



Durham County Council

Contaminated Land Inspection Strategy

Executive Summary

The statutory regime for the regulation of contaminated land came into force on 1 April 2000 under Part 2A Environmental Protection Act 1990 and is supported by Statutory Guidance. This regime imposes a duty on each local authority to strategically inspect the land within its area for the purpose of identifying land which could be defined as 'contaminated land'. Durham County Council (DCC) is the enforcing authority for contaminated land legislation within its area.

Under the provisions of Part 2A local authorities are also obliged to produce a written strategy outlining how they intend to fulfil their inspection duties.

The Contaminated Land Inspection Strategy (CLIS) for DCC aims to fulfil the requirements of the Statutory Guidance.

DCC became a unitary authority in April 2009, taking over seven district councils. The CLIS for DCC helps to ensure an attractive and 'liveable' local environment, and contributes to tackling global environmental challenges.

To date, approximately 7,000 potentially contaminated land sites have been identified across the DCC area. The sites have been prioritised using a dedicated contaminated land data management system and priority given to those sites considered to be the greatest risk to human health.

The Environment Protection (EP) team will continue to carry out strategic and where necessary detailed inspections of potentially contaminated land sites across the DCC area addressing the highest priority sites first.

No land is assumed to be contaminated land unless there is supporting evidence to suggest otherwise.

Details of the determination and remediation of contaminated land under Part 2A are not included as they are outside the scope of this CLIS. These can be found in the Statutory Guidance.

Part 2A will only be used as a last resort to deal with land contamination and only where no appropriate alternative solution exists.

Information relating to contaminated land is published on the Contaminated Land webpage on the Council website.

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1 Introduction

The statutory regime for the regulation of contaminated land came into force on 1 April 2000 under Part 2A Environmental Protection Act 1990, inserted in Section 57 of the Environment Act 1995.

This required that all local authorities to take a “strategic approach” to inspect land within their areas (Section 78B).

The Contaminated Land Statutory Guidance dated April 2012, issued by DEFRA, states that the strategic approach to be adopted when carrying out the inspection duty under section 78B(1), should be rational, ordered, efficient and it should reflect local circumstances.

The purpose of this Strategy is to set out the proposals for identifying, inspecting and assessing contaminated land within the DCC area taking into account the statutory guidance and, broadly, the Council Plan. It does not include information on the enforcement, determining liability and details of remediation of contaminated land.

The Statutory Guidance should be read in conjunction with this Strategy.

Part 2A provides a means of dealing with unacceptable risks posed by land contamination to human health and the environment, and enforcing authorities should seek to find and deal with such land. The main objectives of the Government’s policy on contaminated land and the Part 2A regime as stated in Section 1.4 of The Statutory Guidance are: -

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

1.1 Definition of Contaminated Land

Section 78A(2) of the Environmental Protection Act 1990 defines contaminated land for the purposes of Part 2A as “any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that: -

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

1.1.1 Harm

Section 78A(4) of the Environmental Protection Act 1990 defines harm as “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”.

Harm could be to human health, protected ecological systems, property (crops, produce, livestock, wild animals, subject to fishing / shooting rights), and property (buildings).

Conditions for determining that land as contaminated land on the basis that significant harm is being caused would exist where: -

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

The following health effects will always be considered to constitute significant harm to human health: death, life threatening diseases (e.g. cancers); other diseases likely to have serious impacts on health; serious injury; birth defects; and impairment of reproductive functions. Other health effects may also be considered. When deciding whether or not a particular form of harm is significant harm, the EP team will consider the seriousness and scale of the harm, including the impact on the health and quality of life of any person suffering the harm.

1.1.2 Pollution of Controlled Waters

Section 78A(9) of the Environmental Protection Act 1990 defines the pollution of controlled waters as “the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter.”

“Controlled waters”, in relation to England, has the same meaning as in Part 3 of the Water Resources Act 1991 (territorial waters, coastal waters, inland freshwaters and groundwaters) except that “groundwaters” does not include waters contained in underground strata but above the saturation zone.

Significant pollution is being caused if substances are continuing to enter controlled waters or substances have entered controlled waters and are likely to do so again.

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

- (a) Pollution equivalent to “environmental damage” to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations but cannot be dealt with under those Regulations.
- (b) Inputs resulting in deterioration of the quality of water abstracted, or intended to be used in the future, for human consumption such that additional treatment would be required to enable that use.
- (c) A breach of a statutory surface water Environment Quality Standard, either directly or via a groundwater pathway.
- (d) Input of a substance into groundwater resulting in a significant and sustained upward trend in concentration of contaminants (as defined in Article 2(3) of the Groundwater Daughter Directive (2006/118/EC)).

1.2 The Regulatory Role of Local Authorities under Part 2A

The Statutory Guidance states there are four possible grounds for the local authority to make a determination under Part 2A: -

- (a) Significant harm is being caused to a human, or relevant non-human, receptor.
- (b) There is a significant possibility of significant harm being caused to a human, or relevant non-human receptor.
- (c) Significant pollution of controlled waters is being caused.
- (d) There is a significant possibility of significant pollution of controlled waters being caused.

Tables 1 and 2 in The Statutory Guidance describe the non-human receptors, e.g. Site of Special Scientific Interest (SSSI), crops and livestock, relevant for the purposes of Part 2A.

Where decisions under Part 2A are not straightforward, and where there may be unavoidable uncertainty underlying some of the facts of each case, the local authority, when coming to a decision must strike a reasonable balance between: -

- (a) dealing with risks raised by contaminants in land and the benefits of remediating land to remove or reduce those risks; and,
- (b) the potential impacts of regulatory intervention including financial costs to whoever will pay for remediation (including the taxpayer where relevant), health and environmental impacts of taking action, property blight, and burdens on affected people.

1.3 General Policy of the Council

There are five key priority themes within the Sustainable Community Strategy (SCS), ‘Altogether Better Durham’. The CLIS conforms to one of the priority themes: ‘Altogether Greener’, ensuring an attractive and ‘liveable’ local environment, and contributing to tackling global environmental challenges.

The CLIS forms part of the objectives of the 'Environment, Health & Consumer Protection Service' (EHCP), within Neighbourhood Services (NS) Directorate in DCC. EHCP aims to protect and improve the health, safety, economic wellbeing and environment of the community.

1.4 The Development of the CLIS / the Strategy

1.4.1 Roles and Responsibilities

DCC is the enforcing authority for contaminated land legislation within its area.

The responsibility for development and implementation of the CLIS rests with the EP team.

The Head of EHCP is responsible for the work area.

The EP Manager has delegated powers under Part 2A of the Environmental Protection Act 1990 and Section 108 of the Environment Act 1995.

Officers in the EP team have the responsibility for determining whether any land is contaminated land under Part 2A. Officers may seek information or advice from another body, such as the Environment Agency or suitably qualified experienced practitioner appointed for that purpose (e.g. an environmental consultant) to reach a decision.

The EP team will take a precautionary approach to assess the risks raised by contamination, whilst avoiding a disproportionate approach given the circumstances of each case. The various benefits and costs of taking action will be considered, with a view to ensuring that the regime produces net benefits, taking account of local circumstances, as specified in the Statutory Guidance.

No land is assumed to be contaminated land under Part 2A unless there is supporting evidence to suggest otherwise, in line with the relevant guidance.

The EP team will only use Part 2A as a last resort to deal with land contamination and only where no appropriate alternative solution exists.

1.4.2 Aims and Objectives

This Strategy aims to fulfill the requirements of the Statutory Guidance and the following objectives have been set: -

- (a) Continue with the identification of all potentially contaminated land sites in the DCC area in a manner, which is rational, ordered and efficient.
- (b) Ensure the approach taken and resources are concentrated on carrying out strategic and where necessary detailed inspections of the approximate 7,000

potentially contaminated land sites identified across the DCC area (Land Quality Inspection Programme (LQIP)).

- (c) Prioritise human health sites of highest risk.
- (d) Consider all land on an equal basis, whether it is private or public (such as the Council's own land).
- (e) Improve understanding within our community about contaminated land and the LQIP.
- (f) Inform stakeholders (e.g. landowners) of any action to be taken in relation to carrying out detailed inspections of potentially contaminated land through the LQIP.
- (g) Promote and encourage voluntary remediation.
- (h) Protect receptors from significant harm by determining which sites meet the definition of 'contaminated land'.
- (i) Understand the importance of differentiating between its role as land owner and its statutory regulatory duty under Part 2A when it comes to inspecting Council owned land.
- (j) Promptly inspect of those sites where solutions are most urgently needed, without waiting for it to emerge from the prioritised list.
- (k) Maintain an up to date public register.
- (l) Ensure all information is stored on the Council's contaminated land data management software system and is reliable and of high quality.
- (m) Maintain an up to date website to ensure the public have access to current information.
- (n) Ensure all land likely to be affected by contamination is recorded for future consideration if circumstances change.
- (o) Encourage the re-use and remediation of brownfield land through the planning regime in accordance with the National Planning Policy Framework (NPPF) to ensure that new developments are suitable for use.

1.4.3 Consultation

DCC will consult with neighbouring authorities and other interested parties; any comments received during the consultation period will be carefully considered and the strategy will be amended accordingly. A list of the specific consultees is provided in Appendix A.

