LAND QUALITY INSPECTION STRATEGY

Part 2A
Environmental Protection Act 1990

BOROUGH OF BARROW IN FURNESS
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- Priorities
- Procedures
- Aims
- Detailed Inspections

Barrow-in-Furness Borough Council
Public Protection Services
Rev. 4; January 2020

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i Foreword

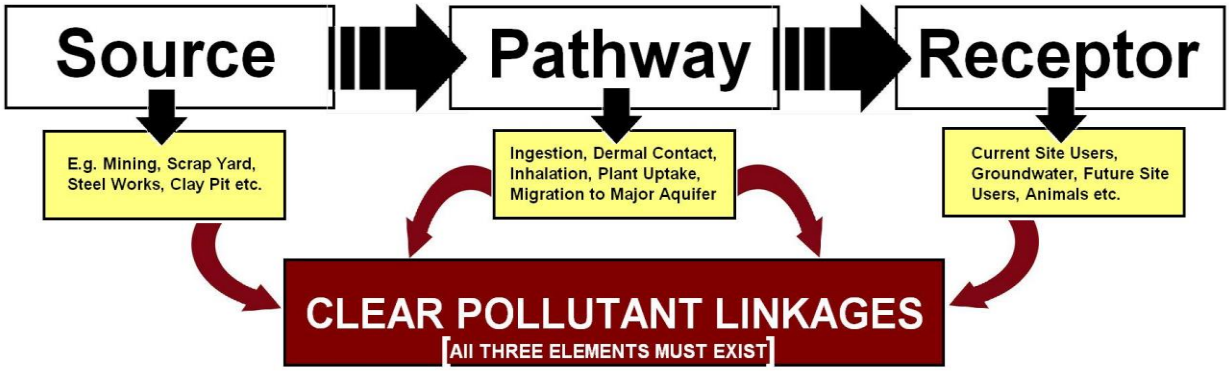
The UK has a legacy of contaminated land due to the accidental or deliberate release of chemicals into the environment as a result of past industrial development, lower environmental standards and poor waste management practices.

Part 2A of the Environmental Protection Act 1990 (the 'act') as inserted by section 57 of the Environment Act 1995, places a statutory duty on Barrow Borough Council (the Authority) to 'cause its areas to be inspected from time to time for the purpose of identifying contaminated cand'. Part 2A came into force 1st April 2000 and provides a means of dealing with unacceptable risks posed by land contamination to human health and the environment. The Secretary of State has also issued statutory guidance for implementing the contaminated land regime in England. 'Part 2A' represents legislation sectioned in 78A-78YC of the Environmental Protection Act 1990.

Contaminated Land

For a site to be identified as 'Contaminated Land' under Part 2A, the authority must establish the presence of a contaminant-pathway-receptor linkage, termed 'contaminant linkage' (See Figure 1). At least one contaminant linkage must exist in relation to particular land before the land can be considered to be contaminated land under Part 2A, including evidence of the actual presence of contaminants in, on or under the land. The term 'significant contaminant linkage', means a contaminant linkage which gives rise to a level of risk sufficient to justify a piece of land being determined as 'contaminated land'.

Figure 1: Contaminant Linkage showing all Three Elements and their Examples.



i Foreword

Radioactive Contaminated Land

Part 2A also deals with 'radioactive contaminated land', however contaminants cover only substances containing radionuclides which have resulted from the after-effects of a radiological emergency or have been processed as part of a past practice or past work activity; therefore associated terms such as 'contaminant linkage' are similarly limited. (See Section 5.3.6)

Contaminated Land Inspection Strategy

The Authority is required to take a strategic approach when undertaking its inspection duty, ensuring that it is be rational, ordered and efficient, reflecting local circumstances. This Strategy will be reviewed, at least every 5 years, to ensure it remains up to date.

Contaminated Land Register

The authority is required to maintain a register of information relating to the remediation of Part 2A Contaminated Land. The details and contents of the register are set out in the legislation and access to the register is available to the public. The Public Protection Services Department in the authority will be responsible for the maintenance of this register.

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ABBREVIATION	DEFINITION
Appropriate Person	defined in section 78A(9) EPA 1990 as: "any person who is an appropriate person, determined in accordance with section 78F…, to bear responsibility for any thing which is to be done by way of remediation in any particular case."
Authority	in this document refers to Barrow Borough Council
BBC	Barrow Borough Council
Charging Notice	a notice placing a legal charge on land served under Section 78P(3)(b) EPA 1990 by an enforcing Authority to enable the Authority to recover from the appropriate person any reasonable cost incurred by the Authority in carrying out remediation
Class A person	A person who is an appropriate person by virtue of section 78F(2) (that is because he has caused or knowingly permitted a pollutant to be in, on or under the land).
Class B Person	A person who is an appropriate person by virtue of section 78F(4) or (5) (that is, because he is the owner or occupier of the land in circumstances where no class A person can be found with respect to a particular remediation action).
CL(E)R 2000	Contaminated Land (England) Regulations 2000 (SI 2000 No. 227)
CLEA	Contaminated Land Exposure Assessment, a methodology for carrying out a risk assessment
CLR	Contaminated Land Report
DEFRA	Department of the Environment, Food & Rural Affairs
EA	The Environment Agency
Enforcing Authority	Either the Local Authority or the Environment Agency depending on whether the site is deemed a special site or not.
EPA 1990	The Environmental Protection Act 1990
GIS	Geographical Information System
Groundwater	Any water in underground strata, wells or boreholes
ICRCL	Interdepartmental Committee on Remediation of Contaminated Land
LA	Local Authority
MAPAC	Manchester Area Pollution Advisory Council
MapInfo	A GIS system. Barrow Borough Council currently uses MapInfo Professional Version 15.0
NNR	National Nature Reserve
OS	Ordnance Survey
Pathway	One or more routes or means by, or through, which a receptor is being, is affected by or could be exposed or affected by a contaminant.
Part 2A	Refers to Part 2A of the Environmental Protection Act 1990 (the 'act') as inserted by section 57 of the Environment Act 1995. Part 2A represents legislation sectioned in 78A-78YC of the Environmental Protection Act 1990.
Radionuclide	Also known as 'radioisotopes', they are atoms with an unstable nucleus which can undergo radioactive decay, emitting gamma rays and/or subatomic particles, which constitutes ionising

iv Glossary, Terms & Abbreviations

	radiation.
RAMSAR Site	Listed under the Convention on Wetlands of International Importance (Statutory designation is SSSI)
Receptor	Is defined as the health of a person, property, waters or any receptor detailed in Table A as Appendix Three
Remediation	Preventing, minimising or mitigating the effects of any significant harm, or any pollution of controlled waters, defined in section 78A (7) EPA 1990
Remediation Declaration	defined in Section 78H(6) EPA 1990 as a document which is prepared by the enforcing Authority concerning remediation actions which it would have specified in a remediation notice but is prevented from doing so by conditions in Sections 78E (4) or (5) EPA 1990
Remediation Notice	Defined in section 78E(1) as a notice specifying what an appropriate person must do in terms of remediation and the timescales involved.
Remediation Statement	defined in Section 78H(7) EPA 1990 as a statement prepared by the responsible person detailing the remediation actions which have been, are being or are to be expected to be done as well as the periods within which these will be done
Significant Contaminant Linkage	This 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. For a risk to exist there must be contaminants present in, on or under the land in a form and quantity that poses a hazard, and one or more pathways by which they might significantly harm people, the environment, or property; or significantly pollute controlled waters.
Source	A substance in, under or on the ground that has the ability to cause harm to a receptor
Source Protection Zone (SPZ)	Designated zones around public water supply abstractions based on the estimated time it would take a pollutant to reach the abstraction point.
Special Protection Areas (SPA's)	Classified under the EC Directive on the Conservation of Wild Birds.
Special Site	Any land contaminated by waste acid tars, petroleum, oil, explosives, nuclear material, chemical weapons or toxins. Also includes land comprised in the Ministry of Defence Estate and land used by visiting forces.
SSSI	Site of Special Scientific Interest

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Section 1: Introduction

1.0 Introduction

1.1. Contaminated Land

England has a considerable legacy of historical land contamination involving a very wide range of substances. On all land there are background levels of substances, including substances that are naturally present as a result of our varied and complex geology and substances resulting from diffuse human pollution. On some land there are greater concentrations of contaminants, often associated with industrial use and waste disposal. In a minority of cases there may be sufficient risk to health or the environment for such land to be considered contaminated land. However, the fact potentially harmful substances are present in, on or under a piece of land does not in itself mean that land is "contaminated land".

The source of harm may be present but unless a possible route ("significant contaminant linkage") exists through which it is likely to cause harm to health, eco-systems, property or to cause pollution of controlled waters, the land *is not* contaminated within the specific definition.

1.2. Definition of Contaminated Land

Section 78A(2) of the Environmental Protection Act 1990 defines 'contaminated land' as:

> *any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that –*
>
> *a) significant harm is being caused or there is a significant possibility of such harm being caused; or*
>
> b) *significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused;*

1.3. Purpose of the Part 2A Regime

Part 2A provides a means of dealing with unacceptable risks posed by land contamination to human health and the environment, and the authority will seek to find and deal with such

land. Under Part 2A the starting point should be that land is not contaminated land unless proven otherwise. Only land where unacceptable risks are clearly identified should be considered as meeting the Part 2A definition of contaminated land.

The overarching objectives of the Government's policy on contaminated land and the Part 2A regime 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.

Under Part 2A, this authority may need to decide whether and how to act in situations where such decisions are not straight forward and where there may be unavoidable uncertainty underlying some of the facts of each case. The authority will use its judgement to strike a reasonable balance between:

(a) dealing with risks raised by contaminants in, on or under 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.

The aim is to consider the various benefits and costs of taking action, with a view to ensuring that the regime produces net benefits, taking account of local circumstances.

Section 1: Introduction

1.4. Regulatory Context

The contaminated land regime is set out in the following acts, regulations and statutory guidance:

- *Part 2A of the Environmental Protection Act 1990*
- *The Water Act 2014 (Commencement No.11) Order 2012*
- *Contaminated Land (England) Regulations 2006. (Amended 2012)*
- *Radioactive Contaminated Land (Enabling Powers) (England) Regulations 2018*
- *Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2018*
- *Part 2A Contaminated Land Statutory Guidance – DEFRA April 2012*
- *Part 2A Radioactive Contaminated Land Statutory Guidance – April 2012*

The Contaminated Land Regulations (Amendment) 2012 elaborate on various details of the Part 2A regime such as: dealing with rules on when land is to be regarded as a special site, public registers, remediation notices and the rules for how appeals can be made against decisions taken under the Part 2A regime.

1.5. Development of the Strategy

The authority's overall approach in developing an inspection strategy is to ensure that Barrow Borough Council fulfils its responsibilities in respect of the contaminated land provisions set down by the 'Environmental Protection Act' 1990 (as amended) and 'The Contaminated Land Regulations' 2006 (as amended in 2012), therefore meeting the requirements of the 'Statutory Guidance' as amended in April 2012.

The revised strategy includes:

- Aims, Objectives and Priorities
- Description of the area and the fundamental processes that affect decision outcomes
- The Authority's approach to strategically inspect the district
- The Authority's approach to formally define land as contaminated under Part 2A and subsequent remediation adoption.

Section 1: Introduction

- A defined optional approach to Part 2A that links to a wider regulatory framework, including the planning system, environmental planning regulations and the environmental damage regulations 2015 etc.
- A cost recovery and hardship policy

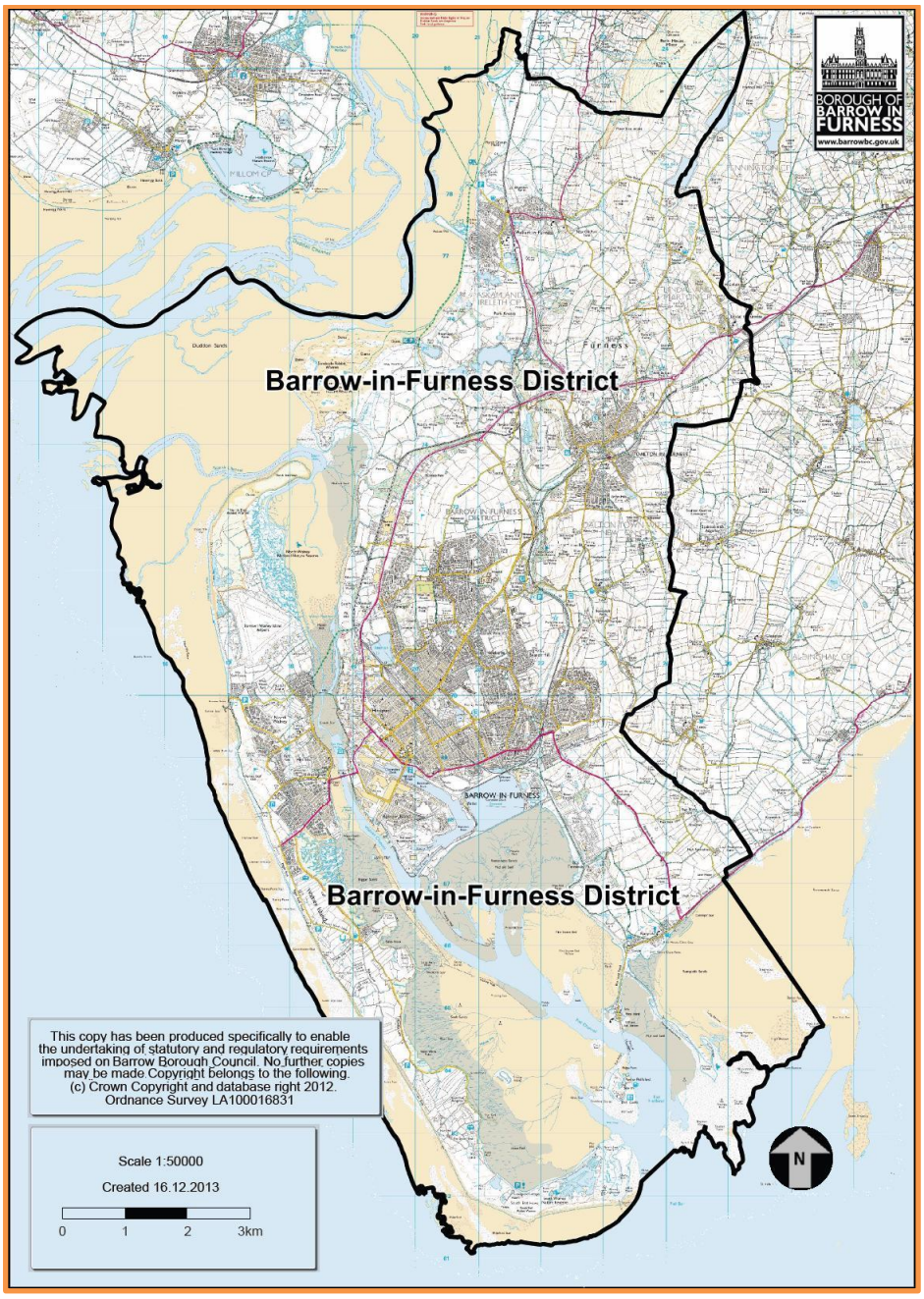
In deriving this strategy, Barrow Borough Council generally followed the DETR guidance document entitled 'Contaminated Land Inspection Strategies' - Technical Advice for Local Authority's.

2.0 Characteristics of the Local Authority

2.1 Geographical Description

The Borough of Barrow-in-Furness is located in south west Cumbria, on the Furness Peninsula (See Figure 2). It is geographically small, covering 77 square kilometres; 1.1% of the area of the County of Cumbria. However, due to its largely urban nature, the borough accounts for 13.8% of the County's population (2011 Census).

Figure 2: Map Showing Barrow In Furness and the District Boundary. [Long. -3.20509, Lat. 54.10554]



Section 2: Characteristics of the Local Authority

2.2 Brief Characteristics

The Borough of Barrow In Furness is a region with numerous characteristics reminiscent of centuries of industry, settlement and growth.

Land use across the Borough of Barrow In Furness is dominated by agriculture and industry; the diverse range of industries and commercial concerns (largely in the manufacturing sector [BAE Systems Submarine, Dong Wind Turbine Energy, Kimberley Clark, Centrica etc.) take advantage of the borough's natural location to the sea.

The only major highway into the area is the A590 trunk road, while the A5087 coastal road exits the borough to the south along the scenic 'coastal route' to Cumbrian town of Ulverston. These routes act as the major arteries through the district eventually leading east to the M6 motorway which lies some 33 miles away at the end of the A590 dual carriage way.

The highest points in the borough lie to the north and are around 290m above sea level, with numerous beaches encompassing the district to the north, west and south forming the lowest points.

2.2.1 Population Distribution

The borough's resident population of 73,125 (1991 Census) is concentrated on two principal settlements of Barrow-in-Furness (61,400) and Dalton-in-Furness (6,691), the remainder living in the smaller outlying villages of Askam, Ireleth, Lindal, Rampside and the more rural areas of the borough. There have been estimations of the borough's more recent population status which has declined to 69,087 as of 2011 census.

2.3 History of the Borough

2.3.1 The Town of Barrow-In-Furness

The name Barrow derives from the Norse 'Barrai' meaning either 'bare island' or 'island off the headland', and was originally referred to as Barrow Island. 'Barrai' was listed in 1190 as one of many hamlets belonging to Furness Abbey and by the 1700s two-thirds of people still lived by agriculture in the area.

Section 2: Characteristics of the Local Authority

The early part of the nineteenth century saw the village of Barrow established as a small port dealing mainly with the shipment of haematite iron ore predominantly from Askam and Dalton-In-Furness mines. However it wasn't until the trend towards industry began with the mines beginning to be exploited on a larger scale and the construction of the Furness Railway in 1843 for the purpose of transporting ore that the town's development rapidly increased.

The railway was able to transport large quantities of ore from Askam & Dalton In Furness mines to Barrow port, and 'Barrow' began to expand. (See Figure 2.1) In a relatively short space of time the development of iron and steel making attracted large numbers of migrant workers (See Figure 2.2) and their families from all over Britain; this changed a small agricultural community into a thriving industrial town.

In the 1860s Barrow was seeing much growth and was attracting workers from all over the country, Staffordshire steelworkers, Geordie shipbuilders and Cornish miners all relocated here. Barrow itself was described by local Barrovian's during these times as rough, tough and insanitary; and was named as the 'English Chicago' by the local press.

From 1871-1881 Barrow's population increased 147% from 18,245 to 45,111, and in 1917 was unofficially 90,000. As the town grew it exported more iron ore and a series of jetties was built into the Walney Channel for this purpose. In 1863 the Furness Railway Company obtained an 'Act of Parliament' to build docks and expand the harbour.

Figure 2.1: General view over the town, Barrow-in-Furness, from the south-east, 1920

Source: www.britainfromabove.org.uk

The Devonshire, Cavendish, Buccleuch, Ramsden and Graving 'Docks' were all opened between 1867 and 1879 and Barrow became an independent port on 1 November 1872. As well as the iron ore attracting industry to the area so did the growing dock system that made use of Barrow's nature location next to the sea and estuarine environment. Industries such as the 'Barrow Corn Mills & Goodall', 'Burnip & Macdougall' and importers of 'petroleum & oils'- all relied on ships to bring in raw materials for manufacturing and industry. The availability of cheap resources whether locally sourced or imported in, were an advantage to the area's growing industry, therefore the mining industry and its local production increased 'tenfold'.

2.3.2 Dalton-in-Furness

Dalton town itself is a much older and more historic than Barrow. Before the 'monastic era', Dalton was a village in Furness with a population of little more than 400 people. However with the arrival of the monks in 1127 at Furness Abbey, Dalton became known and accepted as the capital of Furness and quickly developed into a bustling market town. However Dalton is more widely known for iron ore mining, by the middle of the nineteenth century Dalton was surrounded by mine workings and its population tripled between 1841 and 1871.

Unfortunately the general closure of many of the mines in the early 1900s saw a dramatic decrease in Daltons population, and there has been no major industry in the town since.

2.3.3 Askam-in-Furness

Askam's growth was primarily as a result of the discovery of rich iron ore deposits at Roanhead. The 'Millom and Askam Haematite Iron Co.' established an Ironworks at Askam in 1865 to take advantage of the rich deposit of iron ore, much of the housing in Askam was primarily built for the influx of ironworkers. The Ironworks was operational until 1919 and was demolished in 1933/34.

2.3.4 Local Mining History

The Furness Iron Ore mines have been known to exist for centuries, even the 'Abbots' of Furness Abbey had been involved in disputes over mineral rights. However iron ore was mined on a commercial scale only from the 1770s.

Many of the iron ore deposits in Furness were in the form of 'sops' as well as in vein deposits. Initially digging was concentrated where the ore was near, or at, the surface. Initial shafts were sunk and access gained by ladders, but as shafts were sunk deeper and flooding became a problem, steam engines were introduced.

The most important discovery was the 'Park Mine' which eventually yielded 15 million tons of iron ore and had a huge impact on Barrow's growth and prosperity. There were also many other mines in the Furness area including Yarlside, Stank, Elliscales, Lindal Cote and Anticross to name a few.

The mines in the Furness area produced haematite, a type of iron ore with a high iron and low phosphorus content, which placed the haematite in great demand for the 'Bessemer Process' of steel making. The richest sample of iron ore found in Britain was from samples at Stainton which contained 70% of metallic iron.

Figure 2.2: A Statute Celebrating Miners and their Importance to the Area.

(Source: www.lindal-in-furness.co.uk/History/history.htm, 2020)

The high quality of the ore gave rise to the growth of other industries including shipbuilding, railways and iron and steel production. However the invention of the 'Bessemer Basic Process' for steel production reduced the importance of haematite and allowed other cheaper more accessible sources to be mined, E.g. areas of Cleveland and Northampton. Whereas Cumbrian ore had an iron content of 50-60% iron, other ores contained just 30%, yet these lay in large beds that could be easily quarried or open cast and was therefore cheaper to produce.

Flooding was also a great problem for the local mines and was the primary cause for many of their closures.

2.3.5 Iron & Steel Works

The ironworks at Barrow (Long -3.24356, Lat 54.1196) were established in 1859 and in 1866 steelworks were added to form the Barrow Haematite Iron and Steel Company. The Bessemer furnaces and converters in 1867 made up one of the largest iron and steel works in the world

at the time. The 'Open-Hearth' process eventually replaced the Bessemer system for steel production by 1950 and by the end of the nineteenth century the company had lost many of its advantages that it once had with cheaper sources of ore becoming available elsewhere. The two world wars temporarily increased production, but the advancement of more modern technology spelled the end of the works. The ironworks eventually closed in 1963 and the steelworks a short while later in 1983.

2.3.6 Shipbuilding

Barrow up until the 1870s was heavily reliant on mining and the iron and steelworks for its development however on 28th January 1871 the Barrow Shipbuilding Company was established giving rise to a new era of industrial activity in Barrow. (See Figure 2.3)

The 'Golden Age' for warship building was the early 1910's when the yard was building for Brazil, Turkey and Japan as well as battleships for the British Navy. Particularly well known is the *Mikasa*, one of the vessels built for the Imperial Japanese Navy. When it was launched in 1900, it was considered one of the most powerful battleships of the time. However the shipyard has not just built ships alone and also became involved in aviation construction, heavy engineering and airships.

