CONTAMINATED LAND STRATEGY 2023

Contaminated Land Strategy 2023

ISSUED BY:

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EXECUTIVE SUMMARY

The UK has a proud history as the leading industrial power of the 19th Century, before its decline with the shift towards a service-based economy. Our industrial heritage includes the unwelcome legacy of land contamination, which presents risks to people and the environment.

Under the Environmental Protection Act 1990, every local authority has a duty to identify any contaminated land in its area and to ensure that it is treated. The way in which this is done has to be set out in a written Strategy, itself to be updated periodically; this document has been written in compliance with this requirement.

This is the second Contaminated Land Strategy that the Council has adopted; it has been comprehensively re-written to reflect twenty years of progress in legislation, policy and good practice relevant to contaminated land.

Under the 2001 Contaminated Land Strategy, the Council was successful in obtaining funding for fourteen site investigations, none of which resulted in any land being defined as contaminated land.

In terms of the District's history, the most significant economic activity was coal mining, around which Rugeley, Hednesford, Cannock and Norton Canes grew; most local industry grew around Bridgtown and along Watling Street. Regarding its natural history, Cannock Chase is renowned as a large tract of forest and heathland which contains sensitive ecology and groundwater.

The Contaminated Land Strategy presents an outline of legislation and policy areas (at all levels of government) that have relevance to contaminated land.

Under this strategy, the Council will develop a geographic information system-based screening tool to identify and prioritise potentially contaminated land based on broad screening parameters. A series of desk studies will then be produced for the highest risk sites, following which the sites which are deemed to present the highest risk would be considered for intrusive investigation where necessary. This represents an update from the previous screening methodology.

This strategy sets out how the Council will address the technical and legislative aspects of contaminated land, including:

- The approach to risk assessment and how land will be determined to be contaminated land.
- How remediation will be designed and undertaken.
- The approach to liability and voluntary remediation.
- How the strategy will be funded and how progress will be monitored.

1 INTRODUCTION

1.1 BACKGROUND

The UK has a significant industrial heritage; it gave birth to the Industrial Revolution in the late 18th century to become, until the late 19th century, the world's leading economic and industrial power. However, economic development came with scant regard for the environment; air, water and land pollution were barely considered in the drive to increase output from industries based on coal and iron.

Modern industry is regulated much more stringently, and there is a greater awareness of environmental issues such as pollution and climate change. Furthermore, manufacturing output has been in decline for some time, as the UK economy shifts toward the provision of services.

An unwelcome legacy from past industry remains; the environmental impacts from abandoned factories, petrol stations, landfills, and other sites are still to be addressed.

Land contamination has significant societal costs, in so far as:

- Exposure to contamination can cause adverse health impacts.
- Contamination can migrate to water bodies, where it can cause adverse impacts on wildlife and drinking water.
- Contamination can cause damage to concrete and structures.

Whilst the first laws concerning pollution came into force with the Alkali Act of 1863, the limited understanding of the environment resulted in unintended consequences. This was to be a hallmark of environmental legislation, until the first modern environmental legislation came into force – the Control of Pollution Act 1974.

The first legislation to address contaminated land was contained in Section 57 of the Environment Act 1995; this inserted 'Part 2A' (contaminated land) into the Environmental Protection Act 1990. Section 57 was brought into force by the Contaminated Land Regulations 2001.

The intention of the Environmental Protection Act 1990 Part 2A is to require local authorities to:

- Identify land which is potentially contaminated.
- Prioritise potentially contaminated land for inspection, so that land which presents the highest risks is inspected first.
- Inspect that land to determine whether it is contaminated (this is where an intrusive investigation is undertaken to collect environmental samples for laboratory analysis).
- Where land is determined as contaminated, to secure its remediation (treatment).

Local authorities are required to prepare a written strategy that details how they will carry out their duties under Part 2A.

1.2 Terminology

Most of the specific terms used in this document are defined within the text. Definitions of some of the terms and abbreviations are provided below:

- 'Part 2A' means Part 2A of the Environmental Protection Act 1990 (as amended).
- 'the Council' means Cannock Chase District Council.
- 'District' means land within the administrative area of Cannock Chase District Council.
- 'DEFRA' means the Department for Environment, Food and Rural Affairs.
- 'EA' means the Environment Agency.
- 'Statutory Guidance' means any guidance on contaminated land published for this purpose in accordance with Section 78YA of the Environmental Protection Act 1990.

1.3 2023 Strategy Update

1.3.1 Progress Since Last Strategy

Since the 2001 Contaminated Land Strategy was adopted, the Council has been successful in obtaining DEFRA funding to undertake a number of site investigations across the District, all of which have concluded that the respective sites are not likely to meet the definition of contaminated land.

1.3.2 Updates to the Strategy

The previous Contaminated Land Strategy was approved in 2001, shortly after the enactment of Part 2A of the Environmental Protection Act 1990. In the intervening 22 years, there have been significant developments that impact on how land contamination is assessed and managed.

This revised Strategy is more comprehensive than the previous version and includes:

- The background on relevant legislation, such as the introduction of the Environmental Damage Regulations 2015.
- Updates to central government policy and guidance, including statutory guidance which has been updated twice since 2001.
- The background on relevant local government policies, such as the local plan for both Cannock District and Staffordshire County Councils.
- Updated background information, including revisions to the industrial history, geology and natural history of the district.

Over the last 22 years, there have been significant advances in how land contamination is assessed and managed. Risk assessment techniques have been updated, as have references to the available techniques for monitoring the environment and for undertaking remediation.

This strategy includes a revised methodology for the identification and prioritisation of potentially contaminated land, which reflects advances in computing power and geographic information system capabilities. This represents an advance on the methodology undertaken under the 2001 Contaminated Land Strategy.

2 THE DISTRICT OF CANNOCK CHASE

2.1 GENERAL CHARACTERISTICS

Cannock Chase is one of eight districts located in the county of Staffordshire. Cannock Chase is found in the southwest of Staffordshire, and shares boundaries with South Staffordshire District Council, Stafford Borough Council and Lichfield District Council. To the immediate south lies the Metropolitan Borough of Walsall.

Cannock Chase has a local population of 100,500[1] and covers an area of 78.9km^2 (30.5 square miles).

The district is semi-rural, and is formed of:

- Cannock Chase, an area of outstanding natural beauty, which covers approximately 40% of the District as a continuous band of woodland and heathland.

- The towns of Cannock, Hednesford, Rugeley, Bridgtown, and Norton Canes, with some smaller outlying villages.

2.2 HISTORY AND INDUSTRIAL LEGACY

The District is strongly associated with Cannock Chase, an expanse of ancient woodland and heathland which was a royal hunting forest in medieval times.

The main towns in medieval times were Cannock and Rugeley, although they were modest, and remained so until the Industrial Revolution, during which the towns of Cannock Chase underwent significant growth. The brief industrial history of the District is presented below.

2.2.1 MINING AND MINERALS

The most significant activity associated with the District is coal mining. Rugeley became a mining town, as did Cannock and Hednesford. There was a strong demand for coal in the industrial heartlands of what is now the West Midlands, and numerous deep coal mines were established across the District.

Coal mining no longer takes place; Lea Hall Colliery, the last remaining coal mine in the District, closed in 1990.