2 Principles of Contaminant Linkages and Risk Assessment

The EP team assumes all the land within the DCC area is not contaminated land under Part 2A unless there is reason to consider otherwise, e.g. the identification of a significant contaminant linkage from a detailed inspection.

Under Part 2A the risks should be considered only in relation to the current use of the land. Current use can, however include informal uses and likely future / temporary uses, which would not require a new or amended grant of planning permission.

2.1 Risk

The definition of contaminated land is based upon the principles of risk assessment. "Risk" is defined in the Statutory Guidance as "the combination of: -

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

Risk assessments should be based on information which is: -

- (a) scientifically-based;
- (b) authoritative;
- (c) relevant to the assessment of risks arising from the presence of contaminants in soil; and,
- (d) appropriate to inform regulatory decisions in accordance with Part 2A and the Statutory Guidance.

2.2 Contaminant Linkages

For any land to be designated as contaminated land under Part 2A of the Environmental Protection Act 1990 a significant contaminant linkage (previously referred to as a pollutant linkage) needs to exist. Each element (contaminant, pathway and receptor) can exist independently of each other, but will only create a risk when they are linked together, i.e. a contaminant linkage. Figure 1 shows an example of a human health contaminant linkage and Figure 2 shows an example of controlled waters contaminant linkage.

The term "significant contaminant linkage" means a contaminant linkage which gives rise to a level of risk sufficient to justify the land being determined as contaminated land.

It is important throughout the risk assessment process to formulate a conceptual model. A conceptual model is a representation (textual and / or graphical) of relevant information relating to contamination on a specific site. It identifies potential contamination source(s), pathway(s) and receptor(s) and the possible / significant

contaminant linkages. Figure 3 shows a graphical example of a conceptual model taken from R&D66 (NHBC/EA/CIEH, 2008).

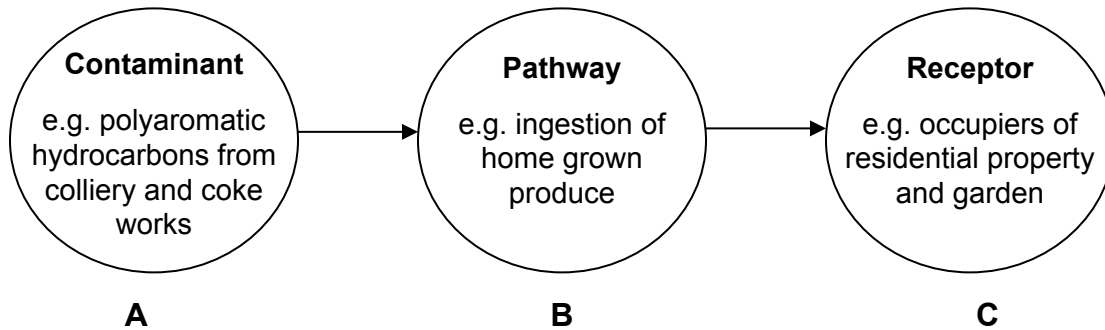


Figure 1: Human Health Contaminant Linkages

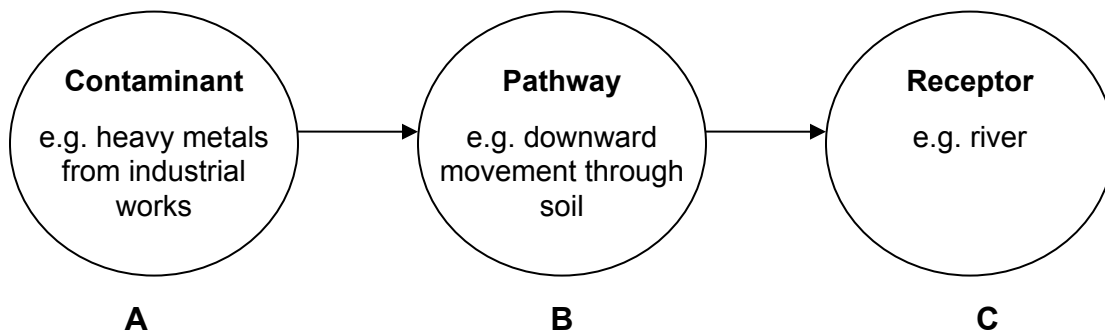


Figure 2: Controlled Waters Contaminant Linkages

2.3 'Normal' presence of contaminants

The Statutory Guidance states that normal levels of contaminants should not be considered to cause land to qualify as contaminated land, unless there is a particular reason to consider otherwise. "Normal" levels of contaminants in soil may be the result of the natural presence of contaminants or the presence of contaminants caused by low level diffuse pollution, and common human activities other than past industrial uses.

In October 2012, Defra published a report and technical guidance sheets, produced by The British Geological Survey (BGS), on normal background concentrations for a number of contaminants in English soils. The normal background concentrations, if necessary, will be used by the EP team as a guide as to what are reasonable levels to support the decision of whether land within the DCC area is contaminated land under Part 2A.

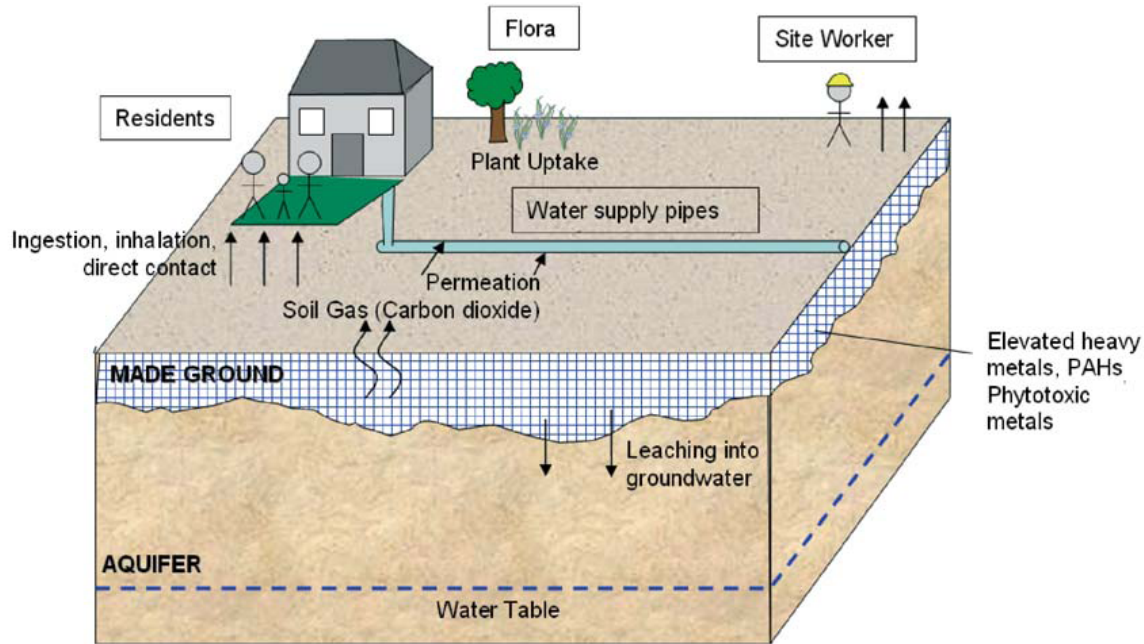


Figure 3: Graphical Conceptual Model

2.4 Strategic and Detailed Inspections

The Statutory Guidance recognises that there are two types of inspection likely to be carried out by the local authorities under Part 2A: strategic inspection and detailed inspection (Figure 4). The strategic inspection involves the collection of information and prioritisation of sites for the detailed inspection or to enable the EP team to make a decision as to whether the land is not contaminated land under Part 2A. An example of a strategic inspection is a Phase 1 Preliminary Risk Assessment (Desk Top Study) including site walkover. A detailed inspection involves obtaining detailed information on the ground conditions. For example by undertaking a Phase 2 Site Investigation and Risk Assessment in order to support the decision as to whether or not the land is contaminated land under Part 2A.

2.5 Risk Categories

The Statutory Guidance has introduced the categorisation of sites investigated and risk assessed under Part 2A for use by local authorities. The EP team will use these categories detailed in Paragraphs 4.19 to 4.29 and 4.46 of the Statutory Guidance to characterise sites inspected under Part 2A. Figure 4 shows where risk summaries fit into the investigation procedure. Table 1 provides a summary of the 4 categories. In brief, Categories 1 and 2 encompass land which is capable of being determined as contaminated land under Part 2A on grounds of significant possibility of significant harm and significant possibility of significant pollution of controlled waters and Categories 3 and 4 would encompass land which is not contaminated land.

Categories	Human Health	Controlled Waters
1	There is an unacceptably high probability supported by robust evidence of the significant possibility of significant harm occurring if no action is taken to stop it. Significant harm may have already been caused.	Strong and compelling case that a significant possibility of significant pollution of controlled waters exists. This would include cases where there is strong science-based evidence for considering that it is likely that high impact pollution would occur if nothing were done to stop it.
2	There is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm. Includes land where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but available evidence suggests that there is a strong case for taking action under Part 2A on a precautionary basis.	The strength of evidence would not place the land into Category 1; however, there is sufficient concern that the land should be considered to pose a significant possibility of significant pollution of controlled waters on a precautionary basis. This may include land where there is a relatively low likelihood that the most serious types of significant pollution might occur.
3	The risks are not low, but regulatory intervention under Part 2A is not warranted. Owners or occupiers of the land could take action to reduce risks outside of the Part 2A regime if they choose.	Risks are such that the local authority might prefer that they did not exist but regulatory intervention under Part 2A is not warranted. This includes land where 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	There is no risk, or that the level of risk posed is low. For example there are no relevant contaminant linkages; contaminant levels do not exceed the Category 4 Screening Levels.	There is no risk, or that the level of risk posed is low. For example there are no relevant contaminant linkages or the water pollution is similar to that which might be caused by background contamination.