Figure 2.3: Barrow Shipbuilding Docks, 1890

Source: Lindal & Marton Community Website. (www.lindal-in-furness.co.uk/History/history.htm, *2020)*

Increasingly after the First World War, the drop in demand for arms forced the company to diversify into other areas and during the inter war years the yard was building 'loco' engines and mining and cement machinery amongst other things.

The company known today as 'BAE Submarine Solutions' has changed name and re-organised many times over the years and has more recently become involved in the construction of nuclear submarines, most notably the Dreadnaught Class Submarine.

2.4 Current Land Use Characteristics

There have been approx. 31,000 houses identified within the Borough, the main residential areas being Barrow, Dalton and Askam. However the condition of some of the older, pre 1919 housing stock is of great concern and is being addressed by an active policy of grant assistance and the creation of a 'housing renewal area'.

The local economy itself is dominated by manufacturing, in particular shipbuilding and engineering. However due to cuts in defence spending and national recession the numbers of jobs in these industries have been reduced. There is although great optimism for some of the Boroughs other major employers such as BAE Systems, Kimberley Clark and Robert McBrides, who have been successful at securing investment for local expansion.

2.5 Land Owned by the Authority

The authority owns various areas of land within the borough including housing estates, commercial buildings, parks and open spaces as well as some areas of derelict land. Details of the current land owned/leased by the Borough Council are easily accessible to the general public by visiting the web-mapping page. ***(http://www.barrowbc.gov.uk/residents/planning/mapping)***

2.6 Hydrological Characteristics

The borough is characterised by a south westerly peninsula incorporating Walney & Piel Islands which are surrounded by the Irish Sea, comprising Morecambe Bay and the Duddon Estuary.

At the northern reaches of the district, there lies the largest two reservoirs maintained by United Utilities; Harlock Reservoir covers 14.3 hectares which immediately runs into Poaka Beck Reservoir which is similar in size at 12 hectares.

Other water bodies in the district comprise of smaller man made features which are mostly representative of past industrial use such as Orsmgill reservoir, Roanhead and Greesecoe disused quarries. Within the lower reaches of the district lies a large water body called the Cavendish Dock reservoir covering 57 hectares.

There are no major rivers flowing through the borough and although many small becks and tributaries exist, there are two main becks which are open to flooding in adverse weather. These two becks are known as Mill Beck and Poaka Beck, which have a general flow from north to south through Dalton & Barrow-in-Furness into Morecambe Bay.

The annual average rainfall for each Parish (Dalton, Askam, Lindal, Barrow) is approx. 956-1032 mm annually (Source: www.climate-data.org)

2.7 Geological Characteristics

Geological conditions have been assessed from the British Geological Survey 1:50,000 Solid & drift Geology Sheet No. 48 & 58. The Barrow District lies within the outcrops of a range of sedimentary rocks varying from the youngest Triassic Mudstones and Sandstones laid down some 195 million years ago, to the oldest Ordovician mudstones and siltstones which are about 480 million years old.

The Triassic rocks occur in the south west part of the District beneath Walney Island and Barrow town itself, becoming sequentially older to the north east. The oldest Ordovician rocks occur as an inlier in the central northern part of the district between Dalton and Askam and is associated with an intrusion of igneous material consisting of granite, which is termed a 'volcanic neck deposit'.

A significant deposit of Carboniferous Limestone occurs around Dalton and to the north-west in the vicinity of Askam. A further series of major geological faults trending in a south easterly direction also occur in the same region, resulting in both vertical and horizontal displacements of the solid strata. [*This can be seen on the British Geological Survey Solid Drift Geology Map 1:50,000 Sheet No. 48*]

The solid deposits are generally overlain by deposits of glacial till (boulder clay), except along the coastal margin where an interglacial outwash of sand is present in the south, with marine alluvium, beach deposits and blown sand in the west.

2.8 Hydrogeology

The borough's largest aquifer (9.51 miles^2 In area) can be located 930 m to the west of the Yarlside Fault which marks the eastern margin of the down-faulted aquifer in the Permo-Triassic age basin.

Upper layers consist of sandy clays mixed with inclined Kirkham Mudstones strata which tops the St Bees Sandstone Formation (part of the Sherwood Sandstone Group of Permo-Triassic age).

The aquifer is confined by the overlying till at certain times of the year i.e. winter, giving rise to annual fluctuations, with maximum water levels rising above the top of the aquifer.

2.8.1 Groundwater Vulnerability

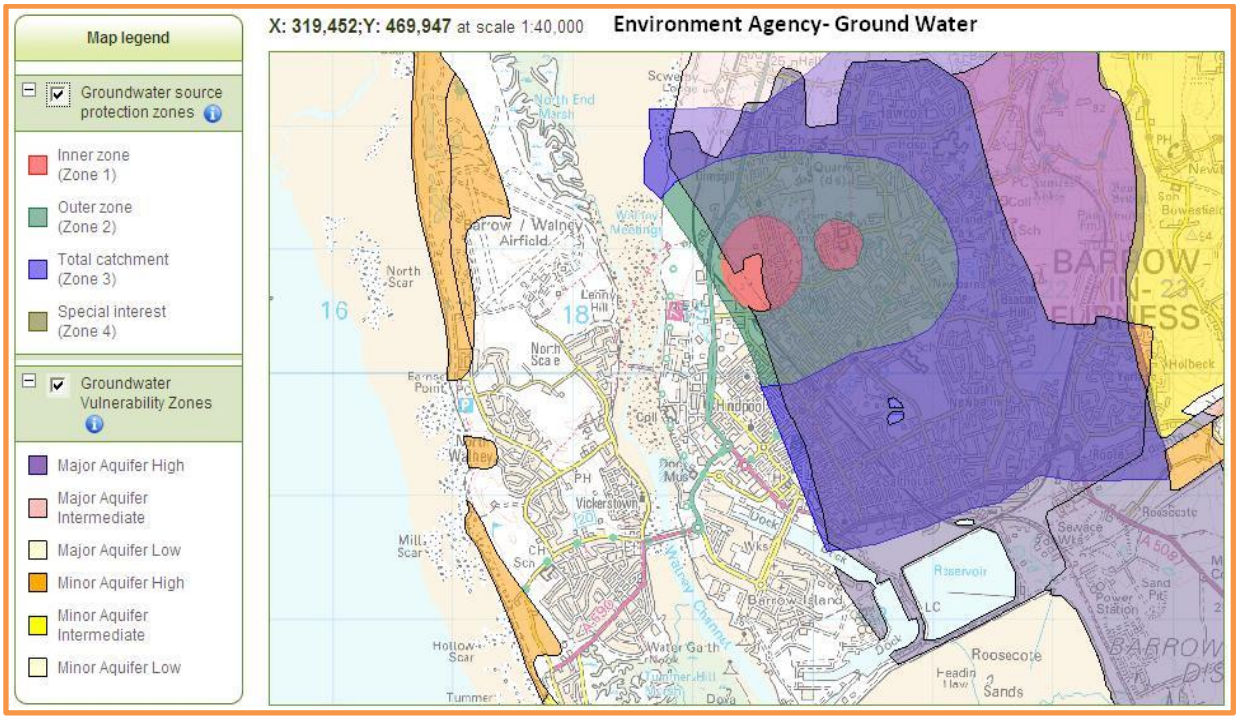
The Environment Agency's 'Groundwater Vulnerability Map' for the area shows that a large proportion of the borough (mainly Barrow) lies within an outcrop of 'St Bees Sandstone,' which acts as a 'principal aquifer' that is classified as highly permeable and can provide a significant drinking water resource. (See Figure 2.4-2.5)

The outlying districts of Dalton, Askam and surrounding villages mostly lie on minor aquifer areas and there are also areas within the borough, mainly on Walney Island, of non-aquifer status. The majority of the area also has low permeability drift deposits occurring at the surface overlying the major and minor aquifers which provides some protection to the aquifer from pollution.

2.8.2 Source Protection Zones

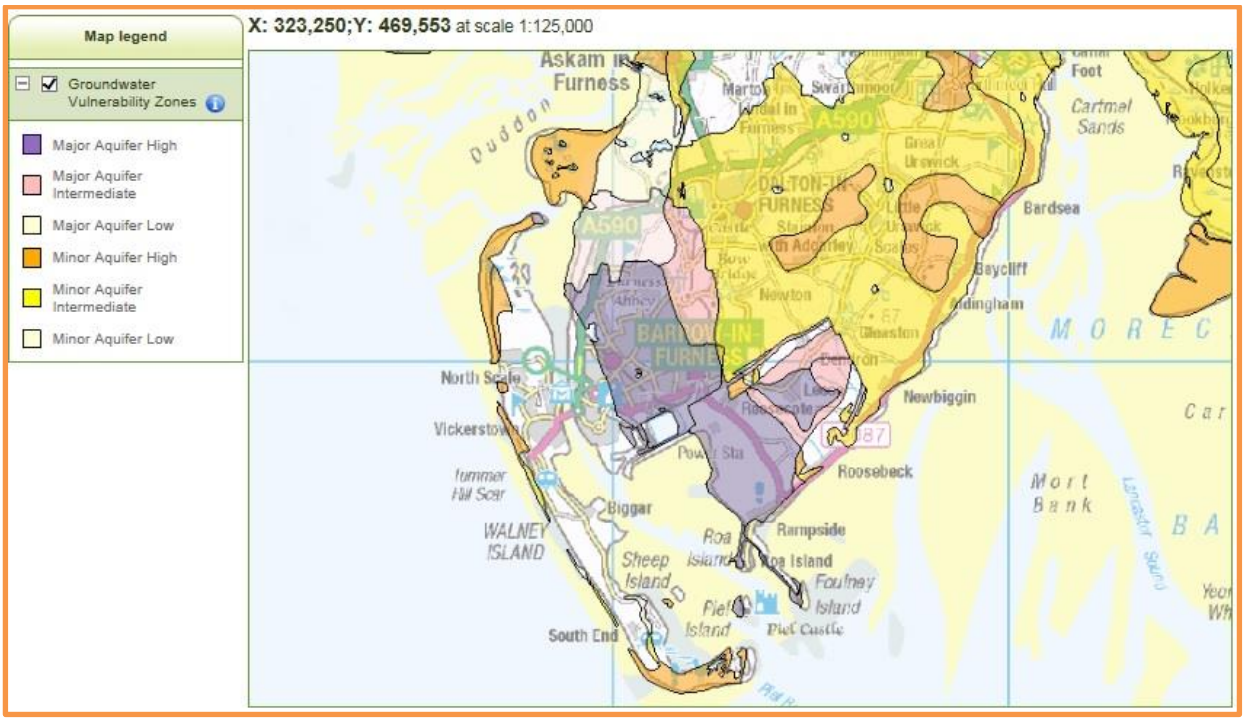
The borough has two abstraction points at Schneider Road (Long' -3.23151, Lat' 54.12745) and Thorncliffe Road (Long' -3.22348, Lat' 54.12933) in Barrow-in-Furness from which water is abstracted for public water supply.

Figure 2.4: Environment Agency (What's in your Backyard?) Ground Water Source Protection Zones



Source: Adapted from Environment Agency 2020.

Figure 2.5: Environment Agency (What's in your Backyard?) Ground Water Vulnerability Map



Source: Adapted from Environment Agency 2020.

These abstractions are protected by Source Protection Zones specified by the Environment Agency and are based on the direction of flow and the time it would take for a pollutant entering the saturated zone of the aquifer to reach the abstraction or discharge point.

- **Inner Zone I** defined by a 50-day travel time from any point below the water table and additionally a minimum 50m from the source.
- **Outer Zone II** defined by a 400-day travel time or 25% of the source catchment area, whichever is larger.
- **Source Catchment Zone III** this zone defines the whole catchment.

2.9 Redevelopment History

The authority has in the past dealt with some areas that may have been classed as derelict or contaminated through the 'Derelict Land Programme'. This was a grant based system with applications being made to central government in relation to areas owned by the authority; for example, Cavendish Dock Road [Long' -3.21541, Lat' 54.10704]. There have also been other remediation schemes which have taken place in conjunction with the County Council and the now abolished- 'North West Development Agency'; for example the Channelside Haven Scheme [Long' -3.24279, Lat' 54.11429].

The authority actively encourages the development of brownfield sites and where these sites are being developed; planning conditions will ensure that an appropriate assessment is carried out to identify possible contamination.

2.10 Information on areas with potential Contamination

Particular areas of the borough have been historically linked with industrial usage including iron and steel production, the railway, shipbuilding and gas works etc.
There are also areas that are known to be old landfill sites, both industrial and domestic. Information concerning these sites has been acquired both from the Environment Agency and also from interviews with past council employees. This includes information on COMAH sites, LAIPPC permitted sites and MOD sites.

2.11 Protected Locations

2.11.1 Internationally Important Sites

There are areas in the borough that are recognised as being important internationally for nature conservation. In October 1996 Morecambe Bay was classified as a Special Protection Area (SPA) and was also listed as a 'Ramsar' site, as was the Duddon Estuary in March 1998.

2.11.2 Nationally Important Sites

There are sites within the borough that are considered nationally important, these are;

No.	Nationally Important Sites	Identification	Grid Ref
1.	National Nature Reserves (NNR)	• North Walney	Longitude -3.27095 Latitude 54.13960
2.	Bird Sanctuary	• Foulney Island	Longitude -3.15234 Latitude 54.06662
3.	Sites of Special Scientific Interest (SSSI's)	• Morecambe Bay	Longitude -3.12429 Latitude 54.05216
		• Duddon Estuary	Longitude -3.23369 Latitude 54.18261
		• South Walney Flats	Longitude -3.20012 Latitude 54.05705
		• Piel Channel Flats	Longitude -3.17256 Latitude 54.06669
		• Elliscales Quarry	Longitude -3.18904 Latitude 54.16269
4.	RAMSAR Sites	• Numerous surrounding Walney Channel & Island	**Widespread**

2.11.3 Locally Important Sites

As well as the nationally and internationally important sites there are also other sites within the borough that have been identified as having a local nature conservation value.

These are;

No.	Nationally Important Sites	Identification	Grid Ref
1.	Local Geological Sites/ Geomorphological Sites (Non statutory LGS's)	• Sandscale Haws	Longitude -3.24754 Latitude 54.16652
		• Hawcoat Quarry	Longitude -3.22749 Latitude 54.13398
		• Rampside Marsh	Longitude -3.16902 Latitude 54.08194
		• Dunnerholme Point	Longitude -3.20906 Latitude 54.20732
		• Greenscoe Quarry	Longitude -3.19418 Latitude 54.17411

		• Mouzell Mine	Longitude -3.17191 Latitude 54.16023
		• Greenhaulme Road Cutting	Longitude -3.19736 Latitude 54.16854
		• Dalton Bypass	Longitude -3.17555 Latitude 54.16456
		• South Walney	Longitude -3.21957 Latitude 54.05834

In addition to the five SSSIs considered important nationally there were in addition areas identified of local natural history interest in the 'currently adopted' Borough Local Plan. These are:

No.	Local Natural Historic Areas/County Wildlife Sites	Grid Ref
1.	Ormsgill Reservoir and Cocken Pool	Longitude -3.23355 Latitude 54.12599
2.	Goldmire Valley (Excluding Millwood)	Longitude -3.19987 Latitude 54.15311
3.	Dalton Railway Cutting	Longitude -3.18483 Latitude 54.15328
4.	Stank and Roosecote Moss	Longitude -3.17565 Latitude 54.12561
5.	Dalton and Lindal Mining Area	Longitude -3.17545 Latitude 54.16812
6.	Walney Airfield Heath, Walney Grasslands	Longitude -3.26400 Latitude 54.12876
7.	Sowerby and Park Road Woods	Longitude -3.22950 Latitude 54.14888
8.	Roanhead Mines	Longitude -3.22347 Latitude 54.16918
9.	Abbotswood	Longitude -3.19515 Latitude 54.14004
10.	Stone Dyke	Longitude -3.18157 Latitude 54.11551
11.	Askam Wood♣	Longitude -3.19818 Latitude 54.18342
12.	Cragg Wood♣	Longitude -3.19119 Latitude 54.17608
13.	Lots Pool♣	Longitude -3.20927 Latitude 54.17989
14.	Rampside Golf Course♣	Longitude -3.15050 Latitude 54.09386
15.	Hillock Whins♣	Longitude -3.23419 Latitude 54.07160
16.	Willow Woods, Lenny Hill♣	Longitude -3.25237 Latitude 54.12617
17.	Furness Golf Links♣	Longitude -3.26626 Latitude 54.11031
18.	Salthouse Pool	Longitude -3.19673 Latitude 54.10567
19.	Millwood♠	Longitude -3.19835 Latitude 54.14831
20.	Park Road Woods, East of Oak Lea Road♠	Longitude -3.21426 Latitude 54.15641
21.	Biggar Bank♠	Longitude -3.25732 Latitude 54.09537

♣ New sites recommended by Cumbria Wildlife Trust, Following Wildlife Sites Project

♠ Sites classified as of Local Natural History Interest in the 2001 Local Plan which the Authority still consider to be of wildlife interest but which are not now felt by the Wildlife Trust to conform to their Site Selection Criteria

2.12 Listed Buildings and Ancient Monuments

There are 271 listed buildings in the Borough of Barrow -in-Furness, with about 70% in Barrow-in-Furness itself. The majority of listed buildings are concentrated in conservation areas. They vary from castles to houses and also include farms and farm buildings. The 11 conservation areas designated in the borough are as follows:

Barrow Island	Biggar Village	Central Barrow
Dalton-in-Furness	Furness Abbey	Ireleth
North Scale	North Vickerstown	St George's Square
South Vickerstown	The Green Lindal	

There are four scheduled ancient monuments in the borough area - Furness Abbey and precinct wall, Bow Bridge, Piel Castle and Dalton Castle. There are also a number of archaeological interest sites in the area such as Furness Abbey, Dove Cote- Roose and parts of Walney Island.

Section 3: The Authority's Strategy

3.0 The Authority's Strategy- Overall Aims

3.1 Aims of the Strategy

Barrow Borough Council seeks to ensure that potentially contaminated sites are assessed, categorised and potentially dealt with in a consistently proficient, professional and timely manner. The authority seeks to ensure that all knowledge, data, adopted statutory powers and local participation is utilised to undertake 'Part 2A' statutory responsibilities as required within DEFRA 'Contaminated Land Statutory Guidance 2012'.

In line with the authority's 'Overall Strategic' approach as described in section 1.5, a list of the authority's priorities have been shown to aid in the decision making process.

The authority'ss aims with regards to dealing with land contamination will be to:

- Protect Human Health
- Prevent Damage to Property, Livestock & Crops
- Protect Controlled Waters
- Prevent Further Contamination of Land
- Encourage Voluntary Remediation of Land & Encourage the Re-use of Brownfield Land
- To Minimise the Impact of Current or Former Ownership or Occupation of Council Land
- To Encourage Regeneration & Promote Sustainable Development
- To Fulfil the Councils Responsibilities with Respect to Implementing Environmental Legislation
- Hold Individuals, Groups and Companies to Account over Knowingly Polluting.

The authority will use 'Part 2A' only where no appropriate alternative solution exists. However, it may not be possible for Barrow Borough Council to reach the expectations of all interested parties while providing a service and executing powers provided to the local authority under Part 2A. The authority will take a precautionary approach to the risks raised by contamination, whilst avoiding a disproportionate approach given the circumstances of each case.

Section 3: The Authority's Strategy

The following section sets out the council's future aims as stated above, with the addition of defined objectives and individual priorities.

3.2 Objectives

This authority has considered many factors in determining its approach on land contamination and its obligations under Part 2A. The following objectives and priorities have been identified and developed in line with Part 2A guidance although they are still open to interpretation, therefore they are under constant review and open to continual change to adapt to current trends and circumstances.

Section 3: The Authority's Strategy

The following aims are in no particular order of prioritisation:

Aim 1	To Protect Human Health
Objectives:	1. To complete a district wide survey of potentially contaminated sites while accessing and updating previous known data & information, including remediated sites, new developments, past and present pollution incidents and community liaison. 2. Identify vulnerable receptors 3. Secure the remediation of all identified contaminated land through the determination of liability and formal processes as described
Priorities:	1. Prioritise sites based on environmental risk 2. Priority given to 'risk to human health' 3. Ensure efficiency by establishing which sites are planned for regeneration where risks can be addressed through redevelopment

Aim 2	To Prevent Damage to Property, Crops & Livestock (Non Human Receptors)
Objectives:	1. Seek to prevent substantial loss in value as a result of death, disease, or physical damage.
Priorities:	1. Seek specialist advice from external agencies on flora, fauna & structural engineers. i.e. Natural England.

Aim 3	To Protect Controlled Waters
Objectives:	1. Identify potential pollution of controlled waters by poisonous, noxious or polluting matter or any solid waste matter. 2. Focus on pollution which may be harmful to human health or the quality of aquatic ecosystems or terrestrial environments
Priorities:	1. Establish whether there is a significant possibility of significant pollution being caused. 2. To utilise technical guidance issued by the environment agency & seek their advice.

Aim 4	To Prevent Further Contamination of Land
Objectives:	1. Ensure that where development on land that is contaminated, or where contamination is suspected, the necessary site investigations & assessments are undertaken to identify any actual or possible significant risk to human health or the environment, and that effective remedial strategies ensure the site is made safe & suitable for its intended use.
Priorities:	1. Ensure the council acts in accordance with the national planning policy framework nppf (policy 120 & 121) 2. The adverse affects to the potential sensitivity of an area and/or proposed development from pollution should be taken into account

Aim 5	To Encourage Voluntary Remediation of Land and the Re-use of Brownfield Land
Objectives:	1. Wherever possible, seek to acheive suitable remediation of Land contamination prior to determination (i.e. defined as 'Contaminated Land') through voluntary 'cleanup' by all occupiers/ owners.
Priorities:	1. Inclusion of suitable brownfield sites to be developed & included as part of the local plan.

Aim 6	To Minimise the Impact of Current or Former Ownership or Occupation of Council Land
Objectives:	1. Identify sites owned or occupied by the authority that may be contaminated land. 2. Identify actual & potentially contaminated sites were the authority had ownership.
Priorities:	1. Identify those sites where land is presenting unaccetable environmental risks & ensure remediation takes place. 2. Ensure all land transactions adequately deal with ground contamination issues. 3. Ensure public confidence in the councils assessments, while seeking to minimise unnecessary burdens on the taxpayer.

Section 3: The Authority's Strategy

Aim 7	To Encourage Regeneration & Promote Sustainable Development
Objectives:	1. Through implimentation of the strategy, identify sites where assessment & remediation can be acheived through re-development of brownfield land. 2. To encourage sustainable remediation techniques in line with 'best practice' guidance.
Priorities:	1. Develope effective procedures for communication, liaison & information exchange within the council & with third parties. 2. Provide information to enable the council to act in accordance with current planning policy (nppf).

Aim 8	To Fulfil the Councils Responsibilities with Respect to Implementing Environmental Legislation
Objectives:	1. Ensure the council's contaminated land strategy meets the requirements of part 2a statutory guidance & subsequent periodic updates. 2. Use part 2a only where no appropriate alternative solution exists. 3. Utilise all legislative regimes such as building regs', environmental permitting, environmental damage regs' 2009.
Priorities:	1. Adopt a rationale, ordered & efficient approach to prioritising inspections. 2. Ensure the most pressing & serious problems are located first. 3. Ensure available resources are effectively targeted.

