Shropshire Council



Contaminated Land Strategy 2013

Consultation Draft

December 2012

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Executive Summary

Under Part 2A of the Environmental Protection Act 1990, each authority has a statutory duty to prepare, implement and keep under periodic review its Contaminated Land Inspection Strategy.
The existence of contamination represents a threat to the sustainable development of the country as a whole. The purpose of the contaminated land regime is:

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; and
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 purpose of the strategy is to ensure a rational, ordered, timely and efficient approach to dealing with potentially contaminated sites in the area. The core objective of the Shropshire Council strategy is

to protect human health and the environment by identification of potentially contaminated sites that require detailed individual inspection in a rational, ordered and efficient manner and using a risk-based approach to ensure a proportionate, manageable and economically sustainable response to contamination and remediation

The three key priority actions in this strategy are:

Priority Action Area 1

Ensure that the Council carries out its statutory duties in relation to inspecting and securing remediation of contaminated land in Shropshire by collecting and evaluating intelligence on land conditions and through the development and implementation of effective and adequate procedures.

Priority Action Area 2

Identify and secure remediation of sites, including land in the ownership of the Council, where an unacceptable level of risk is being caused to human health and the environment.

Priority Action Area 3

Encourage the voluntary remediation of contaminated land (for example through the planning system).

1. Introduction

Part 2A of the Environmental Protection Act 1990 requires that each authority prepare, implement and keep under periodic review a Contaminated Land Inspection Strategy. Shropshire Council adopted its first Contaminated Land Inspection Strategy (2009 to 2012) at the Implementation Executive meeting on 19th March 2009. That strategy has been revised to reflect progress over the 3 year period and changes to the legislation and supporting statutory guidance.

1.1 Historical Legacy

One impact of the rich heritage of UK's industrial past is a substantial legacy of land contamination. Such contamination has the potential to jeopardise the ability of humans to sustain their own health and the long-term viability of the environment.

In the past substances, which we now know to be harmful to human health or the environment, were released from many historic industrial processes or were produced as waste by-products and disposed of inappropriately. Although certain effects were observed at the time, there was little attempt to control the release of these substances into the environment or to prevent unnecessary human exposure.

In the 20th Century there was a growing realisation that the release of such substances was a serious problem. The closure of much of Britain's large scale manufacturing industries resulted in large areas of land being released from productive use. It became apparent that many of these areas were blighted by their industrial past, jeopardising regeneration and economic growth, and becoming an ever-increasing burden to future generations.

1.2 Overview of Regime

Part 2A of the Environmental Protection Act 1990 requires that Local Authorities cause their areas to be inspected with a view to identifying contaminated land taking account of the guidance issued by the Secretary of State for Environment, Food and Rural Affairs.

The Secretary of State issued revised statutory guidance to local authorities on the implementation of Part 2A in England in 2012. The Statutory Guidance requires local authorities take a 'strategic approach' to inspecting their areas and to take a pragmatic approach to this responsibility, ensuring that commercial enterprise is not discouraged. The key objectives of the contaminated land regime are:-

- ensure that risks associated with land contamination are reduced to an acceptable level
- bring contaminated sites back to beneficial use
- make sure that the cost burdens in doing so are proportionate, manageable and economically sustainable

This revised Shropshire Contaminated Land Strategy 2013 links to the wider regulatory framework designed to protect human health and the environment from the impact arising from human activity.

1.3 **The Shropshire Council Strategy 2013: Overview**

In fulfilling its duties as regulator under Part 2A, the Council will:

- regularly review the Contaminated Land Strategy to ensure a rational
- ordered, timely and efficient approach to dealing with potentially contaminated sites in the area
- determine which sites meet the statutory definition of contaminated land and whether these sites need to be designated as special sites
- ensure effective remediation of contaminated land occurs through voluntary action but resorting to enforcement powers where all else fails
- apportioning liability and ensuring that the “polluter pays” principle is followed
- inform the public of the action taken in relation to land contamination by maintaining a public register
- ensuring that potential land contamination issues are considered in all strategic planning and development control decisions

The delivery of the strategy will be based upon partnership working and one key partner is the Environment Agency who will provide the Council with site-specific advice and support, and will take primary responsibility when dealing with special sites and the pollution of controlled waters.

