

# ENVIRONMENTAL PROTECTION ACT 1990 PART 2A CONTAMINATED LAND STRATEGY 2014



**Test Results** Client/client ref: Newcastle-und Site ref: Date: 18-Feb-2014  
Project ref: Data description: User details: Hal Sambrooke

<b>Dataset:</b> Cadmium	<b>Use Normal distribution to test fit</b>	<b>Outliers &amp; non-detects</b>
Sample mean, $\bar{x}$ : 13.813		Outliers present? <b>NO</b>
Sample standard deviation, s: 8.9979		Significance level: 5%
Sample size, n: 16		Outliers removed? 0
Critical concentration, Cc: 10		Non-detects: 0

<b>Normality test</b>	<b>Test scenario:</b> Part 2A: is true mean higher than critical concentration ( $\mu > C_c$ )
Significance level: 5%	Null hypothesis: The true mean concentration is equal to or less than the critical concentration: $\mu \leq C_c$
Normal distribution	Alternative hypothesis: The true mean concentration is greater than the critical concentration: $\mu > C_c$
Change: Chebychev	
	<b>Evidence against Null hypothesis:</b> upper bound <b>94%</b> lower bound <b>74%</b>
	Base decision on: upper bound
	Evidence level required: <b>95%</b>
	Balance of probability? 51%
	Reject Null Hypothesis? Yes, on balance
	<b><math>\mu &gt; C_c</math> (balance of probability)</b>

# Contaminated Land Strategy 2014

ISSUED BY:



NEWCASTLE UNDER LYME BOROUGH COUNCIL  
ENVIRONMENTAL PROTECTION  
CIVIC OFFICES  
MERRIAL STREET  
NEWCASTLE UNDER LYME  
STAFFORDSHIRE  
ST5 2AG

TEL: +44 (0) 1782 717717  
WWW.NEWCASTLE-STAFFS.GOV.UK

PROJECT REF:

TITLE: CONTAMINATED LAND STRATEGY 2014

STATUS: THIRD EDITION

ISSUE DATE: JUNE 2014

Prepared by	Hal Sambrooke B.Sc (hons), Pg.C, M.Sc, AIEMA Technical Assistant	
Checked by	Darren Walters B.Sc (hons), MCIEH Team Leader	
Authorised by		

Version	Date	Revision Detail	Initial
1	2002	First Edition	
2	2007	Second Edition	BS
3	2014	Third Edition	HS

## CONTENTS

<b>1</b>	<b>INTRODUCTION AND LEGISLATIVE CONTEXT .....</b>	<b>1</b>
1.1	BACKGROUND TO THE LEGISLATION .....	1
1.2	TERMINOLOGY .....	3
1.3	RELEVANT LEGISLATION .....	3
1.3.1	Environmental Protection Act 1990 Part 2A.....	4
1.3.2	Town and Country Planning Acts.....	6
1.3.3	The Environmental Damage (Prevention and Remediation) Regulations 2009.....	6
1.3.4	Environmental Permitting Regulations 2007 .....	7
1.3.5	Water Resource Act 1991 .....	7
<b>2</b>	<b>POLICY CONTEXT .....</b>	<b>8</b>
2.1	GOVERNMENT POLICY .....	8
2.1.1	Contaminated Land Statutory Guidance .....	8
2.1.2	National Planning Policy Framework .....	9
2.2	ENVIRONMENT AGENCY POLICY .....	9
2.2.1	River Basin Management Plans.....	9
2.3	STAFFORDSHIRE COUNTY COUNCIL POLICY.....	10
2.3.1	The Minerals Local Plan 1994 – 2006.....	10
2.4	NEWCASTLE-UNDER-LYME BOROUGH COUNCIL POLICY .....	11
2.4.1	Newcastle-under-Lyme and Stoke-on-Trent Core Spatial Strategy 2006 – 2026.....	11
2.4.2	Newcastle-under-Lyme Local Plan 2011 .....	11
<b>3</b>	<b>STRATEGY OUTLINE .....</b>	<b>13</b>
3.1	ROLES AND RESPONSIBILITIES .....	13
3.1.1	Newcastle-under-Lyme Borough Council.....	13
3.1.2	The Environment Agency .....	13
3.1.3	Other Agencies.....	13
3.2	AIMS AND OBJECTIVES .....	14
3.3	PRIORITIES .....	14
3.4	ADDRESSING CONTAMINATION .....	15
<b>4</b>	<b>THE BOROUGH OF NEWCASTLE-UNDER-LYME.....</b>	<b>16</b>
4.1	GENERAL CHARACTERISTICS .....	16
4.2	HISTORY AND INDUSTRIAL LEGACY.....	17
4.2.1	Mining .....	17
4.2.2	Iron Refining .....	18
4.2.3	Felt Hat Manufacturing .....	19
4.2.4	Clay Tobacco Pipe Manufacturing .....	19
4.2.5	Silk Throwing.....	19
4.2.6	Tile and Brick Manufacturing.....	20
4.2.7	Pottery .....	21
4.2.8	Other Industries.....	21
4.2.9	World War 2 .....	22
4.2.10	Transport.....	22
4.2.11	Redevelopment History .....	23
4.3	GEOLOGY .....	23
4.3.1	Solid Geology .....	23
4.3.2	Superficial Geology .....	24
4.3.3	Made Ground .....	25
4.4	WATER RESOURCES.....	25
4.4.1	Hydrogeology .....	25
4.4.2	Hydrology .....	26
4.5	ECOLOGY.....	26
4.5.1	Sites of Special Scientific Interest .....	26
4.5.2	Local Nature Reserves.....	26

<b>5</b>	<b>STRATEGIC INSPECTION .....</b>	<b>28</b>
5.1	STATUTORY GUIDANCE.....	28
5.2	DATA COLLECTION .....	28
5.3	DATA PROCESSING – INITIAL PRIORITISATION .....	30
5.4	DESK STUDIES .....	31
5.5	POWERS OF ENTRY .....	32
5.6	SECONDARY PRIORITISATION.....	32
<b>6</b>	<b>DETAILED INSPECTION .....</b>	<b>33</b>
6.1	OBTAINING FURTHER INFORMATION .....	33
6.2	REQUEST FOR FURTHER INFORMATION FROM RELEVANT PARTIES.....	33
6.3	INTRUSIVE SITE INVESTIGATIONS.....	33
6.3.1	General Approach .....	33
6.3.2	Voluntary Provision of Information .....	33
6.3.3	Potential Special Sites.....	34
6.3.4	Council Inspections of Land .....	34
<b>7</b>	<b>RISK ASSESSMENT.....</b>	<b>35</b>
7.1	GROUNDS FOR DETERMINATION.....	35
7.2	EVALUATION OF RISK.....	35
7.2.1	Current Use .....	35
7.2.2	Contaminant Linkage .....	36
7.2.3	Risk Assessment.....	36
7.2.4	External Expertise .....	37
7.2.5	Normal Presence of Contaminants .....	37
7.2.6	Risk Assessment Methodology .....	37
7.2.7	Categorisation of Risk .....	39
<b>8</b>	<b>DETERMINATION OF CONTAMINATED LAND .....</b>	<b>42</b>
8.1	PRE-DETERMINATION .....	42
8.1.1	Notification of Decisions – Non Contaminated Land.....	42
8.1.2	Notification of Decisions – Contaminated Land .....	42
8.1.3	Risk Summary .....	42
8.1.4	Physical Extent of Land to be Determined.....	43
8.1.5	Voluntary Remediation .....	43
8.2	DETERMINATION.....	43
8.2.1	Public Register .....	43
8.2.2	Special Sites.....	43
<b>9</b>	<b>REMEDIATION.....</b>	<b>44</b>
9.1	OUTLINE .....	44
9.2	REMEDIATION WORKS .....	44
9.2.1	Remediation Aims .....	44
9.2.2	Remediation Standards and Reasonableness.....	45
<b>10</b>	<b>LIABILITY AND COSTS .....</b>	<b>46</b>
10.1	IDENTIFICATION OF LIABLE PERSONS.....	46
10.2	REMEDIATION.....	46
10.3	ATTRIBUTING LIABILITY .....	47
10.3.1	Class A Persons .....	47
10.3.2	Class B Persons .....	47
10.4	RECOVERY OF COSTS .....	48
10.4.1	Cost Recovery Decisions.....	48
<b>11</b>	<b>MISCELLANEOUS PROVISIONS .....</b>	<b>49</b>
11.1	FUNDING FOR CONTAMINATED LAND STRATEGY .....	49
11.2	PROGRESS ON STRATEGY .....	49
11.3	COUNCIL OWNED LAND .....	49
11.4	GUIDANCE FOR DEVELOPMENT .....	49
11.5	PROVISION OF ENVIRONMENTAL INFORMATION .....	50
<b>APPENDIX 1 - PRIORITISATION FLOW CHART</b>		
<b>APPENDIX 2 - LEGAL DEFINITION OF SPECIAL SITE</b>		
<b>APPENDIX 3 - PUBLIC REGISTER OF INFORMATION</b>		

# 1 INTRODUCTION AND LEGISLATIVE CONTEXT

## 1.1 BACKGROUND TO THE LEGISLATION

The UK has a strong industrial heritage, having led the Industrial Revolution from the mid-18<sup>th</sup> Century onwards. Newcastle-under-Lyme Borough Council was not left behind in the rapidly developing industrial economy of the UK. However, the economy developed with little regard for the environment; air, water and land pollution was barely considered in the drive to increase industrial output. This continued until the mid-1970s, when legislation to protect the environment began to emerge.

Modern industry, of course, is now regulated much more stringently on environmental matters such as pollution and carbon emissions; however, an unwelcome legacy from the Industrial Revolution remains, with many redundant factories, landfills and other sites, and their environmental impacts, still to be addressed.

The Government, in its response to the 11th report of the Royal Commission on Environmental Pollution in 1985<sup>1</sup>, announced that the Department of the Environment was preparing a circular on the planning aspects of contaminated land. The draft of the circular stated that:

*Even before a planning application is made, informal discussions between an applicant and the local planning authority are very helpful. The possibility that the land might be contaminated may thus be brought to the attention of the applicant at this stage, and the implications explained.*

Thus suggesting that it would be advantageous for the planning authorities to have available a list of potentially contaminated sites.

In 1988 the Town & Country Planning (General Development) Order required local planning authorities to consult with waste disposal authorities if development was proposed within 250m of land which had been used to deposit refuse within the last 30 years.

In January 1990 the House of Commons Environment Committee published its first report on contaminated land<sup>2</sup>. This document, for the first time, expressed concern that the Government's suitable for use approach, "... may be underestimating a genuine environmental problem and misdirecting effort and resources". The Committee produced 29 recommendations, including the proposals that:

*The Department of the Environment concern itself with all land which has been so contaminated as to be a potential hazard to health or the environment regardless of the use to which it is to be put, and;*

*The Government bring forward legislation to lay on local authorities a duty to seek out and compile registers of contaminated land.*

---

<sup>1</sup> Royal Commission on Environmental Pollution, 'Managing Waste: The Duty of Care', Eleventh Report (Cmnd 9675, 1985)

<sup>2</sup> Contaminated Land, First Report, Session 1989-1990, HC170, 1990

Immediately following the House of Commons report the Environmental Protection Act 1990 had at Section 143, a requirement for local authorities to compile, 'Public registers of land which may be contaminated'. If enacted this would have required local authorities to maintain registers of land that was, or may have been contaminated, as a result of previous (specified) uses, regardless of the actual risks posed to humans or property.

In March 1992, the concern about the potential 'blighting' effect of public registers resulted in a press release published by the Secretary of State delaying the introduction of section 143 stating:

*The Government were concerned about suggestions that land values would be unfairly blighted because of the perception of the registers.*

On the 24<sup>th</sup> March 1993 the Government announced that the proposals for contaminated land registers were to be withdrawn and a belt and braces review of land pollution responsibilities was to be undertaken.

The following year (1994), the Department of the Environment consultation paper, *Paying For our Past*<sup>3</sup>, elicited no less than 349 responses. The outcome of this was the policy document, *Framework for Contaminated Land*<sup>4</sup>, published in November 1994. This useful review emphasised a number of key points:

- The Government was committed to the, "polluter pays principle", and, "suitable for use approach".
- Concern related to past pollution only (there are effective regimes in place to control future sources of land pollution).
- Action should only be taken where the contamination posed actual or potential risks to health or the environment and there are affordable ways of doing so.
- The long standing statutory nuisance powers had provided an essentially sound basis for dealing with contaminated land.

It was also made clear that the Government wished to:

- Encourage a market in contaminated land;
- Encourage its development, and
- That multi functionality was neither sensible nor feasible.

The proposed new legislation was first published in in the form of Section 57 of the Environment Act 1995, which amended the Environmental Protection Act 1990 by introducing Part 2A (contaminated land). After lengthy consultation on statutory guidance, this came into force in April 2001.