Table 1: Summaries of the 4 Categories

Following a strategic inspection, the EP team may be able to place some sites within Category 4 where no relevant contaminant linkage exists. For other sites, following the detailed inspection of the land (Phase 2 Site Investigation and Risk Assessment) the EP team should have a sufficient understanding of the risks in order to decide whether or not land is contaminated land on the grounds of significant possibility of significant harm and / or significant possibility of significant pollution of controlled waters and place the site into one of the four categories.

The Statutory Guidance states that where all factors are taken into account, if the local authority cannot decide whether or not a significant possibility of significant harm exists and / or a significant possibility of significant pollution of controlled waters exists, it should conclude that the legal test has not been met and the land should be placed in Category 3.

2.6 Use of Generic Assessment Criteria and Other Technical Tools

In line with common practice, the EP team will compare the findings of detailed inspections against generic and site specific assessment criteria for human health, generated using the most up to date version of CLEA UK (Contaminated Land Exposure Assessment) in order to interpret and risk assess the data and make an informed decision under Part 2A. In order to aid the risk assessment, where necessary Category 4 Screening Levels (C4SLs) which were released in March 2014 and will also be used along with normal background concentrations.

For contaminants in groundwater and surface water, depending on the environmental setting and conceptual site model, the UK Drinking Water Standards (DWS) and World Health Organisation (WHO) and River Basin Standards may be appropriate to use generic assessment criteria. The Environment Agency recommends that the framework set out in the Remedial Targets Methodology is used.

2.7 Investigation Procedure

Figure 4 shows the procedure for investigating sites under Part 2A of the Environmental Protection Act 1990. Further details regarding each stage of the investigation process are provided in Sections 4 and 5.

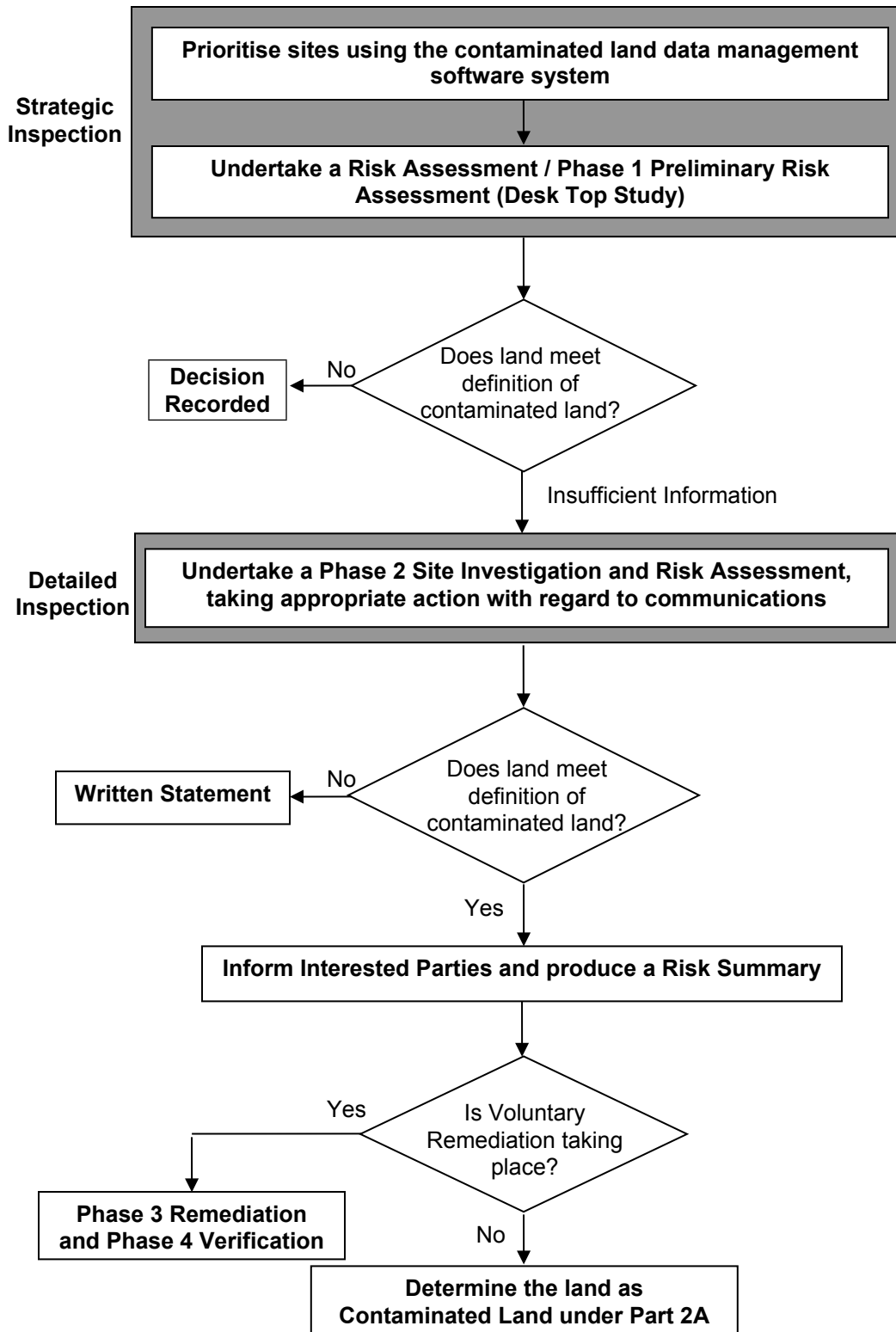


Figure 4: Investigation Procedure

2.8 Written Statement

In implementing the Part 2A regime, the EP team is likely to inspect land that it then considers is not contaminated land. For example, this will be the case where the authority has ceased its inspection and assessment of land on grounds that there is little or no evidence to suggest that it is contaminated land. The EP team will produce a written statement and record to that effect to minimise detrimental effects on property and land (Figure 4). The statement will provide reasons for why on the basis of its assessment the EP team has concluded that the land does not meet the definition of contaminated land under Part 2A.

2.9 Risk Summary

For any land within the DCC area likely to be determined as contaminated land, the EP team will produce a risk summary. A risk summary explains the authority's understanding of the risks and other factors considered relevant. This should be prepared in advance of a formal determination of the land as contaminated land under Part 2A. Risk summaries should be targeted towards the land owners and members of the public who may be affected by the decision. Details of what should be included in a risk summary are in the Statutory Guidance. Risk summaries are not required: -

- (a) For land which will not be determined as contaminated land (land in Categories 3 and 4).
- (b) For land which has been prioritised for detailed inspection but which has not yet been subject to risk assessment.
- (c) For land determined as contaminated land before the revised Statutory Guidance came into force.

2.10 Determining Whether Land is Contaminated Land under Part 2A of the Environmental Protection Act 1990

At the end of the Phase 2 Site Investigation and Risk Assessment the conceptual model will be updated to show whether one or more significant contaminant linkages exist or otherwise. Should one or more significant contaminant linkages exist between any sources of contamination and receptors, such as human health, controlled waters and / or ecology, the EP team will follow the procedure for determining the land as contaminated land, as set out in Section 78A(2) of the Environmental Protection Act 1990 and the Statutory Guidance. The land would be placed in either Category 1 or 2.

The EP team may postpone the determination of contaminated land following informing the interested parties to give the landowners or other interested person(s) the opportunity to choose to undertake the remediation to an appropriate standard and timescale agreed with the EP team.

The determination may also be postponed by the EP team should one or more significant contaminant linkages only exist if the circumstances of the land were to

change in the future within the bounds of the current use of the land (e.g. if a more sensitive receptor were to move onto the land or a temporarily interrupted pathway were to be reactivated). Alternatively, in this situation the EP team could determine the land as contaminated land but postpone the remediation.

The EP team may reconsider a determination if new information comes to light, which is significant enough to alter the original decision. In such cases the EP team will decide whether to retain, vary or revoke the determination.

Further details of the determination and remediation procedures are not included as they are outside the scope of this CLIS. These can be found in the Statutory Guidance.

3 Characteristics of the DCC area

3.1 Geographical Location

DCC is located in the North East of England. It covers an area of 223,000 hectares and is predominantly rural (some 200,000 hectares (90%) is agricultural land). It incorporates the majority of the land known as County Durham. Figure 5 shows a map of the DCC area.