Mudstone was worked at Bridgtown for local brick and tile manufacture.

The sandstone and conglomerates that form the Chester Formation are quarried for use as aggregates (sand and gravel). There are two aggregate quarries in operation today, although one (CEMEX) is predominantly located in Stafford Borough, whilst another (Hanson) lies entirely in South Staffordshire, immediately to the north of the District.

[1] 2021 Census

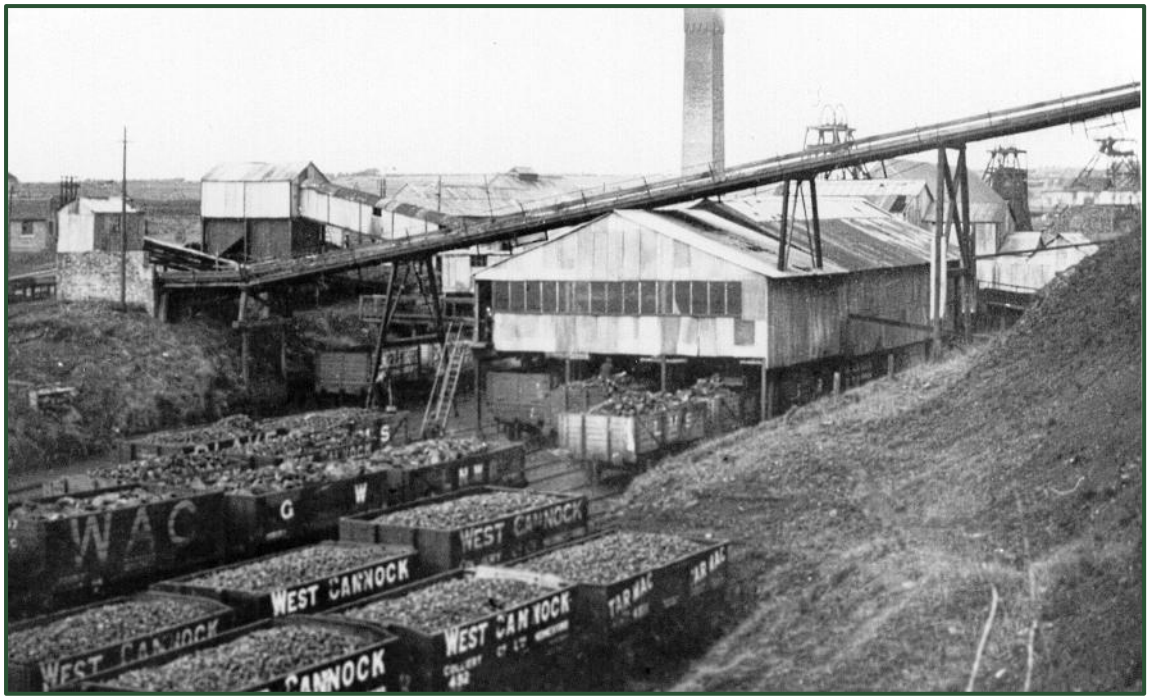


Figure 1: West Cannock Colliery (courtesy of the Museum of Cannock Chase).

2.2.2 Other Industries

The District is not widely known for industry. Locally significant industries include:

- Town gas works at Rugeley, Hednesford and Cannock.
- Tool manufacturing at Bridgtown.
- Brick and tile manufacturing at Bridgtown and Littleworth.
- A tannery at Rugeley.
- Rugeley power station (coal).

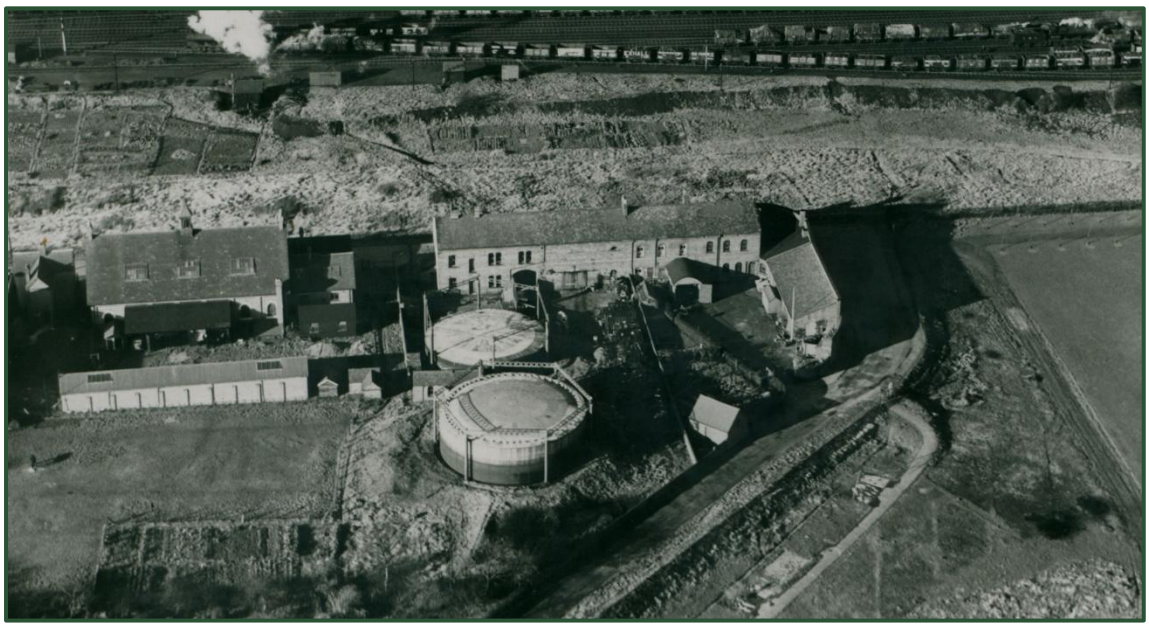


Figure 2: Hednesford Gas Works (courtesy of the Museum of Cannock Chase).

2.2.3 TRANSPORT

Historic transport links which were developed in the District include:

- The Trent & Mersey Canal at Rugeley and the Birmingham Canal Navigations (Cannock Extensions), which have largely been filled.
- A well-developed railway network, a significant proportion of which served collieries and have since been abandoned.