---

<sup>3</sup> *Paying for Our Past*, March 1994

<sup>4</sup> *Framework for Contaminated Land*, November 1994

## 1.2 TERMINOLOGY

Most of the specific terms used in this Strategy are defined within the text. Some general aspects of terminology are:

- “Contaminated land” is used to mean land which meets the Part 2A definition of contaminated land.
- Part 2A means Part 2A of the Environmental Protection Act 1990 (as amended).
- The terms “contaminant”, “pollutant” and “substance” as used in this Strategy have the same meaning – i.e. they all mean a substance relevant to the Part 2A regime which is in, on or under the land and which has the potential to cause significant harm to a relevant receptor, or to cause significant pollution of controlled waters.
- “Unacceptable risk” means a risk of such a nature that it would give grounds for land to be considered contaminated land under Part 2A.
- “The Council” or “NULBC” means Newcastle-under-Lyme Borough Council.
- “The Borough” means land falling within the legislative boundary of Newcastle-under-Lyme Borough Council.
- “Contaminant linkage” means the presence of a source (of contamination), a pathway (a way for the source to affect the receptor) and a receptor (something affected by contamination).
- “Remediation” means to carry out works to address contamination, by breaking the contaminant linkage.
- “Statutory Guidance” means any guidance on contaminated land published for this purpose in accordance with Section 78YA of the Environmental Protection Act. At the time of writing, statutory guidance is contained within the following publications:
  - Department for Environment, Farming and Rural Affairs (DEFRA), ‘Contaminated Land Statutory Guidance’, April 2012
  - Department of Energy and Climate Change (DECC), ‘Radioactive Contaminated Land Statutory Guidance’, April 2012

## 1.3 RELEVANT LEGISLATION

Whilst this document details the Council’s strategy for dealing with contaminated land under Part 2A, other legislation exists which also addresses issues of contamination. Current English legislation for addressing contamination is outlined below.

It is worth noting that the Environmental Damage Regulations (Section 1.3.3) is a new piece of legislation that has come into force since version 2 of this Strategy.

### 1.3.1 ENVIRONMENTAL PROTECTION ACT 1990 PART 2A

Contaminated land is defined under Part 2A (Section 78A) thus:

- “Contaminated land” is any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that—
  - a. significant harm is being caused or there is a significant possibility of such harm being caused; or
  - b. significant pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused.

Contaminated land is also defined under Part 2A (Section 78A(2)) thus:

- “Contaminated land” is any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that –
  - a. harm is being caused or
  - b. there is a significant possibility of harm being caused.

In the context of Section 78A(2), “harm” means lasting exposure to any person resulting from the after-effects of a radiological emergency, past practice or past work activity.

In order for land to be considered contaminated, the following elements must be present:

- A source (of contamination).
- A receptor (something affected by contamination).
- A pathway (a way for the source to affect the receptor).



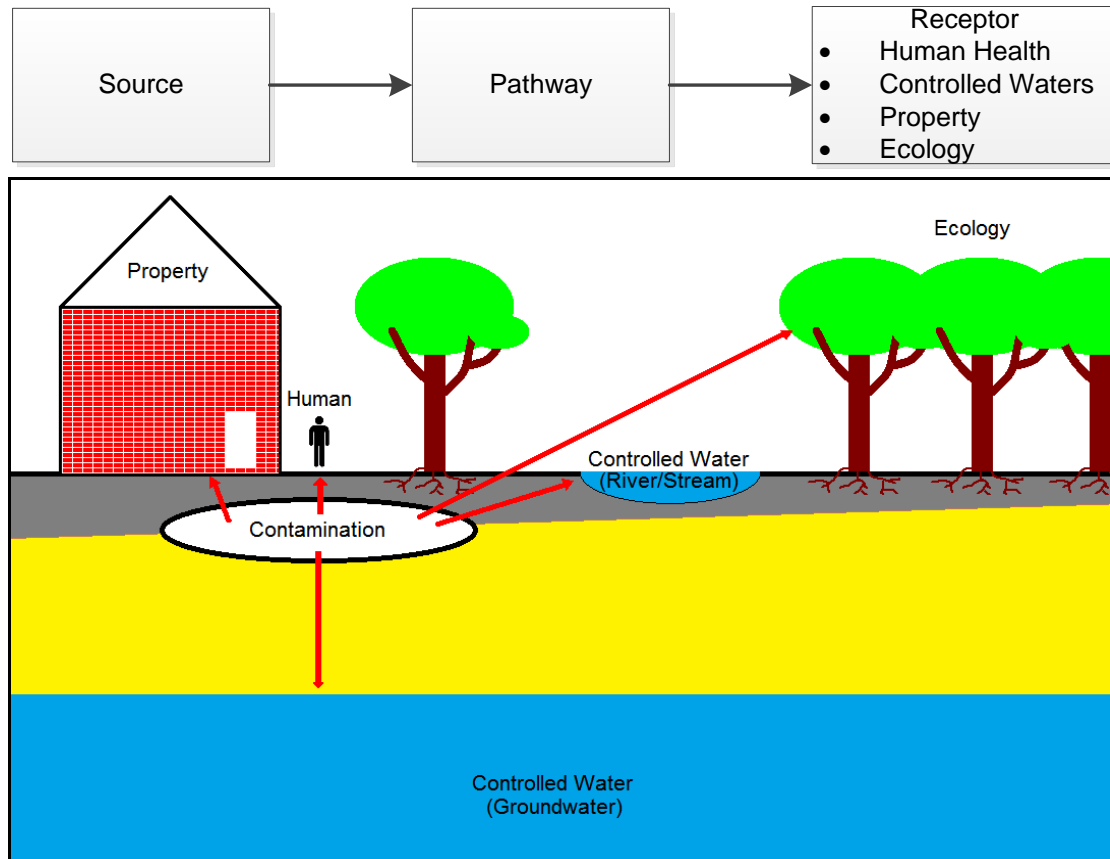


Figure 1– Contaminant Linkage

Should land be identified as ‘contaminated’ under Part 2A, then the Council would have several options to address the contamination:

- Enter negotiations with the relevant parties (liable persons) to encourage voluntary remediation.
- Serve notice on the relevant parties to compel remediation.
- Carry out remediation works and recover costs from relevant parties.

Part 2A (Section 78B) requires that local authorities cause their areas to be inspected with a view to identifying contaminated land. Relevant sections of the Act include:

- Every local authority shall cause its area to be inspected from time to time for the purpose –
  - a. of identifying contaminated land; and
  - b. of enabling the authority to decide whether any such land is land which is required to be designated as a special site.
- A local authority shall act in accordance with any guidance issued for the purpose by the Secretary of State.

### 1.3.2 TOWN AND COUNTRY PLANNING ACTS

The most common method of addressing issues of contamination is through the planning system.

For many planning applications, a desk study and site walkover, as a minimum, will be required to be submitted as part of a planning application when contamination is suspected of being present on the development site.

If the desk study identifies a potential contaminant linkage, then conditions are likely to be attached to any planning permissions, which will require the site investigation works and remediation as necessary.

In this way, any new development within the Borough should be incapable of being determined as “contaminated land”; the responsibility for carrying out all works lies with the developer.

### 1.3.3 THE ENVIRONMENTAL DAMAGE (PREVENTION AND REMEDIATION) REGULATIONS 2009

When there is an imminent threat of “environmental damage” or actual “environmental damage” the operator responsible is required to take immediate steps to prevent damage or further damage and to notify the authority.

“Environmental Damage” under the Environmental Damage Regulations is damage to one or more of:

- Protected species and natural habitats
- Surface water or groundwater
- Land

The Council has responsibility for damage to land under these regulations (damage to waters is covered by the Environment Agency (EA), whilst damage to protected species and natural habitats is covered by Natural England).

Damage to land is defined as:

- Contamination of land by substances, preparations, organisms or micro-organisms that results in a significant risk of adverse effects on human health.

Once the Council is aware of a potential case of “environmental damage”, either because it has been reported by an operator, an interested party, or through other means, it must determine whether there is “environmental damage”.

The Council is responsible for deciding what remedial measures will be implemented, taking account of any measures proposed by the operator, and will consult certain specified people before serving a remediation notice on the operator; operators are responsible for carrying out remediation measures.

The Environmental Damage Regulations only apply to operators of economic activities.

### 1.3.4 ENVIRONMENTAL PERMITTING REGULATIONS 2007

Under the Environmental Permitting Regulations 2007, anyone who applies for an environmental permit (specifically, an Integrated Pollution Prevention and Control (IPPC) Permit) is obligated, on surrender of their permit

- To avoid any pollution risk resulting from the operation of the installation.
- To return the site of the regulated site to a satisfactory state, having regard to the state of the site before the installation was put into operation.

In short, when an IPPC permit is surrendered, the site should be returned to the same condition it was before the permit was granted.

### 1.3.5 WATER RESOURCE ACT 1991

The EA, under Section 161 of the Water Resources Act 1991, serve a works notice to address situations where pollution has occurred, (or is likely to) and poses a risk to groundwater.

## 2 POLICY CONTEXT

### 2.1 GOVERNMENT POLICY

#### 2.1.1 CONTAMINATED LAND STATUTORY GUIDANCE

The current government policy on contaminated land has been outlined in the latest versions of the Part 2A Statutory Guidance<sup>5,6</sup>.

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.

The Government's view is that enforcing authorities should seek to use Part 2A only where no appropriate alternative solution exists. The Part 2A regime is one of several ways in which land contamination can be addressed.

For example, land contamination can be addressed:

- (a) When land is developed (or redeveloped) under the planning system, during the building control process.
- (b) Where action is taken independently by landowners.
- (c) Other legislative regimes may also provide a means of dealing with land contamination issues, such as building regulations; the regimes for waste, water, and environmental permitting; and the Environmental Damage (Prevention and Remediation) Regulations 2009.

Under Part 2A, the enforcing authority may need to decide whether and how to act in situations where such decisions are not straightforward and where there may be unavoidable uncertainty underlying some of the facts of each case. In so doing, the authority should use its judgement to strike a reasonable balance between:

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

---

<sup>5</sup> Department for Environment, Farming and Rural Affairs, 'Contaminated Land Statutory Guidance', April 2012

<sup>6</sup> Department of Energy and Climate Change, 'Radioactive Contaminated Land Statutory Guidance', April 2012

The authority should take a precautionary approach to the risks raised by contamination, whilst avoiding a disproportionate approach given the circumstances of each case. The aim should be 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.

## 2.1.2 NATIONAL PLANNING POLICY FRAMEWORK

Further to the Part 2A Statutory Guidance, the National Planning Policy Framework<sup>7</sup> seeks to encourage the remediation of contaminated land through the planning regime:

- Section 11: Conserving and enhancing the natural environment
  - The planning system should contribute to and enhance the natural and local environment by...remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
  - To prevent unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.

## 2.2 ENVIRONMENT AGENCY POLICY

### 2.2.1 RIVER BASIN MANAGEMENT PLANS

The Borough of Newcastle-under-Lyme lies within the area of the following River Basin Management Plans:

- Humber River Basin District<sup>8</sup>.
- North West River Basin District<sup>9</sup>.
- Severn River Basin District<sup>10</sup>.

The above plans have been developed by DEFRA and the EA, under the EU Water Framework Directive, which requires all countries throughout the European Union to manage the water environment to consistent standards.

The River Basin Management Plans focus on the protection, improvement and sustainable use of the water environment. Many organisations and individuals help to protect and improve the water environment for the benefit of people and wildlife.

---

<sup>7</sup> Department for Communities and Local Government, 'National Planning Policy Framework', March 2012.

<sup>8</sup> DEFRA and the EA, 'River Basin Management Plan Humber River Basin District', December 2009

<sup>9</sup> DEFRA and the EA, 'River Basin Management Plan North West River Basin District', December 2009

<sup>10</sup> DEFRA and the EA, 'River Basin Management Plan Severn River Basin District', December 2009

The duties of each member state under the Water Framework Directive which are of particular relevance to this Strategy are:

- Prevent deterioration in the status of aquatic ecosystems, protect them and improve the ecological condition of waters.
- Aim to achieve at least good status for all water bodies by 2015. Where this is not possible and subject to the criteria set out in the Directive, aim to achieve good status by 2021 or 2027.
- Meet the requirements of Water Framework Directive Protected Areas.
- Conserve habitats and species that depend directly on water.
- Progressively reduce or phase out the release of individual pollutants or groups of pollutants that present a significant threat to the aquatic environment.
- Progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants.

The Humber River Basin District Plan makes particular reference to Staffordshire Trent Valley catchment area. A key action is:

- [To] target pollution prevention campaigns around industrial areas in the upper Staffordshire Trent Valley catchment, particularly around Stoke-on-Trent.

The risks posed to water quality from mine drainage are also emphasised in the management plans.

## 2.3 STAFFORDSHIRE COUNTY COUNCIL POLICY

Staffordshire County Council, as the local planning authority on mineral and waste matters, plays an important part in contaminated land, especially when considering the impact of historic landfill sites.

### 2.3.1 THE MINERALS LOCAL PLAN 1994 – 2006

The Staffordshire Minerals Local Plan has been extended and is not anticipated to be replaced until 2013; however, key features of the policy include:

- To conserve minerals as far as possible whilst ensuring an adequate supply to meet needs.
- To encourage sensitive working, restoration and aftercare practices so as to preserve or enhance the overall quality of the environment.

## 2.4 NEWCASTLE-UNDER-LYME BOROUGH COUNCIL POLICY

Newcastle-under-Lyme Borough Council has long been committed to the issue of contaminated land as indicated by the 1992 Corporate Plan, where it is stated that the council will implement government proposals regarding contaminated land.