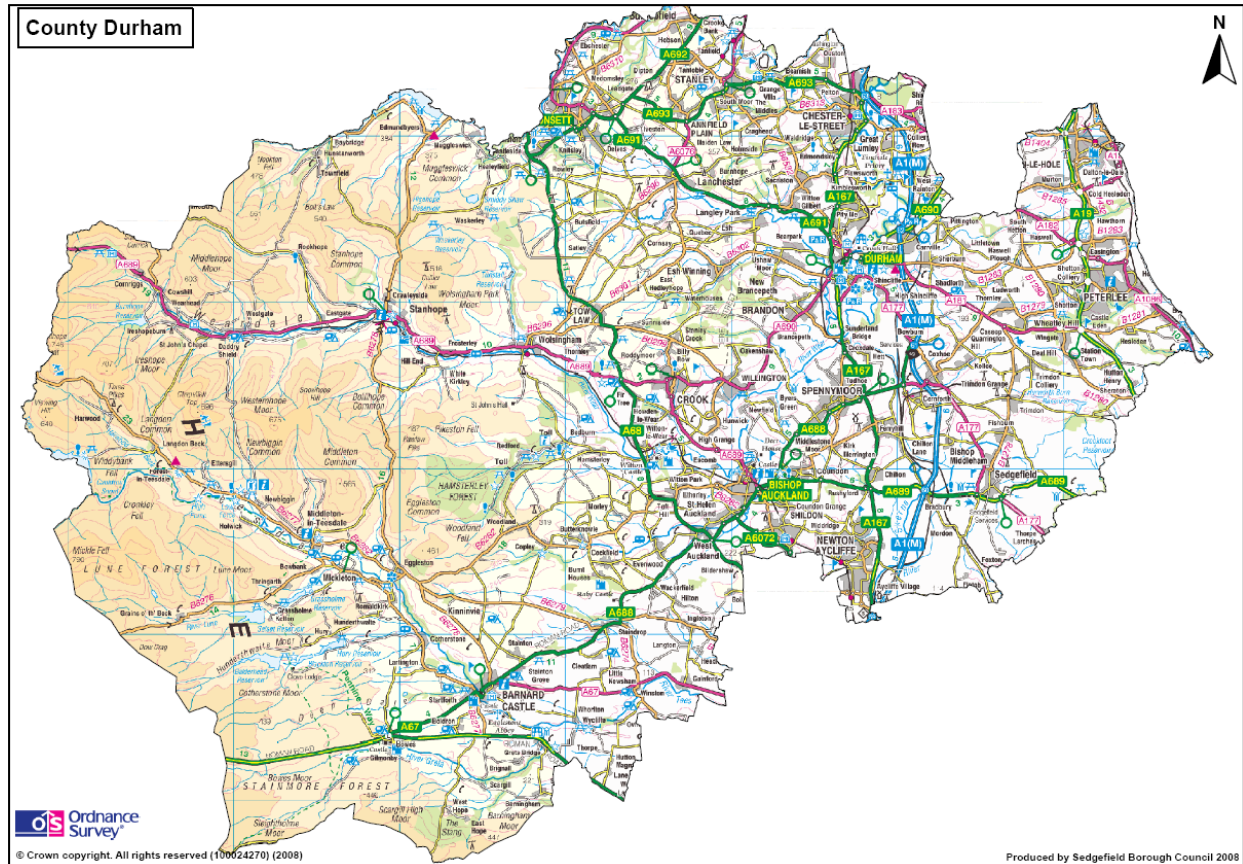


Figure 5: Map of the DCC area

The conurbation of Tyne & Wear and the County of Northumberland lie to the north, Cumbria lies to the west and to the south are Darlington, the Tees Valley conurbation and North Yorkshire. The North Sea borders the eastern boundary and the Durham coastline extends some 20km.

The majority of the population live in the central and eastern parts of the DCC area. In the first release of the 2011 population census, the population was 513,200 and the 2013 population estimate was 516,000. The main population centres are Durham City, Chester-le-Street, Crook, Consett, Stanley, Peterlee, Seaham, Spennymoor, Shildon, Bishop Auckland and Newton Aycliffe. To the west of the A68, comprises the upper

valleys of the River Wear and the River Tees, and these areas are sparsely populated. The majority of the population living within these areas are located within the many small towns and villages, with the main service centre being Stanhope for Weardale which has a population of approximately 1,600, and for Teesdale, the market town of Barnard Castle which has a population of approximately 5,000.

3.2 Geology and Hydrogeology

In terms of solid geology, County Durham (Figure 6) consists principally of a succession from west to east of Carboniferous and Permian rocks, with the Permian giving way to Triassic rocks in the south-east of the County; all the strata dip gently towards the east. The Great Whin Sill, an igneous complex consisting of a number of sills and associated dykes, underlies much of the County but is best exposed in Upper Teesdale and to a lesser extent in Weardale.

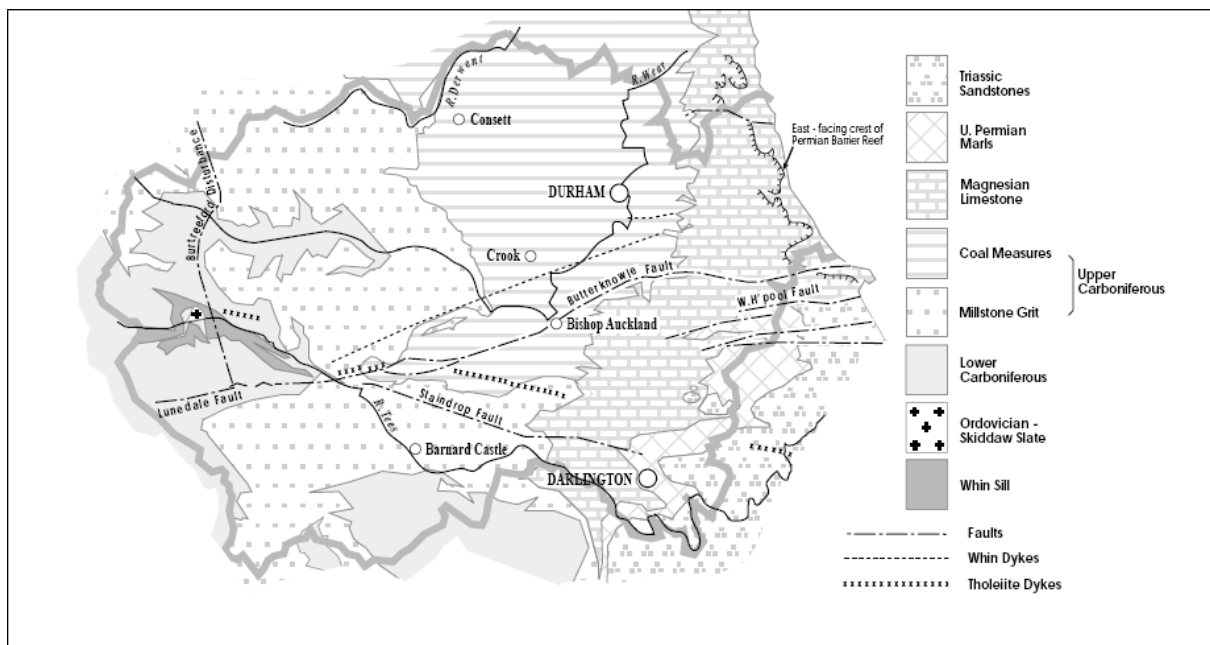


Figure 6: County Durham Geological Map

The Carboniferous Limestone series is represented by alternations of sandstone, shale and relatively thin limestone bands, which crop out in the upper reaches of West Durham. The Carboniferous sequence hosts an ore field consisting of numerous mineral infilled fractures and although it is mainly developed in the Carboniferous limestone and Millstone Grit to the west of the County, in places it extends to the coal measures in the east.

Although generally eroded away in the upper reaches of west Durham, the Millstone Grit increasingly forms the fells and ridges between the main Dales to the east of a line

between Blanchland and Middleton in Teesdale. The Millstone Grit series is represented by three groups of sandstone beds separated by shales, with a few thin coal seams.

The succession eastwards continues with the Millstone Grit being overlain by the Coal Measures, the division broadly corresponding with the easterly extent of the open moorland of west Durham. The Coal Measures extend to the east of the Wear Valley, where Permian rocks overlie them. Southwards the strata are thrown into strong undulations beyond the Butterknowle Fault and end in a sharp uprise beneath the Magnesian Limestone. These boundaries to the east and south mark the extent of the 'exposed' part of the Durham coalfield; the concealed part of the field extends beneath the Permian strata eastwards across the County and continues beneath the North Sea. The eastern edge of the Wear lowlands is marked by the outcrop of Permian rocks in the form of a bold escarpment running in a north - south direction between Pittington and Ferryhill and then turning south-westwards, with the outcrop gradually disappearing to the south of Shildon. The base of the Permian is represented by the Basal Yellow Sands, which outcrop north of Ferryhill. Above the Basal Yellow Sands lies a thin bed of marl slate, followed by deposits of Magnesian Limestone, which consists of a variable mixture of the minerals dolomite and calcite. Where the mineral dolomite is the principal constituent and scarcely any free calcite is present, the deposit is referred to as a dolomite rock. The occurrence of such deposits of dolomite is mainly confined to the lower beds of the Magnesian Limestone, the outcrop of which within the County is restricted to the lower slopes of the escarpment between Ferryhill and Pittington. Throughout the remainder of the Magnesian Limestone series the rock ranges through varying degrees of dolomitised limestone to pure limestone. Eastwards from the escarpment, the Magnesian Limestone is extensively covered by glacial drift deposits, which occasionally give rise to deposits of sand and gravel and brick clay. There is a significant amount of Made Ground in the County, largely associated with the mineral and waste activity that has taken place in the County.