Aim 9	To Hold Individuals, Groups & Companies to Account Over Knowingly Polluting
Objectives:	1. Inspect the district from time to time & monitor incoming complaints across each department by cross-departmental co-operation 2. Actively seek information pertaining to known polluters, access & determine the appropriate course of action on an individual basis and associated liabilities. 3. Liaise with external agencies on particular cases, i.e ea, defra
Priorities:	1. Using the 'polluter pays principle', seek to enforce remediation where no voluntary actions have been undertaken & apportion responsability in proportion. 2. Ensure the burdens faced by individuals, companies & society as a whole are proportionate, manageable & compatible with the principles of sustainable development. 3. Recover costs of any remediation undertaken by the council.

4.0 Authority Priorities, Actions & Timescales

4.1 Priorities

The authority will prioritise within the proposed timetable, those activities which are needed in order to meet the requirements of the statutory guidance or this document.

In general, procedures will be focused on identified potential contaminant linkages and the inspection strategy is biased towards the protection of human health and consequently will concentrate resources where this receptor is likely to be affected.

Priorities will be established by defining certain sub-areas or 'polygons' for more immediate review or specific sites within sub-areas, which contain potential pollutants, an identified pathway and an identified receptor as described in the risk methodology in Section 5.3.4.

The authority has no intention to consider land for which it is currently responsible or has been responsible, through current or historical ownership or management, any differently than other land within the authority area.

4.2 Timescales

The 2012 statutory guidance does not detail how quickly the work must be completed, but it does require this local authority to set out its approach as a written strategy, which it should formally adopt and publish to a timescale to be set by this authority.

This authority has set specific targets for progression of inspection work and regulatory action work as indicated in Figure 4.

The inspection timetable and programme sets out a framework for the overall inspection of the authority's area in assessing potentially contaminated land. In developing the timetable presented, the authority has sought to reflect reasonable targets for completing the strategic inspection of its area, inspecting priority sub-area/sites and implementing regulatory actions.

4.3 Strategic Inspections

The authority has collated and recorded information onto a Geographical Information System (GIS). This information is currently being reviewed and refined so that effective prioritisation can be undertaken.

An attempt to plot the council's upcoming inspection timetable has been achieved in Figure 4, however this programme is dependent upon many factors including:

- Financial and human resources available to the authority;
- Available/ provision of information or services from third parties;
- The nature and scale of defined sites or areas subject to detailed inspection; and
- Progress with regulatory action

The authority, in acknowledging the impact that such uncertainties can have on programmed works, intends to review and, where necessary, publish an updated inspection programme.

The authority also recognises that alongside this timetable, action may commence on urgent sites brought to the authority's attention outside the inspection timetable and also on sites that have been identified through the application of this strategy as having contaminant linkages present and which are posing a significant possibility of significant harm. Resources channelled into the investigation and assessment of these sites may mean that the general inspection programme may be delayed as a result and will require reassessment. This will be done through the periodic reviews as detailed in the inspection timetable.

Figure 4: Strategy Development, Review & Action Timetable

Date/ Timescale	• Activity
April 2001	•Publish Draft Strategy
April- May 2001	•Consultation Phase on 1st Edt. Draft Strategy
June 2001	•Adopt and published Strategy Document
July- December 2001	•Complete process of collating and recording information on a computer Geographical Information System (GIS). •Complete database development to enable risk assessment model to be utilised. •Complete the compilation of the current land use (Receptor) layer. •Run Risk Asessment model to ensure that the risk programme operates properly. •Run Risk assessment model to prioritise sites for inspection.
Annually (January)	•Annual Review of Programme and where neccesary, revise and publish authority timetable for inspection.
July 2011- April 2012	•Strategic Inspections
April 2012	•Publication of Revised Statutory Guidance
April 2020	•Publish 2nd Edt.Draft Stretegy
January- February 2020	•Consultation Phase on 2nd Edt. Draft Strategy
Annually (Starting 1st April 2020)	•Annual Review of Programme and where neccesary, revise and publish authority timetable for inspection
April 2025	•Review, Publish 3rd Edt. Draft Strategy (If Appropriate)
Continuing Work Running Alongside Inspection Timetable	
Ongoing	•Collate and record information on a computer Geographical Information System (GIS) •Working with landowners and polluters to encourage volutary action.
Rolling half year progress check	•Risk assessment model run to ensure that the highest priority sites, in light of any new information received in the course of the inspection programme, are being addressed at any one time.
Within seven days of notification	•Prioritise actions on urgent sites or where a potential pollution linkage is established, the authority will commence inspection and if neccesary regulatory work. •Review of information provided to the authority through anecdotal or anonymous sources.

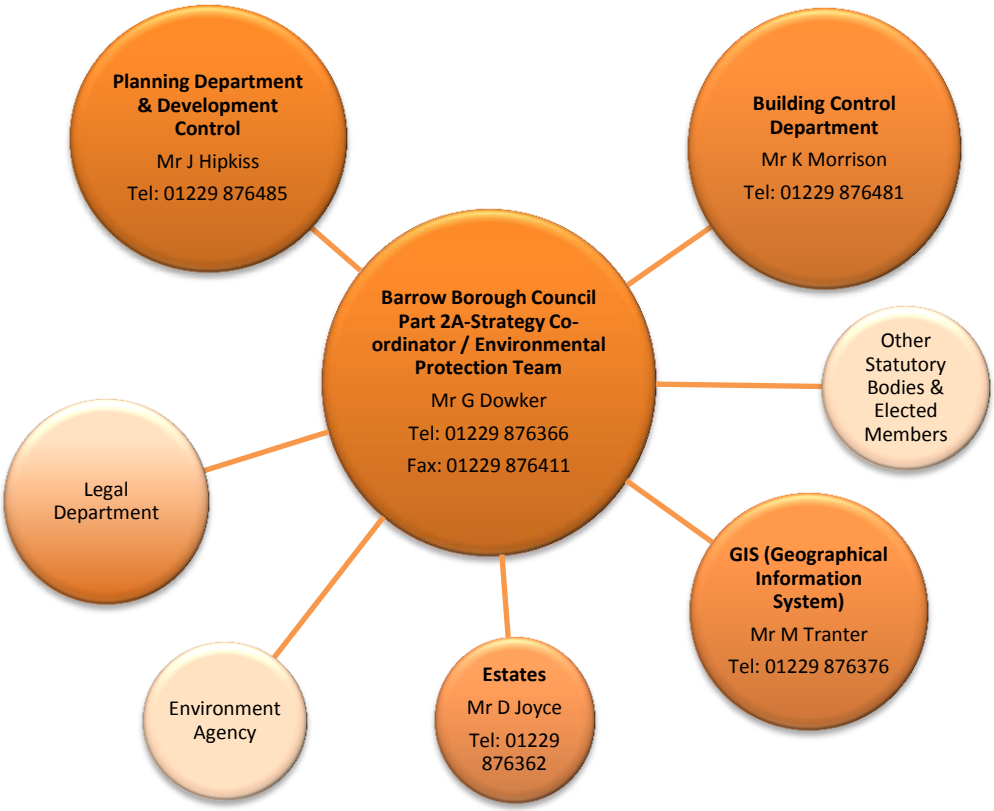
5.0 Procedures

5.1 Internal Management Arrangements for Inspection & Identification

5.1.1 Public Protection Services

Within the authority the Public Protection Services Department has primary responsibility for implementing Part 2A EPA 1990 elements, but this department will liaise with other departments to ensure the wider aims of the strategy are met. As part of Public Protection Services the strategy co-ordinator will be responsible for the day-to-day implementation of the strategy while working with and seeking the cooperation of other departments as shown in Figure 5.

Figure 5: Internal Team Responsible (Including Main External Sources)



5.1.2 Planning and Building Control Departments

Planning and building control departments within the authority will be responsible for ensuring that developers on brownfield and some greenfield sites submit a land quality assessment

report in relation to the land in question. Once received the report will be considered and liaised-on internally with various departments of the authority in order to assess whether any remediation schemes and/or control measures are appropriate. This may require planning conditions to be set and enforced before any development begins.

5.1.3 Legal Department

The legal department will be consulted for advice regarding responsibility for remediation and detailed consultation if land is to be designated contaminated land. The borough solicitor will be responsible for serving remediation notices, subject to consultation with other internal departments. The legal department will also confirm if the authority is liable for any land defined as contaminated land or if the authority is classed as the 'appropriate class [A] person'. (See Section 7.7.1)

5.1.4 Estates & GIS

The authority's estates office will keep a record of all commercial land and property owned by the authority as well as council owned registered land. As the local authority owns a portfolio of stock, it is highly probable that any potentially contaminated land identification will require their information and historical records.

The authority wishes to be open and transparent when considering land that it owns or for which it may be responsible. Such areas of land will be assessed on the same basis as other land within the borough.

Barrow Borough Council holds information pertaining to current and former sites owned by the authority. This information has been added as a layer to the authority's 'internal' GIS 'Web Mapping' service, but historic ownership is paper based and is managed by the authority's 'estates department'.

Current ownership details will need to be constantly reviewed in light of changes, and these changes will continue to be maintained by the estates department. The strategy co-ordinator will liaise closely with the designated person in the estates department for information concerning authority ownership on a continuing basis.

Information may be provided to the council by the general public, businesses or other organisations or individuals either as a complaint regarding contaminated land or informally if it relates to land contamination that is not affecting them.

5.1.5 Other Statutory Bodies

This may consist of but not limited to statutory bodies identified in Appendix A and other local authorities that may border the Borough of Barrow in Furness, such as Copeland and South Lakeland District Councils.

5.1.6 Elected Members

Elected members will be consulted as soon as possible if the authority plans to determine any land as Contaminated Land under Part 2A for which the authority may be the ''appropriate'' person or for land which is currently owned by the authority.

5.2 Collating Information for Strategic Inspection

There are a variety of information sources that are relevant in investigating potential contaminant linkages including: sources, pathways and receptors as detailed in Section 2 and shown in Table 2a, 2b & 2c. These will assist in prioritising sites for inspection.

- *Land Use Information- to identify receptors.*
- *Information on current and past industrial & waste management activities –so that potentially contaminated land can be identified.*
- *Ground Information- Geological, hydrogeological and topographical information to characterise pathways between potential contaminants and receptors.*
- *Records relating to past remediation/ reclamation – to establish if risks from sources of contamination relevant to particular receptors are likely to be present.*

Tables 2a, 2b and 2c indicate information sources that may be used by the authority during its strategic inspection in order to prioritise sites that may require detailed inspection under Part 2A.

Table 2a: Possible Sources of Information (Contaminant Sources)

Table 2b: Possible Sources of Information (Receptors)

Information Required	Obtained From
Human beings using or occupying: •Residential land with gardens •Residential land withoutgardens •Allotments •Schools and nurseries •Recreational land(e.g. parks, playingfileds, playgrounds, open spaces) •Commercial/ industrial premises	•Local Authority planning building control and economic development records.
Specified Ecological Systems: •Sites of Special Scientific Interest (SSSIs) •National Nature Reserves (NNR's) •Marine Nature Reserves (MNR) •Areas of Special Protection for birds •European Sites [i.e. Special Areas of Conservation (SAC's) and Special Protection Areas (SPA's)] •Candidate SAC's & SPA's •RAMSAR Sites •Nature Reserves & Local Wildlife Sites	•Natural England •Local Authority Planning and land use records
Property, buildings and other structures •Ancient Monuments •Sites of Archaelogical Importance •Other buildings and structures (e.g. that may be affected by migrations of landfill gas or aggressive ground conditions)	•English Heritage •Local Authority records and local knowledge.
Other forms of property •Crops, including timber •Produce grown domestically or on an allotment for consumption •Livestock •Other owned or domesticated animals •Wild animals subject to shooting or fishing rights.	•DEFRA & Food Standards Agency •Local Authority Records
Controlled waters •Surface waters (e.g. rivers, streams, lakes, ponds, estuarine waters) •Groundwater's (including information on groundwater vulnerability) •water abstraction points (including major public and smaller private sources) •Source protection zones •Surface and groundwater quality data.	•Environment Agency •Local Authority Records on private water abstraction supplies •Geological Maps

Table 2c: Possible Sources of Information (Information Held within the Authority Archive) on File

Data Source	Comments	Use
OS Historical Maps at the 1:10560 and 1:2500 scale (pre war)	Digital Maps covering the Borough purchased from Landmark Information Group Ltd, (*Data Layer on Authority's Web Mapping)	To identify potential sources, pathways and receptors.
Landfill site Locations and Records	Provided in digital format by the local office of the Environment Agency and also from information from past council employees. (*Data Layer on Authority's Web Mapping)	To identify potential sources
British Geological Survey	Geological Layers, superficial deposits and background metal levels. Available on BGS website. (*Data Layer on Authority's Web Mapping)	To Identify potential sources & pathways.
Barrow Record Office and Local Studies Library	The Record Office holds a wide range of literature and historical documents relating to the industrial history. The catalogue of directories is an especially important source of information	To identify potential sources
Groundwater Vulnerability Maps	Digital data downloaded from the Environment Agencys website. (*Data Layer on Authority's Web Mapping)	To identify potential receptors
Source Protection Zones (SPZs)	Digital data downloaded from the Environment Agencys website. (Data Layer on Authority's Web Mapping)	To identify potential receptors
Mine Workings	Current & historical mine workings showing veins, tunnels and shafts etc. (*Data Layer on Authority's Web Mapping)	To identify sources and pathways.
OS Maps (1:1250 scale)	Paper copies from the 1950s and 1970s are held within the Councils Planning offices. (*Data Layer on Authority's Web Mapping)	To identify potential sources, pathways and receptors
Radon Potential Maps	British Geological Survey supplied this information and can be accessed at the following government website ukradon.org (*2017 Data Layer on Authority's Web Mapping)	To identify areas of natural contamination
Integrated Pollution Control (IPC)	The Authority holds details of authorised industrial processes within the Borough	To identify potential sources
Drainage Network	The Council holds digital maps of drainage networks. (*Data Layer on Authority's Web Mapping)	To identify potential pathways
Flooding Information	Digital data downloaded from the Environment Agencys website. (*Data Layer on Authority's Web Mapping)	To assess hydrological information
Locations of Sites of Special Scientific Interest (SSSIs)	Data obtained from Natural England-Location of Ramsar Sites, SSSI's, Conservation & Special protection Areas. Data obtained from English Heritage., (*Data Layer on Authority's Web Mapping)	To assess potential receptors
Local Authority owned land	Details of land owned by the Local Authority is held within the Estates department. Current land ownership is held on a GIS system and is maintained by the Estates Department. Historic ownership is held on paper based files within the department.	To assess potential sources, receptors and ownership details.
Location of scheduled monuments	Data obtained from English Heritage. (*Data Layer on Authority's Web Mapping)	To assess potential receptors
Fly tipping data	Obtained from Capita, Council customer relations management team & street care. (*Data Layer on Authority's Web Mapping)	To access potential sources
Council Staff	Many council staff have a good local knowledge and are able to identify potential sources.	To identify potential sources/ pathways and receptors
Information on Local Mining	Information is held within the Authority on local mining areas. (*Data Layer on Authority's Web Mapping)	To identify potential sources and pathways

* Data layers on the authority's Web Mapping service is open to the public on the authority's website www.barrowbc.gov.uk , but some layers mentioned above may be restricted and/or may incur a nominal fee for the service.

5.2.1 Dealing with requests for information

Within the Public Protection Services Department the Part 2A Strategy Co-ordinator will be the designated contact point within the authority for dealing with information concerning land contamination within the Borough.

Some specific information and data requests can sometimes be very sensitive and misunderstood, therefor information requests pertaining to a specific site can and will most probably be obtained through the authority's legal Services who deal with Freedom of Information Requests (FOI) and Environmental Information Requests (EIR's); this includes 'land searches' which are usually requested when carrying out a property or premises sale. A minimum charge may be made for information required in writing, providing the information is not deemed 'confidential'.

Further details & enquires can be made by contacting:

The Corporate Services Officer,
Barrow-in-Furness Borough Council,
Town Hall,
Duke Street,
Barrow-in-Furness,
Cumbria,
LA14 2LD.
e-mail foi@barrowbc.gov.uk
e-mail eir@barrowbc.gov.uk

5.2.2 Third Party Information

If the authority receives information from members of the public or businesses relating to land contamination, the authority will record this information in a password protected designated filing system where records of related incoming and outgoing correspondence will also be maintained.

The council, acting as custodians of personal data, recognizes its moral duty to ensure that all such data is handled properly and confidentially at all times, irrespective of whether it is held on paper or by electronic means. The council is subject to data protection laws and has a data protection policy.

This policy covers the whole lifecycle, including:

- *the obtaining of personal data;*
- *the storage and security of personal data;*
- *the use of personal data;*
- *the disposal / destruction of personal data;*

5.2.3 Anecdotal Evidence

Anecdotal evidence can be very important to a project of this kind and is useful for information that may not be documented elsewhere.

However the determination of contaminated land cannot and will not be made on this information alone. The strategy co-ordinator will record the information and then determine whether further study or investigation is required for the site in line with section 4.1.

This further study should be in the form of a desk based study known as a 'Preliminary Site Investigation' carried out to a standard set out in the 'CLR11' Model Procedures. (See Figure 5.1)

5.2.3.1 Anonymously provided Information

There may be occasions where the authority receives information from sources that may wish to remain anonymous. This information will be logged on the authority's 'Flare v8.2.1' data base system, and noted as anonymously provided. However, the authority will need to establish a pollutant linkage before the land is designated as 'Contaminated Land' irrespective of any information provided. Although there is no obligation to provide details pertaining to the client; if information is provided, this will have to be checked and further details may be needed, therefore contact details will aid in the potential determination of contaminated land and will remain confidential as highlighted in sections 5.2.4- 5.2.5.

5.2.4 Complaints

Complainants will be asked for their name and address and for details of the site they wish to complain about. The identity of the complainant will remain confidential. The current Flare v8.2.1' data base system used within the Public Protection Services Department will be used for

logging complaints related to potential land contaminated issues and will follow a set procedure:

1. The complaint will be taken and recorded on the system within one day
2. The complainant will be contacted by an officer within three days who will acknowledge the complaint.
3. The officer will keep in touch with the complainant informing them of progress concerning the complaint.

5.2.5 Confidentiality

Only if information provided by a company or individual is designated 'confidential' upon receipt; will it be treated as such. Enquirers will be provided with the informants name and address only and no other further details in any reports, correspondence etc. that has been provided will be given.

5.3 Information Evaluation & Risk Assessment

5.3.1 Evaluating Information on Actual Harm or Pollution

As highlighted in the previous sections, there are many types of information which are valuable and useful when identifying potential land contamination. However, large volumes of diverse documentary and anecdotal evidence relating to numerous potential sites are very difficult to evaluate manually. Therefore the authority will adopt a modified version of the 'MAPAC (Manchester Area Pollution Advisory Council) PG01 model' which has been developed for risk assessment in relation to Part 2A Contaminated Land. This is a preliminary procedure for identifying broad areas and sites of geographical coincidence or close proximity between sources, pathways and receptors of contamination, and prioritising these identified sites for more detailed assessment using a risk scoring system.

A database has been developed by the authority and has married the MAPAC model with the authority's own Web Mapping GIS system. This efficiently risk-scores certain sites with information obtained or manually inputted into the Web based GIS system.

This will give each site a risk score and will enable detailed investigations to begin, concentrating resources on areas where there is greater potential for risk, i.e. with the highest generated score.

However the authority recognises that this prioritisation of sites may change in light of new information received in the course of the strategy implementation, therefore an assessment of the risk scores will be re-evaluated every 6-12 months or when deemed prudent to ensure that the most serious potential cases are being investigated at any one time. (See Figure 4)

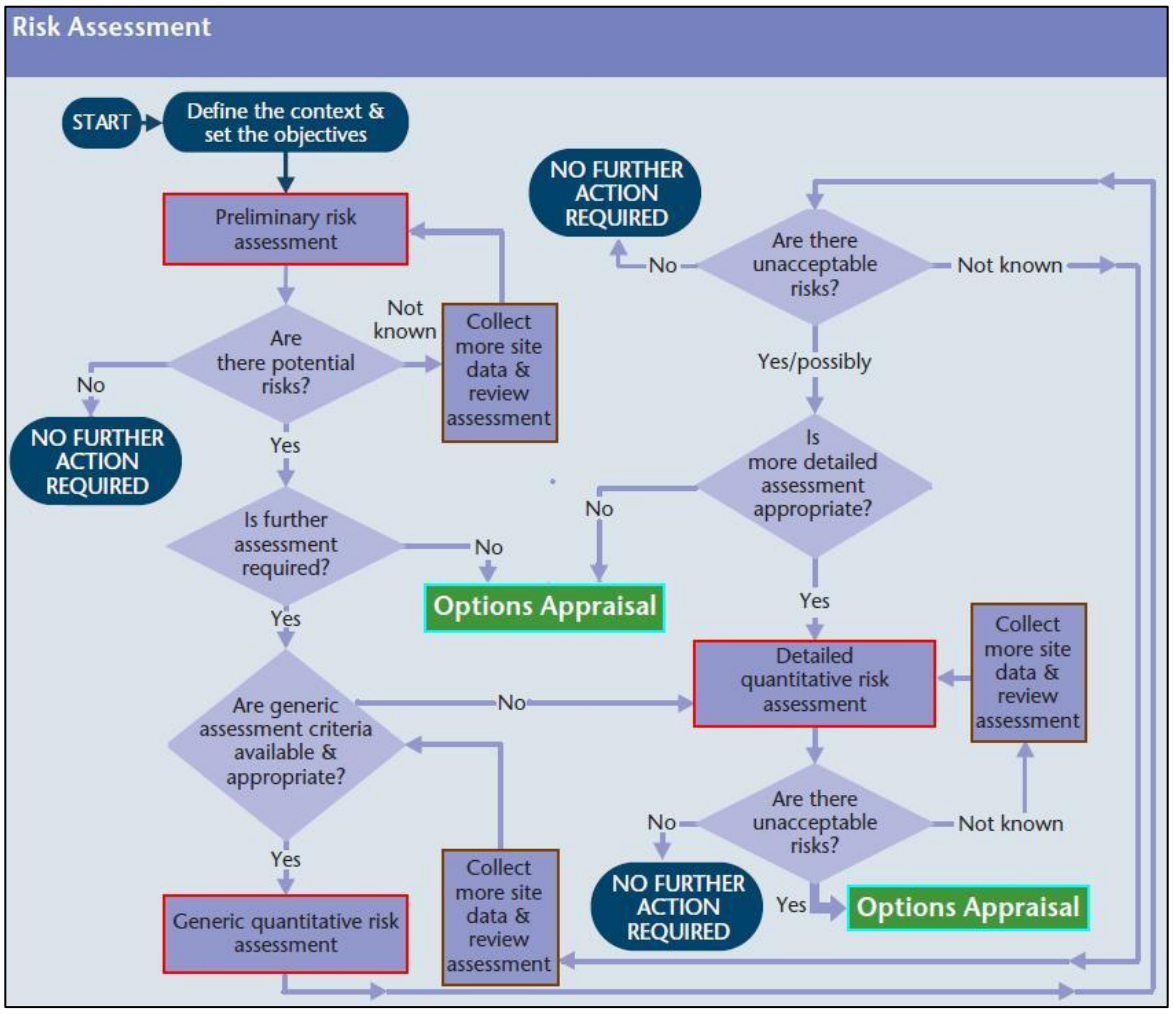
5.3.2 The Process of Risk Assessment

The process of risk assessment requires intricate understanding of the risks posed by land and controlled water contamination and the associated uncertainties. To make informed decisions, it is essential that a site specific approach is adopted in line with current guidance and best practice. This staged approach as shown in figure 5.1 will aid this authority in deciding whether there is sufficient evidence to proceed further with an investigation and assessment; or whether no further action is required.