The Council Plan<sup>11</sup> defines its overall vision within four priorities:

- A clean, safe and sustainable borough.
- A borough of opportunity.
- A healthy and active community.
- Becoming a co-operative council which delivers high quality, community-driven, services.

To this end, the Council has set a specific performance indicator for contaminated land:

- The amount of contaminated land that has been remediated and is now in use (1.1.3).

A number of Council policies, besides the Contaminated Land Strategy, are in place to help achieve corporate performance in remediating contaminated land.

### 2.4.1 NEWCASTLE-UNDER-LYME AND STOKE-ON-TRENT CORE SPATIAL STRATEGY 2006 – 2026

The Core Spatial Strategy recognises the potential for brownfield land to be utilised within the region for economic development.

- Policy SP1: Spatial Principles of Targeted Regeneration
  - New development will be prioritised in favour of previously developed land where it can support sustainable patterns of development and provides access to services and service centres by foot, public transport and cycling.

### 2.4.2 NEWCASTLE-UNDER-LYME LOCAL PLAN 2011

The Local Plan<sup>12</sup> outlines the Councils policy on a number of issues when considering planning applications; a number of these relate to contaminated land, and are outlined below.

- Policy S1: Sustainable Development
  - In determining planning applications for any type of development, the Council will have regard to the likely effect of the development on the general aim of moving towards increased sustainability. To the extent that such matters are material to the consideration of a planning application, both direct and indirect effects will be taken into account, including transport implications, the use of water and non-renewable resources and the management of waste.

<sup>11</sup> NULBC Plan 2013-14 to 2015-16.

<sup>12</sup> Newcastle-under-Lyme Borough Council 'Newcastle-under-Lyme Local Plan', 2011.

- Policy S4: Development and Brownfield, Derelict or Potentially Contaminated Land
  - Preference will be given to the development of brownfield land rather than greenfield land and to development schemes that allow the remediation of derelict or potentially contaminated land. Where permission can be given for the use of land suspected of being contaminated (either from substances present on the site or from those migrating from elsewhere), or unstable, there will be a requirement to carry out appropriate site investigations and remediation measures prior to development.



### 3 STRATEGY OUTLINE

#### 3.1 ROLES AND RESPONSIBILITIES

##### 3.1.1 NEWCASTLE-UNDER-LYME BOROUGH COUNCIL

The primary regulator for Part 2A is the Council and specifically the Regeneration and Development Directorate. As such, the Council will carry out its responsibilities under Part 2A in line with Statutory Guidance and any other relevant policies that may apply (including the Council Enforcement Policy).

##### 3.1.2 THE ENVIRONMENT AGENCY

If the Council identifies land which it considers (if the land were to be determined as contaminated land) would be likely to meet one or more of the descriptions of a special site set out in the Contaminated Land (England) Regulations 2006, it will consult the EA and may, subject to the Agency's advice and agreement, arrange for the Agency to carry out any intrusive inspection of the land on behalf of the Council.

If the EA is to carry out such an inspection, the Council, where necessary, will authorise a person nominated by the Agency to exercise the powers of entry conferred by section 108 of the Environment Act 1995; the Council's regulatory functions under section 78B and 78C of Part 2A (including the inspection duty and the decision as to whether land is contaminated land) and the need to comply with the related provisions of the Statutory Guidance remain the sole responsibility of the Council.

In any other case, where the Council determines land to be "contaminated land", it will consult with the EA.

##### 3.1.3 OTHER AGENCIES

Other relevant organisations will be consulted on contaminated land issues when specific circumstances require it, as outlined in Table 1.

Issue	Organisation
Property (Scheduled Ancient Monuments)	English Heritage
Ecology	English Nature
Impact outside of Newcastle-under-Lyme Borough	City of Stoke-on-Trent
	Staffordshire County Council
	Stafford Borough Council
	Staffordshire Moorlands District Council
	Shropshire Council
	Cheshire East Council

Table 1 – Consultees on contaminated land issues.

## 3.2 AIMS AND OBJECTIVES

Part 2A (Section 78B) requires that local authorities cause their areas to be inspected with a view to identifying contaminated land. Relevant sections of the Act include:

- Every local authority shall cause its area to be inspected from time to time for the purpose –
  - a. of identifying contaminated land; and
  - b. of enabling the authority to decide whether any such land is land which is required to be designated as a special site.
- A local authority shall act in accordance with any guidance issued for the purpose by the Secretary of State.

Therefore and in line with the Statutory Guidance and government policy, the objectives of the Council with respect to Part 2A are:

1. To identify and remove unacceptable risks to human health and the environment.
2. To ensure that contaminated land is made suitable for its current, or proposed, use.
3. To ensure that the burdens faced by individuals, companies and society are proportionate, manageable and compatible with the principles of sustainable development.

## 3.3 PRIORITIES

The Statutory Guidance suggests that the Council should take a strategic approach to carrying out its inspection duty under section 78B(1). This approach should be rational, ordered and efficient and it should reflect local circumstances.

The overall aim of the strategic inspection is to identify land that is potentially contaminated within the Borough.

The Council has finite resources and cannot realistically expect to address all potentially contaminated land within the Borough at once. Therefore, the Council must direct its resources at sites that appear to present the greatest risk. This is in line with the Statutory Guidance, which states:

*When the local authority is carrying out detailed inspection of land in accordance with Part 2A, it should seek to give priority to particular areas of land that it considers most likely to pose the greatest risk to human health or the environment.*

The methodology for identifying priority sites for detailed inspection is outlined in Section 5 (Strategic Inspection).

### 3.4 ADDRESSING CONTAMINATION

The Statutory Guidance states:

*Enforcing authorities should seek to use Part 2A only where no appropriate alternative solution exists. The Part 2A regime is one of several ways in which land contamination can be addressed. For example, land contamination can be addressed when land is developed (or redeveloped) under the planning system, during the building control process, or where action is taken independently by landowners. Other legislative regimes may also provide a means of dealing with land contamination issues, such as building regulations; the regimes for waste, water, and environmental permitting; and the Environmental Damage (Prevention and Remediation) Regulations 2009.*

The Council will therefore seek to use Part 2A only where there is no appropriate alternative available. The preference of the Council when addressing contamination is:

1. To encourage voluntary remediation by the relevant parties (this would include the encouragement of development on brownfield and potentially contaminated sites where this is appropriate).
2. Where voluntary remediation cannot be carried out, to use alternative legislation, where appropriate, to bring about remediation.
3. To use Part 2A as a last resort.

The above policy conforms to the Council's Enforcement Policy and the Regulators Compliance Code<sup>13</sup>

The Council's work under Part 2A will be carried out in tandem with other relevant policies of the Council (Sections 2.2 and 2.4), in order to help identify the optimum means of addressing potential contamination.

---

<sup>13</sup> Department for Business Enterprise and Regulatory Reform, 'Regulators' Compliance Code', December 2007

## 4 THE BOROUGH OF NEWCASTLE-UNDER-LYME

### 4.1 GENERAL CHARACTERISTICS

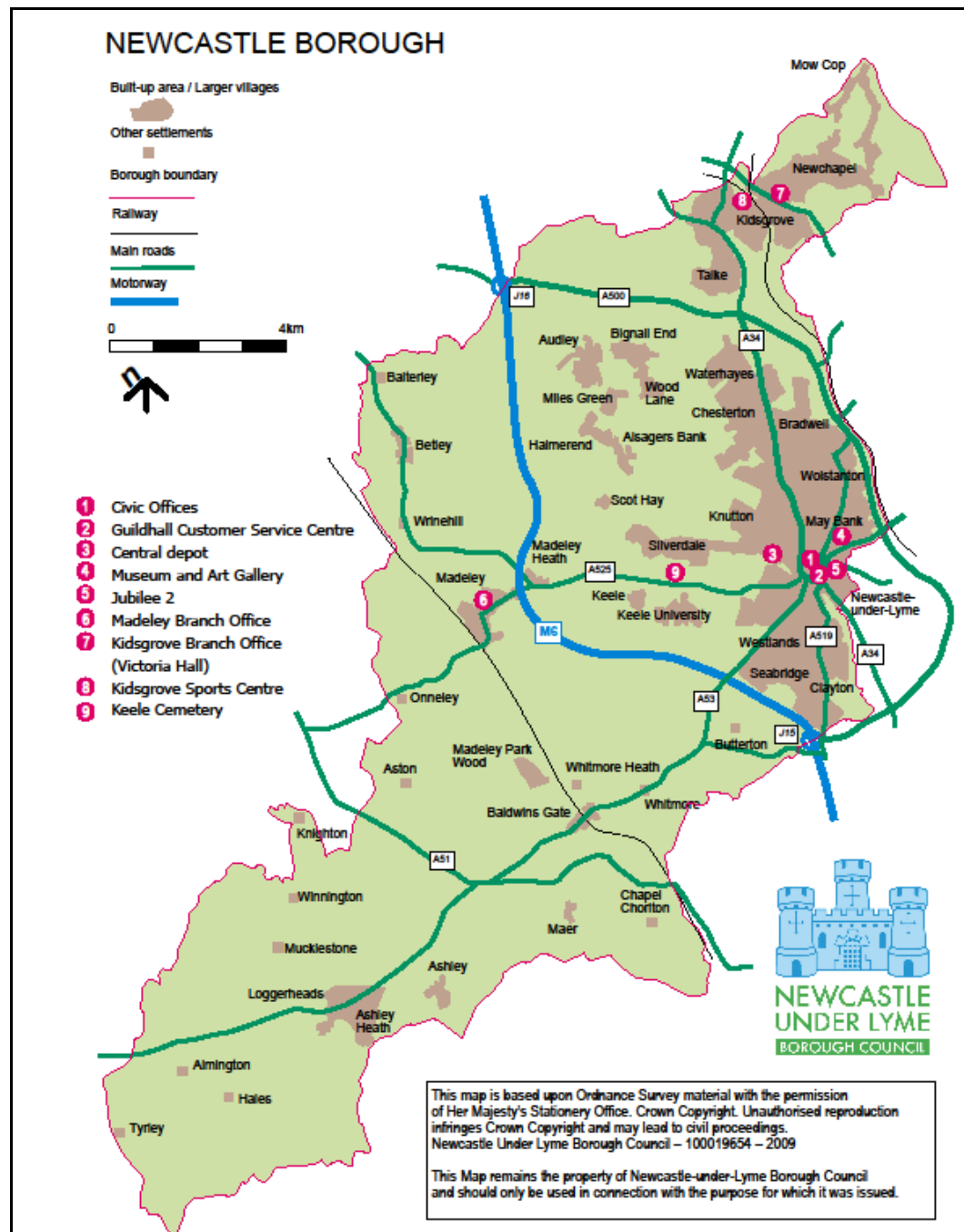


Figure 2 – Map of the Borough.

The Borough of Newcastle under Lyme is located in North Staffordshire, approximately midway between Birmingham and Manchester (Figure 2). It is bordered by the industrial conurbation of Stoke-on-Trent to the east, Cheshire to the north and Shropshire to the west and is served by a well-developed road system, which includes the M6 and A500. The Borough has an overall population of around 124,000, covering an area of approximately 211 km<sup>2</sup> and can be divided into two parts each with distinct characteristics.

The eastern part is predominantly built up and comprises the ancient market town of Newcastle-under-Lyme (population 74,000) and the smaller town of Kidsgrove to the north east (population 24,000). These main population centres are generally contiguous with the industrialised area of Stoke-on-Trent.

The western part of the Borough is predominantly rural. The topography is undulating, the most distinctive features of which are the ridge of high land running from Bignall Hill to Keele and the Maer Hills to the south west. There are many small picturesque villages in this area, several of which date from Anglo Saxon times.

## 4.2 HISTORY AND INDUSTRIAL LEGACY

Newcastle is named after a 'new castle' that was built in the area in the twelfth century. The 'lyme' part of the name derives either from the Lyme Brook that flows through the town or from the lime forest that covered a large part of land in the medieval period.

In prehistoric times, the area was very sparsely populated. The Cornovii tribe populated the area during the Iron Age and there was a hill fort settlement at this time at Berth Hill, near Maer.

In the first century, the Romans established a fort at Chesterton, a settlement at Holditch and a villa at Hales. There is evidence of Saxon settlement in the Borough during the 6<sup>th</sup> to 9<sup>th</sup> centuries.

Madeley was granted a royal charter in 975 by King Edgar and the area was also mentioned in the Domesday Book of 1086. Bradwell, Wolstanton, Clayton, Knutton, Hill and Chapel Chorlton and Maer also appear in the Book, although Newcastle itself is not mentioned.

The castle in Newcastle was constructed to defend the area against attacks from the Welsh borders and to protect Royal lands from claims to the throne.

The town of Newcastle was planned and established by King Henry II and its first charter was granted in 1173. The King encouraged the growth of Newcastle's market, which attracted traders from far and wide. The area flourished because of the rapidly expanding market and Newcastle became the most important market town in the area.

In 1235 the town's leading traders formed a Guild Merchant, which later led to the establishment of the Guildhall, a notable landmark in the Borough.

There is a wide range of historic industrial activity within the Borough, which is broadly outlined in Jenkins<sup>14</sup> and adapted below. All photographs have been obtained from the Borough Museum.