Since becoming a unitary authority in April 2009, Shropshire Council continues to make significant progress in gathering and evaluating historical data on past industrial activities in the area that may have led to land contamination. The Council has identified sites of potential concern that will require further investigation to establish whether they meet the statutory definition of contaminated land and determine any action to be taken by the appropriate agency where necessary to protect human health or the environment.

The Strategy has been developed having regard to the legislative requirements, key national priorities, best practice and the characteristics (geographical, social and economic) of the local area. The Strategy sets out the Council’s approach to inspecting its area to identify contaminated land sites and to ensure timely well planned and effective action is taken to make them suitable for use.

The core objective of this strategy is:

to protect human health and the environment by identification of potentially contaminated sites that require detailed individual inspection in a rational, ordered and efficient manner and using a risk-based approach to ensure a proportionate, manageable and economically sustainable response to contamination and remediation

2. Outline of Part 2A and Key Concepts of the Contaminated Land Regime

2.1 **Principles of Part 2A**

The main legislation is contained in Sections 78A to 78YC of Part 2A of the Environmental Protection Act 1990. It is complemented by the Contaminated Land (England) Regulations 2006 ("the regulations") and the revised statutory guidance issued in April 2012 by DEFRA – "Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance". There is also separate statutory guidance covering radioactive contamination of land.

The guidance explains that Part 2A is concerned with identifying and dealing with land only where there are unacceptable risks posed by land contamination and that the starting point should be that land is not contaminated unless there is reason to consider otherwise. It goes on to explain the "suitable for use" approach. This introduces the concept of risk assessment on a site-by-site basis, were the level of contamination is assessed on the basis of the current use and circumstances of the land, and a wide range of environmental factors.

The overarching objectives of the Government's policy on contaminated land are set out as being:

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

This approach is seen as a reasonable answer to the often conflicting environmental, social and economic questions which arise over contaminated land.

Part 2A is one of several ways in which land contamination can be addressed and should only be applied where no other appropriate alternative solution exists. 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.

A precautionary approach should be taken 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. This will require careful judgement to ensure that a balance is struck between dealing with risks raised by contaminants in land, associated benefits of remediation and the potential impacts of regulatory intervention (including financial costs to whoever will pay for remediation, health and environmental impacts of taking action, property blight, and burdens on affected people).

2.2 **Roles & Responsibilities Under Part 2A**

The Department for Environment, Food & Rural Affairs (DEFRA) is responsible for the strategic management of the regime and the policy which underpins it. The primary regulatory role rests with the local authority, reflecting existing functions dealing with statutory nuisance and the complementary role as the planning authority. The Environment Agency has additional responsibilities, specific to contamination where controlled waters may be affected.

The primary responsibilities are as follows:

LOCAL AUTHORITIES

- to cause the area to be inspected to identify contaminated land;
- to decide, after consultation, what remediation is required in any individual case and to ensure this takes place;
- to establish who should be the appropriate person or persons to bear responsibility for the remediation of such land; and
- to record information about regulatory activity and make it available to the public

ENVIRONMENT AGENCY

- to assist local authorities in identifying contaminated land, particularly where pollution of controlled waters is involved;
- to provide site specific guidance to local authorities;
- to act as the enforcing authority for any site designated as a 'special site';
- to publish periodic reports on contaminated land; and
- to carry out technical research and, in conjunction with DEFRA, publish scientific advice.

2.3 **Definition of Contaminated Land**

The term 'contaminated land' has a specific legal meaning in respect of the interpretation of Part 2A of the EPA 1990 and indeed is a defined in section 78A(2) as:-

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

a. significant harm is being caused or there is a significant possibility of such harm being caused; or

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

Under Part 2A, for a relevant risk to exist there needs to be one or more contaminant, a receptor and a pathway for the contaminant to reach the receptor. This link including the contaminant, pathway and receptor is known as a "contaminant linkage". In other words, for a risk to exist there must be contaminants present in a form and quantity that poses a hazard, and one or more pathways by which they might significantly pollute controlled waters or significantly harm people, the environment, or property.

The guidance provides the following definitions:

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

If these three elements are present then a contaminant linkage can be established. Where no pollution linkage can be established between a source and a receptor, the presence of the contaminant alone will not be sufficient to determine the land as contaminated as defined by Part 2A because although the contamination may be a hazard there is no exposure and hence no risk. More than one pollutant linkage may exist for any site and each linkage will be reviewed for the potential to cause harm. The procedure used for determining whether a particular possibility is significant is based on risk assessment. Risk is defined as the combination of:

a) the probability, or frequency, of occurrence of a defined hazard; and
b) the magnitude of the consequences

2.4 **Significant Harm and Significant Possibility of Significant Harm to Human Health (SPOSH)**

Section 78A(4) defines "Harm" as meaning harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property. However there are no definitions of the term significant but there is additional guidance of the assessment of significance.