A preliminary risk assessment informed by a 'desk based study' may indicate that there is a 'significant possibility of significant harm' (SPOSH) and that there are potentially unacceptable risks, therefore a detailed quantitative risk assessment (DQRA) may be required. However, if the authority is satisfied that SPOSH does not exist and that there is little reason to consider that land or water contamination might pose an unacceptable risk, the authority will stop in its assessment and move on to the next site.

Risk assessment decisions are based on 'best' information that must be scientifically based, authoritative and appropriate in accordance with Part 2A and the revised guidance.

Figure 5.1: Risk Assessment Route Process



Source: Annotated from CRL11, Environment Agency 2004.

5.3.2.1 Contaminant Screening Levels & Background Concentrations

It is common practice to use contaminant screening levels that help the assessor decide whether land needs further assessment or can be discounted.

Some screening tool guidance known as Generic Assessment Criteria (GAC) has been published and provided to local authorities by various organisations; some guidance provides conservative estimates of pollutants within soils at which there is considered to be no risk to health or at most, a minimal risk. However it should be noted that GACs are not wide ranging and other publications may be used that have been adopted for the same purpose (as a technical tool); publications such as the 'Atkins Atrisk Soil' manual and the Environment Agency

's 'Soil Guideline Values' (SGV's), 'Suitable for Use Levels' S4UL's and 'Published' Academic Research.

The aim is to assess a wide range of contaminants and the associated risks, the authority may use these values as a direct indicator of whether a SPOSH to human health exists.

In certain instances, computer modelling may be required to allow detailed, site specific assessments to be conducted prior to any determination. In such instances- the Environment Agency 'Contaminated Land Exposure Assessment' (CLEA v1.071) program open to the industry at large, will be used.

In addition, the British Geological Survey (BGS) has developed technical guidance on behalf of Defra, to help clarify what constitutes 'normal' background concentrations (NBC's) for certain contaminants in soil in specific areas, in accordance with the statutory guidance.

5.3.3 Risk Categories

In all categories described below, harm is directly attributable to the effects of contaminants in, on or under the land on the body(ies) of the person(s) concerned.

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.

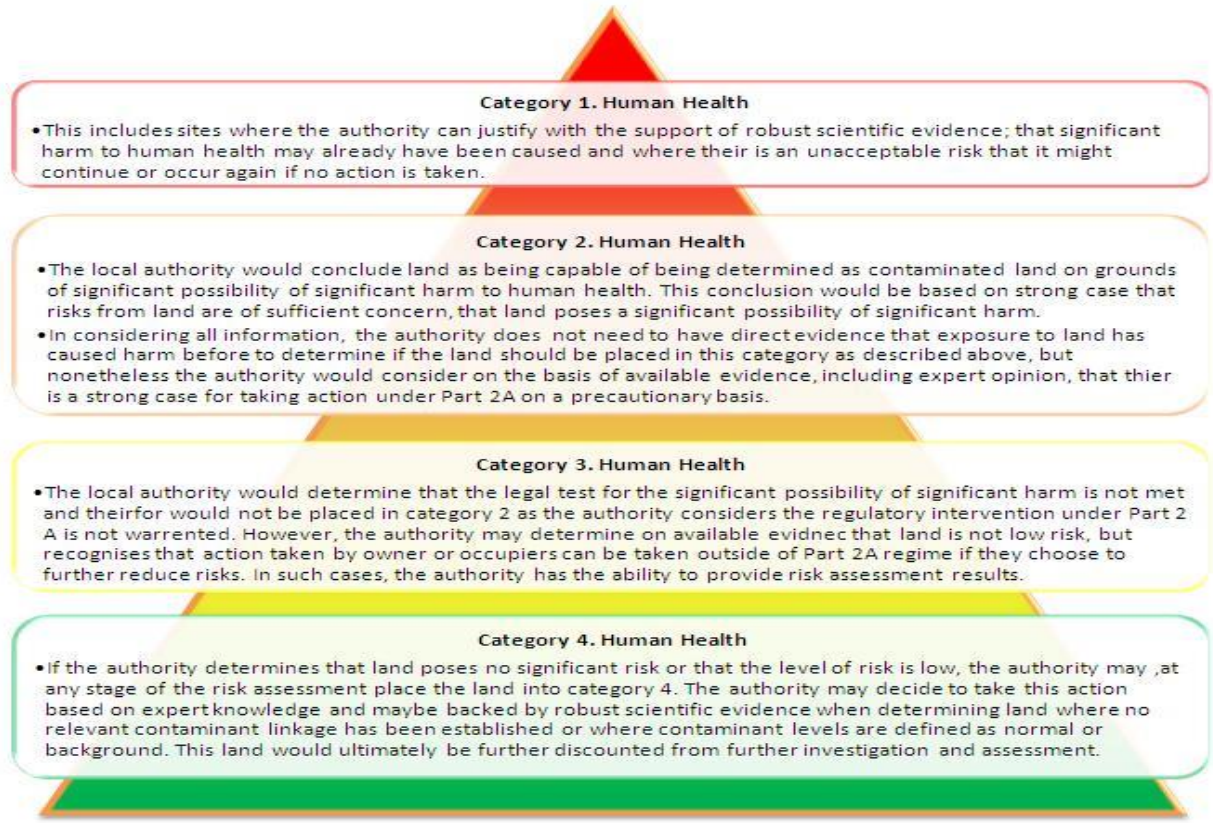
In regards to health effects, this authority would consider what constitutes significant harm to human health such as; life threatening diseases (e.g. cancers), death, serious injury, birth defects, and impairment of reproductive functions. The authority may consider lesser serious health effects that may constitute significant harm such as physical injury, gastrointestinal disturbances, respiratory tract effects, cardio vascular effects, central nervous system effects, skin aliments, effects on organs. Although this list is not exhausted, the authority may from time to time seek expert medical opinion in line with any decisions that are made to better inform the process. This authority would only conclude that harm is significant if it considers that treating the land as contaminated land would be in accordance with the broad objectives of the Part 2A regime.

5.3.3.1 Significant Harm to Human Health and the Significant Possibility of Significant Harm to Human Health (SPOSH)

If this authority takes the decision or is considering whether the possibility of significant harm being caused is significant, this authority would have to determine whether significant harm posed by contamination in, on or under the land is sufficiently high that regulatory action should be taken to reduce it. In deciding whether land is contaminated land on grounds of significant possibility of significant harm to human health, this local authority will use guidance expressed in terms of categories to quantify the risk, and therefore make decisions based on the associated category.

The revised statutory guidance subdivides sites into four categories based upon the likelihood of significant harm or the significant possibility of significant harm. (See Figure 5.2.)

Figure 5.2: Risk Categories Human Health



If this local authority cannot decide whether or not a significant possibility of significant harm exists after all factors have been taken into account, then based on statutory guidance; this

authority would conclude that the legal test has not been met and the land would be placed into category 3.

5.3.3.2 Significant Harm & Significant Possibility of Such Harm (Non-Human Receptor)

When considering non-human receptors such as living organisms or property as shown in tables 3 & 4, this local authority would have regard to receptors listed in the following tables that have been taken from statutory guidance which are deemed relevant for the purposes of Part 2A. In doing so, this local authority may seek further expert advice from agencies such as Natural England, Environment Agency, English Heritage, National Trust & DEFRA.

Table 3: Ecological System Effects Deemed Relevant for the Purposes of Part 2A Assessments.

Ecological System Effects		
Relevant types of receptor	**Significant harm**	**Significant possibility of significant harm**
Any ecological system, or living organism forming part of such a system, within a location which is: • a site of special scientific interest (under section 28 of the Wildlife and Countryside Act 1981) • a national nature reserve (under s.35 of the 1981 Act) • a marine nature reserve (under 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 Species Regulations 2010 • any habitat or site afforded policy protection under paragraph 6 of Planning Policy Statement (PPS 9) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar sites); or • any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949.	The following types of harm should be considered to be significant harm: • 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. In the case of European sites, harm should also be considered to be significant harm if it endangers the favourable conservation status of natural habitats at such locations or species typically found there. In deciding what constitutes such harm, the local authority should have regard to the advice of Natural England and to the requirements of the Conservation of Habitats and Species Regulations 2010.	Conditions would exist for considering that a significant possibility of significant harm exists to a relevant ecological receptor where the local authority considers that: • 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. 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.

Table 4: Property Effects Deemed Relevant for the Purposes of Part 2A Assessments.

Property Effects		
Relevant types of receptor	**Significant harm**	**Significant possibility of significant harm**
Property in the form of: • crops, including timber; • produce grown domestically, or on allotments, for consumption; • livestock; • other owned or domesticated animals; • wild animals which are the subject of shooting or fishing rights.	For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage. For domestic pets, death, serious disease or serious physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage. The local authority should regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose. Food should be regarded as being no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a contaminant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss. In this section, this description of significant harm is referred to as an "animal or crop effect".	Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question, taking into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.
Property in the form of buildings. For this purpose, "building" means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building, or buried services such as sewers, water pipes or electricity cables.	Structural failure, substantial damage or substantial interference with any right of occupation. The local authority should regard substantial damage or substantial interference as occurring when any part of the building ceases to be capable of being used for the purpose for which it is or was intended. 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. In this Section, this description of significant harm is referred to as a "building effect".	Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question during the expected economic life of the building (or in the case of a scheduled Ancient Monument the foreseeable future), taking into account relevant information for that type of contaminant linkage.

5.3.3.3 Significant Pollution of Controlled Waters and the Significant Possibility of Significant Pollution of Controlled Waters (SPOSP)

Under section 78A(9) of Part 2A the term "pollution of controlled waters" means the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter.

In general, this local authority will focus on pollution which:

1 may be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems;

2 which may result in damage to material property; or

3 which may impair or interfere with amenities and other legitimate uses of the environment.

Section 5: Procedures

IIn line with current guidance, the following types of pollution would be considered to constitute significant pollution of controlled waters:

1. Pollution equivalent to “environmental damage” to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations 2009 (Amended 2017), but which cannot be dealt with under those Regulations.
2. 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.
3. A breach of a statutory surface water Environment Quality Standard, either directly or via a groundwater pathway.
4. Input of a substance into groundwater resulting in a significant and sustained upward trend in concentration of contaminants (as defined in Article 2(3) of the Groundwater Daughter Directive (2006/118/EC)5).

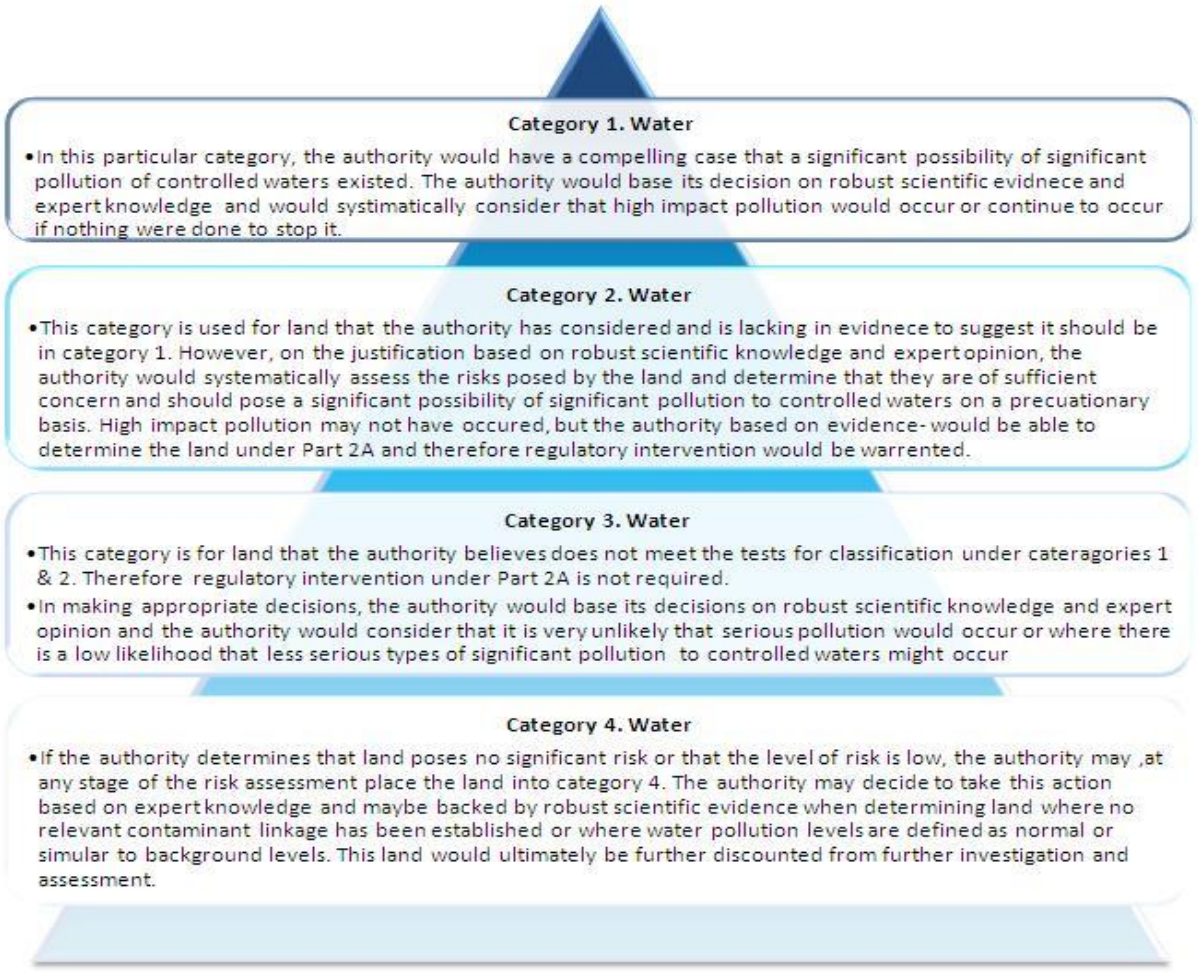
This authority would conclude that pollution is significant if it considers that treating the land as contaminated land would be in accordance with the broad objectives of the Part 2A regime. The authority may conclude (based on robust scientific evidence and expert knowledge gained from the Environment Agency) that less serious forms of pollution are not significant.

In deciding whether or not a significant possibility of significant pollution of controlled waters exists, the local authority should first understand the possibility of significant pollution of controlled waters posed by the land, and the levels of certainty/uncertainty attached to that understanding, before it goes on to decide whether or not that possibility is significant, however for particular land to meet the test -this authority would only have to have a reasonable belief that there is a significant possibility of such pollution, rather than to demonstrate that there is not.

In making a decision on whether a given possibility of significant pollution of controlled waters is significant, this authority would consider the following:

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

Figure 5.3: Risk Categories Water



This authority would then decide which of the following categories the land falls into, such as categories 1 and 2 where land has been assessed and the authority considers that a significant possibility of significant pollution of controlled waters exists as shown in figure 5.3.

5.3.4 Risk Prioritisation Methodology

The aim of the methodology is to describe the approach the authority intends to adopt to enable it to move efficiently from a situation where it is considering the entire area for which it is responsible, to considering small sub-areas or site 'polygons'. This risk prioritisation methodology aims to ensure that the requirements of the Part 2A legislation, requiring 'that the most pressing and serious problems are located first', in a 'rational, ordered and efficient' manner.

The principles underlying the MAPAC model have been derived from DoE documentation, *'Prioritisation and Categorisation Procedure for sites which may be Contaminated' (CLR6), 1995*. The full model has been modified slightly for adoption within the authority for the purpose of risk categorizing potentially contaminated sites.

The methodology is described in detail in Appendix B. Sites are prioritised based on their 'risk scores'. The key factors considered by the MAPAC model to determine the Risk Score are the potential presence of sources and receptors (See Table 5). Details regarding potential pathways are not considered by MAPAC, but would be considered during any subsequent detailed inspection.

Table 5: A Table Summary of the Key Factors Involved in Determining Risk Scores

	Component of pollutant linkage
Historical usage of the site	Potential source of contamination
Current usage of the site	Potential receptors of contamination
Current land usage – in the vicinity of the site	
Groundwater issues	
Surface water issues	

Table 6: Outline methodology for prioritisation of sites considered to have the potential for land contamination

		Remarks
For Each Site	*Action 1:* *Determine whether any remediation has occurred on the site and the standard of such: Remedial factor as Table 1*	***The intention here is to lessen the priority ranking of sites that have been subject to remedial action. The factor applied will be relative to the standard of the action. For example, a site that has been remediated to a standard suitable for its current usage may be assigned a factor = 0.1. In this case the factor, when applied to other risk scores will effectively reduce total site score.***
	Action 2#: *Determine the potential of the site to cause contamination: Risk score as Table 2.(a-e)[Industry Category]*	***Each site is ranked with the aim of reflecting the potential significance of the site to be a source of contamination. The greater the potential of the site to cause contamination the higher the risk score. A high risk score would also indicate a high ranking of priority and vice versa.***
	Action 3#: *Determine the proximity of the site to various current land uses: Risk score as Table (3.1+3.2+3.3).*	***The proximity of the site to receptors of varying sensitivity is considered.***
	Action 4#: **Determine the proximity of the site to various surface water features: Risk score as Table 4.**	***The closer and more sensitive the receptor to the site the greater the risk score.***
	Action 5#: *Determine the proximity of the site to various groundwater features: Risk score as Table 5*	***A total risk score is determined by summating the risk scores for each receptor at various distances.***
	Action 6: Calculate **Total Site Risk Score** = *Risk Score (Table 1) * ∑(Risk Score from (Table 2(a-e)+ Table 3.1+ Table 3.2+ Table 3.3+ Table 4 + Table 5))*	

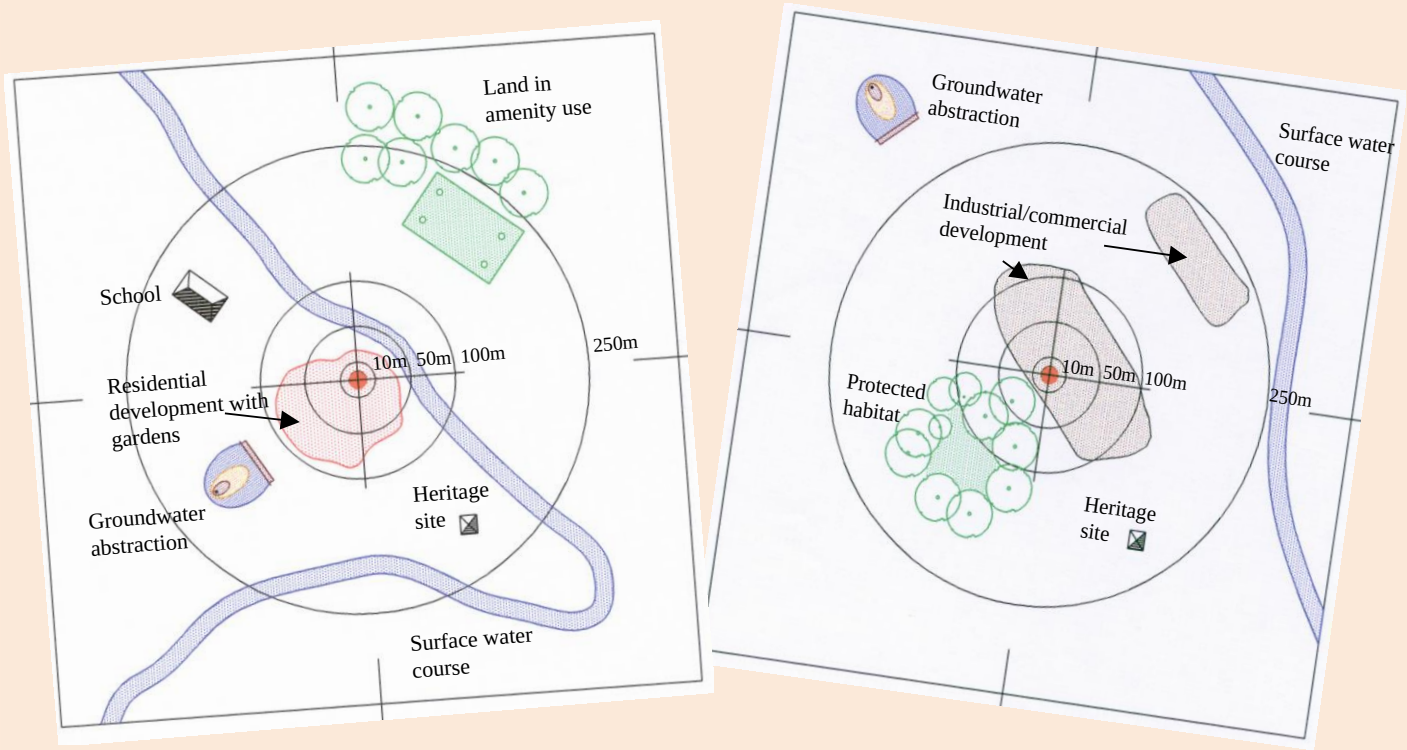
If more than one usage has occurred on a site or if more than one receptor is present then the highest or most sensitive score is used in the final equation i.e. a final score is not obtained by multiplying scores for each use. For example if a site has two receptors on site as in Table 3.1 Appendix B, residential housing with gardens and also a playground, the score would be 190 as residential housing with gardens is more sensitive than a playground area.

Section 5: Procedures

In terms of prioritising areas/sites for investigation, the authority has biased the methodology (MAPAC Model) toward the protection of 'human health'.

This is believed to be appropriate given other statutory regimes that are currently in place to protect water resources and ecological systems etc. Areas considered to have the potential to give rise to contamination as a consequence of their historical usage have been identified from a variety of sources including historic ordnance survey plans, archive information and local knowledge. The extent of each potential source has been defined and recorded within the GIS by a polygon (boundary line).

Figure 5.4: Example of Risk Prioritisation Methodology for former Gas Works site on a Major Aquifer



based on Appendix B, table 1-5 Scoring

Site 1 **Site 2**

Total Site Risk Score = Risk Score (Table 1) Σ(Risk Score from Table (2.0 + 3.1 + 3.2 + 3.3 + 4.0 + 5.0))*

Risk Score Site 1	1*(25+190+90+60+15+25) = **405**		**Risk Score Site 2**	1*(25+40+70+50+5+25) = **215**

Table 7: Risk Prioritisation Methodology- Tabulated Summary of Key Factors in Appendix B.

Table 1	Adequacy of any previous remedial action
Table 2 (a-e)	Previous site usage (Sources of Contamination)
Table 3.1	Current site usage (Receptors of Contamination)
Table 3.2	Current land use (< 50m from the site)
Table 3.3	Current land usage (50 to 250m from the site)
Table 4	Sensitivity of surface water features (Receptors)
Table 5	Groundwater features (Receptors)

The polygons are assigned to one of the 40+ industry categories described in the 'DoE Industry profile' series plus additional categories considered relevant to the Borough by Council Officers. From these classifications a risk score can then be assigned from the scores in Tables 1-5 as shown in Appendix B. The methodology is then used to establish an overall risk score taking in to account other sources and receptors. (See Table 6 & Figure 5.4)

Groundwater information will be determined in reference to Environment Agency published groundwater vulnerability maps and source protection zone datasets (See Figure 2.4-2.5). Surface water information will be taken from 'blue line' data on current digital OS plans. As part of determining a risk score the authority will make an assessment of whether any remediation has occurred on the site and the standard of such.