### 4.2.1 MINING

There is a strong legacy of coal mining in the Borough, in areas including Silverdale, Chesterton, Apedale and Wolstanton. An example is shown in Photo 1.

---

<sup>14</sup> Jenkins, J.G., 'A History of the County of Stafford: Volume 8', 1963.



Photo 1 – Kents Lane Colliery, Silverdale, circa 1930-1939 © NULBC

#### 4.2.2 IRON REFINING

The iron industry also goes back to Roman times although it was not really until the fifteenth century that Newcastle had forged a reputation as a centre for the manufacture and marketing of iron. Many villages in the west of the Borough were built up around iron works where a local supply of ironstone was readily available. Examples are shown in Photo 2 and Photo 3.



Photo 2 – Apedale Furnaces © NULBC

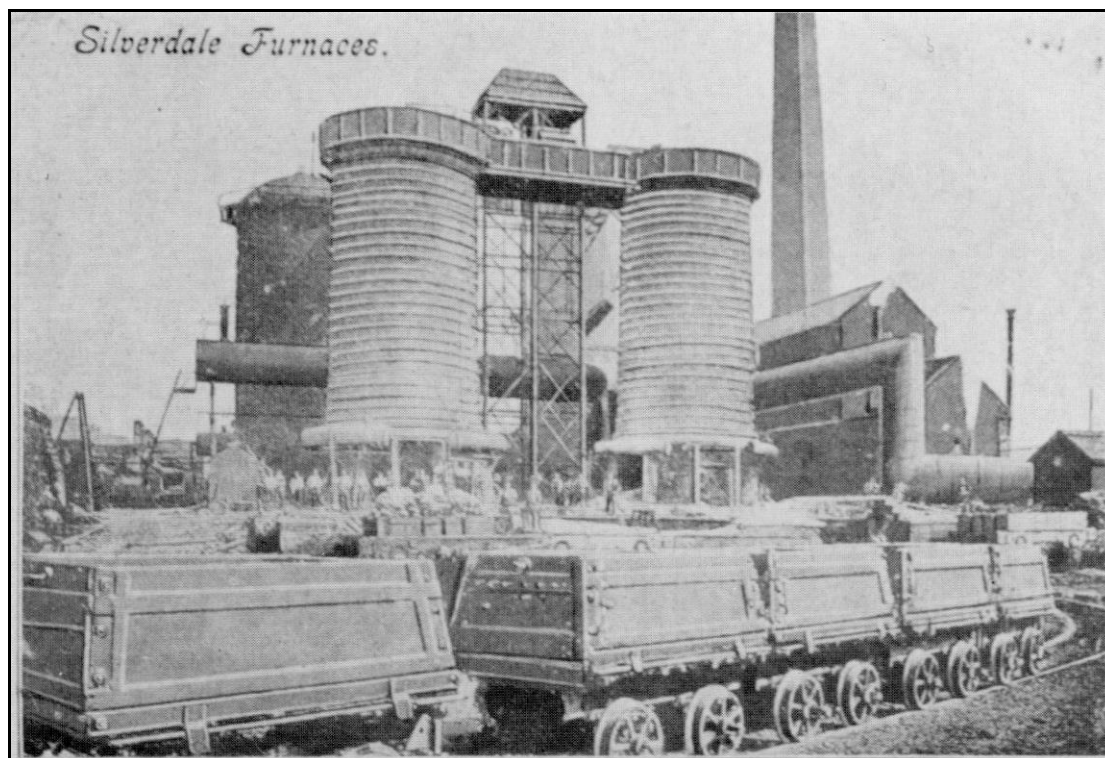


Photo 3 – Silverdale Furnaces © NULBC

#### 4.2.3 FELT HAT MANUFACTURING

From the 17<sup>th</sup> to the 19<sup>th</sup> centuries, Newcastle-under-Lyme had a flourishing felt hat manufacturing industry, which was probably at its peak locally in the 1820s when a third of the town's population were involved in the industry in over 20 factories; by 1892 there was only one manufacturer still in production in the town.

#### 4.2.4 CLAY TOBACCO PIPE MANUFACTURING

The manufacture in the borough of clay tobacco smoking pipes started about 1637 and grew rapidly and was second only to hatting within the borough. Nationally, the town was ranked with Chester, York and Kingston upon Hull as the four major pipe producers. This industry continued until the mid-19th century when decline set in rapidly and by 1876 only one tobacco pipe maker was left.

#### 4.2.5 SILK THROWING

In the early 19<sup>th</sup> century a new industry of silk throwing had appeared; by 1829 over 700 people were employed in this industry. In 1833 there were three silk mills, but by 1851 this was reduced to two (one in Friarswood Road, the other in Hempstalls Lane); a silk mill existed in Silverdale. By the 20<sup>th</sup> century, the industry ceased to exist in Newcastle.



Photo 4 – Brampton Silk Mill c. 1936 © NULBC

#### 4.2.6 TILE AND BRICK MANUFACTURING

Tile-making, made possible by the abundance of Etruria and Keele clay, is perhaps the most important local industry and the borough is credited with being the largest single production area in the country of clay roofing tiles. The local clay is also utilized for the manufacture of bricks and fireplaces.

Tile manufacturing continues to this day, with several manufacturers still present in the Borough.



Photo 5 – Chesterton Brickworks © NULBC



#### 4.2.7 POTTERY

Although bordering on the Pottery towns, Newcastle has never been a centre of the pottery industry, though during the later 19th century a few, never more than half a dozen, potters were to be found in the Borough.

#### 4.2.8 OTHER INDUSTRIES

Paper manufacturing had been carried out at the Holborn Paper Mill for over a century.

One of the older industries of the town was that of tanning, though it was never a large one. In the later 18<sup>th</sup> century there were three tanners in the town, varying between one and three tanners in the 19<sup>th</sup> century.

One important industry of a somewhat specialised kind which was established in the late 19<sup>th</sup> century was the manufacture of uniforms, carried on at the Enderley Mills in Liverpool Road, who employed around 700 people. The factory was erected in 1881 (Photo 6).



Photo 6 – Enderley Mills, 1940-1959 © NULBC

A cotton mill was founded in Cross Heath in 1797 and produced textile until the late 1960's (Photo 7).



Photo 7 – The Cotton Mill, Cross Heath, 1956 © NULBC

Among other light industries in the Borough were

- The manufacture of glue at the Waterloo Works.
- The manufacture of leather goods in London Road.
- The manufacture of silica in Sutton Street and at Rose Vale, Chesterton.
- The manufacture of tyres in Liverpool Road.

#### 4.2.9 WORLD WAR 2

During the Second World War two large munitions factories were established in the Cross Heath area and after the war continued in industrial use.

One became the largest manufacturer of motor-car harness in the country and the largest producer of telephone and microphone cords, and was also engaged in the manufacture of fluorescent lighting equipment.

The other manufactured fractional h.p. motors, loom motors for the cotton industry, and electric lamps.

The Borough was subjected to some bombing during World War 2, but this was limited in extent.

#### 4.2.10 TRANSPORT

Historic transport links which were developed in the Borough included a canal network (two main canals were constructed in the Borough and have since largely been infilled) and a railway network (including the Stoke to Market Drayton Line, constructed in 1850 and removed in 1964).

Many rail lines and tramways were associated with historic industry in the Borough (specific lines on which raw materials and finished products were transported).

#### 4.2.11 REDEVELOPMENT HISTORY

In recent years the Council has instigated a number of reclamation schemes for derelict land generally associated with waste disposal, mining and quarrying activities. Examples include the reclamation and landscaping of the Apedale Country Park and the Birchenwood area; this has a long industrial history including gas works and open cast mining and is now a residential and park area.

This further demonstrates the Council's commitment to the redevelopment of brownfield sites.

### 4.3 GEOLOGY

#### 4.3.1 SOLID GEOLOGY

##### Rock Types and Stratigraphy

The solid geology of the Borough (and indeed the North Staffordshire region) is dominated by interbedded layers of mudstone, siltstone and sandstone (historically referred to as the coal measures)

Found between these layers are seams of coal, many of which have historically been worked, both in the near surface and at depth, especially in areas such as Silverdale, Apedale and Kidsgrove.

To the north, west and south of the North Staffordshire region, the geology is dominated by sandstones; to the east, millstone grit which is common to the Peak District.

##### Geological Structures

There are two major geological folds in the Borough:

- The Western Anticline – this runs north-south along the western part of the Borough and has pushed older layers of rock to the surface.
- The Main Syncline – This is where the older rocks have 'bowed' and are found at greater depth.

Along with the folds, there are many faults, the major faults being:

- The Western Boundary Fault, which runs parallel to the west of the Western Anticline.
- The Apedale Fault, which runs to the east of the Main Syncline.
- The Newcastle Fault, which runs to the east of the Apedale Fault.

The physical geology is presented as Figure 3 (descriptions of geological units on the plan are historic).

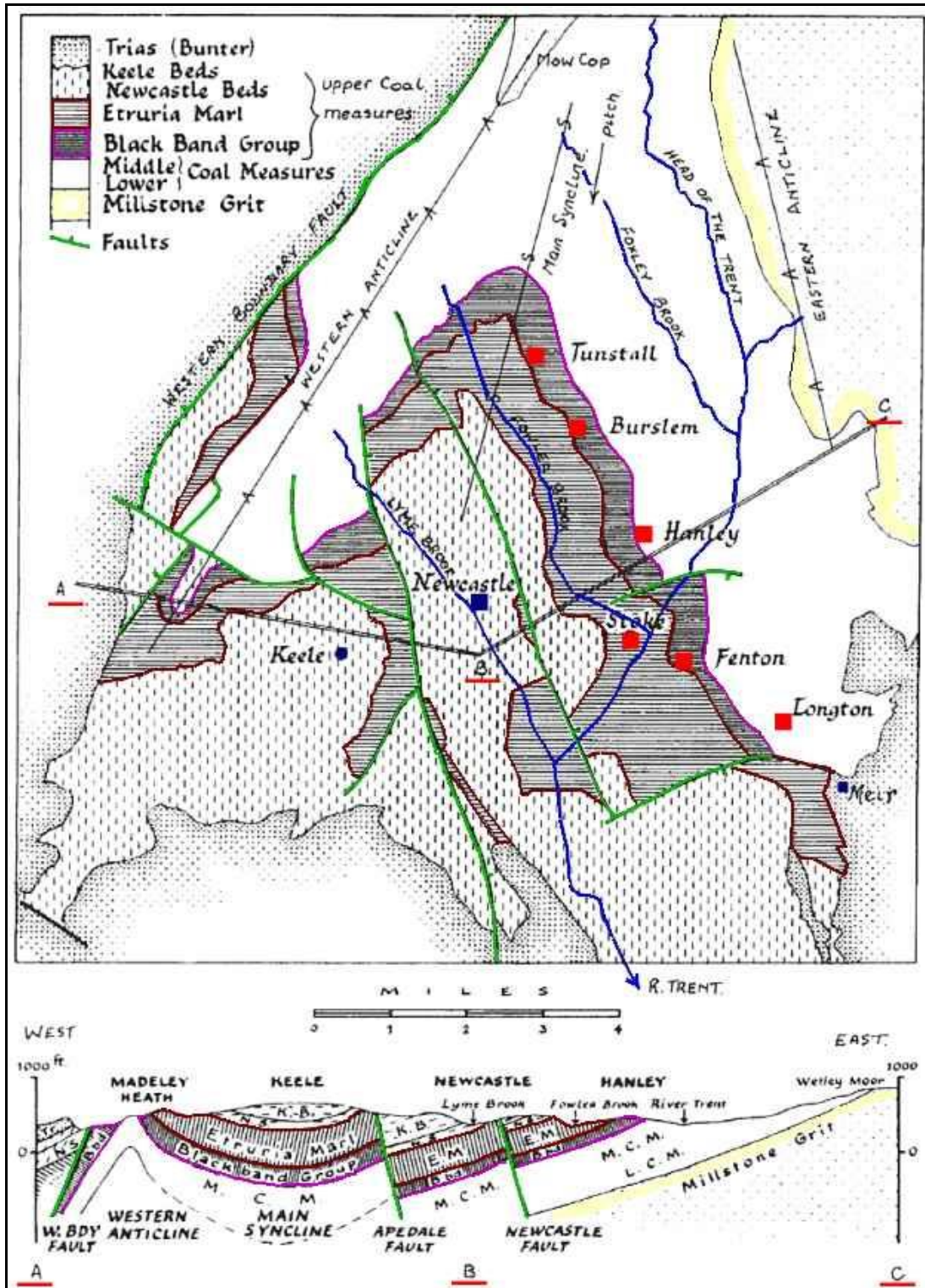


Figure 3 – Schematic Representation of the Physical Geology of North Staffordshire.

#### 4.3.2 SUPERFICIAL GEOLOGY

Much of the northern part of the borough is free of superficial deposits, with glacial till found mainly on the slopes of valleys and in patches on higher ground. The till comprises silty brownish grey clay with pebbles of granite, sandstone and volcanics indicating erratics from as far as the Lake District.

There are also minor deposits of glacial sand and gravel found in the Borough, which are overlain in parts by alluvium associated with the many brooks and streams crossing the area.

#### 4.3.3 MADE GROUND

Made ground (i.e. reworked natural and artificial deposits) is widespread in the district, from a diverse range of sources including:

- Colliery spoil.
- In filled mineral extraction pits.
- Relict foundations (i.e. brownfield sites).
- In filled canals and tunnels.

