Part 2A - The Legal Definition

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

‘any land which appears to the LA 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’.

Under Part 2A, for a relevant risk to exist there needs to be at least one ‘[contaminant linkage](#)’. This is the term used which identifies the relationship between a contaminant, a pathway and a receptor.

- A ‘[contaminant](#)’ is a substance which is in, on or under the land and which has the potential to cause significant harm to a relevant receptor, or to cause significant pollution of controlled waters.
- A ‘[receptor](#)’ 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 receptors that are relevant under the Part 2A regime are explained in later sections.
- A ‘[pathway](#)’ is a route by which a receptor is or might be affected by a contaminant.

All three elements of a contaminant linkage must exist in relation to particular land before the land can be considered potentially to be contaminated land under Part2A, including evidence of the actual presence of contaminants.

The term ‘significant contaminant linkage’, as used in the Statutory Guidance (DEFRA, 2012), means a contaminant linkage which gives rise to a level of risk sufficient to justify a piece of land being determined as contaminated land. The term ‘significant contaminant’ means the contaminant which forms part of a significant contaminant linkage.

National Planning Policy Framework

The Planning System

The [National Planning Policy Framework](#) (NPPF) (DCLG, 2012) seeks to prevent unacceptable risks from pollution and land instability, and planning decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account.

Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.

Paragraph 121 of the NPPF (DCLG, 2012) states that planning decisions should ensure that:

- the site is suitable for its new use taking account of ground conditions and land instability, including from natural hazards or former activities such as mining, pollution arising from previous uses and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation;
- after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and
- adequate site investigation information, prepared by a competent person, is presented.

When to consider contamination

On a precautionary basis, the possibility of contamination should be assumed when considering individual planning applications in relation to all land subject to or adjacent to previous industrial use and also where uses are being considered that are particularly sensitive to contamination – e.g. housing, schools, hospitals, children’s play areas.

[Sensitive End Uses](#)

Where development includes any of the following sensitive end uses, a contamination assessment is required:



Potentially contaminating land uses

A wide range of industries may historically have contaminated, or have the potential to contaminate the land they are sited upon (and neighbouring land) — The [DOE Industry Profiles](#) give further details.



Developers Responsibility

It is the developers responsibility to secure safe development and provide the necessary information. The minimum information that should be provided by an applicant is the report of a Preliminary Investigation (desk study, site reconnaissance and preliminary risk assessment).

All investigations of land potentially affected by contamination should be carried out in accordance with established procedures (such as British Standard 10175 (2011) Investigation of Potentially Contaminated Sites – Code of Practice).

Full and Outline Planning Consent

Section 15 on the national planning application form (1APP) relates to land contamination. It states that if you answer **YES** to any these questions, then you **MUST SUBMIT** an appropriate contamination assessment. You are advised to speak to [Environmental Protection Units](#)/Planning Authority before submitting an application.

The need to provide an adequate assessment of land contamination is outlined in the National Planning Policy Framework. The developer should be aware that failure or omissions on his part could lead to liability under Part 2A in addition to planning enforcement.

15. Existing Use
Please describe the current use of the site:

Is the site currently vacant? ☐ Yes ☐ No

If Yes, please describe the last use of the site:

When did this use end (if known)? DD/MM/YYYY
(date where known may be approximate)

Does the proposal involve any of the following:

Land which is known to be contaminated? ☐ Yes ☐ No

Land where contamination is suspected for all or part of the site? ☐ Yes ☐ No

A proposed use that would be particularly vulnerable to the presence of contamination? ☐ Yes ☐ No

If you have answered Yes to any of the above, you will need to submit an appropriate contamination assessment.