5.3.4.1 Identifying specific potential pollutant linkages

The strategic inspection programme is designed to establish whether there is a potential contaminant linkage associated with sites highlighted from the historical OS desktop study exercise and receptors by carrying out further detailed inspections. This is further explained in Section 7.0.

5.3.4.2 Identify gaps in information and how these are to be remedied

Gaps in information are likely to be as the result of a lack of site specific data at the early stages. Once a contaminant linkage has been established and the site has been prioritised, we

will then proceed to a detailed inspection. Intrusive site surveys will give more information relating to the actual contaminants at the site and potential processes carried out.

5.3.5 Special Sites

Special sites are defined in the Contaminated Land (England) Regulations 2006 and summarised in Annex 4 of the Defra Circular 01/2006. These special site designations are categorised into main groups of cases where a description of land that;

1. seriously affects drinking waters, surface waters (for example lakes and rivers) and important groundwater sources
2. has been, or is being, used for certain industrial activities, such as oil refining or making explosives
3. is being or has been regulated using a permit issued under the integrated pollution control or pollution prevention and control regimes
4. has been used to get rid of waste acid tars
5. is owned or occupied by the Ministry of Defense
6. is contaminated by radioactivity
7. is a nuclear site

If land is contaminated land and it falls within one of the above categories, this local authority will consult with the Environment Agency before deciding whether or not to determine the land

5.3.6 Radioactivity

The Part 2A regime was extended in 2006 to include 'Contaminated Land by Radiation' and such land will be designated as a special site as described in section 5.3.5.

The same co-existing system that applies to Part 2A has been applied to land affected by radiation, namely to provide a system for the identification and remediation of land where contamination is causing a lasting exposure to radiation of human beings and where 'Intervention' is liable to be 'justified'.

In the event that land is affected by both radioactive and non-radioactive contaminants, this authority will decide on the best course of action having due regard for primary legislation and advice from the Environment Agency.

The Radioactive Contaminated Land (Modification of Enactments) (Amendment) Regulations 2007 came into force which extends the Part 2A regime to cover land contaminated with radioactivity originating from nuclear installations; however it is thought unlikely that any sites meeting the relevant criteria will be found as nuclear installation operators are liable under the Nuclear Installations Act 1965, and as such- these installations will comply with relevant legislation and have a 'Offsite Emergency Plan' which already involves this local authority.

5.4 Interaction with Other Regulatory Regimes

Site specific needs of land contamination means that individual regimes may prove more efficient in dealing with land contamination rather than solely using Part 2A, or these regimes may be used in conjunction with each other to expedite an intervention or remedy. Specific sites and officer experience will dictate what regime is most appropriately used.

5.4.1 Planning

Dealing with land contaminated through redevelopment is a main focus of this authority, and Part 2A is only used as a last resort.

It is the authority's policy to encourage, where practical, the redevelopment of brownfield land within the borough. This redevelopment and associated planning controls will remain the primary mechanism for dealing with land contamination; therefore any identification or remediation of land contamination will be dealt with under 'planning condition' and not under the Part 2A regime. However, the developer must satisfy the authority, that as a minimum; the developed site cannot be determined as contaminated land under Part 2A. (See Appendix D.)

This emphasis is based on the National Planning Policy Framework 2019 (NPPF) which seeks to prevent unacceptable risks from pollution while ensuring that all new development is appropriate for its location and intended use.

The following paragraphs (178 & 179) have been extracted from the NPPF and relate to the planning regulatory regime:

178. Planning policies and decisions should ensure that:

a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);

b) 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

c) adequate site investigation information, prepared by a competent person, is available to inform these assessments

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

5.4.2 Building Regulations

Although not a primary tool, the Building Regulations [2010 Amended] enacted under the Building Act 1984 are just as effective as planning legislation and requires measures to be taken to protect new buildings and their future occupants from the effects of contamination. The requirements with respect to land contamination are set out in the 'Approved Document Part C' 2004 [2013 Amended] (Site Preparation and Resistance to Moisture), which gives practical guidance for ensuring new buildings are protected from ground materials, water transportation and contaminants.

5.4.3 Environmental Permitting Regulations 2016

Legislation has been developed to regulate industry and any associated pollution that may be a by-product or as a result of negligence. Such industry installations are required to have a 'permit or authorisation' from the local authority or the Environment Agency to operate, and any operation that has knowingly or unknowingly caused pollution, will usually be dealt with under that permit.

The Environmental Permitting Regulations 2016 are designed to minimize the impact from potentially polluting activities and combine the previous Pollution Prevention Control (PPC) & Waste Management Licensing (WML) Regulations.

Under these regulations, processes are split into three categories:

1. Part 1A- Installations regulated by the Environment Agency and are usually substantial; every factor of environmental impact is taken into account.
2. Part 2A- Similar to Part 1A permitting installations except these are usually smaller and are regulated by the Local Authority.
3. Part B- These are only permitted for impacts to 'Air Quality' and are regulated by the local authority.

Specific permitted activities or processes include: landfill, mining, radioactive operations, waste facility, painting facility, process venting to atmosphere, smelting, garage forecourt pumps, water discharge activity, mobile plant activity etc.

As a result of permitted operations, the regulator will inspect the installation and will usually require a log and/ or report detailing compliance with the permit.

Any land contamination or pollution of controlled waters that is knowingly permitted under the above regulations by an installation would constitute a breach of a permit conditions, therefore under the above regime, enforcement under Regulation 36 could ensue to resolve the contamination.

5.4.4 Environmental Damage Regulations 2009

The Environmental Damage (Prevention & Remediation) Regulations 2009 (Amended 2015) were introduced on 1st March 2009 to implement the provisions of the European Commission's

Environmental Liability Directive into law in England. The operation of the regulations can be seen below in figure 5.5.

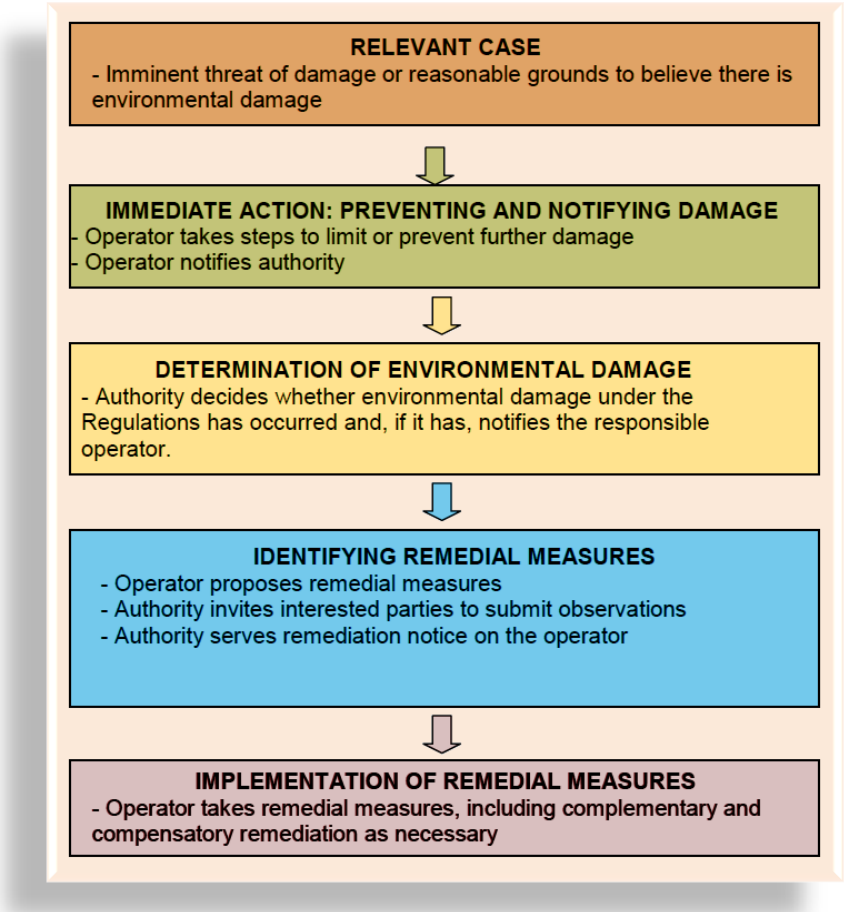
They are based on the 'polluter pays principle' so those responsible prevent and remedy environmental damage, rather than the taxpayer paying.

The emphasis, in the first instance, is on the business or other 'operator' identifying when there is an imminent threat or actual damage and taking immediate action.

Enforcing authorities must determine whether there is environmental damage and decide on the necessary remedial measures.

Environmental liability is only a 'backstop'. The emphasis should be on proactively putting in place appropriate pollution prevention measures so that imminent threats and damage do not arise.

Figure 5.5: Operation of the Environmental Damage Regulations, 2009



Source: DEFRA 2013.

5.4.5 Water Resources Act

The Waters Resources Act 1991 and the Groundwater Regulations 1998 gives the Environment Agency powers to deal with 'harm' to controlled waters. This may be effective in preventing further water contamination, and may or may not address the underlying land contamination aspect of the pollutant. However, in practice it is best to deal with the source of the contamination first and this most likely emanates from a source on land and therefore a joint partnership between the local authority and the Environment Agency may be needed under the Part 2A regime.

Therefore the following steps will be adopted:

1. This local authority will liaise with the Environment Agency before determining any land as contaminated land and explore available options.
2. If the Environment Agency identifies a risk to controlled waters from land that may be potentially contaminated, this authority will be notified to enable determination of the land and any remedial actions necessary under Part 2A.

2a. Under such circumstances, this authority will seek to prioritise this case and implement the methodology outlined in section 5.3.4.

Section 6: Liaison & Communication

6.0 Liaison & Communication

6.1 Internal Contacts

The internal contact points within the authority are shown in figure 5 of section 5.1, with primary responsibility designated to the Public Protection Services Department. As the Public Protection Services Department is the lead department responsible for implementation and enforcement of the Part 2A regime, they will deal with all enquiries from interested parties whether the enquiry is internal or external. Information relating to contaminated land will be held and dealt with within the Public Protection Services Department except where records specific to a particular site are held elsewhere, i.e. Planning Portal, Cumbria County Council Planning Dept. The authority's Public Protection Services Department will be maintaining the Contaminated Land Public Register.

6.2 Liaison with other Statutory Bodies

At the local level the Environment Agency has nominated 'Area Contacts' within their Contaminated Land team who will be the first point of contact for the authority. The authority also falls within the north-west region the contact details of which are given below:

Local Office
Environment Agency
Ghyll Mount
Gillan Way
Penrith 40 Business Park
Penrith, Cumbria
CA11 9BP
Tel: 0870 850 6506

North West Regional Office
Environment Agency
Richard Fairclough House
Knutsford Road
Warrington
WA4 1HG
Tel: 0870 850 6506

Barrow Borough Councils local contact for contaminated land issues at the Environment Agency's Penrith office is:

Mr Peter Bardsley **Tel:** 03708 506506
Email: peter.bardsley@environment-agency.gov.uk

Section 6: Liaison & Communication

The Environment Agency will be a major consultee for the authority regarding issues relating to land contaminated. However liaison with other statutory bodies is also important for maintaining communication and keeping up to date on the most current information available. The authority has identified consultees as listed in Appendix A.

Relevant statutory bodies will be notified and consulted if necessary regarding intrusive investigation and any remediation schemes proposed to ensure that all factors, for example ecological system effects, are considered.

6.3 Liaison with Other Local Authorities

This authority will liaise closely with a designated contact for South Lakeland District Council & Copeland Borough Council for any issues that may arise concerning cross border sites.

However, representatives of all the local authorities in Cumbria have established an Environmental Protection Working Group. A subgroup of this deals with land contamination issues and shares experiences and knowledge on a quarterly basis. This subgroup's function is to achieve a consistent approach for working with contaminated land within the wider County.

6.3.1. Public Contributions

There is considerable scope for members of the public, businesses and voluntary organisations to make a valuable contribution towards the identification of potentially contaminated sites and past land use. Each parish council will be an important source of information and will be a 'first point' for public liaisons between councillors, voters and the strategy co-ordinator. This will inform any strategic inspections as noted in section 5.2.

6.4 Communicating with Owners, Occupiers & Other Interested Parties

The authority would always seek to carry out is statutory duties in a thoughtful and respectful manner. This has proven successful at remediating land in an effective manner that surpasses targets and timescales. However, where this is not achievable, effective communication with all stakeholders and interested parties should be carried out as disputes may arise.

If cross party communication brakes down, this authority may attempt to communicate through a third party before formal action or determination is considered. This third party will

be at the discretion of the authority and will be used as a mediator in matters that need resolving.

6.5 Risk Communication

The authority will integrate risk communication into its overall strategy for the inspection of land contaminated and take into account current guidance in communicating with interested persons. In seeking to ensure good risk communication, the authority shall have regard to the publication 'Communicating Understanding of Contaminated Land Risks Scotland and Northern Ireland Forum for Environmental Research 2010'. (SNIFFER, 2010)

This current strategy document forms a key part of the authority's communication strategy, by detailing the process and measures that will be used in the inspection and classification of land. In addition, the consultation with interested parties described above, particularly site owners/occupiers, will further enhance the communication process.

The aim of the risk communication strategy will be to:

- raise awareness and understanding of the contaminated land issue without alarming the local population and business community;
- improve the understanding of the inspection and risk assessment process;
- enable the effective participation and/or representation of all the interested parties in the site specific process of inspection and assessment and in making decisions about how to manage risks;
- inform and protect any community deemed to be at risk from a particular site through access restrictions, notices, leafleting, press notices and other consultation mechanisms;
- provide opportunities for feedback through open government initiatives, local meetings, etc.;
- engender support from concerned an interested parties for the effective implementation of any risk management decisions.

Section 7: Detailed Inspection of Sites

7.0 Detailed Inspection of Sites

7.1 General

Previous sections of this strategy have described the approach that the authority will adopt in identifying and prioritising areas and sites where there is potential for land contamination. The aim of this section is to outline the approach that the authority intends to adopt in carrying out detailed inspections of sites.

7.2 Purpose & Rationale

The aim of a detailed inspection of potential land contamination is to make the following assessment:

- is the land or site deemed Contaminated Land as defined by the Part 2A legislation?;
- may the land fall within the definition of a special site (See Section 5.3.5), and therefore does the Environment Agency need consulting.

In gathering information to allow an assessment to be made, the authority will follow technical procedures in accordance with 'Model Procedures for the Management of Contaminated Land (CLR11, 2004) or any successor document, which further explains the risk assessment procedure when dealing with potentially contaminated land; it is recommended that a tiered approach be adopted (See Figure 7.0) and investigations undertaken in accordance with the most up to date version of the British Standard 10175 [(2013) Investigations of Potentially Contaminated Sites- Code of Practice].

In making a decision, the authority need only satisfy itself that there is "a reasonable possibility" that a contaminant linkage exists. If at any stage the authority establishes that there is not 'a reasonable possibility' that a contaminant linkage exists, the authority will not continue with any further enquiries and will not proceed to a detailed inspection.

Due to the scale of the work and the limited resources available, the authority will seek to undertake its Part 2A duties efficiently whilst maintaining high levels of protection for the public and the environment. As noted above, detailed inspections will be prioritised using the

methodology outlined in Section 5.3.4. In addition, the authority will consider whether it is necessary to carry out a detailed inspection of any particular area of land by considering the simple guidance matrix presented in Figure 7.3.

7.3 Site Specific Liaison & Powers of Entry

Under Section 108 of the Environment Act 1995, the council has been granted powers of entry to carry out investigations.

Before the Council carries out an inspection using statutory powers of entry, it will have carried out site specific liaison with relevant stakeholders [person(s) responsible, owners, parties, the Environment Agency, Natural England and/or English Heritage] and satisfied itself on the basis of any information already obtained that:

- there is a reasonable possibility that a pollutant linkage exists on the land; or
- in cases involving intrusive investigation that it is likely that the contaminant is actually present and that given the current use of the land, the receptor is actually present or is likely to be present.

The Council will not carry out an inspection using statutory powers of entry, which takes the form of intrusive investigation, if:

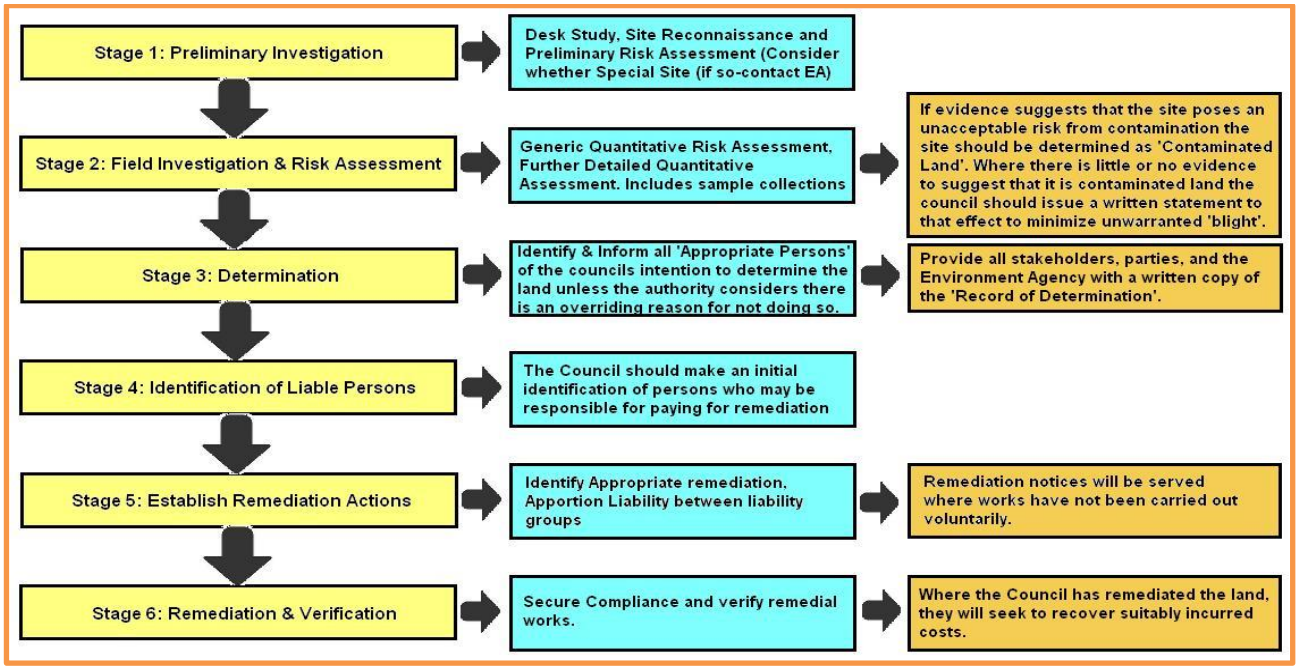
- it has already been provided with detailed information on the condition of the land upon which the Council can determine whether the land is contaminated; or
- a person offers to provide such information within a reasonable and specified time, and then provides such information within that time.

7.4 Inspection Methodology

A detailed inspection initially involves the development of a conceptual site model through the collation and assessment of information identified in a 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' under Part 2A. A tiered approach has been indicated in Figure 7 which will aid in this process.

Figure 7.0: Investigation Procedure Set Out in a Six Tiered Approach to Carry Out A Detailed Inspection of Contaminated Land.



7.4.1 Stage 1: Preliminary Investigation & Desk Study

Objective: to provide the authority with a preliminary understanding of potential environmental and health risk, determine the need for further data collection and carry out the health and safety risk assessment prior to an essential site visit.

Description: a desk based assessment of all available information relating to a site's history, geology, hydrogeology, and environmental setting, together with a site reconnaissance walkover visit to ascertain site status, neighbouring land use and access, etc. Information will be considered in terms of a source-pathway-receptor linkage to formulate a conceptual model of the site and make an initial assessment as to the sites status under the statutory legislation. (See Figure 7.1)

The consultee's listed in section 6.0 will provide a significant amount of information, however further documentary evidence will be required, as follows:-

- Historical information (maps, photographs, etc) related to the site;
- Industry profiles indicating likely contamination associated with the historic use;
- Geology, hydrology and hydrogeology;
- Past / Present use of adjacent land;
- Information from previous investigations;
- Service Information

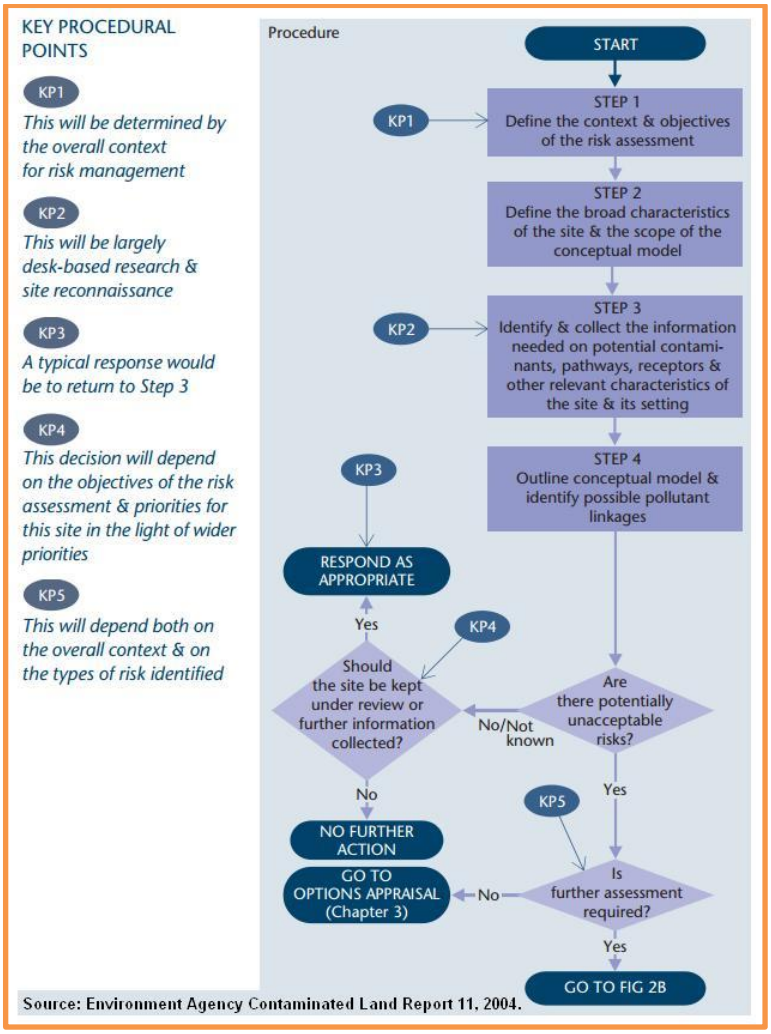
Guidance documents to which the authority will have regard too during desk based investigations shall include:-

- Contaminated Land Report 11 (2004)- Model Procedures for the Management of Land Contamination
- BS10175:2013
- Green Leaves 3 (2011) Guidelines for Environmental Risk Assessment and Management

Older Guidance, but still maintain good advice in certain areas:

- CLR2 Guidance on preliminary site inspection of contaminated land.
- CLR3 Documentary research on industrial sites.
- BS 5930:1999 Code of Practice for Site Investigations
- CIRIA Special Publication 103, Volume III: Site Investigation and Assessment (1995);
- Documentary Research on Industrial Sites, DETR, 1994, (CLR3)

Figure 7.1: Preliminary Risk Assessment Procedure Set Out in CLR11 2004 Fig 2a.