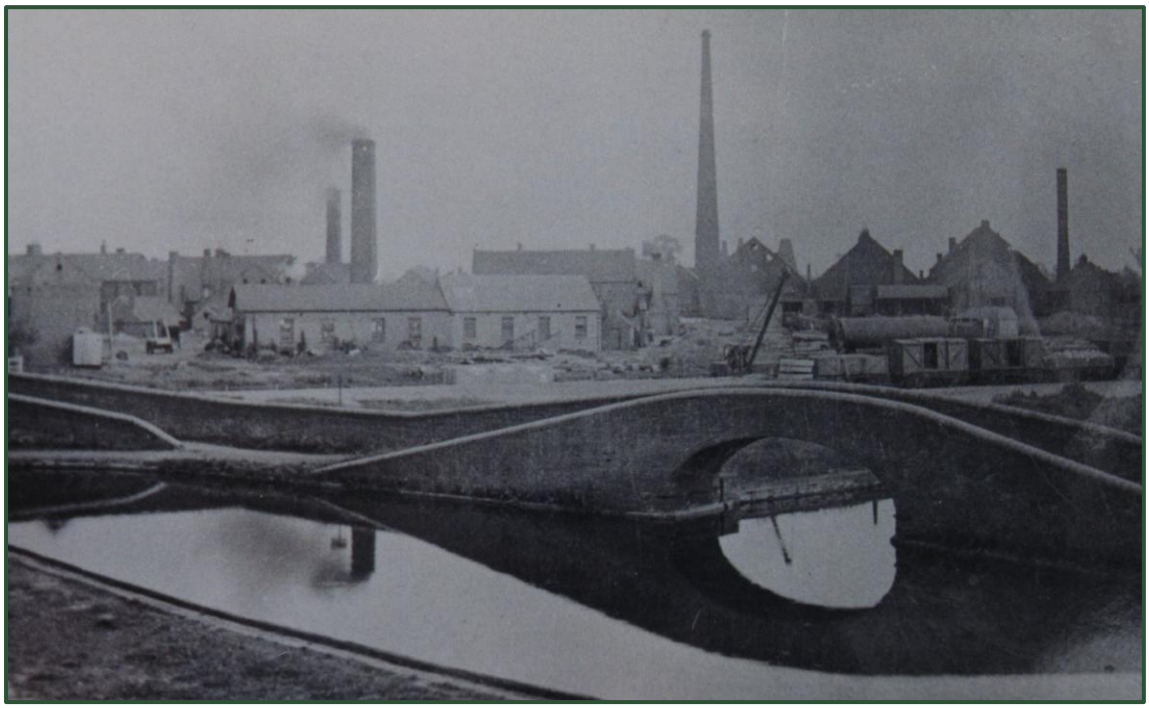


Figure 3: Edge Tool Factory (courtesy of the Museum of Cannock Chase).

Petrol filling stations, many of which have closed, are associated with fuel storage tanks which may present an on-going source of contamination.

2.3 Geology

2.3.1 Solid Geology

Rock Types and Stratigraphy

The geology of the District is broadly split into two:

- The north of the District is dominated by sandstone and conglomerates of the Chester Formation (part of the Pero-Triassic Sherwood Sandstone Group), and underlies much of Cannock Chase, Hednesford and Rugeley.
- The south of the District overlies the Pennine Middle Coal Measures, which consists of mudstone, siltstone, and sandstone, with bands of coal.

Geological Structures

Bedrock of the Middle Coal Measures is highly faulted, although only one significant fault passes through the District.

Subsidence associated with coal mining induced 'fault reactivation' has, in the past, necessitated the demolition of unsafe properties, although further incidents are unlikely to occur with the cessation of coal mining.

An overview of the local geology is presented as Figure 4.

2.3.2 Superficial Geology

The District is partially covered by a range of superficial deposits.

Superficial deposits in Rugeley are largely formed of river terrace deposits of sand and gravel, associated with the River Trent and it's tributary Rising Brook.

Hednesford, Cannock and the south of the District are largely covered by superficial deposits of diamicton (predominantly clay) and sand and gravel, both of which are glacial in origin.

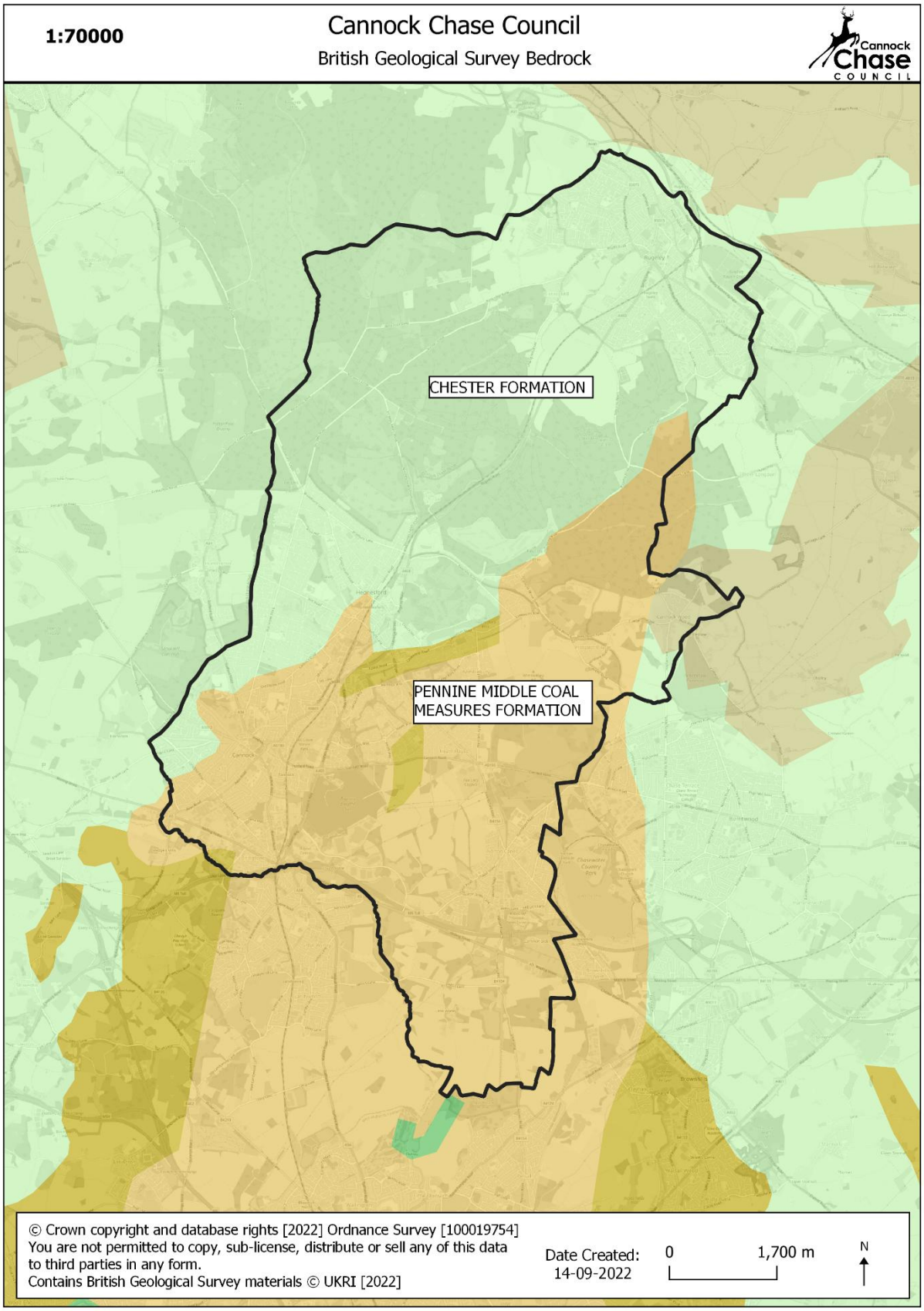


Figure 4: Bedrock Geology of the District.

2.3.3 MADE GROUND

Made ground (reworked natural and artificial deposits) is found throughout the District, from a diverse range of sources including:

- Colliery spoils.
- Filled mineral excavation pits (clay, sand and/or gravel pits).
- Relict foundations and demolition arisings.
- Filled canals and railway cuttings.