Callouts:

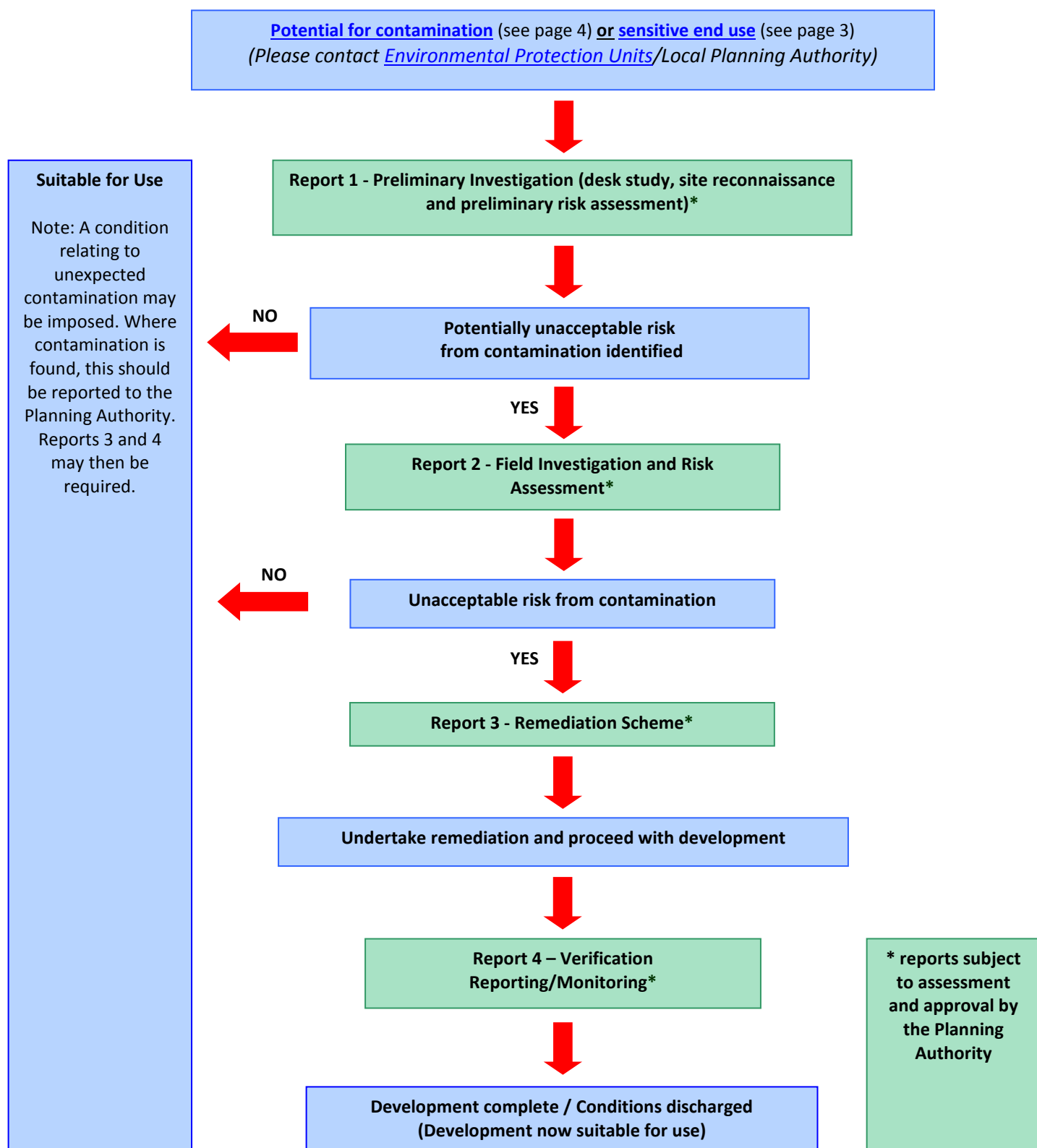
- When describing the current use of the site please also include any details of the part(s) of any listed building(s)/structure(s) being affected.
- When answering whether the site is currently vacant, this means whether the site is currently not in active use, including waste/derelict land.
- Development on land which has known contamination or known to be affected by contamination. (see page 4).
- Development on or in close proximity to potentially contaminative uses. (see page 4)
- Undeveloped sites may still be contaminated - it is not restricted to brown field sites. Please state if the proposed use is sensitive. (see page 3)

Reports [1](#), [2](#) and [3](#) (see page 7) where required, should be submitted with the application. However, it is understood that permission for some developments may be uncertain and therefore advise you to speak to your Local Planning Authority/Environmental Protection Unit to establish if, as a minimum, a Preliminary Investigation would be accepted and conditions imposed for further investigation, if necessary.