7.4.2 Stage 1: Site Walkover Visit

Objective: to provide the authority with first hand indication of the likelihood of contaminant linkage and the local environmental setting, including the presence of contamination, pathways and sensitive local receptors. Liaison with the site owner and occupiers will take place prior to the site inspection, as indicated above.

Description: the site visit will allow the opportunity to assess and identify the potential hazards present on the site in relation to the adjacent receptors and look for details of any evidence that suggests pollution and impacts on receptors is currently taking place. The walkover also provides opportunities to collect samples if appropriate and take an initial view of the feasibility and hazards associated with further investigation if this should be required.

Key observations will be recorded on a standard inspection form in order to ensure consistency between sites, maintain quality control and provide a transparent record of the assessment. In undertaking the site visit and visual inspection the authority will pay particular attention to the health and safety aspects of work on land that may have contamination.

The scope and key observations/activities associated with the walk-over survey shall include:

- Confirmation of previous categorisation of the site based on assumed source –pathway – receptor model
- Evidence of surface contamination
- Presence of contaminants entering and leaving the site
- Condition of surface waters and ponds
- Presence of drainage and discharges
- Signs of distressed vegetation
- Site use / chemicals / tanks
- Location and proximity of sensitive receptors
- Boundary conditions and the security of the site
- Potential site hazards such as cables, voids, etc.
- Limited sampling of surface waters and potentially contaminated materials

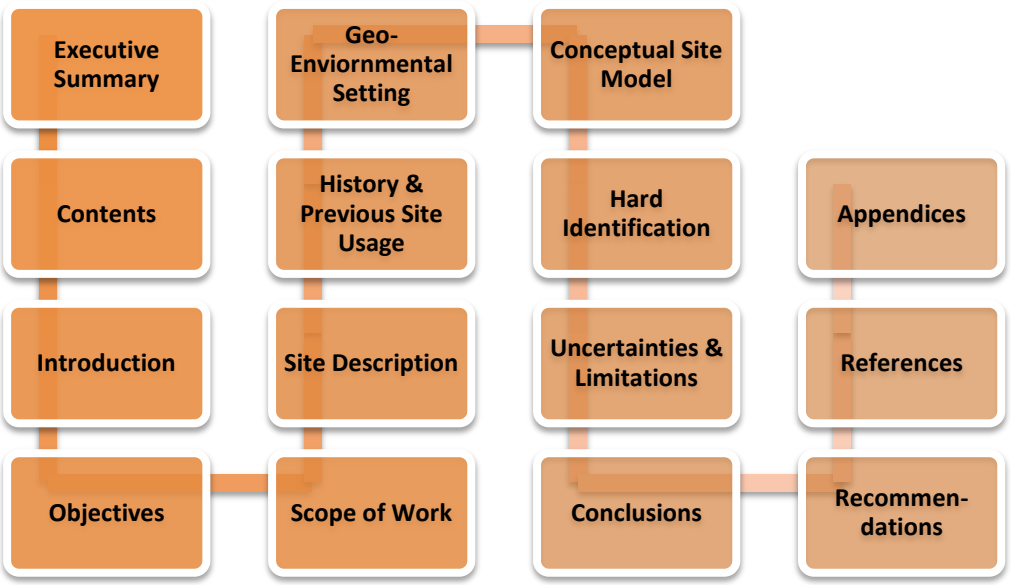
7.4.3 Stage 1: Desk Study Report

The authority intends to produce a desk study interpretive report for each site considered. A model reporting style will be developed having regard to current best practice documentation. A typical report format is presented as Figure 7.2.

The collated desk study information will assist the authority to:

- make an assessment as to the likely presence of pollutant linkages, and thereby a determination as to the whether the site is classified as Contaminated Land; or,
- design further investigations to determine whether pollutant linkages exist; and,
- design the health and safety plan associated with further on-site work.

Figure 7.2: Anticipated Format of Desk Study Report



7.4.4 Stage 2: Intrusive Investigation

Objective: to collect sufficient data to allow the authority to:-

- confirm the presence or likelihood of one or more contaminant linkages that exist;
- enable an evaluation of the significance of harm posed by the linkage;
- make recommendations, where necessary, for cost effective remedial measures.

Description: An intrusive investigation typically involves the use of trial pits, boreholes and other excavation methods to gather information that allows an assessment of the ground conditions and to collect samples for chemical analysis.

The design of the investigation rationale is based around the conceptual site model developed in the previous stages of the inspection process. The information from Stage 1 (Sec 7.4.1--2) influences the type, location, number and depth of investigation points, as well as determining the chemical contaminants for which the samples are analysed.

Overall, the intrusive investigation provides additional detail to determine whether;

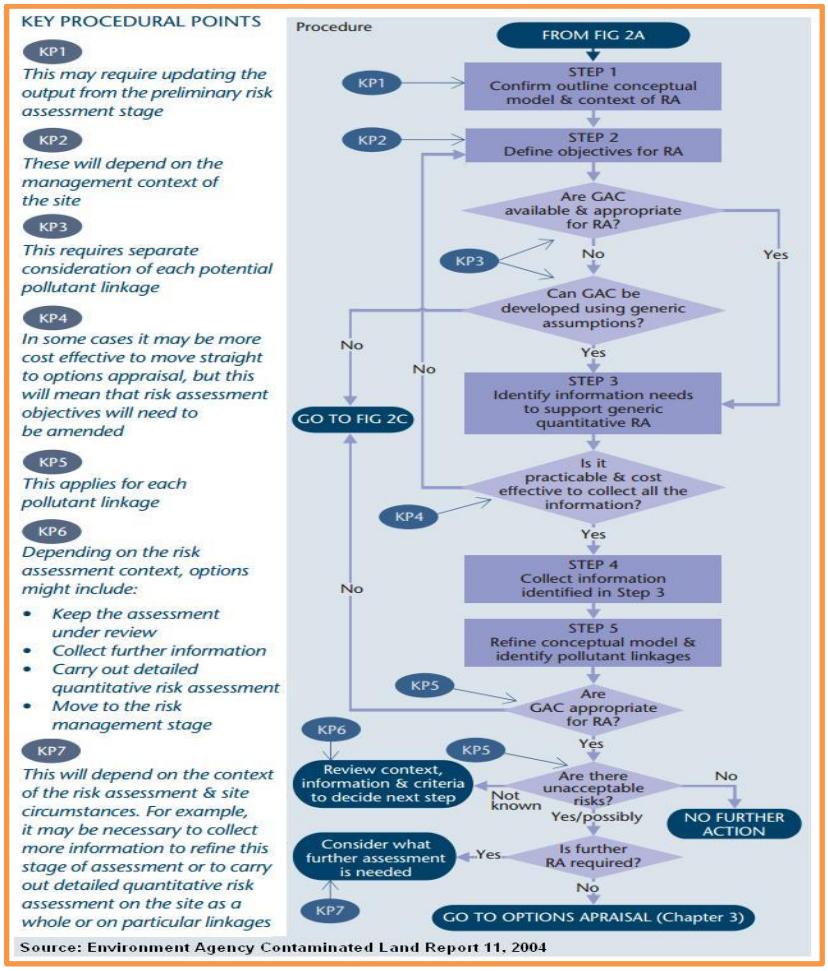
- a hazard is present on the site, in what quantity and where;
- if a contaminant pathway exists which connect these hazards to a potential receptor.

Section 7: Detailed Inspection of Sites

The authority intends to ensure that the following key factors are considered prior to and during implementation of any intrusive investigation work:-

- Health and Safety Plan to protect site workers;
- Careful design of sampling pattern, density and depth to optimise knowledge of contaminant distribution and behaviour and understanding of pollutant pathways;
- Consideration of rapid methods such as geophysical techniques to increase confidence and target resources;
- Analytical schedule designed to identify likely contaminants at levels appropriate to the risk assessment;
- Quality Assurance/ Quality Control procedures to confirm the validity of procedures and data used in subsequent risk assessments.
- Prior to intrusive investigation of SSSIs or sites of international importance the Authority will consult with Natural England under the Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981 as incorporated by the Countryside and Rights of Way Act 2000.

Figure 7.3: Intrusive- Generic Quantitative Risk Assessment Procedure Set Out in CLR11 2004 Fig 2b.

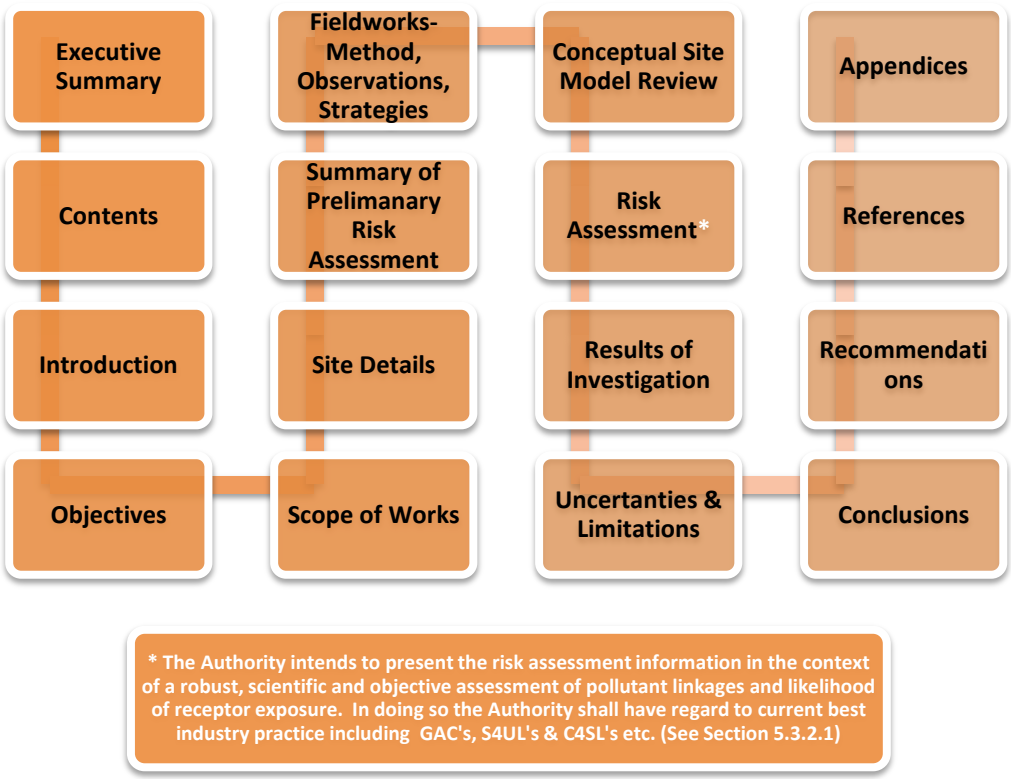


Guidance documents to which the authority will have regard too during desk based investigations shall include:-

- Contaminated Land Report 11 (2004)- Model Procedures for the Management of Land Contamination
- BS10175:2013
- Green Leaves 3 (2011) Guidelines for Environmental Risk Assessment and Management

The authority intends to produce an interpretative report for each site considered. A model reporting style will be developed having regard to current best practice documentation. A typical report format is presented as Figure 7.4.

Figure 7.4: Anticipated Format of Intrusive Investigation Report



Further information on desk studies, intrusive field investigations and risk assessment can be found in the 'Developers Guide' (Appendix D).

In the event that further intrusive investigation is needed, (i.e. to identify contaminant hotspots [delineation]) a 'Detailed Quantitative Risk Assessment' as outlined in Appendix F; will need to take place which will further bolster the intrusive 'Generic Quantitative Risk Assessment' shown in section 7.4.4.

7.5 External Consultants & Contractors

In fulfilling its duties under Part 2A the authority may consider it necessary to use private sector consultancy or contracting services. When engaging such services the authority shall ensure that the person(s) providing the service have appropriate training, experience and resources commensurate to the service required. On this issue, any investigation 'on site' must be undertaken by a suitably qualified contaminated land practitioner, in accordance with established procedures BS10175 (2017) Code of Practice for the Investigation of Potentially

Contaminated Sites and Model Procedures for the Management of Land Contamination [CLR11].

7.6 Formal Determination of Contaminated Land

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.

In each instance, the land must be determined based on robust scientific knowledge and expert advice and placed into risk category 2 or 1 as described in section 5.3.3.1.

7.7 Cost Recovery & Hardship Policy

The cost of remediation can sometimes be expensive although necessary to protect human health and meet requirements so that land cannot be determined as 'contaminated land' under the Part 2A.

Recovering the costs of remediation is a complex and sensitive matter, especially where costs cannot be met and/or hardship is a contributing factor.

In general, the authority should seek to recover the costs of any remediation which it has carried out and which it is entitled too. Section 78P(1) of Part 2A states that "costs reasonable incurred should be recovered from the appropriate person or persons in the appropriate proportions" as described in section 78F(7) of Part 2A. (See Section 7.7.1) This Authority will have regard to the following summarized sections to aid in this decision making process. *Further details can be found in Appendix C: Cost Recovery & Hardship Policy.*

7.7.1 Determining Liability

Contaminated land guidance is instructively clear and puts individuals into classes (i.e. Class A or B) and focuses on the principle that the 'polluter pays'. The authority would initially identify

any potentially liable persons for paying remediation costs. Determining liability is an important part of any cost recovery decision and therefore would follow a similar process:

1. The authority would look at a person(s) who knowingly permitted each contaminant linkage, these would be defined as 'Class A' persons.
2. In the event that no 'Class A' persons can be found, the authority would seek to identify owners or occupiers of the land who are referred to as 'Class B' Persons. The responsibility for contaminant linkages may rest with a number of persons under each class; therefore these are known as a 'liability group'.
3. In the event that no Class A or B persons can be found liable for a linkage after the authority has carried out reasonable inquiries, that linkage would be known as an 'orphan linkage', and in such circumstances- sections 7.92-7.98 of the 'Contaminated Land Statutory Guidance (2012)' should be reviewed and the authority will determine who is liable.

Although the Contaminated Land Guidance (April 2012) is the leading provision in liability processing and definition, further key legislation containing liability provisions are listed below:

- COMAH Regulations 2015
- Environmental Permitting Regulations 20016
- Part 2A of the Environmental Protection Act 1990
- Water Act 2014
- Water Resources Act 1991
- Wildlife and Countryside Act 1981

7.7.2 Cost Recovery Decisions

Every case will be different and have variations in ownership & liability which will affect cost recovery decisions. This authority will aim to meet a balanced, fair, equitable and transparent result when meeting costs for remediation.

The authority may waive or reduce the recovery of costs to the extent that it considers this appropriate and reasonable. These decisions are not based on 'pay all or nothing' principle;

rather this authority would consider part payment of costs if the polluter cannot reasonably be made to pay all of the costs.

During this decision making process, the authority has devolved powers to defer recovery of costs by securing them as a charge on the land. This has the added benefit that costs can be met in instalments or in full when the land is sold.

7.7.3 Information Required in the Decision Making Process

If any decision is to be made by this authority with regards to hardship or reducing the recovery of costs, it must have the relevant information provided to aid in this decision making process. Relevant information provided by the appropriate person(s) may be specific, but under certain circumstances, the authority understands that obtaining information needs to be reasonable, accessible, significant and proportionate to the specific case.

The authority also recognises that some information required may be financial based or contain personal information and in this case, the authority will always adhere to data protection laws as highlighted in section 5.2.5.

Despite decisions being seen as negative or positive, this authority will be as open and transparent in its approach to the overall process and will inform the appropriate person of any cost recovery decisions while explaining the reasons behind such decisions.

7.7.4 Hardship

When making decisions based on information provided, the authority would consider whether meeting the full costs of recovery would make an appropriate person, (i.e. In this case a company[1]) insolvent and thus cease to exist. In this instance, external factors are considered such as costs to the local economy of such a closure.

Therefore, considerations towards waiving or reducing the recovery of costs can also have a human element as well as an economic sustainability element, and therefore this authority will

[1] Appropriate Person(s) may also be acting as trustees, charitable companies, social housing landlords etc. In each respect- there are specific considerations applying to Class A & B persons as outlined in Appendix D Sec. 6-16

attempt to approach each case open-minded and will be based on collective decisions of an assessing group rather than that of an individual's overview of the situation.

Therefore this authority has adopted a Land Quality- 'Cost Recovery & Hardship Policy' (See Appendix C)

Section 8: Review Mechanisms

8.0 Review Mechanisms

Part 2A of the EPA 1990 requires that the local authority inspect their areas from "time to time" for the purpose of identifying land that may fall within the statutory definition of Contaminated Land. An integral part of this strategy is to review processes in the light of changes to legislation, guidance and priorities.

Therefore the authority needs to consider 2 main aspects:

a) **Triggers for review of inspection decisions**

b) **Timetable for review of the inspection strategy**

8.1 Triggers for Undertaking Inspections

The procedures in Section 5 recognise that there may be occasions when the assessment of data and inspections may have to be undertaken outside the general framework. These include:

- responding to information from other statutory bodies, owners, occupiers, the general public or other organisations relating to pollution incidents or alleged harm to health;
- the introduction of new receptors as a result of particular land uses identified in the Local Plan;
- dealing with urgent sites as identified (e.g. as a result of unplanned events); and
- supporting voluntary remediation where a potentially liable party wishes to undertake a clean-up before their land has been inspected by the local authority.

8.2 Triggers for Reviewing Inspection Decisions

All decisions made with regard to contamination need to be made objectively, consistently, transparently, and with proper regard to uncertainty. One important aspect of managing contaminated land is the need to review from time to time, the decisions that no action is necessary, to establish whether any material changes have occurred. Examples of factors which influence the decisions and which have the potential to change include:

- site use including actions taken by humans to reduce the effectiveness of remedial measures.
- use of adjoining land
- climatic or meteorological change
- change in physical characteristics e.g. the water environment
- legislative or internal or external policy changes
- technical standards or procedures

8.3 Reviewing the Strategy

The authority will review the inspection strategy to ensure that it represents an efficient use of resources and is effective in meeting the requirements of the legislation. The purpose of the reviews is to assess the ongoing progress and any work being carried out at the time. The reviews will also re-examine the priorities laid out - in case any investigations have brought land to attention needing greater priority.

The inspection strategy will be reviewed on a yearly basis for the first five years after full implementation; this will then be reviewed every five years. (See Section 4.3 & Figure 4)

However, the Authority recognises that reviews may be required earlier in light of new information including:

- Significant changes in legislation
- Establishment of significant case law or other precedent
- Revision of guideline values for exposure assessment

If any of the above points require immediate action, a review meeting will be arranged to discuss that particular point before the next scheduled review. Arranging these meetings will be the responsibility of the strategy co-ordinator and to whom issues requiring urgent attention must be addressed too.

Section 9: Information Management

9.0 Information Management

A compendium of data including potentially contaminated sites has been added to the councils 'GIS' system. It is understood that while some information remains sensitive, the general public has a right to see specific information as defined below.

9.1 The Public Register (Part 2A)

The authority is required to maintain a register concerning the land within the borough that has been formally designated as 'Contaminated Land' under Part 2A. The contaminated land register layout is shown as Appendix E, and shows the information that will be recorded on the register when any land is designated 'Contaminated Land' within the borough.

The register will be stored in a digital format, although paper copies will be maintained, by the strategy co-ordinator who will ensure that information on the register is kept up to date and valid in accordance with the relevant legislation. Other authority departments will also have access to the register through the strategy co-ordinator and will be able to request information from the register in the usual manner.

The following information is kept on Barrow Borough Councils public register as and when it becomes available:

- Remediation Notices & Associated Appeals against such Notices
- Remediation Declarations
- Remediation statements
- Appeals against charging notices
- Designation of identified special sites as described in section 5.3.5.
- Notification of Claimed Remediation
- Convictions for offences under section 78M of the Environmental Protection Act 1990
- Site specific guidance issued by the Environment Agency
- Other Environmental Controls
- Contact details to obtain further information

9.2 Requests for Information

Information on contaminated land is primarily held within the Environmental Protection section of the Public Protection Services Department.

If a member of the public requests environmental information it will be considered under the Environmental Information Regulations (EIR). (See Section 5.2.1) Whilst the Council is expected to make environmental information proactively available, there are certain exceptions to disclosure as described in section 9.2.1. The regulations are similar to the Freedom of Information Act (FOIA), however some of the main differences are:

- 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 the 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.

Further information on the EIRs is available from the corporate services officer (See Section 5.2.1)

9.2.1 Confidentiality of Information

There are certain exclusions from the register of information that may affect national security and commercially confidential information. These are detailed in sections 78S and 78T of the EPA 1990.

Section 10: References

10.0 References

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Building Regulations [2010 Amended] enacted under the Building Act 1984. [Online] Available from: http://www.legislation.gov.uk/uksi/2010/2214/contents/made

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CLR2 Guidance on preliminary site inspection of contaminated land.

CLR3 Documentary research on industrial sites.

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Communicating Understanding of Contaminated Land Risks Scotland and Northern Ireland Forum for Environmental Research 2010'.

Contaminated Land (England) Regulations 2006 (summary) Annex 4 of the Defra Circular 01/2006.

Contaminated Land Exposure Assessment' (CLEA v1.071)

DEFRA 2013.

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DoE documentation, *'Prioritisation and Categorisation Procedure for sites which may be Contaminated' (CLR6), 1995*

Section 10: References

Environment Agency (2009b) Updated Technical Background to the CLEA Model. EA. Bristol.