Lower Carboniferous Limestone and Upper Permian Magnesian Limestone are rock formations listed in Paragraph 2 of Schedule 1 of The Contaminated Land (England) Regulations 2006. Any of the pollutants listed in Paragraph 1 of Schedule 1 of the Regulations, which are likely to be present or are present in the water in these strata in concentrations that would lead them to be considered to be polluting, noxious, poisonous or solid waste matter will result in the designation of a Special Site. The Groundwater Vulnerability Map for the area shows the DCC area to be underlain by Principal, Secondary A or Secondary B Aquifers. The majority of the area is underlain by a Secondary A Aquifer. The relevant source protection zones for the DCC area are shown on Environment Agency's website and in Figure 7. The Environment Agency has defined source protection zones (SPZs) for groundwater sources such as wells, boreholes and springs used for public drinking water supply.

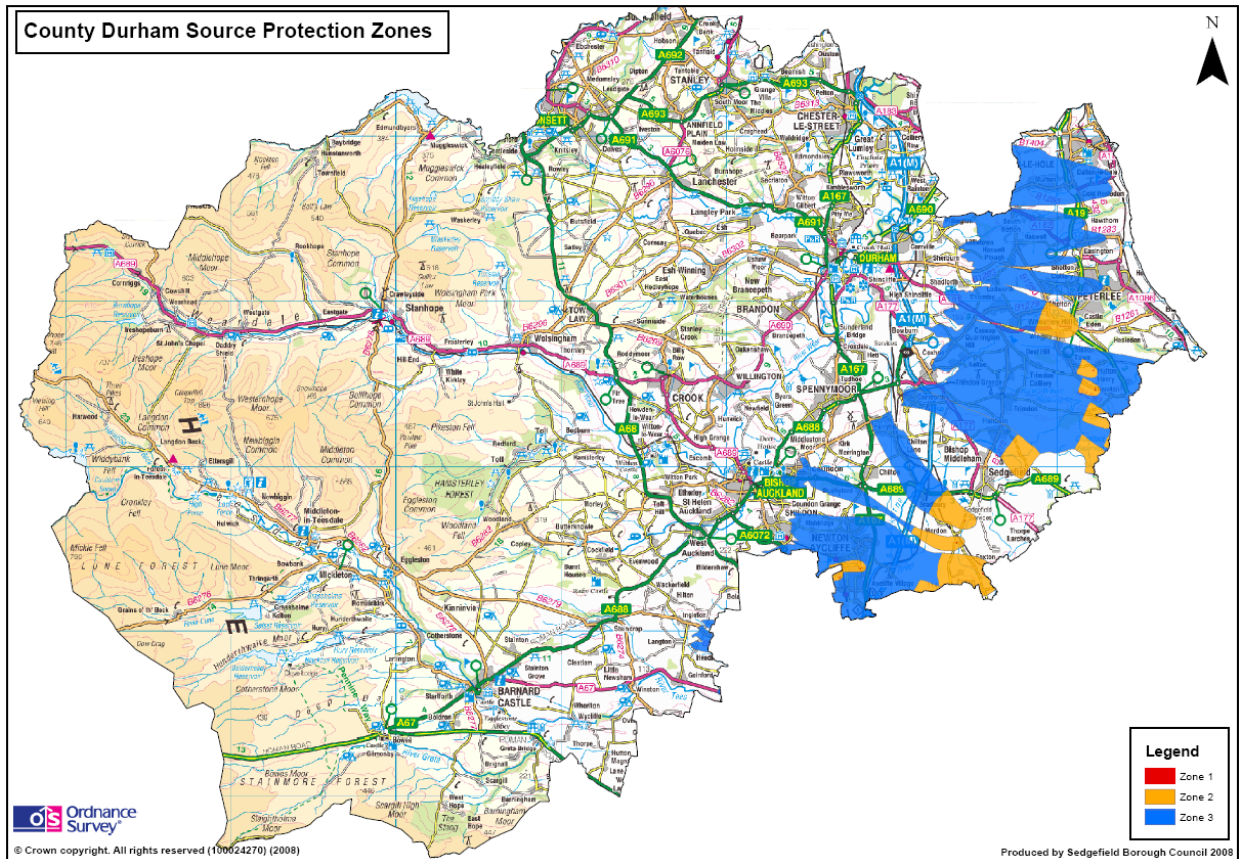


Figure 7: DCC area's Source Protection Zones

3.3 Hydrology

The Rivers' Wear, Derwent and Tees, and their associated tributaries are the main water bodies in the DCC area. The water quality of the rivers is classified by the Environment Agency. Land use and water resources are entwined, therefore activities such as, industrial activity, agriculture, urban infrastructure, agriculture etc., can affect water quality.

3.4 Landscape, Character and Biodiversity

The landscape of the area is one of great contrast and diversity (Figure 8). From the summit ridges in the North Pennines in the west, to the Durham Coast and its limestone cliffs in the east, it contains landscapes of outstanding quality and natural beauty as well as those recovering from the legacies of an industrial past. The character and biodiversity of the landscape are closely linked. Further information can be found on the Landscape character page on the Council's website.

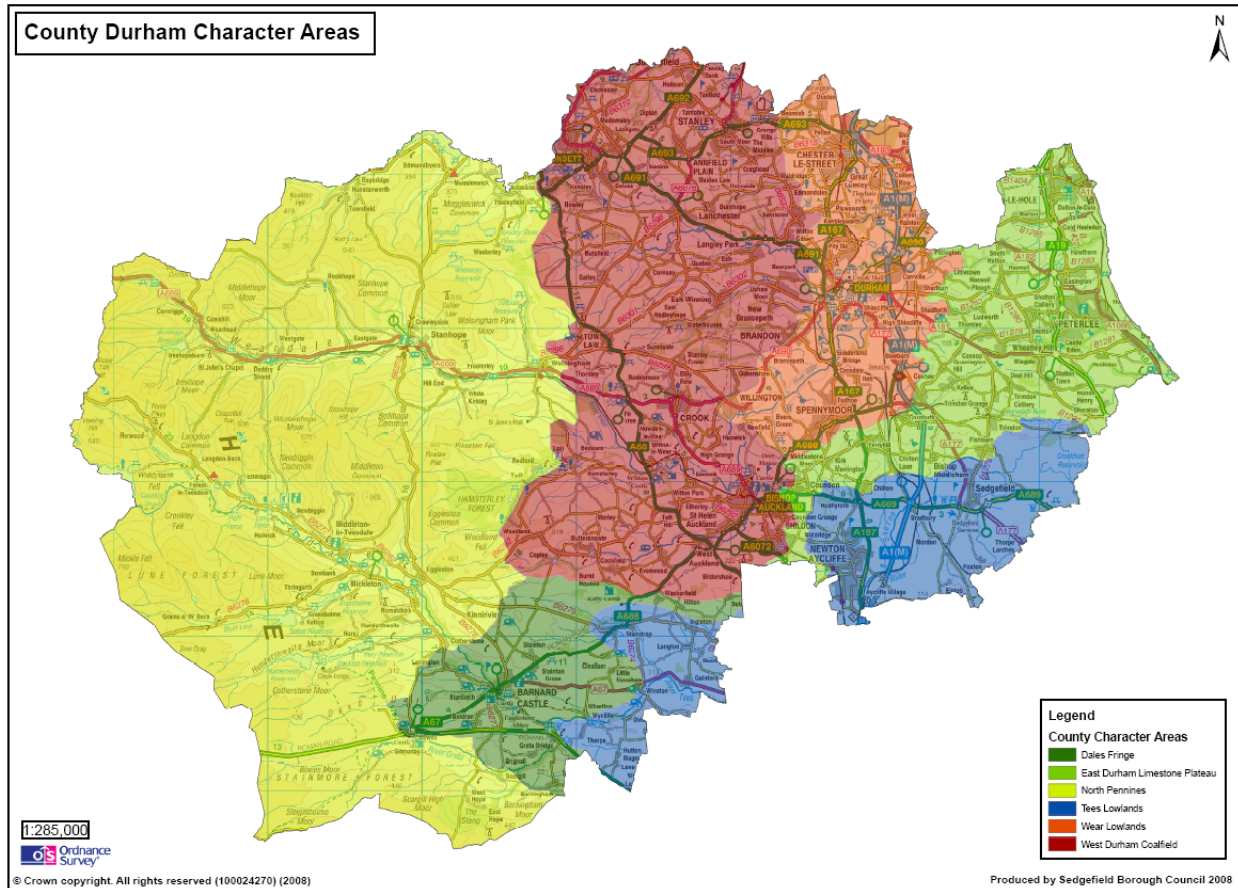


Figure 8: DCC's Character Area

3.5 Nature Conservation

The DCC area has an increasing number of protected wildlife sites of international, national and county significance, these sites support a variety of protected species.

The Durham Biodiversity Action Plan is divided into separate workplans for priority habitats and species. The priority habitats within the County are Woodland, Wetland, Upland and Lowland.

Further information can be found on the Durham Biodiversity Action Plan webpage on the Council's website.