Building Regulations

Compliance with the [Building Regulations](#) is a separate issue and approval may also be required. The developer/applicant must ensure that the Building Control Officer is aware of any contamination issues and that the appropriate requirements are met.

The **Model Procedures for the Management of Land Contamination (CLR11)** explains the risk assessment procedure when dealing with potentially contaminated land; it is recommended that a tiered approach be adopted and investigations should be undertaken in accordance with **BS10175 (2011) Investigation of Potentially Contaminated Sites – Code of Practice** ([available here](#)). This flow chart outlines how this process interacts with the planning regime.



Preliminary Investigation

(desk study, site reconnaissance and preliminary risk assessment)

The investigation should be carried out in accordance with *British Standard 10175 (2011), Investigation of potentially contaminated sites – Code of Practice* and *Contaminated Land Report 11 (CLR11)*.

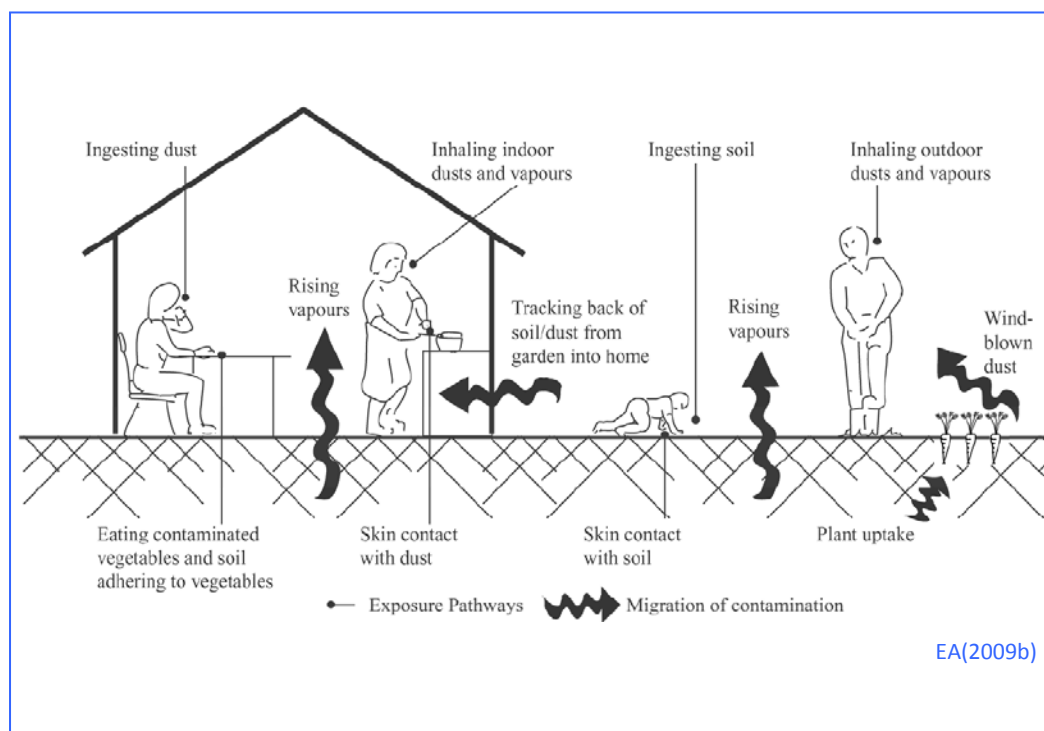
The approach to undertaking a Preliminary Investigation is provided in BS 10175, section 10.2. Guidance on carrying out the formal risk assessment and interpretation of the information is provided in CLR11.