Environment Agency (2016) [Online] Available from: http://apps.environment-agency.gov.uk/wiyby/37833.aspx

Lindal & Marton Community Website (2016) [Online] Available from: http://www.lindal-in-furness.co.uk/Heritage/heritage.htm

Model Procedures for the Management of Contaminated Land (CLR11, 2004]

Nuclear Installations Act 1965

The Environmental Damage (Prevention & Remediation) Regulations 2017

The Environmental Permitting Regulations 2016

The Radioactive Contaminated Land (Modification of Enactments) (Amendment) Regulations 2007

Waters Resources Act 1991 and the Groundwater Regulations 2009

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Appendix A

Environment Agency Ghyll Mount, Penrith 40 Business Park, Penrith, Cumbria CA11 9BP Tel: 0870 850 6506	Natural England Murley Moss Business Park Oxenholme Road, Kendal, Cumbria LA9 7RL Tel: 0300 060 3900
English Heritage 3rd floor, Canada House 3 Chepstow Street Manchester. M1 5FW Tel: 0161 242 1400 Fax: 0161 242 1401	Department for Environment, Food & Rural Affairs Nobel House 17 Smith Square London SW1P 3JR Tel: 08459 33 55 77
Health & Safety Executive Redgrave Court Merton Road, Bootle Merseyside L20 7HS Tel: 01519 514 000	Public Health England Regional Office Blenheim House West One, Duncombe Street Leeds LS1 4PL

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Food Standards Agency Foss House, Kings Pool, 1-2 Peasholme Green, York YO1 7PR Contaminated land/ allotments Alan Dowding tel: 020 7276 8736	Cumbria County Council The Courts Carlisle Cumbria CA3 8NA Tel: 01228 606060

Section 11: Appendices

Appendix B

Risk Prioritisation

Outline methodology for prioritisation of sites considered to have the potential to cause contamination

		Remarks
For each site.....	***Action 1:*** ***Determine whether any remediation has occurred on the site and the standard of such: Remedial factor as Table 1***	***The intention here is to lessen the priority ranking of sites that have been subject to remedial action. The factor applied will be relative to the standard of the action. For example, a site that has been remediated to a standard suitable for its current usage may be assigned a factor = 0.1. In this case the factor, when applied to other risk scores will effectively reduce total site score.***
	Action 2: ***Determine the potential of the site to cause contamination: Risk score as Table 2.***	***Each site is ranked with the aim of reflecting the potential significance of the site to be a source of contamination. The greater the potential of the site to cause contamination the higher the risk score.***
	Action 3: ***Determine the proximity of the site to various current land uses: Risk score as Table (3.1+3.2+3.3).***	***The proximity of the site to receptors of varying sensitivity is considered.***
	Action 4: *Determine the proximity of the site to various surface water features: Risk score as Table 4.*	***The closer and more sensitive the receptor to the site the greater the risk score.***
	Action 5: ***Determine the proximity of the site to various groundwater features: Risk score as Table 5***	***A total risk score is determined by summating the risk scores for each receptor at various distances.***
	Action 6: *Calculate* ***Total Site Risk Score*** *=* ***Risk Score (Table 1)* Σ(Risk Score from Table (2.0 + 3.1 + 3.2 + 3.3 + 4.0 + 5.0))***	

PREVIOUS REMEDIAL ACTION

Table 1: Risk associated with previous remedial action

Satisfactory remediation undertaken on site	**0.1**
No information available regarding previous remedial action	**1**

SOURCES OF CONTAMINATION

Table 2a: Potential of site to cause contamination

Industry Category	Industry Sub-Category	Sensitivity	Risk Score
Animal and animal products processing works		Industrial activity that is believed to have the potential to cause significant levels of contamination	**25**
Asbestos			
Ceramics, cement and asphalt manufacturing works	• Asphalt		
Chemical Works	• Coating (paints and printing inks) manufacturing works • Explosives, propellants and pyrotechnics • Fine Chemicals • Inorganic Chemicals • Linoleum, vinyl and bitumen based floor covering • Organic Chemicals • Pesticides • Pharmaceuticals		
Engineering Works	Ordnance		
Gas works, coke works and other coal carbonisation plants			
Metal manufacturing, refining and finishing works	• Electroplating and other metal finishing works • Iron and steelworks • Lead works • Non-ferrous metal works (excluding lead works)		
Oil refineries and bulk storage of crude oil and petroleum products			
Road vehicle fuelling, service and repair	• Filling stations • Filling stations and repair		

Radioactivity [See Sec 5.4.6.]	• Historic industrial use • Sites that may be deemed as a 'special site'.		
Textile works and dye works			
Timber treatment works			
Waste recycling, treatment and disposal sites	• Drum and tank cleaning and recycling plants • Hazardous waste treatment plants • Landfills and other waste treatment or waste disposal sites • Metal recycling sites • Solvent recovery works		

Table 2b (continued): Potential of site to cause contamination

Industry Category	Industry Sub-Category	Sensitivity	Risk Score
Airports		Industrial activity that is believed to have the potential to cause medium levels of contamination	20
Building Materials	• Manufacturing		
Ceramics, cement and asphalt manufacturing works	• Ceramics/ Cement		
Chemical Works	• Cosmetics and toiletries • Disinfectants • Rubber Processing		
Engineering Works	• Electrical and electronic equipment • Mechanical Engineering • Railway • Shipbuilding, repair and shipbreaking		
Metal manufacturing, refining and finishing works	• Precious metal recovery works		
Railway Land			
Pulp and paper manufacturing works			

Road vehicle fuelling, service and repair	• Service and repair		
Haulage/ Distribution Facility	• Railway and Mineral Railway		
Photographic Processing Industry			

Table 2c (continued): Potential of site to cause contamination

Industry Category	Industry Sub-Category	Sensitivity	Risk Score
Building Materials	• Storage	Industrial activity that is believed to have the potential to cause low levels of contamination	15
Chemical Works	• Mastics, sealants, adhesives and roofing • Soap and detergent		
Dockyards and dockland			
Engineering Works	• Aircraft		
Food and drink products	• Manufacture • Preparation		
Power stations (excluding nuclear power stations)			
Sewage works and sewage farms			
Haulage/ Distribution Facility	• Storage and Distribution		
Dry-Cleaners			
Fibreglass and fibreglass resins manufacturing works			
Timber Product Manufacturing Works			
Glass Manufacturing Works			
Printing and Bookbinding Works			
Mining	• Metaliferous • Coal • Other		

Table 2d (continued): Potential of site to cause contamination

Industry Category	Industry Sub-Category	Sensitivity	Risk Score
Chemical Works	• Fertilisers	Industrial activity that is believed to have the potential to cause minimal levels of contamination	10
Food and drink products	• Storage • Distribution		
Charcoal Works			
Reservoirs			
Landform/ Surface Features			

Table 2e (continued): Potential of site to cause contamination

None of the above uses noted – enter a suitable score based upon other research or knowledge about the land-uses on the site.	User defined	Enter
Otherwise, enter: DEFAULT = 15	Default	15

RECEPTORS OF CONTAMINATION

Table 3.1: Current land usage: Onsite	Risk score
Residential development with gardens	190
Allotments	
Residential development without gardens	180
Schools or nurseries	170
Agricultural land	80
Land in amenity use e.g. Parks/Play Grounds	

Commercial or Industrial	**40**
Protected habitats	**25**
Heritage Sites	**10**

Table 3.2: Current land usage: Less than 50m distant from site	Risk score
Residential development with gardens	**90**
Allotments	
Residential development without gardens	**85**
Schools or nurseries	**80**
Agricultural land	**70**
Land in amenity use e.g. Parks/Play Grounds	
Commercial or Industrial	
Protected habitats	**20**
Heritage Sites	**5**

Table 3.3: Current land usage: 50 to 250m distant from site	Risk score
Residential development with gardens	**60**
Allotments	**60**
Residential development without gardens	**57**
Schools or nurseries	**55**
Agricultural land	**50**
Land in amenity use e.g. Parks/Play Grounds	
Commercial or Industrial	
Protected habitats	**10**
Heritage Sites	**1**

Table 4: Surface water features	Risk score
Surface water features on-site	**25**
Surface water features within 10m of the site	**20**
Surface water features within 10 and 100m of the site	**15**
Surface water features within 100 and 500m of the site	**5**

Table 5: Groundwater features	Risk score
Abstractions and related Source Protection Zone (SPZ) I; High risk Major Aquifer	**25**
Abstraction SPZ II (Outer Zone); Medium risk Major Aquifer: High risk Minor aquifer	**20**
Abstraction SPZ III (Total Catchment); Low risk Major Aquifer: Medium risk Minor Aquifer	**15**
Low risk Minor Aquifer	**5**

Section 11: Appendices

APPENDIX C- Land Quality Cost Recovery & Hardship Policy

LAND QUALITY- COST RECOVERY & HARDSHIP POLICY

Part 2A
Environmental Protection Act 1990

- Fairness Tests
- Hardship Tests
- Cost Recovery Options
- Hardship Review Panel

Barrow-in-Furness Borough Council
Public Protection Services
Rev. 3; January 2020

i Glossary

The 'Act'	The Environmental Protection Act, 1990
The 'Regulations'	The Contaminated Land (England) Regulations, 2006
The 'Guidance'	The Contaminated Land Statutory Guidance [Defra, April 2012]
Apportionment	As defined by the Act, means:- Any determination by the enforcing authority under section 78F(7) (that is, a division of the costs of carrying out any remediation action between two or more appropriate persons).
Appropriate Person	As defined by section 78A(9) of the Act, means:- 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.
CLCPP	Contaminated Land Capital Projects Programme
Class A Person	As defined by paragraph 7.3 of the Guidance, is a person who is an appropriate person by virtue of section 78F(2) (that is, because he has caused or knowingly permitted a pollutant to be in, on or under the land).
Class B Person	As defined by paragraph 7.3 of the Guidance, is a person who is an appropriate person by virtue of section 78F(4) or (5) (that is, because he is the owner or occupier of the land in circumstances where no Class A person can be found with respect to a particular remediation action).
Contaminant	As defined by paragraph 6 of the Introduction of the Guidance, is a substance that 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.
Controlled Waters	As defined by section 78A(9) by reference to Part III (section 104) of the Water Resources Act 1991, which includes territorial and coastal waters, inland fresh waters, and ground waters.
Cost Recovery Decision	Any decision by the enforcing authority whether: (i) to recover from the appropriate person all reasonable costs incurred by the authority in carrying out remediation; or (ii) not to recover those costs or to partially recover costs
Enforcing Authority	For land not designated as being a 'Special Site', the enforcing authority within the Borough of Barrow District is Barrow Borough Council . For land designated as being a 'Special Site', the enforcing authority is the Environment Agency.
Exclusion	Any determination by the enforcing authority under section 78F(6) (that is, that a person is to be treated as not being an appropriate person) *Refer to Sections 7(b) and 7(e) of the Guidance*.
Hardship	A factor underlying any cost recovery decision made by an enforcing authority under section 78P(2)
Council	Barrow Borough Council
Orphan Linkage	A significant pollutant linkage for which no appropriate person can be found, or where those who would otherwise be liable are exempted by one of the relevant statutory provisions.
Owner	As defined by section 78A(9) of the Act as being: "a person (other than the mortgagee not in possession) who, whether in his own right or as trustee for any other person, is entitled to receive the rack rent of the land, or where the land is not let at a rack rent, would be so entitled if it were so let."
Part 2A	Means Part 2A of the Environmental Protection Act, 1990
Pathway	As defined by paragraph 3.8 of the Guidance, is a route by which a receptor is or might be affected by a contaminant.
Precautionary Principle	Article 130 of the "Treaty on European Union" places the basis for environmental protection upon the 'Precautionary Principle'. Where, in the absence of firm scientific evidence

	regarding the effects of a particular substance or activity, the protection of the environment should be the first concern. Furthermore, there is no need for scientific proof before preventative action is taken. In summary, the reduction of risks to the environment by taking avoiding action before any serious problem arises.
The Polluter Pays Principle	Article 130 of the "Treaty on European Union" looks to ensure that the costs of environmental damage caused by polluting activities are borne in full by the person responsible for such pollution (the polluter). The principle accepts that (i) the polluter should pay for the administration of the pollution control system, UNLESS they are no longer in business; and (ii) the polluter should pay for the consequences of the pollution (e.g. compensation and remediation).
Receptor	As defined by paragraph 3.8 of the Guidance, is something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property or controlled waters.
Register	The public register maintained by the Authority under section 78R of the Environmental Protection Act, 1990.
Remediation	As defined by section 78A(7) of the Act, means:- (a) The doing of anything for the purpose of assessing the condition of (i) the contaminated land in question; (ii) any controlled waters affected by that land; or (iii) any land adjoining or adjacent to that land; (b) The doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land or waters for the purpose: - (i) of preventing or minimising, or remedying or mitigating the effects of, any significant harm, or any pollution of controlled waters, by reason of
Remediation Action	As defined by paragraph 7.3(c) of the Guidance, any individual thing which is being, or is to be, done by way of remediation
Remediation Package	As defined by paragraph 7.3(c) of the Guidance, is all the remediation actions which relate to a particular linkage.
Remediation Scheme	As defined by paragraph D.5(h) of the Guidance, is the complete set of remediation actions (relating to one or more linkages) to be carried out with respect to the relevant land or waters.
Risk	As defined by paragraph 3.1 of the Guidance, means 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.
Special Site	Land that has been designated as such by virtue of sections 78C(7) and 78D(6) of the Act, and that further defined within regulations (2), (3), and schedule (1) of the Regulations.
Substance	As defined by section 78A(9) of the Act, means any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour.

ii Non-Technical Summary

This policy has been written to set out how the Barrow Borough Council intends to recover the cost of cleaning up or making safe land that has been identified as 'Contaminated Land' under Part 2A..

The council will look to ensure the company or person responsible for the contamination, pays the costs of cleaning up the land under the 'polluter pays principle'. However, in some cases the company has stopped trading or the person has died, and therefore the liability for any remediation may pass to the present owner/occupier of the land. The council has a duty to be reasonable and fair when recovering these costs and this policy sets out how this will be achieved.

If the owner/occupier has an insurance policy in place to cover the costs of any remediation works, then this should be used to cover the costs in the first instance.

The Council can pay for the cost of clean-up works up front (i.e. works in default) and recover costs at a later date. When the Council decides that costs cannot be recovered in full, the council may waiver or reduce the burden proportionately. Any decision would have to be subject to approval from a recommendation from a 'Hardship Assessment Panel' and senior management.

In line with the statutory guidance on contaminated land the council will apply the following tests when recovering costs:

(1) Reasonable and Fairness Tests

(i) For any person(s) who bought land/property before January 2003 it will be considered unfair for the cost of any necessary clean up works to be recovered from this party.

(ii) For any person(s) who bought land/property after January 2003 it will be considered unfair for the cost of any necessary clean up works to be recovered from this party providing they didn't ignore any advice/information from the conveyancing solicitor on contaminated land and/or negotiated a reduction in the sale price of the land/property due to potential contamination issues.

(2) Hardship Test

Any person(s) who does not meet the criteria set in (1)(ii) above can apply for 'hardship' if costs are to be recovered. Hardship is considered to mean hardness of fate or circumstance or severe

suffering. The council will assess all such applications in line with this policy, and decide whether the costs should be waived or reduced.

If, as a result of applying these tests, a decision by the Council is made to waiver or reduce the recovery of any costs, dependent upon a specific case and circumstances, the council may consider whether it could recover more of the costs by deferring recovery and securing them by a charge on the land in question.

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Section 1: Introduction

1.0 Introduction

Under Part 2A of the Environmental Protection Act 1990; local authorities have a duty to inspect and identify 'Contaminated Land' within their authority. This process will follow an-adopted 'Land Quality Inspection Strategy'. When land has been formally determined, the authority has a duty to serve a remediation notice on the appropriate person(s) specifying what they are to do by way of remediation.

As part of this process, statutory guidance requires local authorities to adopt a formal 'Cost Recovery and Hardship Policy'.

This 'Statement of Policy' sets out Barrow Borough Council's (hereafter referred to as the "Council") position in regards to the possibility of it waiving or reducing the costs associated with the remediation of contaminated land and provides a framework for the council to apply when recovering costs for remediation. The 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 the council makes in future.

This policy is based on the relevant sections of the primary legislation, regulations and associated statutory guidance. However, it is recognised that there is likely to be a wide variation in the circumstances associated with potentially contaminated land (including its history, ownership and liability for its remediation). Therefore, this policy statement defines how these principles and approaches will be interpreted and ultimately applied by the council.

Section 2: Purpose

2.0 Purpose

- To clearly set out the council's policy on the recovery of costs and consideration of hardship.
- To provide a consistent and transparent approach to the recovery of costs from persons who have to meet the cost of remediation including national taxpayers that is both fair and equitable
- The policy should be in accordance with the relevant acts, regulations and guidance set out in section 4.
- To ensure, wherever possible, that the cost of remediation is borne by the original polluter or knowing permitter (Class A persons) under the "polluter pays" principle.

Section 3: Application

3.0 Application

In general it is the council's intention, where appropriate person(s) have either:

(a) satisfied the 'reasonable and fairness tests' for reducing or waiving cost recovery as detailed in this policy; or

(b) satisfied the 'financial test of hardship' as detailed in this policy;

3.1 The policy applies to any remedial action(s), both retrospective and proposed, for the purposes of remediating "Contaminated Land". The policy applies to the following parties (not exhaustive):

(a) Owner/Occupiers of residential properties – both freehold and leasehold

(b) Owners of land

(c) Commercial enterprises

(d) Charities

(e) Trusts

(f) Registered Social Housing Landlords

3.2 The policy applies to person(s) who have originally caused or knowingly permitted the pollution ("the polluter", Class A persons) and current owners of the land (Class B persons) who were not responsible for the pollution.

3.3 Class B parties are only liable for remediation of contamination within the boundaries of their property and cannot be held liable for any pollution of controlled waters.

3.4 Responsibility for cleaning up 'Contaminated Land' will only fall on the council when no liable parties can be found for the site in question; so termed "orphan sites" (this is only the case when the council is not regarded as a potential Class A or B party).

3.5 The guidance or this policy places no requirement on the council to pay for remediation for which it is not itself liable, only to consider reducing or waiving cost recovery.

Section 4: Legislation Review

4.0 Legislative Review

4.1 Primary Legislation

Part 2A (Section 78) of the Environmental Protection Act 1990 (as inserted by Section 57 of the Environment Act 1995) introduced a duty for all authorities to identify and remediate land where contamination is causing unacceptable risks to human health or the wider environment.

4.1.1 Relevant Sections

Section 78P(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)…"*

Section 78P(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."*

4.1.2 Further Legislative Reading

Please refer to the following website address for the entire Acts:

The Environmental Protection Act 1990

http://www.legislation.gov.uk/ukpga/1990/43/part/IIA

4.2 Statutory Regulations

Section 4: Legislation Review

The Contaminated Land (England) Regulations (2006) as amended (2012) set out provisions relating to the identification and remediation of contaminated land under Part 2A of the Environmental Protection Act 1990 ("the 1990 Act").

4.2.1 Grounds of Appeal against a Remediation Notice

7. *— (1) The grounds of appeal against a remediation notice under section 78L(1) are any of the following—*

> ***(n)*** *that the enforcing authority, in considering for the purposes of section 78N(3)(e) whether it would seek to recover all or a portion of the cost incurred by it in doing some particular thing by way of remediation—*
>
> > ***(i)*** *failed to have regard to any hardship which the recovery may cause to the person from whom the cost is recoverable or to any guidance issued by the Secretary of State for the purposes of section 78P(2); or*
> >
> > ***(ii)*** *whether by reason of such a failure or otherwise, unreasonably determined that it would decide to seek to recover all of the cost;*
> >
> > *Note: (a-m) & (o-s) – These clauses are not relevant to cost recovery or hardship*

4.2.2 Further Legislative Reading

Please refer to the following website address for the complete regulations:

http://www.legislation.gov.uk/uksi/2012/263/made

4.3 Statutory Guidance

Defra Contaminated Land Statutory Guidance is regulatory guidance that came into force on the 6th April 2012 and replaced the previous statutory guidance which came into force in 2006.

4.3.1 Relevant Sections

> ***7.26*** *The financial circumstances of those concerned should have no bearing on the application of the procedures for exclusion, apportionment and attribution in this Chapter, except where the circumstances in paragraph 7.74 below apply (the financial circumstances of those concerned are taken into account in the separate*

consideration under section 78P(2) on hardship and cost recovery). In particular, it should be irrelevant in the context of decisions on exclusion and apportionment: (a) whether those concerned would benefit from any limitation on the recovery of costs under the provisions on hardship and cost recovery in section 78P(2); or (b) whether those concerned would benefit from any insurance or other means of transferring their responsibilities to another person.

8.3 *This Section also explains when the enforcing authority is prevented from serving a remediation notice under section 78H(5), under which the authority may not serve a remediation notice if the authority has the power to carry out remediation itself, by virtue of section 78N. Under that latter section, the authority asks the hypothetical question of whether it would seek to recover all of the reasonable costs it would incur if it carried out the remediation itself. The authority then has the power to carry out that remediation itself if it concludes that, having regard to hardship and the guidance in this Chapter, it would either not seek to recover its costs, or seek to recover only a part of its costs. The relevant sections of the 1990 Act are:*

• Section 78H(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 78 below to do what is appropriate by way of remediation are exercisable..."

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

"**(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… 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;…"

8.6 *In general the enforcing authority should seek to recover all of its reasonable costs. However, the authority should waive or reduce the recovery of costs to the extent that it considers this appropriate and reasonable, either: (i) to avoid any undue hardship which the recovery may cause to the appropriate person; or (ii) to*

reflect one or more of the specific considerations set out in the statutory guidance in sub-sections 8(b), 8(c) and 8(d) below. In making such decisions, the authority should bear in mind that recovery is not necessarily an "all or nothing" matter (i.e. where reasonable, appropriate persons can be made to pay part of the authority's costs even if they cannot reasonably be made to pay all of the costs).

***8.12** Paragraphs 8.13 – 8.22 below set out considerations to which the enforcing authority should have regard when making any cost recovery decisions, irrespective of whether the appropriate person is a Class A person or a Class B person. They apply in addition to the general issue of the "hardship" which the cost recovery may cause to the appropriate person.*

4.3.2 Further Legislative Reading

Please refer to the following website address for the complete statutory guidance document:
https://www.gov.uk/government/publications/contaminated-land-statutory-guidance

Section 5: The Policy

5.0 The Policy

5.1 Underlying Principles

There is a lack of 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 the council is likely to consider waiving or reducing the amount of costs it would seek to recover.

The recovery of costs incurred by the council for remediation works shall:

1. Wherever possible, apply the "polluter pays" principle, whereby the costs of remediating pollution are borne by the polluter.
2. Be recovered in full where reasonable

3. 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.

4. Have due consideration to hardship where the decision to waive or reduce costs to the appropriate person(s) will be to the extent needed to ensure that the appropriate person(s) in question bears no more of the cost of remediation than it appears reasonable to impose.

5. Not normally consider waiving or reducing cost recovery from Class A appropriate person(s)

6. Be in accordance with all relevant acts, regulation and guidance.

7. Where the recoveries of costs are undertaken the council shall provide suitable opportunities for the appropriate person to provide evidence for their need for financial support. The appropriate person(s) shall be responsible for providing the council with sufficient evidence to support a claim for financial support.

5.2 Payment of the Councils Costs

In each case where the council has used public funds to remediate land in its area, a decision will be taken by the 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.

The council will also consider how payment to the council should be made. This could for example take the form of payment within a fixed period of the full amount, payment by instalment or by attaching a charge to the property so that it is recovered when the property is first sold. In the latter case, the 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.

5.2 Assessment Criteria

Decisions relating to the recovery of costs for remediation will have regard to the following:

1. The estimated cost of remediation in relation to the value of land

2. The estimated cost of remediation in relation to the income, capital and outgoings of an appropriate person(s).

3. Whether at the time the land was acquired reasonable precautions were taken by the purchaser to ensure that the land was not likely to be blighted by contamination.

4. The burden on local/national taxpayers.

5. The estimated cost of remediation in relation to the solvency of a business and the associated effect on the local community and economy should a business be rendered insolvent as a result of recovering costs for remediation.

5.3 Hardship Assessment Panel

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

The Hardship Panel will consist of:

- Contaminated Land Officer (Geoff Dowker)
- Housing Grants Officer (Kay Rawlinson)
- Public Protection Manager (Graham Barker)
- Finance Department Officer (Chris Butler)
- Senior Management
- [On Occasion] Ward Councillors

In addition to the above Ward members may also make representations. The panel can receive technical support and advice from the Environmental Protection Team, wider Council departments [including the management board] and external consultants where appropriate.

The panel will agree on the information required in order to assess the hardship of the responsible person(s). The Hardship Panel will have regard to the following before making a decision:

- the guidance in this Policy and the Contaminated Land Revised Statutory Guidance (April 2012)
- the report of the officer in the Environmental Protection Team
- any representations from the persons concerns
- any reports of experts
- any representation from the relevant 'ward' members

5.3.1 Information for Making Decisions

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 the council.

When making decisions on cost recovery, the council should consider all relevant information provided by appropriate person(s). In addition the 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.

Below is a non-exhaustive list of examples of information the council may ask for:

- The value of the land on the open market (the 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 the 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

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 within 1 week of the decision being made.