Common made ground constituents in the Newcastle area include pottery, tile and brick fragments, although other constituents can include glass, concrete and cement. Made ground presents a potential source of contamination, as well as presenting ground engineering difficulties from differential settlement and poor bearing capacities.

Terms to describe made ground which might be encountered include 'shraff' (a local term referring to pottery waste) and 'slip' or 'slurry' (a technical term generally relating to wet, unfired pottery clay).

### 4.4 WATER RESOURCES

#### 4.4.1 HYDROGEOLOGY

Although the Borough is not strongly linked with groundwater resources, there are nevertheless a number of areas where groundwater is present and abstracted.

Superficial deposits of glacial sand and gravel within the Borough may be sources of locally important groundwater, which has led to many being designated by the EA as secondary aquifers.

The southern and western areas of the Borough are underlain mainly by the Triassic Sherwood Sandstone Group, which is designated a principal aquifer by the EA.

There are a number of public drinking water abstraction boreholes located within the Borough, leading to several areas in the south and west being designated as groundwater source protection zones by the EA. There are also a number of private water abstractions (fed by boreholes or springs), providing potable water to farms and rural communities.

In the vicinity of old coal workings, groundwater quality tends to deteriorate with depth and hence is rarely potable. In the past pumping was required to allow mining to proceed leading to the depression of the water table. Since mining (and hence pumping) ceased in the Borough, the groundwater has risen with the consequence of contaminated water issuing from conduits that were not previously active. This is evident in several areas of the Borough, notably in Kidsgrove (where the canal is stained orange) and Parrots Drumble (Photo 8).

#### 4.4.2 HYDROLOGY

There are no major rivers within the Borough, although there are a number of streams and brooks, with watercourses to the east draining into the Humber River Basin and watercourses to the west draining into the North West River Basin. The very south western part of the Borough falls within the Severn Basin.

### 4.5 ECOLOGY

#### 4.5.1 SITES OF SPECIAL SCIENTIFIC INTEREST

A small number of sites of special scientific interest (SSSI) are present within the Borough, which are summarised below.

##### Wetlands

The Meres & Mosses of the North West Midlands form a nationally important series of open water and peatland sites. These have developed in natural depressions in the glacial drift left by the ice sheets which covered the Cheshire-Shropshire plain some 15,000 years ago. The majority lie in Cheshire and north Shropshire, with a small number of outlying sites in adjacent parts of Staffordshire and Clwyd.

##### Woodlands

An area of semi-natural woodland, situated to the east of Market Drayton, has been designated a SSSI as it represents the least-modified remnants of a formerly extensive tract of ancient broadleaved woodland. It contains representative examples of three types of oakwood on acidic soils derived from rocks of the Upper Coal Measures (Carboniferous) and Bunter Sandstone (Triassic). Such stands were formerly widespread in North Staffordshire but have been significantly reduced in area by reforestation and clearance. The site supports an outstanding terrestrial and freshwater fauna, with butterflies and moths *Lepidoptera* and caddis flies *Trichoptera* especially well represented.

#### 4.5.2 LOCAL NATURE RESERVES

There are also several local nature reserves, some of which arose following the restoration of historic mineral and mining sites in the Borough (such as Bateswood Local Nature Reserve, which is on long term lease to the Council).



Photo 8 – Acid mine drainage at Parrots Drumble, a Staffordshire Wildlife Trust owned nature reserve.

## 5 STRATEGIC INSPECTION

### 5.1 STATUTORY GUIDANCE

The Statutory Guidance suggests that the Council should take a strategic approach to carrying out its inspection duty under section 78B(1). This approach should be rational, ordered and efficient and it should reflect local circumstances.

The method for carrying out a strategic inspection of potentially contaminated land can be summarised thus:

1. Data collection.
2. Data processing (initial prioritisation).
3. Desk studies.
4. Secondary prioritisation.

A flowchart outlining this approach has been prepared and is included as Appendix 1.

It should be noted that the Council will start with the assumption that land is **not** contaminated land unless there is reason to consider otherwise.

### 5.2 DATA COLLECTION

In order to carry out a strategic inspection of the Borough, it is first necessary to obtain as much relevant information on each potentially contaminated site as possible.

As outlined in Section 1.3.1, in order for land to be contaminated the following must be present:

- A source (of contamination).
- A receptor (something affected by contamination).
- A pathway (a way for the source to affect the receptor).

Relevant receptors, as outlined in Part 2A, are summarised in Table 2.



Type of Receptor	Definition
Human Health	NA
Ecological System	Site of Special Scientific Interest (under section 28 of the Wildlife and Countryside Act 1981)
	National Nature Reserve (under section 35 of the 1981 Act)
	Marine Nature Reserve (under section 36 of the 1981 Act)
	Area of Special Protection for Birds (under section 3 of the 1981 Act)
	“European Site” within the meaning of regulation 8 of the Conservation of Habitats and Species Regulations 2010
	Any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949.
	Any habitat or site accorded 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)
Property	Crops, including timber
	Produce grown domestically or on allotments for consumption
	Livestock
	Owned or domesticated animals
	Wild animals which are subject to shooting or fishing rights
	Buildings (any structure or erection and any part of a building including any part below ground level – does not include buried services such as sewers, water pipes or electricity cables)
Controlled Waters	Part 3 of the Water Resources Act, except “ground waters” does not include waters contained in underground strata but above the saturation zone.

Table 2 – Relevant Receptors under Part 2A

Relevant information that is held (or will be developed) on the Borough on the corporate geographical information system (GIS) is summarised in Table 3.

Data Source	Source	Pathway	Receptor
Current and historical mapping	✓	✓	✓
Current and historical aerial photography	✓	✓	✓
Current land use mapping	✓	✓	✓
Geological mapping	✓	✓	✓
Potential contaminant source mapping	✓		
Landfill mapping	✓		
Environmental permit holders	✓		
Hazardous substances & COMAH sites	✓		
Groundwater vulnerability mapping		✓	
Groundwater source protection zone mapping		✓	✓
Private water supply mapping			✓
Aquifer mapping			✓
Ecological mapping (SSSI, Nature Reserves etc)			✓
Scheduled Ancient Monument mapping			✓

Table 3 – Sources of Information

### 5.3 DATA PROCESSING – INITIAL PRIORITISATION

Once sufficient data has been obtained, it can be processed in order to screen the Borough for potentially contaminated sites.

The screening process involves identifying intersects between areas with potential sources and areas with potential receptors, to obtain a basic list of potentially contaminated sites.

Further data processing is required in order to refine this list and obtain a basic prioritisation. Such processing takes into account:

- The potential contamination source
  - How likely contaminants are to have been used at the site.
  - How likely contaminants are to have escaped or migrated from containment or storage on the site.
  - How toxic or hazardous those contaminants might be.
- The receptor sensitivity
  - Inherently, some receptors are considered to be more sensitive than others. When conducting the screening process, the following hierarchy when considering receptor sensitivity will be followed:

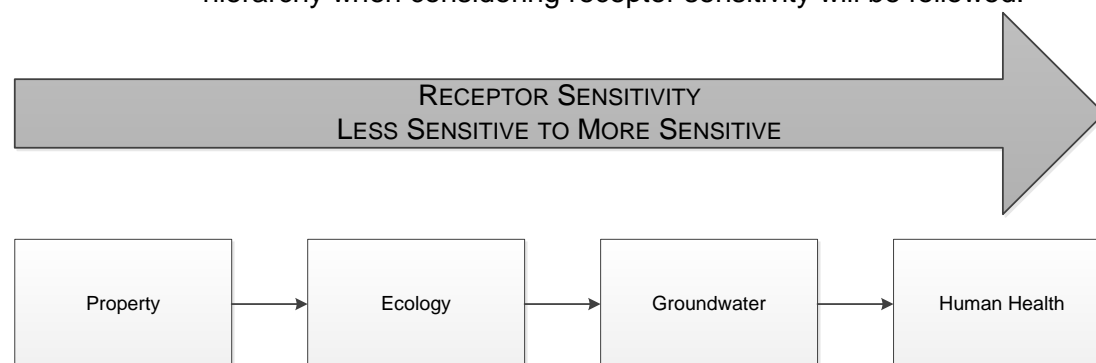


Figure 4 – Receptor Sensitivity for Prioritisation

Following the data processing, a prioritised list of potentially contaminated sites will be developed. A manageable number of sites, which pose with the highest risk, will then be selected for more detailed consideration.

## 5.4 DESK STUDIES

Subject to the results of the screening process, a manageable number of sites, which potentially pose the greatest risk, will be selected to have a phase 1 (desk study) carried out on them.

The desk study is the first step when carrying out detailed consideration of whether land is contaminated or not and follows from good practice outlined in Contaminated Land Report 11<sup>15</sup> and BS10175:2011+A1:2013<sup>16</sup>.

The desk study will consider all available information on the site, in order to generate a preliminary risk assessment for a site. Such information will typically include detailed consideration of:

- Historical mapping.
- Planning information.
- Archive information (such as that held within the Borough Museum, or by Staffordshire County Council).
- Geological information.
- Previous site investigations (if available).
- Site history (records of activities carried out at the site).
- Coal Authority records (when appropriate).
- Groundwater and environmental quality information.

A site walkover survey will usually be carried out, to obtain site photographs and inspect the site for any visual evidence of contamination; in the case of Part 2A, it may also be to confirm the current (or likely) use of the site. However, this may not always be appropriate and therefore the need for a walkover survey will be considered on a case by case basis.

The landowner, or other relevant parties, may be approached in order to obtain any relevant information that they might hold on the site (where this is considered appropriate). However, such enquiries will be considered on a case by case basis, bearing in mind the Councils wish to minimise public alarm and issues of possible property blight.

Once all the information has been gathered, a preliminary risk assessment can be developed, based on the source-pathway-receptor model outlined in section 1.3.1.

---

<sup>15</sup> DEFRA and EA, 'Model Procedures for the Management of Land Contamination – Contaminated Land Report 11', September 2004.

<sup>16</sup> BSi, 'BS10175:2011+A1:2013 Investigation of Potentially Contaminated Sites – Code of Practice', October 2013.

## 5.5 POWERS OF ENTRY

Under Section 108 of the Environment Act 1995, the Council, or an authorised agent of the Council (which would include the Environment Agency), may exercise the following powers of entry when undertaking an investigation:

- a. Entry of premises;
- b. Entry with other authorised persons and with equipment or materials;
- c. Examination and Investigation;
- d. Direction that premises be left undisturbed;
- e. Taking measurements, photographs and recordings;
- f. Taking samples of air, water and land;
- g. Subjecting articles or substances suspected of being polluting to tests;
- h. Taking possession of and detaining such articles;
- i. Requiring persons to answer questions;
- j. Requiring production of records or the furnishing of extracts from computerised records;
- k. Requiring necessary facilities or assistance to be afforded; and
- l. Any other power conferred by the Regulations.

In the case of a desk study, therefore, the Council has the power to obtain information on potentially contaminated land, both from relevant persons (e.g. the owner of the land, or a person who might be liable for contamination) and their agents (for instance, environmental consultants who carried out work on a site). The Council also has the power to request site access in order to undertake a site walkover inspection and, in the case of a detailed inspection, to undertake intrusive site investigation works.

Before exercising powers of entry, the Council will always seek to obtain cooperation from the landowner or other relevant parties on a voluntary basis, in line with the Statutory Guidance.

## 5.6 SECONDARY PRIORITISATION

Following the steps outlined above, the Council will have a number of desk studies, each of which will contain an assessment of the risk posed by potential contamination at each site.

The Council will use the results of the desk studies to identify land which it considers to pose the greatest risk to human health or the environment, by carrying out a manual prioritisation (the secondary prioritisation).

The secondary prioritisation will be carried out by the environmental protection department and will allow for full consideration of all available information on each potentially contaminated site.

The secondary prioritisation will inherently rely on professional judgement. Therefore, the decision making process will be fully documented and justified by the author.

Following the secondary prioritisation, the Council will have produced a list of sites; the sites which appear to be the most likely to pose the greatest risk will be placed at the top of the list and will be addressed first when undertaking detailed inspections.

## 6 DETAILED INSPECTION

### 6.1 OBTAINING FURTHER INFORMATION

Following the secondary prioritisation, the Council must determine whether there is a reasonable possibility that a significant contaminant linkage exists.

The process for obtaining additional information will continue until there is sufficient evidence for the Council to determine whether the land is contaminated or not.

If, at any stage, the Council considers that there is no longer a reasonable possibility that a significant contaminant linkage exists, the Council will not carry out any further inspection in relation to that linkage.

### 6.2 REQUEST FOR FURTHER INFORMATION FROM RELEVANT PARTIES

By this stage, the Council will have a desk study report on a site. The Council may, or may not, already have contacted relevant parties to request specific information that they hold on the site.

Before considering detailed inspections, the Council will contact relevant persons (if possible) to request information on the site (as outlined in Section 5.5) where this has not already been done. If necessary, this will be by issue of a notice to request information.