Common made ground constituents include ceramics (such as brick and tile), wood, glass, concrete/cement, plastic, and metal (including slag).

Abandoned mineral workings, railway cuttings and other excavations were often filled with waste, such as:

- Colliery spoil.
- Domestic/municipal waste.
- Industrial wastes (usually from local industries).

2.4 Water Resources

2.4.1 Hydrogeology

Groundwater Distribution

Most of the accessible groundwater is found in the sandstones associated with the Chester Formation, in the north of the District.

Whilst groundwater is found in the Coal Measures, it is not transmitted so easily though the mudstone dominated bedrock.

Groundwater Classification

The sandstones of the Chester Formation are classified by the EA as 'principal aquifers'. These are layers of rock that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale.

The interbedded mudstones and sandstones of the Coal Measures are of lesser importance (as a source of groundwater) and are classified by the EA as 'secondary aquifers' – meaning that they support water supplies at a local scale.

Groundwater Utilisation

Groundwater is utilised as a resource by two different groups of users: the public water undertaker (South Staffordshire Water) and private water supply owners.

South Staffordshire Water source approximately 40% of public supplies from groundwater. Within the District, this is drawn from multiple boreholes drilled at three locations within the Chester Formation; it is important that these are protected from contamination.

The Council is not aware of any private water supplies in the District.

Groundwater Vulnerability

The groundwater held in the Chester Formation is vulnerable to contamination. This is because any contamination that is released into the soils is likely to percolate through superficial deposits (if present) of sand and gravel, then through the sandstone dominated bedrock, until it reaches the groundwater.

Groundwater held in the Coal Measures is of lesser concern, as it is not only not utilised for drinking water, but the superficial deposits of diamicton are likely to limit contaminant mobility.

Contamination Sources

Contamination poses a risk to groundwater when it is mobile; the main risks are from leachable metals and hydrocarbons (including fuel and solvents).

Another source of contamination is from acid rock drainage, which is associated with coal mining. This occurs where sulphur containing minerals are exposed to both oxygen and water which, through biochemical reactions, generate acidic sulphates, which have significant environmental impacts, particularly on surface water.

The Coal Authority operate two mine water treatment schemes at:

- Cannock Wood.
- Mid-Cannock.

2.4.2 Hydrology

The River Trent forms the north-eastern boundary to the District; otherwise, the District contains only minor tributaries.

2.5 Ecology

2.5.1 Sites of Special Scientific Interest

Three sites of special scientific interest (SSSI) are found within the District:

- Cannock Chase.

  This covers a significant proportion of Cannock Chase (across Stafford Borough and Cannock Council). In the District, it is formed from four parcels of land with an approximate combined area of 388Ha (959 acres), which represent '[some of] the most ecologically valuable parts of the former Royal Chase'.

  Cannock Chase is formed of a mixture of mature woodland and heathland.

- Chasewater and the Southern Staffordshire Coalfield Heaths.

  This again covers a significant proportion of land, although only half lies within Cannock Chase. It is formed of two parcels of land with an approximate combined area of 267Ha (660 acres); further parcels are found in Lichfield District and Walsall.

  Chasewater and the Southern Staffordshire Coalfield Heaths is important for its wet and dry lowland heath, and its open water habitats.

- The Birmingham Canal Navigations (Cannock Extensions),

  This represents a 2.5km (1.5 miles) length of canal which suffers a low volume of canal traffic. This has resulted in scarce plants becoming established along its length, and along the associated banks.

2.5.2 Local Nature Reserves

There are two local nature reserves in the District, those areas are:

- Hednesford Hills Common

  This forms part of the Cannock Chase SSSI.

- Hazel Slade

  This covers an area of 13Ha (32 acres) and is an historic wood pasture.

2.5.3 Special Areas of Conservation

The majority of Cannock Chase that has been designated as a SSSI has also been designated as a Special Area of Conservation (SAC).

The Cannock Extension Canal has also been designated as a SAC.

3 LEGISLATION

3.1 ENVIRONMENTAL PROTECTION ACT 1990

The Environment Act 1995 amended the Environmental Protection Act 1990 to insert new provisions (Part 2A of the 1990 Act) relating to contaminated land.

Part 2A places a range of obligations onto local authorities, the overall aim of which is to proactively find and treat land contamination that poses a significant risk to public health and the environment.

Broadly speaking, the duties placed on the Council under Part 2A include:

- To prepare and implement a Contaminated Land Strategy, to detail how the Council will carry out its legal duties.
- To identify all potentially contaminated land in the District and to assess the potential risks posed at each potentially contaminated site.
- To investigate potentially contaminated sites to confirm whether it is contaminated land.
- To identify the relevant parties (including those who created the contamination) and determine who is liable for remediation.
- To evaluate the ways of treating the contamination.
- To ensure that the contamination is treated.
- To maintain records of the actions that have been carried out.

The Council must consider Statutory Guidance[2,3] when performing its duties.

3.2 TOWN AND COUNTRY PLANNING ACT 1990

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

When a planning application is submitted to the local planning authority, the developer must demonstrate that they understand and can manage the risks associated with land contamination. Planning applications can be conditioned to ensure that the developer undertakes their responsibilities to an appropriate standard.

The standards imposed under the planning regime are higher than those under Part 2A, as the development must be demonstrably safe (rather than not presenting an unacceptable risk), although the general principles for assessing and managing land contamination remain the same.

New development that has been constructed to a good standard should not be capable of being declared as contaminated land under Part 2A.

[2] DEFRA, 'Contaminated Land Statutory Guidance', April 2012.
[3] Department for Business, Energy & Industrial Strategy 'Radioactive Contaminated Land Statutory Guidance', June 2018.

3.3 The Building Regulations 2010

The Building Regulations 2010 requires the risks from land contamination to be addressed as part of construction works.

The standards are outlined in government published guidance[4] as 'resistance to contaminants'; this essentially mirrors the requirement of the planning regime to manage land contamination so that development is safe.

Whilst The Building Regulations 2010 is separate from development control under The Town and Country Planning Act 1990, satisfaction of planning conditions covering land contamination will usually satisfy the equivalent requirements of building control.

3.4 The Environmental Damage (Prevention and Remediation) (England) Regulations 2015

When there is an imminent threat of 'environmental damage' or actual 'environmental damage' those responsible are required to take immediate steps to prevent that damage, or further damage, and to notify the relevant authority.

'Environmental damage' under the Environmental Damage Regulations (Prevention and Remediation) (England) 2015 (EDR) is damage to one or more of:

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

The Council has (with some exceptions) responsibility for damage to land under the EDR (damage to waters is regulated by the EA, whilst damage to protected species and natural habitats is regulated 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 relevant regulator is aware of a potential case of 'environmental damage', it must determine whether that 'environmental damage' exists.

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

The EDR only apply to operators of economic activities.

[4] HM Government, Approved Document C: Site Preparation and Resistance to Contaminants and Moisture, 2013.

3.5 Environmental Permitting (England and Wales) Regulations 2016

The Environmental Permitting Regulations 2016 (EPR) require certain 'regulated facilities' to obtain an environmental permit to operate.

A regulated facility is required to operate in an environmentally responsible manner. Depending on the type and scale of industrial activity, the EPR may cover issues such as:

- Emissions to air, land, and water.
- Operational efficiency.
- Management of waste.
- Procedures and operator competence.