3.6 Built Environment

The DCC area contains many areas and sites of cultural importance. These include Durham Cathedral and Castle, designated a World Heritage Site in recognition of its outstanding international historic importance, many historic parks and gardens, which are also considered of national importance, and numerous Conservation Areas and Listed Buildings. In addition, there are over 3,500 known archaeological sites in the

DCC area, of which over 100 are considered to be of national importance and are designated as Scheduled Ancient Monuments.

3.7 Industrial Heritage

The DCC area has a rich industrial heritage, dominated by the mining and quarrying activity, which has taken place since 19th Century.

The East Durham Coalfield mined underlying coal seams beneath the North Sea. Colliery spoil was deposited onto the beaches and into the North Sea which heavily degraded the coastline for many decades until the closure of the last pit in 1993. Some colliery spoil heaps have been removed from the coast line in a project called 'Turning the Tide' whilst others are naturally being eroded by the sea and this process will continue in the medium term. Associated mining activities, such as coke works and gas works with their related waste products have also left a legacy of industrial land in the DCC area. The expansion of the railways, and its subsequent retraction, has also contributed to the industrial heritage of the DCC area. There were a number of iron and steel works operating in the early 20th Century. Some of the main towns were historically supplied with town gas, and some of these sites still remain vacant.

Further information can also be found on the Durham Mining Museum website and the Durham Heritage Coast website.

4 Implementing the CLIS / the Strategy

4.1 Work programme between November 2011 and 2015

Since the publication of the CLIS, dated November 2011, DCC purchased a dedicated contaminated land software system, which is a single all-encompassing database, including a general system for managing technical environmental data (historic industrial activity, soil quality, groundwater, surface waters, ecology etc.).

It has also been integrated with standard geographical information systems (GIS), it also allows the licence holder to reliably and efficiently manage all the data that is collected for each site, (i.e. reports, digital images, sample analyses, borehole logs, etc).

Using this data management software, DCC has identified approximately 7,000 potentially contaminated land sites. The sources used to collect and collate information regarding potential sites of contamination, pathways and receptors include historical maps, geological maps, land use data, Environment Agency data such as landfill licensing, information from Natural England on environmental sensitive sites and local knowledge.

The software also includes a risk based site prioritisation system. The initial prioritisation, which produced a Stage 1 risk assessment score and site prioritisation list is based on cross referencing the current use of the site with the past industrial / historical use(s).

The Stage 1 Inspection Priority List was used to work down the list from high to low priority sites, with those sites considered to be the greatest risk to human health. This work began in 2012 and since then the EP team has inspected sites in line with the Statutory Guidance through the LQIP. The EP team has strategically inspected approximately 4,000 sites and met the target of inspecting 10 of the highest priority sites per annum, this being the detailed inspection of approximately 40 sites. All of the Council's high priority sites have been inspected.

4.2 Work Programme for 2015 - 2020

The Council recognises that in order to implement the CLIS and achieve the objectives set in Section 1.4.2, that a number of major tasks are required. These are listed below in Table 2 and detailed within this section.

Task No.	Task Description	Target Date
1.	Review highest priority sites (Stage 1 Site Prioritisation)	Ongoing
2.	Continue to collate information on sites of potential land contamination as part of the strategic inspection	Ongoing
3.	Carry out strategic and where necessary detailed inspections of potentially contaminated land sites across the DCC area (LQIP)	Ongoing
4.	Produce written statements / risk summaries for each site following the strategic and detailed inspections	Ongoing
5.	Review highest priority sites (Stage 2 Site Prioritisation)	Where resources are available
6.	Undertake strategic and where necessary detailed inspections of sites where information comes to light to deem them as urgent	Where necessary
7.	Review the CLIS	2020

Table 2: The Work Programme for 2015-2020

4.2.1 Review of Highest Priority Sites (Stage 1 Site Prioritisation)

As new information is collated regarding potentially contaminated land sites on the database a review in the Stage 1 site prioritisation is required to be undertaken focusing on those sites, which were identified as highest priority sites.

The Other Factors Score (OFS) will be applied in the Stage 1 site prioritisation. The OFS allows sites to be further risk assessed. It will be used to aid the risk assessment process, by lowering or increasing the score assigned to the site where appropriate.

Table 3 shows the breakdown of the number of potentially contaminated land sites in the DCC area in each inspection priority category. The highest priority sites will be reviewed first.

Inspection Priority Category	Score	No. of Sites
High Priority for Inspection	48-69	0
Medium - High Priority for Inspection	40-47	170
Medium Priority for Inspection	30-39	581
Low – Medium Priority for Inspection	15-29	3040
Low Priority for Inspection	0-14	3185

Table 3: Number of Sites in each Inspection Priority Category

The current uses of these sites are:

- Housing with gardens, and / or
- Allotments

The past industrial uses of these sites are:

- Coal Mining Site with Coke Works
- Gas Works, Coke Works, Coal Carbonisation Works
- Mining of Coal and Lignite
- Waste: Landfills and other Waste Treatment and Disposal Sites, and / or
- Heaps including Spoil and Slag

The majority of the DCC area has been surveyed for potentially contaminated land sites, however it is recognised that there are gaps in this data relating to some of the more remote areas. As new potentially contaminated land sites come to light they will be added to the database and prioritised in the Stage 1 site prioritisation.

4.2.2 Strategic Inspections

Working down the Stage 1 inspection priority list, information should be collated for potentially contaminated land sites to aid with the strategic inspection. This information may be obtained from reclamation files, geoenvironmental reports, the Coal Authority, Environment Agency or local knowledge etc. This is invaluable information for producing a Phase 1 Preliminary Risk Assessment (Desk Top Study).

Phase 1 Preliminary Risk Assessments (Desk Top Studies) will be undertaken on the highest priority sites identified in the Stage 1 site prioritisation. They will be produced in accordance with the risk assessment principles based on the contaminant-pathway-receptor approach, to identify a contaminant linkage or linkages as detailed in CLR 11 (Defra and Environment Agency, 2004). They will be carried out by the EP team or a suitably qualified Environmental Consultant who will develop a conceptual model for each site to identify whether or not there are any potentially unacceptable risks. Sufficient information may be obtained from the Phase 1 Preliminary Risk Assessment to allow a decision to be made under Part 2A.

Additional, strategic risk assessments of potentially contaminated land sites will be undertaken by the EP team, where sufficient information is known in order to allow a decision to be made under Part 2A. The assessment will follow the contaminant-pathway-receptor approach, however it will be a robust but quicker assessment than the Phase 1 Preliminary Risk Assessment (Desk Top Study). This work will not be given priority and will only be undertaken when resources are available.

4.2.3 Detailed Inspections

Where land is identified as having the potential for one or more significant contaminant linkage to exist, a Phase 2 Site Investigation and Risk Assessment is required and will be undertaken where necessary. This is based on information from the Phase 1 Preliminary Risk Assessment (Desk Top Study). The Phase 2 Site Investigation and Risk Assessment will be undertaken by a suitably qualified Environmental Consultant / Contractor, although the final decision as to whether the land constitutes contaminated land lies with the EP team.

Prior to any work being undertaken all stakeholders will be notified, appointments made, availability of consultants and contractors booked and Health and Safety Procedures put in place. A written risk assessment will be carried out by an appropriate person, of the risks to personnel in carrying out the detailed inspection, and referred to the Council's Health and Safety team for comment. Site Investigation and Risk Assessments are carried out in accordance with CLR11 (Defra and Environment Agency, 2004) and BS10175: 2011. The results will be compared against relevant assessment criteria. The EP team will then assign the land into one of the four categories detailed in Paragraphs 4.19 to 4.29 and 4.46 of the Statutory Guidance and a decision made as to whether or not the land is contaminated land under Part 2A.

Phase 2 Site Investigations and Risk Assessments are invariably time consuming and expensive, therefore once sufficient information has been obtained, which confirms that no contaminant linkage exists, or if it does, it is not significant, the investigation will stop and no further investigative action will be taken.

Following a detailed inspection the EP team will communicate the results back to the stakeholders.

The detailed inspections are locally known as the LQIP. Further information regarding the LQIP can be found on the Council's website.

4.2.4 Written Statements

Following either a strategic or detailed inspection where sites do not meet the definition of contaminated land under Part 2A, the EP team will produce a written statement. Written statements detail the site, the inspections, finding and conclusions. Written statements will be provided to owners of the land and other interested parties (e.g.

occupiers of the land) upon request. Further information regarding written statements was detailed in Section 2.8.

4.2.5 Risk Summaries

Following either a strategic or detailed inspection where sites meet the definition of contaminated land under Part 2A, the EP team will produce a risk summary. Further information regarding risk summaries was detailed in Section 2.9.

4.2.6 Review highest priority sites (Stage 2 site prioritisation)

The Stage 2 site prioritisation allows an assessment of individual sites in more detail.

The following information will be entered onto the contaminated land data management software system for each site:

- Identification of likely contaminants based on previous industrial use
- Distance to the nearest surface water, groundwater and / or buildings
- Surface conditions at the site (e.g. hard standing, soft standing etc.)

This information is used to produce a Stage 2 risk assessment score for each site and subsequently an 'action priority list'.

4.2.7 Dealing with Urgent Sites and Imminent Risk of Harm or Water Pollution

If information is received alleging significant harm or pollution, for example if there is a chemical spillage, unplanned change of use (such as persistent unauthorised use of the land or the site or the site being designated as a Site of Conservation Importance), a Phase 1 Preliminary Risk Assessment (Desk Top Study) will be produced. Where it is identified that a significant contaminant linkage may exist, urgent action to carry out further investigation will be necessary and an action plan produced.