### 6.3 INTRUSIVE SITE INVESTIGATIONS

#### 6.3.1 GENERAL APPROACH

Where evaluation of all available data suggests that there is a reasonable possibility that a significant contaminant linkage may exist, it may be necessary to visit the site and carry out some form of on-site testing, or take away samples for analysis. In every case this will be carried out by a 'suitable person', adequately qualified to undertake the work. Inspections will be conducted as quickly, discreetly, and with as little disruption, as reasonably possible.

The Council will seek to consult the landowner before inspecting their land, unless there is a particular reason why this is not possible (for instance, because it is not possible to identify or contact the landowner).

Should the owner refuse access, or cannot be found, the Council will consider using powers of access as outlined in Section 5.5.

#### 6.3.2 VOLUNTARY PROVISION OF INFORMATION

If a reasonable possibility of a contaminant linkage exists on a site, then the Council will consider undertaking an intrusive site inspection of the land in order to obtain sufficient information to determine whether it is contaminated land or not.

However, if a relevant person were to offer to provide such information within a reasonable and specified time, and does so, then the Council would not proceed with its own investigation.

### 6.3.3 POTENTIAL SPECIAL SITES

In the case of potential special sites (as set out in the Contaminated Land (England) Regulations 2006), the Council will liaise with the EA and, subject to their advice and agreement, permit the EA to carry out an intrusive site inspection on behalf of the Council. The Council will, where necessary, authorise the EA to exercise the powers of entry outlined in Section 5.5.

The definition of a special site is reproduced in Appendix 2.

Where the EA carries out an inspection on behalf of the Council, the Council's regulatory functions under section 78B and 78C of the 1990 Act (including the inspection duty and the decision as to whether land is contaminated land) remain the sole responsibility of the Council.

### 6.3.4 COUNCIL INSPECTIONS OF LAND

Intrusive investigations will be carried out by the Council in accordance with appropriate good practice technical procedures for such investigations.

Should it be necessary, the Council will employ a consultant or contractor to undertake appropriate site investigation works and prepare a report; the Council will, if necessary, authorise the contractor to exercise powers of entry as outlined in Section 5.5. The Council will ensure, as far as possible, that any consultants are appropriately qualified and competent to undertake the work.

## 7 RISK ASSESSMENT

### 7.1 GROUNDS FOR DETERMINATION

There are six possible grounds for determining land to be contaminated:

- Significant harm is being caused.
- There is a significant possibility of significant harm being caused.
- Significant pollution of controlled waters is being caused.
- There is a significant possibility of significant pollution of controlled waters.

With respect to harm from radioactivity:

- Harm may be caused.
- There is a significant possibility that harm may be caused.

In making any determination the Council will take all relevant information into account, carry out appropriate scientific assessments, and act in accordance with the statutory guidance. The determination will identify all three elements of the contaminant linkage and explain their significance.

### 7.2 EVALUATION OF RISK

#### 7.2.1 CURRENT USE

Under Part 2A, risks are evaluated in the context of the current use of the land. In this case, the current use is determined as:

- The current use of the land.
- Reasonably likely future use of the land which would not require planning permission.
- Any temporary use to which the land is put, or likely to be put, within the bounds of the current planning permission.
- Likely informal use of the land, whether authorised by the owners or occupiers, or not.

When considering risks from future use of a site which fall under the definition of current use, it will be assumed that any development which is subject to a planning permission will be fully carried out (including any conditions), although issues of potential land contamination would ordinarily be addressed in such circumstances through the planning system.

### 7.2.2 CONTAMINANT LINKAGE

For there to be a risk, an appropriate contaminant linkage must exist (as outlined in Figure 1).

- A “contaminant” is a substance which is in, on, or under the land and which has a potential to cause significant harm to a relevant receptor, or to cause significant pollution of controlled waters.
- A “receptor” is something that could be adversely affected by a contaminant – namely, a person, an ecosystem, property, or controlled waters (as defined in Table 2).
- A “pathway” is a route by which a receptor is or might be affected by a contaminant.

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

The Council may encounter sites with multiple contaminant linkages, from a number of different contaminants, pathways and receptors. In such cases, the Council may treat contaminants with similar properties as a single contaminant source, provided that there is a scientifically robust reason for doing so; the Council will fully document the reasons for adopting this approach where appropriate.

### 7.2.3 RISK ASSESSMENT

The process of risk assessment involves understanding the risks posed by land and the associated uncertainties.

As more information is obtained on a site (in the case of this Strategy, from identification of land as potentially contaminated in the preliminary prioritisation, to the collection of all available information in a desk study and finally the collection of site specific data in a site investigation), the understanding of the risks posed by a site increase and the uncertainties decrease.

The collection of information on a site increases until it is possible for the Council to decide:

- That there is insufficient evidence of contamination to justify further investigation into the site; and/or
- Whether or not the land is contaminated land.

In order to continue to justify obtaining more information on a site, the Council must be satisfied that an unacceptable risk could reasonably exist.



#### 7.2.4 EXTERNAL EXPERTISE

Contaminated land is a complex subject and requires skills in a number of different disciplines. It is possible that, if a site is particularly complex, the Council may not have adequate in house expertise to be able to adequately assess the risks.

Where necessary, the Council will seek external experts to assist in the risk assessment. External experts may come from government departments (as outlined in Table 1) or specialist consultancies. This is especially relevant when considering potential special sites (Section 6.3.3), for which the Environment Agency may assume some responsibility.

In all cases, the Council will maintain sole responsibility for determining whether land is, or is not, contaminated.

#### 7.2.5 NORMAL PRESENCE OF CONTAMINANTS

It is possible that, in some circumstances, some substances might be present in what would otherwise be considered “elevated” concentrations due to natural circumstances, for instance:

- The natural presence of contaminants from the underlying geology that might reasonably be considered typical of an area and have not been shown to pose an unacceptable risk to health or the environment.
- The presence of contaminants from low level diffuse pollution and common human activity (for example, from historic use of leaded petrol and the spreading of ash from domestic coal fires in gardens and allotments that might have been considered typical).

In these circumstances, the Council will not usually consider the land to be contaminated, unless there is a particular reason to consider that those contaminants might pose a significant risk.

#### 7.2.6 RISK ASSESSMENT METHODOLOGY

There are a number of different methodologies for assessing risks from different contaminants to different receptors. Current methodologies which would typically be used by the Council are outlined below, although their use would depend on their specific relevance to the site being investigated, as well as any updates or revisions to official technical guidance. The use of alternative risk assessment methodologies will be considered if there are justifiable benefits from doing so.

➤ Human Health

The Council will seek to apply the methodology outlined in the Contaminated Land Exposure Assessment (CLEA) model<sup>17</sup> when assessing the risks from potential contaminants to human health.

The Council may rely on the use of soil guideline values (SGV), published by the EA and developed with the CLEA model, as a screening tool to identify land that does not pose a significant risk to human health. Where an SGV has not been developed, generic assessment criteria<sup>18, 19</sup> (GAC), which have been developed using the CLEA model, may be used instead. In either case, the use of a SGV or GAC will only be considered where the assumptions used to generate the SGV or GAC are appropriate to the specifics of the site under investigation.

When considering risks from ground gas, the Council would consider guidance offered in BS8485:2007<sup>20</sup> and CIRIA C665<sup>21</sup> when characterising a site and identifying remediation options.

➤ Human Health - Radioactivity

The risk assessment of potential radioactive contaminated land will be undertaken using the methodology outlined in the Radioactive Contaminated Land Exposure Assessment Model<sup>22</sup> (RCLEA).

➤ Groundwater

Risk assessments for groundwater will be undertaken using the EA Remedial Targets Methodology<sup>23</sup>.

➤ Ecology

When considering risks to ecological systems, the Council would seek to follow the Ecological Risk Assessment<sup>24</sup> (ERA) methodology set out by the EA.

---

<sup>17</sup> EA, Updated Technical Background to the CLEA model – Science Report SC050021/SR3, 2009

<sup>18</sup> Land Quality Management (LQM) and CIEH, The LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment (2<sup>nd</sup> edition), 2009

<sup>19</sup> Contaminated Land: Applications in Real Environments (CL:AIRE), Soil Generic Assessment Criteria for Human Health Risk Assessment, 2010

<sup>20</sup> BSi, BS8485:2007 Code of Practice for the Characterization and Remediation from Ground Gas in Affected Developments, 2007

<sup>21</sup> CIRIA, CIRIA C665 Assessing Risks Posed by Hazardous Ground Gases to Buildings, 2007

<sup>22</sup> EA, Using RCLEA – the Radioactively Contaminated Land Exposure Assessment Methodology, 2011

<sup>23</sup> EA, Remedial Targets Methodology – Hydrogeological Risk Assessment for Land Contamination, 2006

<sup>24</sup> EA, An Ecological Risk Assessment Framework for Contaminants in Soil, 2008

### 7.2.7 CATEGORISATION OF RISK

Following each phase of risk assessment, land can be placed into one of four categories for human health or controlled water, as outlined in Table 4.

Category	Human Health	Controlled Water
1	A significant possibility of significant harm exists in any case where the Council considers there is an unacceptably high probability, supported by robust science based evidence that significant harm would occur if no action is taken to stop it.	There is a strong and compelling case for considering that a significant possibility of significant pollution of controlled waters exists.
2	There is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm; on the basis of the available evidence, including expert opinion, there is a strong case for taking action under Part 2A on a precautionary basis.	The strength of evidence to put the land into Category 1 does not exist; but nonetheless, on the basis of the available scientific evidence and expert opinion, considers that the risks posed by the land are of sufficient concern that the land should be considered to pose a significant possibility of significant pollution of controlled waters on a precautionary basis.
3	The strong case described above does not exist, and therefore the legal test for significant possibility of significant harm is not met.	The risks are such that the tests set out above are not met, and therefore regulatory intervention under Part 2A is not warranted.
4	There is no risk or the level of risk posed is low.	There is no risk, or the level of risk posed is low.

Table 4 – Risk Categorisation for Human Health and Controlled Water

In the case of radioactive contamination of land, the possibility of harm is a measure of the probability, or frequency, of the occurrence of circumstances which would lead to lasting exposure being caused where:

- a. The potential annual effective dose is below or equal to 50 millisieverts (mSv) per annum; and
- b. The potential annual equivalent dose to the lens of the eye and to the skin is below or equal to 15 mSv and 50 mSv respectively.

The Council will regard the possibility of harm as significant if, having regard to uncertainties, the potential annual effective dose from any lasting exposure multiplied by the probability of the dose being received is greater than 3 mSv.

Risk assessments for ecological systems and property are not categorised in the same way as above, but instead are considered as outlined in Table 5 and Table 6.

Significant Harm	Significant Possibility of 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.	Significant harm of that description is more likely than not to result from the contaminant linkage in question.
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.	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.
In the case of European sites, harm which endangers the favourable conservation status of natural habitats at such locations or species typically found there.	

Table 5 – Risk Categorisation for Ecological Systems

	Significant Harm	Significant Possibility of Significant Harm
Crops, Produce, Livestock, Domestic Animals and Game	<p>For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage.</p> <p>Significant harm would be considered when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose.</p> <p>Food will be regarded as being no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990.</p> <p>Where a diminution in yield or loss in value is caused by a contaminant linkage, a diminution or loss of over 20% will be regarded a substantial diminution or loss.</p> <p>For domestic pets, death, serious disease or serious physical damage.</p> <p>For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the Council considers that significant harm is more likely than not to result from the contaminant linkage in question, taking into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>
Property	<p>Structural failure, substantial damage or substantial interference with any right of occupation.</p> <p>Substantial damage or substantial interference as occurs when any part of the building ceases to be capable of being used for the purpose for which it is or was intended.</p> <p>In the case of a scheduled Ancient Monument, substantial damage will also be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the Council 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.</p>

Table 6 – Risk Categorisation for Property

## 8 DETERMINATION OF CONTAMINATED LAND

### 8.1 PRE-DETERMINATION

#### 8.1.1 NOTIFICATION OF DECISIONS – NON CONTAMINATED LAND

Where the Council inspects land and determines that it is not contaminated land, the Council will prepare a written statement confirming that it does not consider the land to be contaminated land.

The Council will maintain records including the reasons for deciding that land is not contaminated land.

The Council will also provide a copy of the written statement to the owners of the land; the Council will consider providing the same to other interested parties as appropriate and with due regard to the Council's legal obligations under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004.

#### 8.1.2 NOTIFICATION OF DECISIONS – CONTAMINATED LAND

Where the Council considers that land meets the definition of contaminated land, the Council will inform the owners and occupiers of the land, as well as any other person who may be liable to pay for remediation, of the Council's intention to determine the land as contaminated land, unless there is an overriding reason not to do so.

The Council may also consider representations from interested parties regarding the intention for determination.

#### 8.1.3 RISK SUMMARY

In accordance with the statutory guidance, the Council will produce a risk summary for any land where the Council considers it likely that the land may be determined as contaminated.

The risk summary will explain how the Council understands the risks and other factors which are relevant in a way that is understandable to non-experts; this will be prepared before a determination is made.

The risk summary will include:

- A summary of the Council's understanding of risk, including a description of:
  - The contaminants involved.
  - The identified contaminant linkages or a summary of the linkages.
  - The potential impacts.
  - The estimated possibility that impacts may occur.
  - The timescale over which risks may become manifest.
- A description of how the Council understands the uncertainties behind the risk.
- A description of risks put in context.