The Preliminary Investigation involves the development of a Conceptual Site Model (CSM) to establish whether or not there are any potential unacceptable risks. The CSM is a representation of possible contaminant linkages.

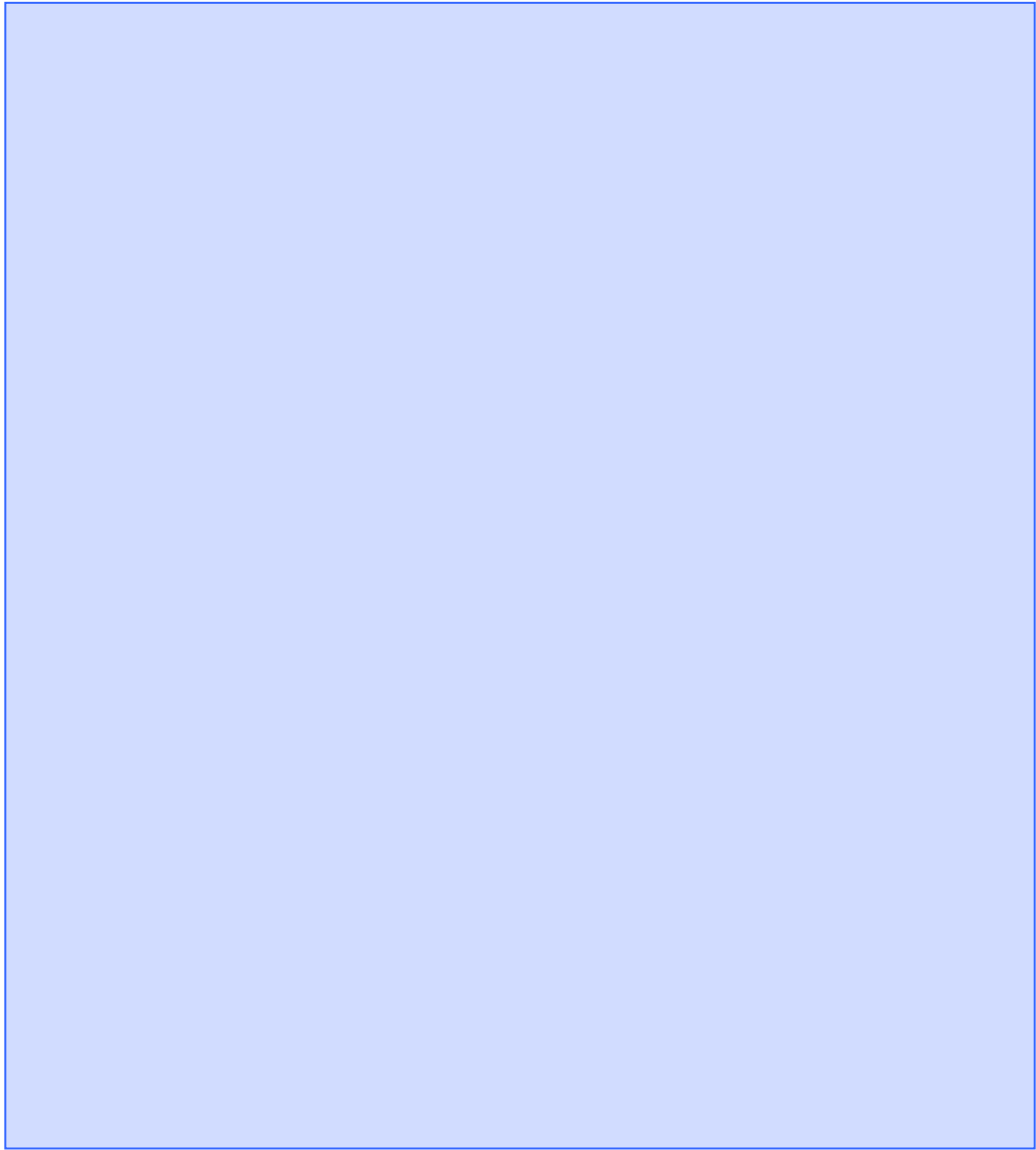
Contaminant → Pathway → Receptor

The CSM is based on information from a desk study and site walkover. The desk study involves a detailed search of historic maps, aerial photographs and both current and historic records to identify potential contaminative uses of the land and adjacent areas. A site walkover is necessary to observe the condition of the site (soils, surface materials and vegetation) and identify any structures such as pipe work, storage tanks etc.

Illustration of Potential Exposure Pathways



There are also other exposure pathways such as the examples provided below:



The findings of the Preliminary Investigation will then determine if further investigation is necessary.

Field Investigation and Risk Assessment

The Field investigation is undertaken to determine the presence or absence of contamination and where found, the nature and extent. A suitable sampling and analytical strategy should be undertaken to address the potential risks identified in the Preliminary Investigation. Data needs to be collected from the right locations and at the right time using the appropriate collection methods in order to estimate and evaluate the risks. The factual information should then be collated and interpreted with reference to the Conceptual Site Model (CSM). This is an iterative process and it is expected that the CSM and potential contaminant linkages will be revised as a result of the field investigation as part of the risk assessment process. This risk assessment is split into 2 tiers:

- **Generic Quantitative Risk Assessment (GQRA)** - involves the comparison of contaminant concentrations at a site with generic assessment criteria. These relate to the following land uses:
 - Residential
 - Allotment
 - Commercial
- **Detailed Quantitative Risk Assessment (DQRA)** - makes greater use of site-specific data to conduct a more accurate assessment of risks. This may involve the derivation of site specific assessment criteria (SSAC) that are then compared with contaminant concentrations.

If a contaminant linkage is confirmed and the risk assessment demonstrates that there are unacceptable risks associated with the site, then progression to the next phase will be necessary.

N.B. There are three phases of field investigation (exploratory, main and supplementary). Please consult BS10175 (2011) for further information.