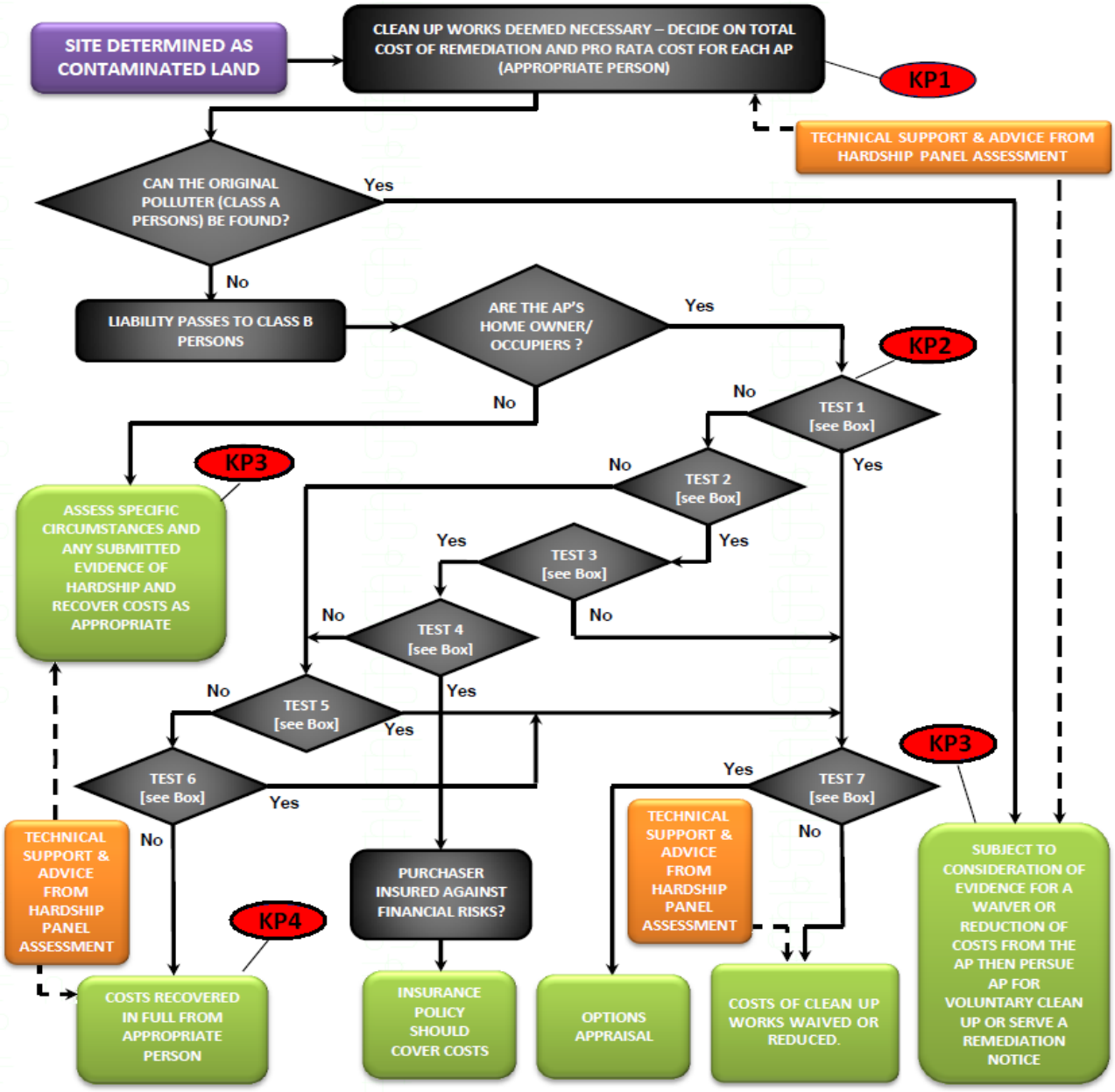
5.4 The Appeals Panel

While every decision is based on information provided, the council will attempt to be transparent and fair in its approach, but it recognises that certain decisions may not be welcome; therefore if the appropriate person(s) is aggrieved by the decision of the panel the person(s) concerned may appeal that decision by informing the council in writing within 21 days of the date of the decision document. An appeals panel will form and consider the appeal and may confirm, vary or quash the original decision. As well as presenting any original information the appellant(s) is entitled to present relevant new information to the panel. The appeals panel will be made up of different members from the original panel and members of the authority's Full Council Executive Committee.

Section 6: The Procedure

6.0 The Procedure

6.1 Procedural Flow Chart



6.2 Establishing Reasonable Costs in Carrying Out Remediation Works (KP1)

The main purpose of this is to establish the pro rata cost of the remediation works for each appropriate person to enable TESTS 5, 6 & 7 to be applied for all appropriate person(s)

Basic remedial options appraisal will be undertaken by the council as detailed in 'Contaminated Land Report 11' [2004]: Model Procedures for the Management of Land Contamination. (Under review 2020)

The council will ensure that the following is carried out:

(a) Identification of a minimum of three feasible remedial options for any necessary remediation works; and

(b) Evaluation of a minimum of two feasible remedial options for any necessary remediation works sufficient to obtain a budget estimate for the cost of remediation; and

(c) Selection of one remedial option proposed for implementation on the site to refine costs and finalise a budget; and

(d) Utilise at least one environmental consultant to propose and estimate remediation costs.

The output of the above should be an outline remediation cost for the project. This cost should be broken down to the individual pro rata for each appropriate person(s). Costs should be fairly distributed across the liability group i.e. for a residential scenario this could be based on the area of land being determined (for example three gardens where two are $100m^2$ and one is $200m^2$ the costs would be apportioned as 25% of costs for the two $100m^2$ gardens and 50% of costs for the $200m^2$ garden)

6.3 Individual Home/Land Owner/Occupiers(s) – Class B Appropriate Person(s) (KP2)

The council will consider waiving or reducing the recovery of costs incurred where the appropriate person(s) meets one of the TESTS 1 – 4 (Reasonable & Fairness Tests) and/or TEST 5 & 6 (Financial Hardship Tests) and/or TEST 7 (Burden on Taxpayers Test).

6.3.1 Test 1- Land/ property Bought Prior to January 2003

An acquisition of land/property made prior to publication of the Contaminated Land Strategy (January 2003) will not be required to be accompanied by evidence of reasonable precautions for contaminated land. This is because prior to its publication it could be reasonably argued that enquiries made to the council about contaminated land issues would not have been dealt with in

the same manner as such enquiries made after this publication date. In addition it is deemed unfair that a lay person buying a property should have reasonably been expected to enquire about contaminated land and subsequently deal with any associated risks before the council has published its own strategy to deal with contaminated land.

6.3.2 Test 2 – Reasonable Precautions Taken

Steps were taken prior to acquiring the land as would have been reasonable at that time to establish the presence of any pollutants. This would normally involve the commission of a conveyancing company to obtain the necessary searches which should have included the previous uses of the land that may be potentially contaminative. The land owner/occupiers(s) should not have been aware of any previous industrial uses that may have caused contamination at the time they purchased the property or land. Conveyancing companies should have been aware of the issues relating to contaminated land liabilities after the issue of a Law Society Warning Card on the matter on the 1st June 2001. Owner/occupier(s) are not considered responsible for the conveyancing company being negligent in so far as not commissioning such an environmental search after this date.

6.3.3 Test 3 – Contaminative Past Use Identified

An environmental search undertaken as part of TEST 2 should have identified whether or not the land/property in question was likely to be affected by contamination due to historic industrial land use(s). These searches normally issue a pass/fail certificate to the purchaser depending on the outcome of the search, i.e. Landmark or Enviro-check. The purchaser may also have undertaken a search direct with the council (Environmental Information Request), which would also have to be assessed in a similar manner and would normally include an indication of previous uses, potential for contamination and a level of risk.

This information would normally be included in the property deeds which would need to be provided.

6.3.4 Test 4 – Information Acted Upon by the Purchaser

Where initial enquiries raise a potential concern, further appropriate research should be shown to have been undertaken i.e. discussions with the council responsible officer or team dealing with contaminated land; obtaining suitable insurance to indemnify themselves against the financial risks

of any future action under Part 2A of the EPA 1990. The information from the research should not have been disregarded.

6.3.5 Test 5 – Financial Hardship

It is proved that the appropriate person(s) would suffer financial hardship by:

(a) Making an assessment of the financial resources of the appropriate person(s) by employing an appropriate 'Means Tested' methodology. This means test is similar to that used in the assessment for Housing Renewal Grants. The council will provide the appropriate person(s) with a copy of the Means Test form along with a covering letter sufficient to explain the purpose of the test and what the council will do with the information provided.
The council will input the information provided into the approved 'means test' computer software assessment or other alternative paper based system.

(b) The result of the assessment will determine whether the appropriate person has sufficient financial resources in order to fund the identified pro rata cost of the proposed remediation works. No upper limit has been set for this exercise because of the potential relatively high costs associated with remediation work.

(c) The Council will be responsible for communicating the result of this assessment to the appropriate person(s). There shall be no appeal mechanism against the findings of the Means Test unless it can be demonstrated that:

(i) The information submitted for assessment was erroneous; or

(ii) The circumstances of the appropriate person have substantially changed between the time of the selection of the remediation methodology and completion of the works in a way that would require a re-test.

6.3.6 Test 6 – Land Value

Where it is conceivable that the cost of remediation may exceed the property, land or business value (value based on post remedial value with no perceived/actual blight from contamination

issues) the council will request the appropriate person to obtain an independent valuation of the land, property or business from an appropriately accredited professional.

If there is any doubt over the validity of the submitted valuation the council retains the right at its own expense to obtain a separate independent valuation of the land/property.
In general, the extent of the waiver or reduction in costs 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, the council will 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.

6.3.7 Test 7 – Burden on National Taxpayers

A decision will have to be made to establish whether undue financial burden would be placed on national taxpayers where cost recovery is waived or reduced. The hardship panel will be responsible for establishing this and making a recommendation to the councils executive director.

6.3.8 Additional Considerations

(a) Where the contaminated land in question extends beyond the dwelling and its curtilage, and is not owned and occupied by the same appropriate person(s) the above principles will be applied to the dwelling and its curtilage only.

(b) Where the appropriate person(s) has inherited the dwelling or received it as a gift the above principles will be applied to the time at which the person(s) received the property or land.

6.4 Non Residential Class A and Class B Person(s) (KP3)

6.4.1 Commercial Enterprises[2]

The council will normally seek to recover in full any reasonable costs incurred where:

(a) It is clear that an enterprise has deliberately arranged matters to as to avoid responsibility for the cost of remediation.

[2] Commercial enterprises are considered to be public corporations, limited companies (whether public or private), partnerships (whether limited or not) or an individual operating as a sole trader.

(b) It appears that the enterprise would become insolvent whether or not recovery of the full cost takes place; or

(c) It appears that the enterprise could be kept in, or returned to business even if it does become insolvent under its current ownership.

The council may choose to take account of such adopted policies relating to the economic prosperity / development of the district when determining cost recovery decisions.

In case of small or medium sized enterprises[3] the Council will consider:

(a) Whether recovery of the full cost attributable to the appropriate person(s) would mean that the enterprise is likely to become insolvent and thus cease to exist; and

(b) If so, the cost to the community of such a closure.

Where the cost of remediation would force an enterprise to become bankrupt or insolvent, the council will consider waiving or reducing its costs recovery to the extent needed to avoid making the enterprise insolvent.

The above will be determined in consultation with legal and accountancy departments as business accounts would have to be submitted for assessment by the council. This would normally include a financial assessment by an independent financial assessor.

Any shortfall in funding from any such waiver or reduction in cost recovery action may instigate the council to review or undertake an appraisal of options available at that particular time. This is likely to included determination of the land as 'Contaminated Land' and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated i.e. through its redevelopment.

6.4.2 Trusts

Where the appropriate persons include persons acting as trustees, the council will assume that such trustees will exercise all powers which they have, or may reasonably obtain, to make funds

[3] For these purposes, a "small or medium-sized enterprise" is as defined as an independent enterprise with fewer than 250 employees, and either an annual turnover not exceeding €50 million, or an annual balance sheet total not exceeding €43 million. Source: Defra Contaminated Land Statutory Guidance [April 2012].

available from the trust, or from borrowing that can be made on behalf of the trust, for the purpose of paying for the remediation. The council will, nevertheless, consider waiving or reducing its costs recovery to the extent that the costs of remediation to be recovered from the trustees would not exceed the amount that can be made available from the trust to cover these costs.

However, the council will not waive or reduce its costs recovery:

(a) Where it is clear that the trust was formed for the purpose of avoiding paying the costs of remediation; or

(b) To the extent that trustees have personally benefited, or will personally benefit from the trust.

Any shortfall in funding from any such waiver or reduction in cost recovery action may instigate the council to review or undertake an appraisal of options available at that particular time. This is likely to included determination of the land as 'Contaminated Land' and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated, i.e. through its redevelopment (National Planning Policy Framework).

6.4.3 Charities

The council will consider the extent to which any recovery of costs from a charity would jeopardise that charity's ability to continue to provide a benefit or amenity, which is in the public interest.

Where this is the case, the council will consider waiving or reducing its costs recovery to the extent needed to avoid such a consequence. This approach applies equally to charitable trusts and to charitable companies.

Any shortfall in funding from any such waiver or reduction in cost recovery action may instigate the council to review or undertake an appraisal of options available at that particular time. This is likely to included determination of the land as 'Contaminated Land' and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated, i.e. through its redevelopment (National Planning Policy Framework).

6.4.4 Registered Social Landlords

The council will consider waiving or reducing its costs recovery if:

(a) 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);

(b) Its liability relates to land used for social housing, and

(c) Full recovery would lead to financial difficulties for the appropriate person(s), such that the provision or upkeep of the social housing would be jeopardised.

Any shortfall in funding from any such waiver or reduction in cost recovery action may instigate the council to review or undertake an appraisal of options available at that particular time. This is likely to included determination of the land as 'Contaminated Land' and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated, i.e. through its redevelopment (National Planning Policy Framework).

6.4.5 Where Other Potentially Appropriate Person(s) Have Not Been Found

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 pollutant in question, but who cannot now be found for the purposes of treating the person(s) as an appropriate person. For example, this may apply where a company has been dissolved.

The council will consider waiving or reducing its costs recovery from a Class A person if that person demonstrates to the satisfaction of the council that:

(a) Another identified person, who cannot now be found, also caused or knowingly permitted the significant pollutant to be in, on or under the land: and

(b) If that other person could be found, the Class A person seeking the waiver or reduction of the

council's costs recovery would either:

(i) Be excluded from liability by virtue of one or more of the exclusion tests set out in Defra Circular 01/2006, or

(ii) The proportion of the cost of remediation of which the appropriate person has to bear would have been significantly less, by virtue of the guidance on apportionment set out in Defra Circular 01/2006.

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

Any shortfall in funding from any such waiver or reduction in cost recovery action may instigate the council to review or undertake an appraisal of options available at that particular time. This is likely to included determination of the land as 'Contaminated Land' and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated, i.e. through its redevelopment (National Planning Policy Framework).

6.5 Cost Recovery (KP4)

The council will seek to recover costs either in full or in part in line with the outcome of the hardship and fairness tests detailed in KP1 to KP3.

When the council either does not serve a remediation notice or where a remediation notice has been served and not complied with the council could bear the costs (where external funding can't be found). The council is entitled[4] to recover 'reasonable' costs where it has carried out remediation works.

[4] The council is unable to recover costs associated with the investigation of a site.

6.5.1 Cost Recovery Options

1. Agreement between the land owner/liable person(s) and the council for placing a charge on the property/land either on the contaminated land on any other associated asset

2. The council places a charge on the property without any agreement with the land owner/liable person(s)

3. Agreement between the land owner/liable person(s) and the council to release equity of property/land

4. Land owner/liable person(s) provide the council with sufficient funds to cover the cost of the works

5. The council seeks to recover the costs through the courts.

Section 7: Contacts

7.0 Contacts

Contact	Email	Telephone
Contaminated Land Officer	gdowker@barrowbc.gov.uk	01229 876366
Public Protection Services	envhealth@barrowbc.gov.uk	01229 876543
Freedom of Information	foi@barrowbc.gov.uk	N/A
Environmental Information Requests	eir@barrowbc.gov.uk	N/A
Housing Grants Officer	kfrawlinson@barrowbc.gov.uk	01229 876381
Environmental Protection	environment@barrowbc.gov.uk	01229 876543

7.1 Further Reading

Barrow Borough Councils Environmental Protection Page

http://www.barrowbc.gov.uk/residents/environmental-health/environmental-protection/

Barrow Borough Councils Contaminated Land Page

http://www.barrowbc.gov.uk/residents/environmental-health/environmental-protection/contaminated-land/

Contaminated Land Statutory Guidance 2012

https://www.gov.uk/government/publications/contaminated-land-statutory-guidance

Section 11: Appendices

APPENDIX D- Developers Guide 2013

Section 11: Appendices

APPENDIX E

Public Register Template

Barrow Borough Council Part 2A EPA 1990 Contaminated Land Register

• Local Authority Unique Reference Number
• Grid Reference of the Site
• Location/ Address of the Site and Extent of Land - see also attached map
• Historical Usage of the Site
• Date of Designation
Remediation Notice
• The name and address of the person(s) on whom the notice is served
• The significant harm or pollution of controlled waters by reason of which the land in question is designated Contaminated Land
• The substances that are in, on or under the ground that deem the land in question 'Contaminated Land'

• The current use of the land
• The details of what each appropriate person is required to do by way of remediation and the time scales allowed for these
• The date of the notice
Site Investigation Reports
• Brief description of information
• Date Prepared
• Person by whom it was prepared and for whom
Appeals against remediation notice
• Details of any appeals against remediation notices and any decisions on appeals
Remediation Declarations
• Details of any remediation declarations made by the Enforcing Authority under Section 78H(6) EPA 1990

Section 11: Appendices

Remediation Statements
• Details of Remediation Statements prepared by the responsible person, undertaking voluntary works, under Section 78H(7) or by the Enforcing Authority under Section 78H(9) EPA 1990.
Appeals against Charging Notices
• Details of any charging notice appeals under Section 78P(8) EPA 1990 and decisions on such appeals
• **Notification of claimed remediation** (In the case of claimed remediation section 78R(3) makes it clear that in no way does it represent any endorsement or confirmation by the Authority maintaining the register that the remediation measures have been carried out nor, therefore, that the land is no longer Contaminated Land.)
Designation of Special Sites
• Details of any notice given which designates the land as a special site

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• Identification of the description of land under which it is a special site
• Notice given by the appropriate agency of its decision to adopt a remediation notice
• Any notice given by the enforcing Authority under section 78Q(4) terminating the designation
Details of Environment Agency site specific guidance issued under Section 78V(1) EPA 1990
Convictions for offences under Section 78M EPA 1990
• Specifically in relation to a remediation notice served by the Authority including the name of the offender, date of conviction, penalty imposed and the name of the court
Details of land designated as Contaminated Land but dealt with under other environmental controls e.g. section 27 Part I EPA 1990 (IPC) and Section 59 Part II EPA 1990 (Waste Management Licensing)

Section 11: Appendices

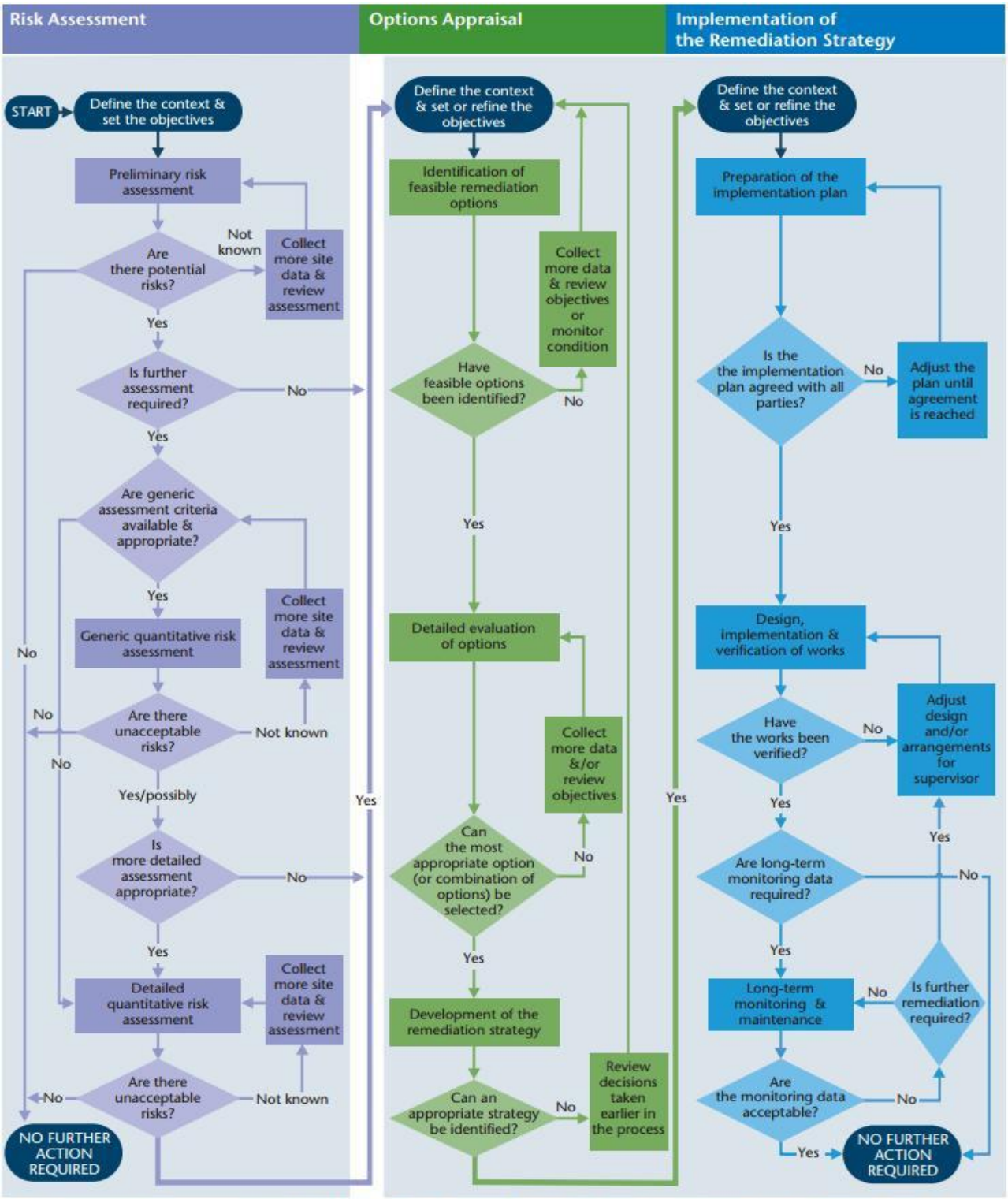
Details of remediation which cannot be specified in a remediation notice as it would interfere with a discharge into controlled waters for which consent has been given under Chapter II of Part III of the Water Resources Act 1991

Reference : Regulations EPA 1990, s. 78R (1), CL (E)R 2000 reg. 15 sch.3, DETR Circular Annex 4

Section 11: Appendices

APPENDIX F

CLR11 Process for the Determination, Assessment & Management of Contaminated Land



Note: The process may apply to one or more pollutant linkages each of which may follow a different route. For some linkages, it may be possible to stop at an early stage – others will progress all the way through the process. The level of complexity of each stage may also vary and in some cases may be very simple.