A well-run facility should present a low risk to the environment and their site should not be impacted by contamination.

When the operator wishes to surrender their permit, they are required to ensure that their site is in the same condition as it was before the permit was granted. To evidence this, they may be required to submit a 'site condition report'. Should any contamination be found (regardless of risk), then they will be required to return the site to the pre-permit condition.

3.6 Water Resources Act 1991

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

4 POLICIES

4.1 CENTRAL GOVERNMENT POLICY

4.1.1 CONTAMINATED LAND STATUTORY GUIDANCE

The current government policy on Part 2A is detailed in the Statutory Guidance.

The overarching objectives of the Government's policy on the Part 2A regime are:

(a) To identify and remove unacceptable risks to human health and the environment.
(b) To ensure that contaminated land is made suitable for its current use.
(c) To ensure that the burdens faced by individuals, companies and society are proportionate, manageable, and compatible with the principles of sustainable development.

The Part 2A regime is one of several ways in which land contamination can be addressed; alternative mechanisms for dealing with land contamination include:

(a) Requiring potential land contamination issues to be addressed during development under planning/building regulations.
(b) The use of alternative legislation, such as the EDR.

Government advice is that enforcing authorities should use enforcement powers under Part 2A only where an appropriate alternative solution cannot be found.

Under Part 2A, the enforcing authority may need to decide when, 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 the financial costs to whoever will pay for remediation (including the taxpayer where relevant), the health and environmental impacts of taking action, property blight, and burdens on affected people.

The authority should take a precautionary, but proportionate approach to the risks raised by contamination, with a view to ensuring that the regime produces net benefits.

4.1.2 National Planning Policy

Current government policy on development control is set out in the National Planning Policy Framework[5] (NPPF).

The NPPF seeks to encourage the remediation of land contamination as a function of development, as reflected in the following excerpts:

- Section 11: Making effective use of land:

  Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously developed or 'brownfield' land.

  Planning policies and decisions should:

  - *"give substantial weight to the value of using suitable brownfield land… and support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land."*

- Section 15: Conserving and enhancing the natural environment:

  Planning policies and decisions should contribute to and enhance the natural and local environment by:

  - *"remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."*

  Planning policies and decisions should ensure that:

  - *"a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation)."*
  - *"after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990."*
  - *"adequate site investigation information, prepared by a competent person, is available to inform these assessments."*

[5] Ministry of Housing, Communities & Local Government, 'National Planning Policy Framework', 2021.

Brownfield Registers

The Town and Country Planning (Brownfield Land Register) Regulations were introduced in 2017; they require local planning authorities to prepare, maintain and publish registers of previously developed (brownfield) land that is suitable for residential development.

Sites may also be entered onto the register with planning permission in principle; development constraints presented by land contamination will still need to be satisfactorily addressed, as they would in any other development.

The aim of these regulations is to promote the redevelopment of brownfield land in preference to the development of greenfield land, by streamlining the planning process.

4.2 Environment Agency Policy

4.2.1 River Basin Management Plan - Humber River Basin

The River Basin Management Plan[6] (RBMP) has been developed under the Water Framework Directive (WFD), which requires EU member states to manage the water environment to a consistent standard. This legislation was retained under the European Union Withdrawal Act 2018.

The WFD Regulations require the preparation and publication of RBMP; the setting of environmental objectives for groundwater and surface waters and the devising and implementing of measures to meet those objectives.

Abandoned mines affect 4% of water bodies in the river basin district; the RBMP sets out how pollution from minewater is managed at a strategic level.

[6] EA, 'River Basin Management Plan Humber River Basin District', https://www.gov.uk/guidance/humber-river-basin-district-river-management-plan-updated-2022

4.3 Staffordshire County Council Policy

4.3.1 The Minerals Local Plan for Staffordshire 2015 - 2030

The Staffordshire Minerals Local Plan, which details Staffordshire County Council policy when determining planning applications (for mineral development) has the following strategic objectives:

- To provide minerals to support sustainable economic development.
- To locate mineral sites in acceptable locations.
- To ensure that mineral sites operate to high environmental standards.
- To ensure that mineral sites are restored and managed in a way that enhances local amenity and the environment.

Of specific relevance is Policy 4 (minimising the impact of mineral development), which is paraphrased:

> *"In assessing the impact of proposals for mineral development on people, local communities, and the environment, where relevant [land contamination] will be taken into account."*

4.4 Cannock Chase District Council Policy

4.4.1 Cannock Chase Corporate Plan 2022-2026

The Council Plan[7] defines the Council's priorities:

1. Economic Prosperity.

   "To reinvigorate the economy and create a District that thrives."

2. Health and Wellbeing.

   "To encourage and support residents to lead healthy and independent lives."

3. The Community.

   "To ensure Cannock Chase is a place that residents are proud to call home."

4. Responsible Council.

   "To be a modern, forward thinking and responsible Council."

This strategy seeks to support the Council priorities by improving the health and wellbeing of the local community by addressing significant risks to health and the environment from contaminated land.

[7] Cannock Chase Corporate Plan 2022-2026.

4.4.2 CANNOCK CHASE LOCAL PLAN 2014

The Local Plan[8] outlines the Council policy when determining planning applications; some of the policy outcomes relate to land contamination.

- Policy CP16 - Climate Change and Sustainable Resource Use.

  "The Council, working with partners, will tackle climate change and ensure sustainable resource use via the promotion and positive consideration of initiatives and development proposals that use land and building assets sustainably, including the preference for Brownfield land (provided it is not of high environmental value) whilst taking into account the need for avoidance of mineral resource sterilisation and having regard to all sources of land contamination and stability issues arising from the mining legacy."

The amount of derelict and/or contaminated land is a local indicator.

The Council's Local Plan is currently under review and is scheduled for adoption in 2024.

[8] Cannock Chase Local Plan 2014.

5 STRATEGY OUTLINE

5.1 ROLES AND RESPONSIBILITIES

5.1.1 CANNOCK CHASE DISTRICT COUNCIL

The primary regulator for Part 2A is Cannock Chase Council.

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's Enforcement Policy).

5.1.2 THE ENVIRONMENT AGENCY

If the Council identifies land which it considers 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, subject to agreement, authorise them to carry out an intrusive inspection of the land (Section 7.1.3).

The Council may authorise EA colleagues to exercise the powers of entry conferred by section 108 of the Environment Act 1995.

Regulatory functions under section 78B and 78C of Part 2A (including the inspection duty and the decision as to whether land is contaminated land) remain the sole responsibility of the Council.

Where the Council determines land to be contaminated land, it will consult with the EA as appropriate; where contaminated land is a 'special site', the EA will assume all regulatory functions under Part 2A.

5.1.3 OTHER AGENCIES

Other relevant organisations will be consulted on contaminated land issues as circumstances demand, as outlined in Table 1.

Issue	Organisation
Potential impact on controlled waters; investigation of a potential 'special site'	Environment Agency
Potential impact on features of historic significance	Historic England
Potential impact on features of ecological significance	Natural England
Staffordshire County Council owned land	Staffordshire County Council
Impact on or from land adjacent to Cannock Chase District.	South Staffordshire Council Stafford Borough Council Lichfield district council Walsall Council

Table 1 – Possible consultees on contaminated land issues.