The typical contents of a Field Investigation are also provided in BS10175 (2011), section 10.3. In summary, the report will include factual information based on the field investigation, followed by an interpretive section on the assessment of the results and an updated conceptual site model.

Remediation Scheme

A Remediation Scheme should be submitted where a Field Investigation and Risk Assessment has identified levels of contamination that would result in unacceptable risks to end users without appropriate remediation on the site.

The Remediation Scheme is action to be carried out so that contamination no longer presents an unacceptable risk to human health or the environment. It may include measures such as the removal of contamination, encapsulation of the contaminants, treatment of the contaminants or measures to break the contaminant linkages. The standard of remediation work should comply with current good practice and guidance. This must be approved by the Local Planning Authority before any remedial actions at the site commence. You should also state if you intend to undertake works in phases and seek progressive discharge of conditions on larger developments.

An options appraisal should be undertaken to identify and evaluate feasible remedial options for dealing with unacceptable risks. All identified options should be combined into a scheme that is capable of achieving overall remediation. Please note that Government policy encourages sustainable methods of remediation. It is important to note that re-use of materials on site, treatment of land and/or groundwater may require a permit (or an exemption) from the Environment Agency.

As a minimum, the following should be documented:

- Conceptual Site Model/Description of Site/Proposed Development
- Remedial Objectives
- Remediation Criteria
- Verification Plan (to include sampling and analytical strategies)

It should be noted that no assessment can inspect every section of the site and therefore should any unsuspected contamination be found, immediate contact should be made with the Local Planning Authority.

Once the site has been remediated, a Verification report will be required. This should demonstrate that the remedial objectives have been met and carried out in accordance with the verification plan.

Where remediation on a housing development is achieved by a cover system or encapsulation of contamination, a statement should be drawn up for future purchases and a copy sent to the Local Planning Authority as part of the validation process. This statement should advise on permitted development (where planning permission would not be required) or on the type of development that would be suitable, i.e. depth of foundations, water pipes/ponds, etc.