- A description of the Council's initial views on possible remediation. This will include:
  - What remediation might entail.
  - How long remediation might take.
  - The likely effects of remediation works on local people and businesses.
  - How much difference it might be expected to make to the risks posed by the contaminated land.
  - The Council's initial assessment of whether remediation would be likely to produce a net benefit.

#### 8.1.4 PHYSICAL EXTENT OF LAND TO BE DETERMINED

The Council will identify the area of land that it is considering determining as contaminated land, based on the available information regarding historic land use boundaries and information from site investigations.

Large areas of contaminated land may be sub-divided into smaller plots, with separate determinations for each area, where appropriate. For instance, divisions may be based on the nature of the contaminant linkages which have been identified, historic and current land ownership, liability and the nature of any remediation which may be required.

#### 8.1.5 VOLUNTARY REMEDIATION

The Council may decide not to determine the land, if there were an offer to deal with the contamination on a voluntary basis, although such a decision would be taken on a case by case basis, and would involve consideration of a number of factors including (but not limited to):

- The proposed timescales.
- The technical acceptability of any proposal.
- The proposed remediation standards.

## 8.2 DETERMINATION

If, following pre-determination consultation, there are no valid reasons to delay determination, the Council will formally determine land as contaminated land.

#### 8.2.1 PUBLIC REGISTER

The Council maintains a public register of contaminated land, as prescribed by Section 78R of the Act; this is reproduced in Appendix 3.

Information on the public register may also be made available online through the Council website.

#### 8.2.2 SPECIAL SITES

Where a site is determined as a special site (as outlined in Appendix 2), the EA would, under normal circumstances, formally take on the responsibilities of the Council with regards to the enforcement of Part 2A.

## 9 REMEDIATION

### 9.1 OUTLINE

Once land has been determined as contaminated land, the Council must consider how it should be remediated and, where appropriate, it must issue a remediation notice to require such remediation.

Remediation involves undertaking works to break, or permanently disrupt, the contaminant linkage, thus ensuring that the site no longer poses an unacceptable risk to any receptors; remediation may also involve taking reasonable steps to remedy harm or pollution that has been caused by a significant contaminant linkage.

### 9.2 REMEDIATION WORKS

#### 9.2.1 REMEDIATION AIMS

The aim of remediation is to demonstrably address contaminant linkages. Such works may involve the following:

- Reducing or treating the contaminant part of the linkage (e.g. by physically removing contaminants or contaminated soil or water, or by treating the soil or water to reduce levels of contaminants, or by altering the chemical or physical form of the contaminants).
- Breaking, removing or disrupting the pathway parts of the linkage (e.g. a pathway could be disrupted by removing or reducing the chance that receptors might be exposed to contaminants, for example by installing gas membranes in a property, or by sealing land with a material such as clay or concrete).
- Protecting or removing the receptor. For example, by changing the land use or restricting access to land it may be possible to reduce risks to below an unacceptable level.

Remediation may be completed in one operation, or split across several phases.

As well as carrying out remediation works, further site investigation may be required in order to provide evidence that the remediation works have been carried out to a satisfactory standard (known as verification), or to determine where further works may be required. Such works may also involve site monitoring, especially where groundwater or ground gas are involved, over a prolonged period in order to obtain sufficient information on which to make a robust decision.



## 9.2.2 REMEDIATION STANDARDS AND REASONABLENESS

The overall aim of remediation works is to break the contaminant linkage that has been identified on a site. However, the Council will consider the reasonableness of the remediation requirements, taking into account the cost of remediation works and the seriousness of any harm that might be caused.

Where the Council considers that it is not practicable or reasonable to remediate land to a degree where it stops being contaminated land, it will consider instead whether it would be reasonable to require remediation to a lesser standard.

When considering what is reasonable, the Council will take into account:

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

## 10 LIABILITY AND COSTS

Under Part 2A, the Council is responsible for identifying liable persons and apportioning liability amongst those groups; the Council may also recover its costs where it has had to carry out remediation. This section outlines the process that the Council will follow when doing so.

### 10.1 IDENTIFICATION OF LIABLE PERSONS

For each identified significant contaminant linkage, the Council will make reasonable enquiries to identify persons who caused or knowingly permitted that linkage. Those persons would be classified as follows:

- Class A persons – Generally the polluters and those who knowingly permit contamination; this includes developers who leave contamination on a site.
- Class B persons – The current owners or occupiers of the land.

If no Class A persons can be identified for a given contaminant linkage, then liability may fall to Class B persons (with the exception of contaminant linkages that fall solely to controlled waters).

Once all of the liable persons have been identified, they are placed in a liability group, based on their class (i.e. a 'Class A liability group' or a 'Class B liability group').

If no liable persons can be established, that contaminant linkage becomes an orphan linkage; the Council has the power to carry out remediation of orphan linkages, at its own cost.

### 10.2 REMEDIATION

Following identification of the liable persons for each contaminant linkage, the Council will identify the remediation that is necessary for each contaminant linkage.

Where there is only one contaminant linkage on the contaminated land, all remediation actions will refer to that contaminant linkage. However, if there are two or more contaminant linkages, the Council will establish if that remediation action relates to a single contaminant linkage (a single linkage action) or multiple contaminant linkages (a shared action).

Where remediation is a shared action, the Council will establish whether the shared action is:

- A common action – that which addresses contaminant linkages to which it is referable, and would have been part of the remediation works if each contaminant linkage had been addressed separately.
- A collective action – that which addresses contaminant linkages to which it is referable, but would not have been part of the remediation for one or more of those contaminant linkages if they had been addressed separately.

This distinction may be important when considering how costs may be split between liable persons.

## 10.3 ATTRIBUTING LIABILITY

### 10.3.1 CLASS A PERSONS

Where a liability group has been established for a contaminant linkage, that group will be responsible for carrying the cost of remediation; however, the Council will consider whether any members of the liability group are exempted from liability under Part 2A. This is done by carrying out a number of exclusion tests, in strict order, until only one person remains in the liability group. Where an exclusion test would remove all persons from liability, that test is not run and the next test is applied.

Those exclusion tests are summarised thus:

1. Excluded activities.
2. Payment made for remediation.
3. Sold with information.
4. Changes to substances.
5. Escaped substances.
6. Introduction of pathways or receptors.

The Council has responsibility for attributing remediation costs between liable persons; this is a complex legal matter and the Council will follow the procedure laid out in the Statutory Guidance.

### 10.3.2 CLASS B PERSONS

Two exclusion tests have been set for Class B persons, the purpose of which is to exclude from liability those who do not have an interest in the capital value of the land.

## 10.4 RECOVERY OF COSTS

Under Part 2A, if the Council carries out remediation it is entitled to recover its reasonable costs from doing so.

### 10.4.1 COST RECOVERY DECISIONS

When deciding on whether to pursue recovery of costs, the Council will have regards to the following principles:

- The recovery of costs should be as fair and equitable as possible to all who have to meet remediation costs, including the taxpayer.
- The “polluter pays principle” should be applied.

The Council will seek to recover all of its reasonable costs for remediation; however, the Council may waive or reduce the recovery of its costs where it considers this appropriate and reasonable – for instance, in circumstances where:

- The recovery of costs would cause undue hardship to the appropriate person.
- There is a threat of business insolvency or closure.
- There could be adverse impacts on the activities on charities.
- There could be adverse impacts on registered social landlords.
- In the case of Class B persons (and where the presence of contamination was not known about nor reasonably foreseeable), where recovering full costs appears unreasonable.

The Council may be willing to consider deferring recovery of costs and instead securing them by a charge on the land in question.

When making decisions on the recovery of costs, the Council will require relevant information on that person’s financial status; when making such requests, the Council will consider:

- Accessibility of the information.
- The cost of obtaining the information.
- The likely significance of the information.

Any personal financial information will be held in accordance with the Councils obligations under the Data Protection Act 1998.

The Council will inform relevant persons of the outcome of cost recovery decisions, and the reasons for making those decisions.

## 11 MISCELLANEOUS PROVISIONS

### 11.1 FUNDING FOR CONTAMINATED LAND STRATEGY

The Council will seek to advance the Contaminated Land Strategy in line with its statutory duties as budgetary constraints allow.

Where possible, the Council will seek funding for the investigation of potentially contaminated land from the Environment Agency under the Local Authority Contaminated Land Capital Programme.

### 11.2 PROGRESS ON STRATEGY

Progress on addressing contaminated land will be reported on as a performance indicator, as required by the Council Plan (Section 2.4).

The performance indicator will take into account remediation of potentially contaminated sites through the actions of the planning process, as well as through other means (such as Part 2A or the Environmental Damage Regulations).

### 11.3 COUNCIL OWNED LAND

It may be the case that the Council may have some liability or other interest in land identified as potentially contaminated under this Strategy. This could occur for a number of reasons, including:

- Land identified as potentially contaminated is owned by the Council (allotments, for example).
- The Council has been identified as a potentially liable person (see Section 10).

The Council will seek to treat Council owned land on the same basis as privately owned land within the Borough.

### 11.4 GUIDANCE FOR DEVELOPMENT

Staffordshire Local Authorities have collated their resources to produce guidance for developers on the redevelopment of land affected by contamination<sup>25</sup>, which can be downloaded for free from the Council website.

The guidance serves two purposes:

1. To explain to developers and land owners why contaminated land conditions have been applied to a planning application and the background to the legislation.
2. To inform consultants of the Council requirements when addressing contaminated land conditions.

---

<sup>25</sup> A Guide for the Redevelopment of Land Affected by Contamination in Staffordshire (3<sup>rd</sup> Edition), Staffordshire Local Authorities and the EA, 2009.

## 11.5 PROVISION OF ENVIRONMENTAL INFORMATION

The Council often receives requests for information on land within the Borough, typically as part of environmental due diligence or as part of the preparation of a desk study.

The Council will, on request, provide information on land within the Borough which may, for example, include:

- Historic topographical mapping.
- Historic landfill sites.
- Information contained within any public register (including the contaminated land register and environmental permit register).
- Previous site investigations carried out by the Council under Part 2A.
- Contaminated land issues addressed through the planning system.

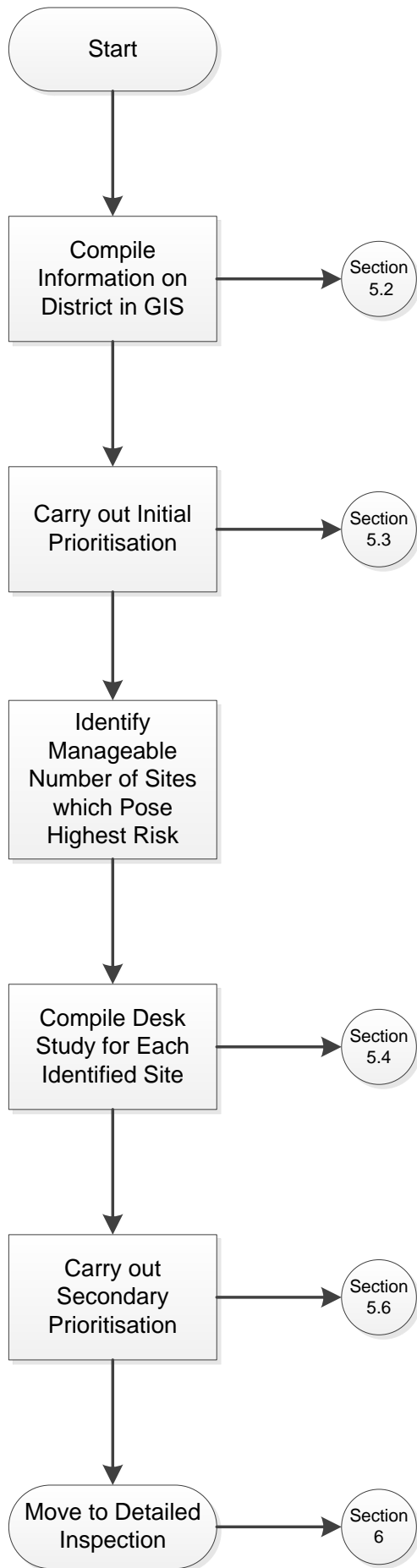
When compiling information, the Council will act in accordance with the Freedom of Information Act 2000 and the Environmental Information Regulations 2004.

The Council will usually levy a fee for compiling and preparing environmental information.

Some information held by the Council might not be available due to copyright restrictions.

The Council will not release information on sites identified as 'potentially contaminated' (under the Strategic Inspection) as part of the Contaminated Land Strategy. Any list of potentially contaminated land is information which is considered to be 'a record which is in the course of completion' and therefore exempt from disclosure under Regulation 12(4) of the Environmental Information Regulations 2004. This is also in keeping with the aim of the Statutory Guidance, which seeks to avoid potential property blight.

## **APPENDIX 1 - PRIORITISATION FLOW CHART**





## **APPENDIX 2 - LEGAL DEFINITION OF SPECIAL SITE**

The following is an extract from the Contaminated Land Regulations 2006.