This work would take priority over the scheduled work programme.

4.2.8 Review the CLIS / the Strategy

In line with the Statutory Guidance, DCC's CLIS will be reviewed within five years. The next review is proposed for 2020.

5 General Communication, Liaison and Consultation

5.1 General Communication

The Council recognises that effective communication with the public of the risks associated with land contamination is critical to the successful implementation of the CLIS. The EP team will endeavour to communicate in a clear, consistent and concise manner at all times with the help and assistance of the Neighbourhoods' Communications team, if required and taking account of the advice given and guidance (SNIFFER, 1999).

In all circumstances the EP team will communicate with all relevant stakeholders (e.g. landowners) with regard to carrying out the detailed inspections of potentially contaminated land under the LQIP.

The LQIP webpage on the Council's website will be kept up to date with the details of current and previous detailed inspections. This will include information such as site location plans, frequently asked questions, relevant dates and findings of results. The website will be regularly reviewed.

The EP team will aim to gain the approval of the landowner / occupier prior to undertaking the detailed inspection. Nonetheless, the Council has the power, under Section 108 of the Environment Act 1995, to carry out an inspection under Part 2A using Statutory Powers of Entry, so long as it is satisfied that there is a reasonable possibility that a significant contaminant linkage exists on the land (Sections 2.10-2.11 of the Statutory Guidance). The Council will not exercise these powers if detailed information on which it could make a decision can be provided. Authorised Officers carry a certificate of appointment that includes their name, job title and photograph to confirm their authority to use these powers in the situation where the landowner refuses entry or cannot be found.

5.2 Internal Liaison Procedures

The EP team will ensure they liaise with all the relevant service teams throughout the inspection process, where necessary, for example, County Archivists, Planning team, Waste Management team, Building Control team, Land and Property Team, Health and Safety team, Countryside team and Legal team. Ward Councillors, Parish Councillors and Area Action Partnerships (AAPs) will be informed of the LQIP and the outcome of these works.

5.3 External Liaison Procedures

The Statutory Guidance advises local authorities to consult external expertise as part of the risk assessment process in complex cases. The EP team will liaise closely with the appointed Environmental Consultant / Contractor throughout the inspection process. Where necessary, the EP team will also liaise with the Environment Agency, Public Health England and Natural England. In complex cases the EP team will liaise with the National Panel of Experts set up by Defra in late 2012 to support

local authorities in making the decision on whether land is or is not contaminated land under Part 2A.

5.3.1 Environment Agency

The EP team will formally consult with the Environment Agency when it considers (if the land was to be determined as contaminated land under Part 2A) it would be likely to meet one or more of the descriptions of a Special Site set out in the Contaminated Land (England) Regulations 2006 and the Contaminated Land (England) (Amendment) Regulations 2012. Subject to the Environment Agency's advice and agreement, the EP team may request that the Environment Agency carry out a detailed inspection of the land on behalf of the EP team. The Environment Agency will advise the EP team of its findings. However, the decision as to whether the land meets the definition of contaminated land remains the sole responsibility of the EP team.

5.3.2 Public Health England

The EP team will liaise with Public Health England to assist in the communication of advice, in particular with regard to health effects and if necessary, information, such as leaflets and information packs aimed at the interested parties. If the EP team is considering whether the land might be contaminated land under Part 2A, where there is a potential for risk to human health, such as residential housing, a park or a school, they will consult with Public Health England.

5.3.3 Natural England

If the EP team is considering whether the land might be determined as contaminated land under the legal definition by virtue of an Ecological System Effect, such as a SSSI, the EP team will consult Natural England for their views and recommendations.

5.4 CLIS Consultation

Developing a strong and pragmatic relationship with our communities is a fundamental priority for the Council, and this is demonstrated in engaging with the local residential and business communities and those interested in land use and ownership in the development of the CLIS. The reviewed CLIS is available in draft for consultation on the Council website. Statutory bodies, other services of the Council are provided with a link to the draft copy on the website. The list of the specific consultees is shown in Appendix A. All are invited to provide comments. Where appropriate, the Strategy will be updated to reflect the comments received.

6 Information Management

6.1 General

Information will be managed in a logical manner ensuring its efficient use and availability. The Council will strive to continually improve information management.

6.2 Storage

All known information regarding potentially contaminated land sites and contaminated land sites under Part 2A are stored on the Council's contaminated land data management software system and is linked to GIS. The software is managed by the Senior Contaminated Land Officer.

6.3 Confidentiality

The security of the contaminated land data management software system and the list of potentially contaminated land sites are critical.

Incomplete data and reports, including conclusions based on preliminary or incomplete data, particular sites that are considered potentially contaminated, will be treated as confidential. While respecting legal rights of access to information, the process for information gathering will be made classified as work in progress until such a time when a decision can be made as to whether land is contaminated land under Part 2A or otherwise.

Information given to the Council by a third party during an inspection will be classified and confidential and will only be disclosed for public inspection with the prior agreement of the information provider.

6.4 Public Access to Information

6.4.1 Public Register

Section 78R of the Environmental Protection Act 1990 requires local authorities to keep a public register of the regulatory and remediation actions in respect of land that has been declared as contaminated land under Part 2A.

It must be stressed that the Public Register is not a register of all sites affected by contamination and will only contain details about sites which have been formally determined as contaminated land, and the remediation action carried out to ensure the land is fit for its new purpose.

The register is held in an electronic format by the EP team. It is available for public inspection. See Appendix A for the Key Contacts for more information.

6.4.2 Request for Environmental Information

The EP team will respond to specific written requests for information held by the Council, for example whether a site appears on the Council's inspection priority list and if any site specific reports are held. The Council will act in accordance with the Environmental Information Regulations 2004, Freedom of Information Act 2000 and Data Protection Act 1998. Accuracy of information will always be a high priority.

6.4.3 Complaints and General Enquiries

Complaints and general enquiries will be handled as part of the request for service procedures. All investigations will be carried out as quickly as possible and depending on the nature of the enquiry may consist of telephone advice, site walkover survey and / or consulting with other partnerships and agencies.

7 Dealing with land contamination outside Part 2A of the Environmental Protection Act 1990

Prior to the introduction of Part 2A of the Environmental Protection Act 1990, land affected by contamination in the DCC area was remediated through the reclamation scheme and the planning regime. The introduction of Part 2A led to an increase in the number of sites requiring assessment, specifically addressing the historical legacy of contamination. There are several ways in which land contamination can be addressed, however the planning regime remains the primary mechanism for dealing with sites affected by land contamination.

7.1 Voluntary Action

The EP team encourages owners to deal with contamination by undertaking voluntary action, therefore minimising the unnecessary burdens on the taxpayer, businesses and individuals.

7.2 The Planning Regime

Contamination is a material consideration under the planning and development management regime in the UK. In accordance with the National Planning Policy Framework (NPPF) local planning authorities have to consider the implications of contamination when developing local plans and when considering applications for proposed developments. The planning regime addresses the risks in relation to future use of land and it is the responsibility of the landowner/ developer to ensure the land is suitable and safe for the proposed use. The land should not be capable of being determined as contaminated land under Part 2A following any development under a planning consent. Planning conditions require the developer and/or landowner to risk assess their development land for any contamination, provide an assessment of contamination and if necessary remediate the land. Works are agreed with the EP team on behalf of the Planning Service at DCC prior to commencement. The landowner / developer is also required to provide a validation report, to show that the agreed remediation has been carried out to an acceptable standard following completion of the development.

7.3 Building Regulations

The Building Regulations 2010, and associated approved documents, contain specific requirements regarding contamination and landfill gas issues. These require measures to be taken to protect new buildings, and their future occupants, from the effects of contamination, including hazardous ground gases. Approved document Part C gives guidance on these requirements (HM Government, 2004 incorporating 2010 and 2013 amendments).

7.4 Pollution of Controlled Waters

The Water Resources Act 1991 gives the Environment Agency powers to take action to prevent or remedy the pollution of controlled waters. It is particularly useful in cases where there is historic pollution of groundwater, but where the Part 2A regime

does not apply. For example, where the pollutants are entirely contained within the relevant body of groundwater or where the source site cannot be identified.

7.5 Environmental Permits and Waste Management

Powers are available under the Integrated Pollution Prevention and Control (IPPC) and Local Authority Integrated Pollution Prevention and Control (LA-PPC) regimes for dealing with contamination that result from a breach of an operating permit (Part A1 and A2). The Part 2A provisions will not apply where the regulator can take action under these regimes to remedy the effects of a breach of a permit or the carrying out of an activity authorised by the permit in accordance with its terms and conditions. Under IPPC the permit holder is required to produce a site condition report to ensure that on the surrender of the Permit the land and groundwater are in a satisfactory state (i.e. the condition of the land when the permit was issued).

An enforcing authority acting under Part 2A cannot serve a remediation notice in any case where the contamination results from an illegal deposit of controlled waste. Instead, the Environment Agency and the waste disposal authority have powers under section 59 of the Environmental Protection Act 1990 to remove the waste and to deal with any contamination caused by it being present.

7.6 Environmental Damage Regulations 2009

The Environmental Damage (Prevention and Remediation) Regulations (EDR) 2009 provide additional enforcement powers for the prevention and regulation of land contamination.