Verification Reporting and Monitoring

Where contamination has been found and remediated, the developer will be required to submit a Verification Report. In certain circumstances it may be necessary for the developer to conduct post-completion monitoring. This should be undertaken to the approval of the Local Planning Authority and results of the monitoring should be submitted for review.

For limited remediation works or protective works, a verification statement alone may be acceptable, but prior confirmation of this should be obtained from the Local Planning Authority.

The verification report should provide confirmation that all measures outlined in the approved remediation scheme have been successfully completed including, where appropriate, validation testing.

NB. Verification and Validation are two terms often used quality management standards for the evaluation of a product, service, or system. BS EN ISO 9000:2005 provides the following definitions:

- Quality – degree to which a set of inherent characteristics fulfils requirements;
- Verification – confirmation through the provision of objective evidence that specified requirements have been fulfilled; and
- Validation – confirmation through the provision of objective evidence that the requirements for a specific intended use have been fulfilled.

Key aspects of both verification and validation are setting pre-defined requirements and the collection of evidence to show that those requirements have been met. This is also the case where evidence is needed to show that remediation of land contamination has met defined objectives, usually to ensure that risks to human health and the environment are insignificant. For the purpose of remediation, CLR 11 defines verification as 'the process of demonstrating that the risks have been reduced to meet remediation criteria and objectives based on a quantitative assessment of remediation performance'. (EA, 2010)

On large schemes where development may be phased, progressive discharge of conditions may be possible provided a satisfactory verification report is received for each phase.

Recommendations to discharge contaminated land conditions will only be made once the Contaminated Land Officer/Environmental Protection Officer has received and approved a satisfactory Verification Report.

Cover Systems

The overall design, depth and specification of the cover system will be based upon the findings of the risk assessment and whether an identification/break layer/'hard to dig' layer/geomembrane is required.

Where a cover system is employed to break the contaminant linkage in garden or landscaped areas, a minimum depth of 600mm should be used. This would typically consist of:

- 150mm of uncontaminated topsoil
- 450mm of uncontaminated subsoil
- granular capillary break layer (100mm hardcore) and/or
- a suitable geotextile membrane

Where it is required to reduce infiltration, impervious or low permeability designs will be needed.

Verification of Cover Systems

Imported material should be clean and suitable for its intended purpose. Analytical results should be provided to demonstrate its suitability along with justification for sampling densities, analytical suite and criteria used for assessment. This should be agreed as part of the remediation scheme/verification plan.

Testing rates and suites depend on the soil source but as a guide, a minimum of 3 samples from any one source are required and sampling rates of:

- 1 sample per 150m³ - Greenfield/Virgin
- 1 sample per 50m³ - Mixed/Unknown

Testing should be undertaken both at source and once laid, and is required for each individual soil type imported. Both analytical test results and delivery notes should be presented in the Verification Report.

Further guidance and good practice on the Verification of Cover Systems, published by the NHBC, can be found on page 10 at:

<http://www.nhbc.co.uk/NHBCPublications/LiteratureLibrary/Technical/TechnicalExtra/filedownload,48980,en.pdf>

Websites

You may also find the following websites informative and up-to-date:

Environment Agency:

<http://www.environment-agency.gov.uk/research/planning/33706.aspx>

Department for Environment, Food and Rural Affairs:

<http://www.defra.gov.uk/environment/quality/land/>

Department for Communities and Local Government:

<https://www.gov.uk/government/organisations/department-for-communities-and-local-government>