5.2 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 provisions 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.

In line with Statutory Guidance and government policy, the aims 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.

5.3 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 District.

The Council has finite resources, which will be directed to sites that appear to present the greatest risk. This is in accordance with 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 prioritising sites for detailed inspection is outlined in Section 6.

5.4 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."*

The Council will enforce Part 2A only where it is unavoidable. The preference of the Council when addressing contamination is:

(1) To encourage voluntary remediation (which may include supporting site development).
(2) Where voluntary remediation cannot be negotiated, to use alternative legislation to secure remediation.
(3) To secure remediation through Part 2A.

The above policy conforms to the Regulators Code[9] and the Council's Environmental Health Division Enforcement Policy[10].

The Council's work under Part 2A will be carried out in tandem with other relevant policies to identify the optimum means of addressing potential contamination.

[9] Department for Business Innovation & Skills, 'Regulators' Code', April 2014
[10] Cannock Chase Council 'Environmental Health Division Enforcement Policy 2014'.

6 STRATEGIC INSPECTION

6.1 STATUTORY GUIDANCE

The Statutory Guidance directs the Council to 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.

These steps are described below and a flowchart outlining this approach is included as Appendix 1.

The Council will start with the assumption that land is not contaminated land unless there is reason to consider otherwise.

6.2 DATA COLLECTION

To carry out a strategic inspection of the District, it is necessary to obtain as much information on each potentially contaminated site as possible.

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 are summarised in Table 2.

Type of Receptor	Definition
Humans	Human health
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.

The Council uses a geographical information system (GIS) to carry out the initial prioritisation and as a tool when preparing desk studies. A GIS is a computer programme that can analyse data that has a spatial element to it (for example, an area of land that was a factory). As with any GIS, if robust conclusions are to be reached, the capture of high-quality data is essential.

Some of the information that the Council requires has been acquired from third parties, which includes (but is not limited to) historic mapping, geological mapping, and aquifer classifications.

Some of the data that the Council has collected is used in the initial prioritisation, whilst some is considered when preparing desk studies. The data that the Council has collated in GIS is summarised as Table 3.

Data Source	Source	Pathway	Receptor
Ordnance Survey mapping	✓	✓	✓
Aerial photography	✓	✓	✓
Current land use	✓	✓	✓
Geology	✓	✓	✓
Potential contaminant sources	✓		
Landfills	✓		
Environmental permits	✓		
Hazardous substances & COMAH sites	✓		
Groundwater vulnerability		✓	
Groundwater source protection zones			✓
Aquifers			✓
Ecologically sensitive sites			✓
Scheduled Ancient Monuments			✓

Table 3: Sources of Information.

6.3 Data Processing – Initial Prioritisation

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

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

Further data processing is required to refine this list and obtain an initial prioritisation list. Data processing considers:

- The potential contamination sources.
  - 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.
  - Some receptors are inherently more sensitive than others.

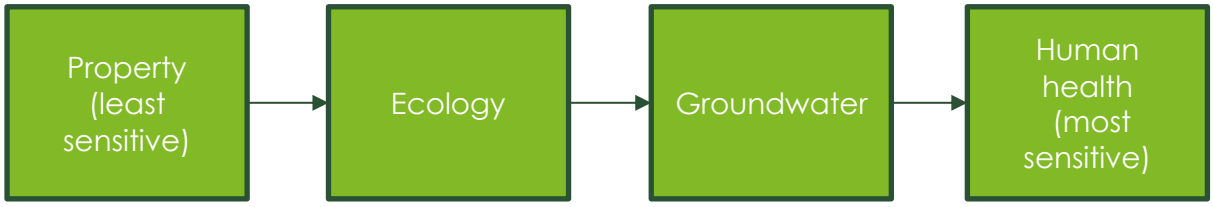


Figure 5: Receptor Sensitivity for Prioritisation.

Following the data processing, a prioritised list of potentially contaminated sites will be developed.

6.4 Desk Studies

Following initial prioritisation, a desk study report will be prepared for a manageable number of sites at which land contamination potentially poses a risk.

The desk study is the first step when assessing whether land is contaminated; the desk study should be prepared in compliance with EA guidance[11] and the relevant British Standard[12].

[11] EA, Land Contamination: Risk Management https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm
[12] BSI, 'BS10175 Investigation of Potentially Contaminated Sites – Code of Practice', December 2017.

A good desk study collates all relevant information on a site and typically includes:

- Historical mapping.
- Aerial photographs.
- Planning records.
- Archive information (such as that held by Staffordshire County Council).
- Geological information.
- Previous site assessments (if available).
- Coal Authority records (when relevant).
- Groundwater and environmental designations.

A site walkover survey will usually be carried out to inspect the site for any visual evidence of contamination and 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.

Third parties may be approached to obtain information that they might hold (where this is considered appropriate). However, such enquiries will be considered on a case-by-case basis, bearing in mind the desire of the Council to minimise public alarm and issues of possible property blight.

Once all the information has been collated, a conceptual site model can be developed. The conceptual site model considers:

- What contamination may be present and where it may be found.
- What receptors are present (e.g., people living on the site).
- How the contaminants might impact the receptors (e.g. by people eating contaminated home grown produce).

The preliminary risk assessment follows the conceptual site model, by examining the likelihood the identified risks will come to pass.

Where the desk study finds that a significant risk is not reasonably likely, further consideration of that site under Part 2A will not be necessary.

6.5 Obtaining Information from Relevant Parties

Information held by the Council on a site may be incomplete – for instance, where records have been lost, or were never submitted to the Council.

Such records may include site investigation reports, or details of remediation that was undertaken. Sometimes, copies of missing records may be held by third parties, such as the consultants who originally prepared the work, or building control agents (such as the National House Building Council).

During the preparation of a desk study, the Council will identify and contact relevant persons (if possible and appropriate) to obtain the information that they may hold. If necessary, enforcement powers will be used.

6.6 Powers of Entry

Under Section 108 of the Environment Act 1995, the Council, or an authorised agent of the Council (such as an EA officer or appointed consultant), 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.
(j) Requiring persons to answer questions.
(k) Requiring production of records or the furnishing of extracts from computerised records.
(l) Requiring necessary facilities or assistance to be afforded.

These powers of entry will be exercised in accordance with statutory guidance[13].

6.7 Secondary Prioritisation

When the Council has multiple sites for which a desk study has identified a potentially significant risk, then those sites will be re-prioritised for detailed inspection. A list of sites will be produced and will be periodically reviewed as additional desk studies are completed.

[13] Home Office, Code of Practice. Powers of Entry, December 2014.

7 DETAILED INSPECTION

7.1 INTRUSIVE SITE INVESTIGATIONS

7.1.1 GENERAL APPROACH

Where a desk study identifies a reasonable possibility that a significant contaminant linkage exists, it will be necessary to visit the site and carry out in situ testing, or to collect environmental samples for analysis, to determine whether that linkage exists. It may be necessary to conduct multiple rounds of investigation, until sufficient information has been collected to enable a decision to be made.

Intrusive investigations will be carried out by a 'suitable person' who is qualified to undertake the work. Inspections will be conducted as quickly and with as little disruption as is reasonably possible.