### **Land required to be designated as a special site**

2.—

- (1) Contaminated land of the following descriptions is prescribed for the purposes of section 78C(8) as land required to be designated as a special site—
  - (a) land affecting controlled waters in the circumstances specified in regulation 3;
  - (b) land which is contaminated land by reason of waste acid tars in, on or under the land;
  - (c) land on which any of the following activities have been carried on at any time—
    - (i) the purification (including refining) of crude petroleum or of oil extracted from petroleum, shale or any other bituminous substance except coal; or
    - (ii) the manufacture or processing of explosives;
  - (d) land on which a prescribed process designated for central control has been or is being carried on under an authorisation, where the process does not solely consist of things being done which are required by way of remediation;
  - (e) land on which an activity has been or is being carried on in a Part A(1) installation or by means of Part A(1) mobile plant under a permit, where the activity does not solely consist of things being done which are required by way of remediation;
  - (f) land within a nuclear site;
  - (g) land owned or occupied by or on behalf of—
    - (i) the Secretary of State for Defence;
    - (ii) the Defence Council,
    - (iii) an international headquarters or defence organisation, or
    - (iv) the service authority of a visiting force, being land used for naval, military or air force purposes;
  - (h) land on which the manufacture, production or disposal of—
    - (i) chemical weapons,
    - (ii) any biological agent or toxin which falls within section 1(1)(a) of the Biological Weapons Act 1974(1) (restriction on development of biological agents and toxins), or

- (iii) any weapon, equipment or means of delivery which falls within section 1(1)(b) of that Act (restriction on development of biological weapons), has been carried on at any time;
  - (i) land comprising premises which are or were designated by the Secretary of State by an order made under section 1(1) of the Atomic Weapons Establishment Act 1991(2) (arrangements for development etc of nuclear devices);
  - (j) land to which section 30 of the Armed Forces Act 1996(3) (land held for the benefit of Greenwich Hospital) applies;
  - (k) land which is contaminated land wholly or partly by virtue of any radioactivity possessed by any substance in, on or under that land; and
  - (l) land which—
    - (i) is adjoining or adjacent to land of a description specified in any of sub-paragraphs (b) to (k); and
    - (ii) is contaminated land by virtue of substances which appear to have escaped from land of such a description.
- (2) For the purposes of paragraph (1)(b), “waste acid tars” are tars which—
  - (a) contain sulphuric acid;
  - (b) were produced as a result of the refining of benzole, used lubricants or petroleum; and
  - (c) are or were stored on land used as a retention basin for the disposal of such tars.
- (3) In paragraph (1)(d), “authorisation” and “prescribed process” have the same meanings as in Part 1 of the 1990 Act (integrated pollution control and air pollution control by local authorities) and the reference to designation for central control is a reference to designation under section 2(4) (which provides for processes to be designated for central or local control).
- (4) In paragraph (1)(e), “Part A(1) installation”, “Part A(1) mobile plant” and “permit” have the same meanings as in the Pollution Prevention and Control (England and Wales) Regulations 2000(4).
- (5) In paragraph (1)(f), “nuclear site” means—
  - (a) any site in respect of which, or part of which, a nuclear site licence is for the time being in force; or
  - (b) any site in respect of which, or part of which, after the revocation or surrender of a nuclear site licence, the period of responsibility of the licensee has not come to an end.

- (6) In paragraph (5), “nuclear site licence”, “licensee” and “period of responsibility” have the meanings given by the Nuclear Installations Act 1965(5).
- (7) For the purposes of paragraph (1)(g), land used for residential purposes or by the Navy, Army and Air Force Institutes must be treated as land used for naval, military or air force purposes only if the land forms part of a base occupied for naval, military or air force purposes.
- (8) In paragraph (1)(g)—
- “international headquarters” and “defence organisation” mean, respectively, any international headquarters, and any defence organisation, designated for the purposes of the International Headquarters and Defence Organisations Act 1964(6);
- “service authority” and “visiting force” have the same meanings as in Part 1 of the Visiting Forces Act 1952(7).
- (9) In paragraph (1)(h), “chemical weapon” has the same meaning as in subsection (1) of section 1 of the Chemical Weapons Act 1996(8), disregarding subsection (2) of that section.

### **Pollution of controlled waters**

3. The circumstances to which regulation 2(1)(a) refers are where—
- (a) controlled waters which are, or are intended to be, used for the supply of drinking water for human consumption are being affected by the land and, as a result, require a treatment process or a change in such a process to be applied to those waters before use, so as to be regarded as wholesome within the meaning of Part 3 of the Water Industry Act 1991(1) (water supply);
- (b) controlled waters are being affected by the land and, as a result, those waters do not meet or are not likely to meet the criterion for classification applying to the relevant description of waters specified in regulations made under section 82 of the Water Resources Act 1991(2) (classification of quality of waters); or
- (c) controlled waters are being affected by the land and—
- (i) any of the substances by reason of which the pollution of the waters is being or is likely to be caused falls within any of the families or groups of substances listed in paragraph 1 of Schedule 1 to these Regulations; and
- (ii) the waters, or any part of the waters, are contained within underground strata which comprise wholly or partly any of the formations of rocks listed in paragraph 2 of Schedule 1 to these Regulations.

## SCHEDULE 1

### SPECIAL SITES

1. The families and groups of substances relevant for the purposes of regulation 3(c)(i) are—

organohalogen compounds and substances which may form such compounds in the aquatic environment;

organophosphorus compounds;

organotin compounds;

substances which possess carcinogenic, mutagenic or teratogenic properties in or via the aquatic environment;

mercury and its compounds;

cadmium and its compounds;

mineral oil and other hydrocarbons;

cyanides.

2. The formations of rocks relevant for the purposes of regulation 3(c)(ii) are—

Pleistocene Norwich Crag;

Upper Cretaceous Chalk;

Lower Cretaceous Sandstones;

Upper Jurassic Corallian;

Middle Jurassic Limestones;

Lower Jurassic Cotteswold Sands;

Permo–Triassic Sherwood Sandstone Group [this geological unit is found within the Borough of Newcastle under Lyme];

Upper Permian Magnesian Limestone;

Lower Permian Penrith Sandstone;

Lower Permian Collyhurst Sandstone;

Lower Permian Basal Breccias, Conglomerates and Sandstones;

Lower Carboniferous Limestones.

## **APPENDIX 3 - PUBLIC REGISTER OF INFORMATION**

The following is an extract from the Environmental Protection Act Part 2A.

**78R Registers.**

- (1) Every enforcing authority shall maintain a register containing prescribed particulars of or relating to—
- (a) remediation notices served by that authority;
  - (b) appeals against any such remediation notices;
  - (c) remediation statements or remediation declarations prepared and published under section 78H above;
  - (d) in relation to an enforcing authority in England and Wales, appeals against charging notices served by that authority;
  - (e) notices under subsection (1)(b) or (5)(a) of section 78C above which have effect by virtue of subsection (7) of that section as the designation of any land as a special site;
  - (f) notices under subsection (4)(b) of section 78D above which have effect by virtue of subsection (6) of that section as the designation of any land as a special site;
  - (g) notices given by or to the enforcing authority under section 78Q(4) above terminating the designation of any land as a special site;
  - (h) notifications given to that authority by persons—
    - (i) on whom a remediation notice has been served, or
    - (ii) who are or were required by virtue of section 78H(8)(a) above to prepare and publish a remediation statement, of what they claim has been done by them by way of remediation;
  - (j) notifications given to that authority by owners or occupiers of land—
    - (i) in respect of which a remediation notice has been served, or
    - (ii) in respect of which a remediation statement has been prepared and published, of what they claim has been done on the land in question by way of remediation;
  - (k) convictions for such offences under section 78M above as may be prescribed;
  - (l) such other matters relating to contaminated land as may be prescribed; but that duty is subject to sections 78S and 78T below.

- (2) The form of, and the descriptions of information to be contained in, notifications for the purposes of subsection (1)(h) or (j) above may be prescribed by the Secretary of State.
- (3) No entry made in a register by virtue of subsection (1)(h) or (j) above constitutes a representation by the body maintaining the register or, in a case where the entry is made by virtue of subsection (6) below, the authority which sent the copy of the particulars in question pursuant to subsection (4) or (5) below—
  - (a) that what is stated in the entry to have been done has in fact been done; or
  - (b) as to the manner in which it has been done.
- (4) Where any particulars are entered on a register maintained under this section by the appropriate Agency, the appropriate Agency shall send a copy of those particulars to the local authority in whose area is situated the land to which the particulars relate.
- (5) In any case where—
  - (a) any land is treated by virtue of section 78X(2) below as situated in the area of a local authority other than the local authority in whose area it is in fact situated, and
  - (b) any particulars relating to that land are entered on the register maintained under this section by the local authority in whose area the land is so treated as situated, that authority shall send a copy of those particulars to the local authority in whose area the land is in fact situated.
- (6) Where a local authority receives a copy of any particulars sent to it pursuant to subsection (4) or (5) above, it shall enter those particulars on the register maintained by it under this section.
- (7) Where information of any description is excluded by virtue of section 78T below from any register maintained under this section, a statement shall be entered in the register indicating the existence of information of that description.
- (8) It shall be the duty of each enforcing authority—
  - (a) to secure that the registers maintained by it under this section are available, at all reasonable times, for inspection by the public free of charge; and
  - (b) to afford to members of the public facilities for obtaining copies of entries, on payment of reasonable charges; and, for the purposes of this subsection, places may be prescribed by the Secretary of State at which any such registers or facilities as are mentioned in paragraph (a) or (b) above are to be available or afforded to the public in pursuance of the paragraph in question.



- (9) Registers under this section may be kept in any form.

**78S Exclusion from registers of information affecting national security.**

- (1) No information shall be included in a register maintained under section 78R above if and so long as, in the opinion of the Secretary of State, the inclusion in the register of that information, or information of that description, would be contrary to the interests of national security.
- (2) The Secretary of State may, for the purpose of securing the exclusion from registers of information to which subsection (1) above applies, give to enforcing authorities directions—
- (a) specifying information, or descriptions of information, to be excluded from their registers; or
  - (b) specifying descriptions of information to be referred to the Secretary of State for his determination; and no information referred to the Secretary of State in pursuance of paragraph (b) above shall be included in any such register until the Secretary of State determines that it should be so included.
- (3) The enforcing authority shall notify the Secretary of State of any information which it excludes from the register in pursuance of directions under subsection (2) above.
- (4) A person may, as respects any information which appears to him to be information to which subsection (1) above may apply, give a notice to the Secretary of State specifying the information and indicating its apparent nature; and, if he does so—
- (a) he shall notify the enforcing authority that he has done so; and
  - (b) no information so notified to the Secretary of State shall be included in any such register until the Secretary of State has determined that it should be so included.

### **78T Exclusion from registers of certain confidential information.**

- (1) No information relating to the affairs of any individual or business shall be included in a register maintained under section 78R above, without the consent of that individual or the person for the time being carrying on that business, if and so long as the information—
  - (a) is, in relation to him, commercially confidential; and
  - (b) is not required to be included in the register in pursuance of directions under subsection (7) below; but information is not commercially confidential for the purposes of this section unless it is determined under this section to be so by the enforcing authority or, on appeal, by the Secretary of State.
- (2) Where it appears to an enforcing authority that any information which has been obtained by the authority under or by virtue of any provision of this Part might be commercially confidential, the authority shall—
  - (a) give to the person to whom or whose business it relates notice that that information is required to be included in the register unless excluded under this section; and
  - (b) give him a reasonable opportunity—
    - (i) of objecting to the inclusion of the information on the ground that it is commercially confidential; and
    - (ii) of making representations to the authority for the purpose of justifying any such objection; and, if any representations are made, the enforcing authority shall, having taken the representations into account, determine whether the information is or is not commercially confidential.
- (3) Where, under subsection (2) above, an authority determines that information is not commercially confidential—
  - (a) the information shall not be entered in the register until the end of the period of twenty-one days beginning with the date on which the determination is notified to the person concerned;
  - (b) that person may appeal to the Secretary of State against the decision; and, where an appeal is brought in respect of any information, the information shall not be entered in the register until the end of the period of seven days following the day on which the appeal is finally determined or withdrawn.
- (4) An appeal under subsection (3) above shall, if either party to the appeal so requests or the Secretary of State so decides, take or continue in the form of a hearing (which must be held in private).
- (5) Subsection (10) of section 15 above shall apply in relation to an appeal under subsection (3) above as it applies in relation to an appeal under that section.

- (6) Subsection (3) above is subject to section 114 of the Environment Act 1995 (delegation or reference of appeals etc).
- (7) The Secretary of State may give to the enforcing authorities directions as to specified information, or descriptions of information, which the public interest requires to be included in registers maintained under section 78R above notwithstanding that the information may be commercially confidential.
- (8) Information excluded from a register shall be treated as ceasing to be commercially confidential for the purposes of this section at the expiry of the period of four years beginning with the date of the determination by virtue of which it was excluded; but the person who furnished it may apply to the authority for the information to remain excluded from the register on the ground that it is still commercially confidential and the authority shall determine whether or not that is the case.
- (9) Subsections (3) to (6) above shall apply in relation to a determination under subsection (8) above as they apply in relation to a determination under subsection (2) above.
- (10) Information is, for the purposes of any determination under this section, commercially confidential, in relation to any individual or person, if its being contained in the register would prejudice to an unreasonable degree the commercial interests of that individual or person.
- (11) For the purposes of subsection (10) above, there shall be disregarded any prejudice to the commercial interests of any individual or person so far as relating only to the value of the contaminated land in question or otherwise to the ownership or occupation of that land.