References

- British Standards Institution (2011) BS 10175:2011: Investigation of Potentially Contaminated Sites – Code of Practice. London: BSI
Online: <http://shop.bsigroup.com/en/ProductDetail/?pid=000000000030205349>
- British Standards Institution (2004) BS EN 1997-1:2004 Geotechnical design. General rules. London: BSI
- British Standards Institution (2007) BS EN 1997-2:2007 Eurocode 7. Geotechnical design. Ground investigation and testing. London: BSI
- CIRIA (2009) The VOC Handbook. London: Ciria
- CIRIA (2007) C665 Assessing risks posed by hazardous ground gases to buildings. London: Ciria
- CLAIRE/CIEH (2008) Guidance on Comparing Soil Contamination Data with a Critical Concentration. London: CIEH
Online: http://www.cieh.org/uploadedFiles/Core/Policy/Publications_and_information_services/Policy_publications/Publications/Statistics_guidance_contaminated_2008.pdf
- DEFRA (2012) Contaminated Land Statutory Guidance. London: HM Government
Online: <http://www.defra.gov.uk/publications/files/pb13735cont-land-guidance.pdf>
- Department for Communities and Local Government (DCLG) (2012) National Planning Policy Framework. London: DCLG
Online: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf
- Department of the Environment (1995) DoE Industry Profiles. EA.
Online: <http://www.environment-agency.gov.uk/research/planning/33708.aspx>
- EA(2010) Verification of remediation of land Contamination. EA
Online: <http://publications.environment-agency.gov.uk/pdf/SCHO0210BRXF-e-e.pdf>
- EA(2010) Guiding Principles on Land Contamination
Online: <http://publications.environment-agency.gov.uk/pdf/GEHO1109BRGY-e-e.pdf>
- EA(2009a) Human Health Toxicological Assessment of Contaminants in Soil. Bristol: EA
Online: http://www.grdp.org/static/documents/Research/TOX_guidance_report_-_final.pdf
- EA(2009b) Updated Technical Background to the CLEA Model. Bristol: EA
Online: http://www.grdp.org/static/documents/Research/CLEA_Report_-_final.pdf
- EA(2004) CLR11: Model Procedures for the Management of Land Contamination. Bristol: EA

Online: <http://publications.environment-agency.gov.uk/pdf/SCHO0804BIBR-e-e.pdf>

- NHBC/EA(2008) Guidance for the Safe Development of Housing on Land Affected by Contamination, R&D66: 2008. NHBC/EA.

Online: <http://www.environment-agency.gov.uk/static/documents/Leisure/SR-DPUB66-e-e.pdf>

- Office of the Deputy Prime Minister (2006) Approved Document C - Site preparation and resistance to contaminants and moisture (Updated 2004). London: ODPM

Online: http://www.planningportal.gov.uk/uploads/br/BR_PDFs_ADC_2004.pdf

Appendix 3

Carlisle City Council WRITTEN STATEMENT OF DECISION

INSPECTION AND ASSESSMENT

PART 2A ENVIRONMENTAL PROTECTION ACT 1990

Contaminated Land (England & Wales) Regs 2012



Carlisle City Council (the authority) has undertaken an inspection of [name] (the site) as part of its Statutory Duty, under Part 2A of the Environmental Protection Act 1990 (Part 2A), to determine whether or not unacceptable risk, to human health and the environment was posed by land contamination.

The site (shown on the attached plan) is located at (National Grid Reference) and covers an area of approximately [].

Actions taken:

Information Available:

On the basis of the above information, the Authority has concluded that the site is NOT 'contaminated land'.

The above information can be viewed at the address below:

Any queries should be addressed to:
Principal Environmental Health Officer
Carlisle City Council
Local Environment
5th Floor, Civic Centre
Carlisle, CA3 8QG

Email: environmentalhealth@carlisle.gov.uk

Author:	Janet Blair	Authorised:	Scott Burns
Post:	Principal Environmental Health Officer	Post:	Environmental Health Manager
Signed:		Signed:	
Date:		Date:	

References:

DEFRA (2012) Contaminated Land Statutory Guidance, London: HM Government
Environmental Protection Act 1990, C.43. London: HMSO

IMPORTANT

This statement has been made in respect to the current use of the and will cease to apply should circumstances change. The decision may be reviewed to take account of any new information received or any change in legislation.