The Council will make reasonable efforts to consult the landowner before inspecting their land, unless there is a particular reason why this is not possible.

Should the owner refuse access, or cannot be found, the Council will consider using powers of entry as outlined in Section 6.6.

7.1.2 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 to obtain sufficient information to determine whether it is contaminated land or not.

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

7.1.3 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, authorise the EA to carry out an intrusive site inspection.

The definition of a special site is reproduced in Appendix 2 - Legal Definition of a Special Site.

Where the EA carries out an inspection on behalf of the Council, 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.

7.1.4 Council Inspections of Land

Intrusive investigations will be carried out by the Council in accordance with current standards of good practice.

Where appropriate, the Council may appoint third parties (such as a drilling contractor, consultant, or legal expert) to assist in the performance of its duties.

The Council will ensure, as far as possible, that third parties who undertake work on its behalf will be able to demonstrate an appropriate level of competency. The NPPF defines a competent person as:

> *"A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation."*

8 Risk Assessment

8.1 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 (which applies only to human health):

- Harm is being caused.
- There is a significant possibility of harm being caused.

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

8.2 Evaluation of Risk

8.2.1 Current Use

Under Part 2A, risks are evaluated in the context of the current use of the land, which is defined as:

- The current use of the land.
- The 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 any current planning permission.
- Likely informal use of the land, whether authorised by the owners or occupiers, or not.

8.2.2 Contaminant Linkage

A contaminant linkage is the relationship between a contaminant, a pathway, and a receptor; all three must be established before land can be declared as contaminated under Part 2A.

- 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, ecology, property, or controlled waters (as defined in Table 2).
- A 'pathway' defines how a receptor is or might be exposed to a contaminant.

The Council may encounter sites with multiple contaminant linkages. In such cases, the Council may treat contaminants with similar properties as a single contaminant source, if there is a robust reason for doing so; the Council will document the reasons for adopting this approach where appropriate.

8.2.3 Risk Assessment

Risk assessment involves understanding the harm that contamination can cause, and the likelihood of that harm being realised.

A risk assessment may initially be made with limited information. In the first instance, this is likely to be that a site once had a potentially contaminative land use. A reasonable assumption may be that contamination is likely to be present, but at an early stage this would be unknown.

To refine the risk assessment, a site investigation is usually undertaken, to confirm the presence and distribution of contamination across a site.

It may be that the findings of a site investigation are inconclusive and further investigation is necessary; as more information is obtained on a site, the understanding of the risks increase, and the uncertainties decrease.

The collection of information continues until it is possible for the Council to make a robust decision on whether the site is, or is likely to be, contaminated land.

The Council will only pursue an investigation if it is satisfied that an unacceptable risk could reasonably exist, in accordance with Statutory Guidance:

> *"Regulatory decisions should be based on what is reasonably likely, not what is hypothetically possible."*

8.2.4 External Expertise

Contaminated land is a complex subject and requires skills across numerous disciplines. It is possible that, if a site is particularly complex, the Council may not have the appropriate expertise to undertake a risk assessment.

Where appropriate, the Council may seek the assistance of external experts; expertise may come from partner organisations or be contracted in.

8.2.5 Normal Presence of Contaminants

In some circumstances, substances might be present in what would otherwise be considered 'elevated' concentrations naturally, for instance:

- The natural presence of contaminants 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).

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

8.2.6 Risk Assessment Methodology

There are a range of methodologies for assessing risks from different contaminants to different receptors.

Current methodologies which would typically be used by the Council are outlined below, although such use would depend on their specific relevance to the site being investigated. The use of alternative risk assessment methodologies will be considered if there are justifiable reasons for doing so.

- Human Health – Soil Contamination

  The Contaminated Land Exposure Assessment (CLEA) model[14] is used to assess the risks from land contamination to human health.

  The Council may also consider:

  - Category 4 Screening Values (C4SL)
  - Soil Guideline Values (SGV)

  C4SL and SGV were both developed by the EA using the CLEA model to define contaminant concentrations that do not pose a significant risk to human health. Where a C4SL or SGV is not available, generic assessment criteria (GAC) may be used instead, such as the 'Suitable for Use Levels'[15].

  Screening values will only be used where the assumptions used to generate those values are appropriate to the site.

[14] EA, Updated Technical Background to the CLEA model – Science Report SC050021/SR3, 2009

[15] Land Quality Press, The LQM/CIEH S4ULs for Human Health Risk Assessment, 2014

- Human Health – Ground Gas

  When assessing risks from ground gas, the Council may consider guidance offered in BS8485[16] and CIRIA C665[17].

- 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[18] (RCLEA).

- Groundwater

  Risk assessments for groundwater will be undertaken using the EA Remedial Targets Methodology[19] where appropriate.

- Ecology

  When considering risks to ecological systems, the Council would seek to follow the Ecological Risk Assessment[20] (ERA) methodology set out by the EA.

[16] BSi, BS8485 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings, 2019
[17] CIRIA, CIRIA C665 Assessing Risks Posed by Hazardous Ground Gases to Buildings, 2007
[18] EA, Using RCLEA – the Radioactively Contaminated Land Exposure Assessment Methodology, 2011
[19] EA, Remedial Targets Methodology – Hydrogeological Risk Assessment for Land Contamination, 2006
[20] EA, An Ecological Risk Assessment Framework for Contaminants in Soil, 2008

8.2.7 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 were 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; based on the available evidence, including expert opinion, there is a strong case for acting under Part 2A on a precautionary basis.	The strength of evidence to put the land into Category 1 does not exist; but nonetheless, based on 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 land contamination, harm is being caused where lasting exposure gives rise to a dose that exceeds at least one of the following:

(a) An effective dose of 3 millisieverts per annum.
(b) An equivalent dose to the lens of the eye of 15 millisieverts per annum.
(c) An equivalent dose to the skin of 50 millisieverts per annum (over any area of at least 1cm^2).

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	For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease, or other physical damage. 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. 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. 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.	Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptors where the Council considers that significant harm is more likely than not to result from the contaminant linkage in question, considering relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.
	For domestic pets, death, serious disease, or serious physical damage.	
	For other property in this category, a substantial loss in its value resulting from death, disease, or other serious physical damage.	
Buildings	Structural failure, substantial damage, or substantial interference with any right of occupation. 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. 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.	Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptors 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), considering relevant information for that type of contaminant linkage.

Table 6: Risk Categorisation for Property.

9 Determination of Contaminated Land

9.1 Pre-Determination

9.1.1 Notification of Decisions

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

The Council will maintain records of its decisions, 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; it will consider providing the same to other interested parties as appropriate and with due regard to its legal obligations under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004.

Where the Council considers that land meets the definition of contaminated land, it will inform the owners and occupiers of the land, as well as any other liable persons, of its intention to determine the land as contaminated land, unless there is an overriding reason not to do so.

The Council may consider representations from interested parties before making a formal determination.

9.1.2 Risk Summary

In accordance with the Statutory Guidance, the Council will produce a risk summary for any land where it 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 the risks put in context.

- Initial views on possible remediation. This will include:

  - What remediation might entail.
  - How long remediation might take.
  - The likely effects of remediation work on local people and businesses.
  - How much difference it might be expected to make to the risks posed by the contaminated land.
  - An assessment of whether remediation would be likely to produce a net benefit.