The regulations ensure that businesses or other responsible operators identify when there is an imminent threat or actual damage and take immediate action. EDR specifically defines environmental damage as:

Damage to:

- a) protected species or natural habitats, or a site of special scientific interest, or
- b) surface water or groundwater with a deterioration in the water's status, or
- c) contamination of land that results in a significant risk of adverse effects on human health.

The Environment Agency, Natural England, local authorities and the Secretary of State are the enforcing authorities responsible for administering and enforcing the regulations in England and Wales, depending on the type of damage involved. The enforcing authority must establish whether damage is 'environmental damage' and identify a responsible operator in order to serve a remediation notice taking account of any measures proposed by the operator.

The Regulations only apply to damage which has taken place after 1 March 2009 and are usually applied to allow a more rapid reactive resolution to land contamination caused by for example a pollution incident.

References

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British Geological Survey (2012) Technical Guidance Sheets
<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=17768&FromSearch=Y&Publisher=1&SearchText=sp1008&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>

BS10175:2011 Code of practice for investigation of potentially contaminated sites

Communities and Local Government (03/2012) National Planning Policy Framework Contaminated Land (England) Regulations 2006 (SI 2006/1380)

CL:AIRE (December 2013) SP1010 – Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination: Final Project Report

Contaminated Land (England) Regulations 2006 (SI 2006/1380)

Contaminated Land (England) (Amendment) Regulations 2012 (SI 2012/263)

Data Protection Act 1998

Defra (April 2012) Environmental Protection Act 1990: Part 2A, Contaminated Land Statutory Guidance, HM Government

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Environment Agency (2006) Remedial Targets Methodology – Hydrogeological Risk Assessment for Land Contamination

Environment Agency and NHBC (2000) Guidance on the Safe Development of Housing on Land Affected by Contamination

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GeoEnviron (2015) Contaminated Land Data Management Software System
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HS(G)66 (1991) Protection of workers and the general public during the development of contaminated land

Landscape character (2015)
<http://www.durham.gov.uk/article/2008/Landscape-character-and-guidelines>

NHBC/EA/CIEH (2008) Guidance for the Safe Development of Housing on Land Affected by Contamination, R&D66: Volume 1

SNIFFER (1999) Communicating Understanding of Contaminated Land Risks

The Building Regulations 2010

The Environmental Damage (Prevention and Remediation) Regulations 2009

The Environmental Information Regulations 2004

Water Resources Act 1991

Appendix A: Contacts and Consultees

A.1 DCC Contacts

Key Contact Points with regard to this Strategy within the Council are:

In writing	Head of Environment Health & Consumer Protection Durham County Council PO Box 617 Durham. DH1 9HZ
By telephone	03000 261016
Email	landqualitysurvey@durham.gov.uk
On-line	www.durham.gov.uk
In person	Durham County Council Environment Health & Consumer Protection Annand House John Street North Meadowfield Durham. DH7 8RS

A.2 Specific DCC Consultees

Head of Planning and Assets

Head of Sport and Leisure

Members

Strategic Waste Manager

A.3 Specific External Consultees

The Coal Authority

Environment Department, 200 Litchfield Lane, Mansfield, Nottingham, NG18 4RG

Durham Wildlife Trust

Rainton Meadows, Chilton Moor, Houghton-le-Spring, Tyne and Wear, DH4 6PU

Durham Biodiversity Partnership

Natural Environment Group Implementation Officer, Durham Biodiversity Partnership, Rainton Meadows, Chilton Moor, Houghton-le-Spring, Tyne and Wear, DH4 6PU

Durham Heritage Coast

Regeneration and Economic Development, Durham County Council, County Hall, Durham, DH1 5UL

Darlington Borough Council

Environmental Health, Town Hall, Feethams, Darlington, DL1 5QT

Durham County Council Area Action Partnerships**Durham County Council Parish Councillors****Eden District Council**

Eden District Council, Pollution Control, Mansion House, Penrith, Cumbria, CA11 7YG

Environment Agency

Groundwater and Contaminated Land Team, North East Office, Tyneside House, Skinnerburn Road, Newcastle Business Park, Newcastle upon Tyne, NE4 7AR

Gateshead Council

Landscape and Reclamation, Development and Enterprise, Civic Centre, Regent Street, Gateshead, NE8 3HH

Hambleton District Council

Environmental Health, Civic Centre, Stonecross, Brompton Road, Northallerton, North Yorkshire, DL6 2UU

Hartlepool Borough Council

Engineering Consultancy, Bryan Hanson House, Lynn Street, Hartlepool, TS24 7BT

Natural England

North East Region, The Quadrant, Newburn Riverside, Newcastle upon Tyne, NE15 8NZ

Northumberland County Council

Public Health and Protection Service, Public Protection (Environmental Protection Team), Loansdean, Morpeth, Northumberland, NE61 2AP

Public Health England

Centre for Radiation, Chemical and Environmental Hazards, Institute of Population Health, Nottingham City Hospital, Hucknall Road, Nottingham. NG5 1PB

Sunderland City Council

Jack Crawford House, Commercial Road, Sunderland, SR2 8QR

Stockton-on-Tees District Council

Environmental Protection Unit, P.O. Box 232, 16 Church Road, Stockton on Tees, TS18 1XD

Appendix B: Glossary of Terms

The Statutory Guidance and Part 2A of the Environmental Protection Act 1990 has been used to develop the glossary of important terms set out below.

Building: any structure or erection, and any part of a building including any part below ground, but not including plant or machinery comprised in a building, or buried services such as sewers, water pipes or electricity cables.

Building effect: an effect on a building that causes significant harm.

Categories 1-4: Categorisation of land the Local Authority should use when deciding whether or not land is contaminated land on the grounds of significant possibility of significant harm.

Category 4 Screening Levels: technical guidance provides detail of the methodology and model for deciding that land is suitable for use and definitely not contaminated land under Part 2A. Six contaminants of concern were used to illustrate the application of the methodology and model, and provided levels.

Conceptual Model: the risks presented by land, and associated uncertainties.

Contaminant: 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

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

Contaminated land:

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

‘(a) significant harm is being caused or there is a significant possibility of such harm being caused, or;

‘(b) significant pollution of controlled waters is being, or there is a significant possibility of such pollution being caused.’

Current use:

(a) The use which is being made of the land currently;

(b) Reasonably likely future uses of the land that would not require a new or amended grant of planning permission;

(c) Any temporary use to which the land is put, or is likely to be put, from time to time within the bounds of current planning permission;

(d) Likely informal use of the land, for example children playing on the land, whether authorised by the owners or occupiers, or not; and

(e) In the case of agricultural land, the current agricultural use should not be taken to extend beyond the growing or rearing of the crops or animals which are habitually grown or reared on the land.

Detailed Inspection: of particular land to obtain information on ground conditions and carrying out the risk assessments which support decisions under the Part 2A regime relevant to that land.

Enforcing Authority: is the Local Authority in whose area the land is situated.

Generic Assessment Criteria: screening tools in generic human health risk assessment to help assessors decide when land can be excluded from the need for further inspection and assessment, or when further may be warranted.

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.

Harm to Human Health: the effects of contaminants in, on or under the land on the body(ies) of the person(s) concerned.

Local Authority: generally means Durham County Council for the purpose of this Strategy

“Normal” levels of contaminants in soil: levels which are commonplace and widespread throughout England or parts of it.

Part 2A: Part 2A of the Environmental Protection Act 1990

Pathway: a route by which a receptor is or might be affected by a contaminant

Pollution of controlled waters: defined as:
'the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter.'

Receptor: something that could be adversely affected by a contaminant, for example, a person, an organism, an ecosystem, property, or controlled waters.

Risk: the combination of:

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

Risk Summary: a written record for any land, where on the basis of its risk assessment, the authority considers it is likely that the land in question may be determined as contaminated land under Part 2A. It will detail the site, the inspections, findings, uncertainties, conclusions and recommendations for possible remediation.

Significant contaminant: the contaminant which forms part of a significant contaminant linkage.

Significant contaminant linkage: a contaminant linkage which gives rise to a level of risk sufficient to justify land being determined as contaminated land under Part 2A.

Special Site: contaminated land, which meets one or more of the conditions listed in the Contaminated Land (England) Regulations 2006 and the Contaminated Land (England) (Amendment) Regulations 2012. These can be broadly split into two categories; land use and significant pollution of controlled waters:

- (a) Land use categories include land used for: petroleum refining, Part A PPC processes and land owned or occupied by the MoD. A special site can also be land adjacent to an area used for the processes in the list that is consequently affected by contamination.
- (b) Significant pollution of controlled waters categories are land where contamination:
 - (1) affects controlled waters that supply public drinking water
 - (2) causes failure of water quality standards set under Water Resources Act 1991 or environmental objectives that apply to specific protected areas in the Water Framework Directive
 - (3) reaches controlled waters contained in specific underground strata

Strategic Inspection: collecting information to make a broad assessment of within an authority's area and then identifying priority land for more detailed consideration.

Unacceptable Risk: a risk of such a nature that it would give grounds for land to be considered contaminated land under Part 2A.

Written Statement: a written record for any land, where on the basis of its risk assessment, the authority considers the land does not meet the definition of contaminated land under Part 2A. It will detail the site, the inspections, findings and conclusions.