9.1.3 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.

9.1.4 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 multiple factors including (but not limited to):

- Timescales.
- Technical acceptability.
- Proposed remediation standards.

9.2 Determination

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

9.2.1 Public Register

The Council maintains a public register of contaminated land, as prescribed by Section 78R of Part 2A.

Information on the public register may also be published on the Council's website.

9.2.2 Special Sites

Where a site is determined to be a special site (Appendix 2 - Legal Definition of a Special Site), the EA will formally assume the responsibilities of the Council with regards to the enforcement of all aspects of Part 2A.

10 REMEDIATION

10.1 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.

Remediation works by breaking 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 contaminant linkage.

10.2 REMEDIATION WORKS

10.2.1 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 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 (e.g., by changing the land use or restricting access to land it may be possible to reduce risks to a more acceptable level).

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

As well as carrying out remediation, further site investigation may be required to confirm that remediation has been carried out to a satisfactory standard (known as verification), or to identify where further work is required. Further investigations may involve site monitoring, especially where groundwater or ground gas are involved, over a prolonged period to obtain sufficient information on which to make a robust decision.

10.2.2 Remediation Standards and Reasonableness

The overall aim of remediation works is to break the contaminant linkage that has been identified on a site.

The Council will assess the reasonableness of requiring remediation, taking 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 balanced against the seriousness of the harm or pollution of controlled waters in question.

Where the Council finds that it is not practicable or reasonable to remediate land to a standard where it stops being contaminated land, a lesser standard of remediation may be considered as an alternative.

11 Liability and Costs

11.1 Outline

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.

11.2 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 are 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 (except for contaminant linkages that fall solely to controlled waters).

Once all 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 may undertake remediation of orphan linkages, at its own cost.

11.3 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.

11.4 Attributing Liability

Where a liability group has been established for a contaminant linkage, that group will be responsible for carrying the cost of remediation.

The Council will determine specific liabilities (in terms of exemptions and or the apportionment of costs) in accordance with the requirements of Part 2A and Statutory Guidance.

11.5 Recovery of Costs

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

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

- That the recovery of costs should be as fair and equitable as possible to all stakeholders, including the taxpayer.
- That the 'polluter pays principle' should apply.

The Council will seek to recover all 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 of 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 or reasonably foreseeable), where recovering full costs appears to be unreasonable.

The Council may be willing to consider deferring the recovery of costs and instead secure 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 obtained by the Council will be held in accordance with the requirements of the Data Protection Act 2018.

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

12 MISCELLANEOUS PROVISIONS

12.1 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 external sources of funding for the investigation of potentially contaminated land. External sources of funding may be available from central government or the EA.

12.2 PROGRESS ON STRATEGY

Progress on addressing contaminated land will be subject to an annual review completed by Environmental Health. Key matters, outcomes and investigations (including any identified budget allocation required as a result of the Strategy implementation) will be reported to Head of Service as appropriate.

The review will contain information relating to 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 2015).

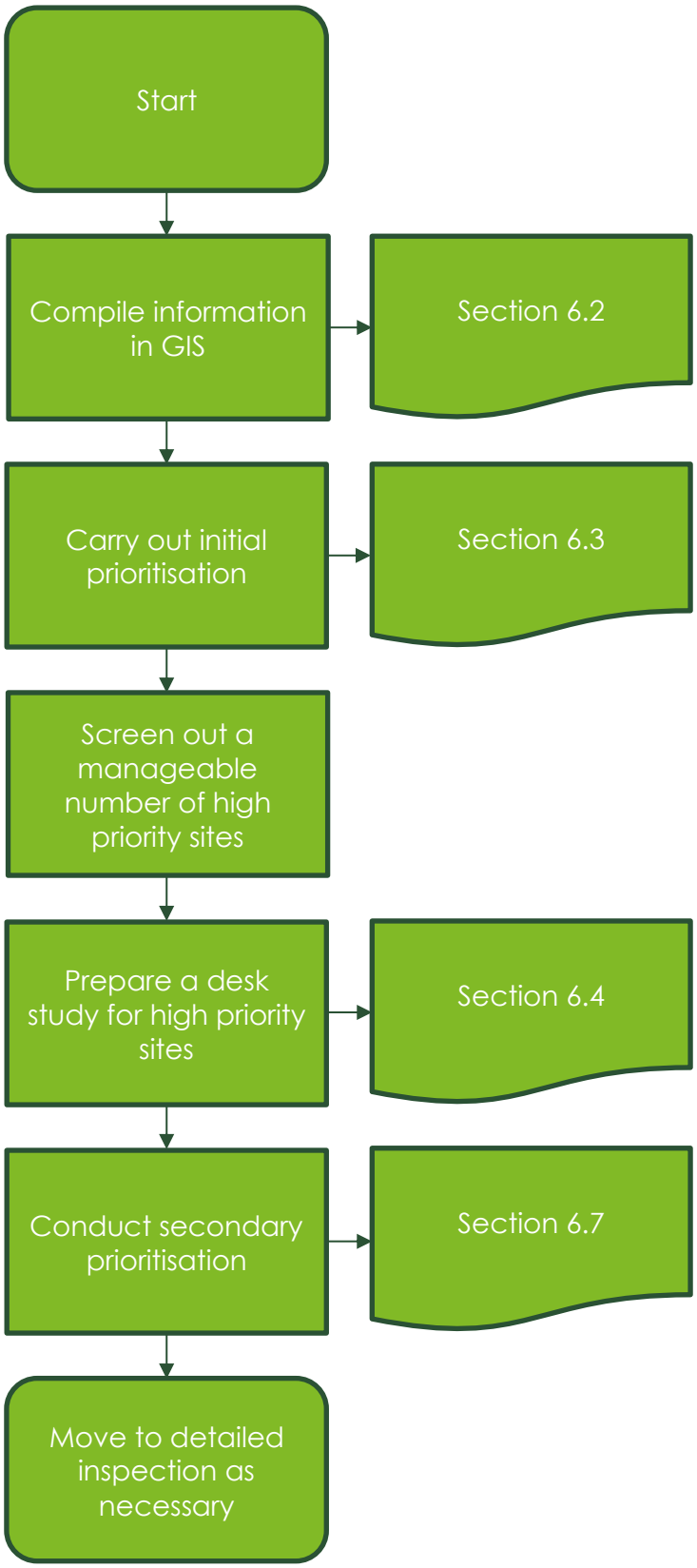
The Council has published the results of its investigations under Part 2A on its website and will continue to do so as appropriate.

12.3 CONFLICTS OF INTEREST

When implementing this Strategy, the Council may find itself to be a relevant person, or have some other association with the land (for instance, through a precursor Council).

In such circumstances, the Council will endeavour to treat such sites on the same basis as it would any other.

APPENDIX 1 - PRIORITISATION FLOW CHART



APPENDIX 2 - LEGAL DEFINITION OF A SPECIAL SITE

The following is an extract from the Contaminated Land (England) 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 Cannock Chase District]**;

Upper Permian Magnesian Limestone;

Lower Permian Penrith Sandstone;

Lower Permian Collyhurst Sandstone;

Lower Permian Basal Breccias, Conglomerates and Sandstones;

Lower Carboniferous Limestones.