The guidance suggests that the local authority should consider any decision on whether land is contaminated in the context of the broad objectives of the regime and of the Government's policy. The revised guidance categorises contaminated sites into 4 categories on the grounds of significant possibility of significant harm to human health as detailed in the box below. The guidance also highlights that as the decision is a positive legal test the starting assumption should be that land does not pose a significant possibility of significant harm unless there is reason to consider otherwise.

Category 1 sites are those where the Local Authority considers that there is an unacceptably high probability, supported by robust scientific based evidence that significant harm would occur if no action is taken to stop it.

Category 2: these are sites where there is a strong case for considering that the risks from the land are of sufficient concern in respect of a significant possibility of significant harm, with all that this might involve. Category 2 may include land where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but nonetheless the authority considers on the basis of the available evidence, including expert opinion, that there is a strong case for taking action under Part 2A on a precautionary basis.

Category 3: these are sites where the strong case described in Category 2 does not exist, and therefore the legal test for significant possibility of significant harm is not met. This may include land where the risks are not low, but nonetheless the authority considers that regulatory intervention under Part 2A is not warranted as it is recognised that placing land in Category 3 would not stop others, such as the owner or occupier of the land, from taking action to reduce risks outside of the Part 2A regime if they choose.

Category 4 sites are those where there is no or low risk that the land poses a significant possibility of significant harm. This would include land where no relevant contaminant linkage has been established, where there are only normal levels of contaminants in soil, where contaminant levels do not exceed relevant generic assessment criteria (GAC's), or other relevant technical tools or advice that may be developed in the future.
(d) Land where estimated levels of exposure to contaminants in soil are likely to form only a small proportion of what a receptor might be exposed to anyway through other sources of environmental exposure (e.g. in relation to average estimated national levels of exposure to substances commonly found in the environment, to which receptors are likely to be exposed in the normal course of their lives).
(e) Land which has been subject to detailed quantitative risk assessment if the Local Authority considers that the risk posed is sufficiently low.

The term GAC's mentioned in (c) above relating to human health risk assessment are generic guideline values which represent cautious estimates of levels of contaminants in soil at which there is considered to be no risk to health or, at most, a minimal risk to health.

For categories 2 (defined as land that would be capable of being determined as contaminated land on grounds of SPOSH to human health) and 3 (defined as land that would not be capable of being determined on such grounds), the guidance sets out the following in terms of how the Local Authority should proceed.

The Local authority should first base its decision on whether there is a strong case, based on its assessment of SPOSH, that the site should be placed in category 2 or 3. If there is not such a strong case, based on SPOSH, then it should also consider other factors relevant to achieving the objectives of the Government's policy. These factors include the likely direct and indirect health benefits and impacts of regulatory intervention; and an initial estimate of what remediation would involve, how long it would take, what benefit it would likely bring, whether the benefits would outweigh the financial and economic costs, and any impacts on local society or the environment. It goes on to say that a detailed assessment of the above, such as a cost benefit analysis or sustainability analysis, is not required, rather it is a "broad consideration of factors it considers relevant" that is necessary.

2.5 **Significant Possibility of Significant Pollution of Controlled Waters (SPOSP)**

The following types of pollution should be considered as constituting significant pollution of controlled waters:

- Pollution equivalent to "environmental damage" to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations 2009, but which cannot be dealt with under those Regulations.
- Inputs resulting in deterioration of the quality of water abstracted, or intended to be used in the future, for human consumption such that additional treatment would be required to enable that use.
- A breach of a statutory surface water Environment Quality Standard, either directly or via a groundwater pathway.
- Input of a substance into groundwater resulting in a significant and sustained upward trend in concentration of contaminants (as defined in Article 2(3) of the Groundwater Daughter Directive (2006/118/EC))

The following factors should be evaluated in coming to a decision in any given case on whether a possibility of significant pollution occurring is a significant possibility:

(a) The estimated likelihood that the potential significant pollution of controlled waters would become manifest, the strength of evidence underlying the estimate and the level of uncertainty underlying the estimate.

(b) The estimated impact of the potential significant pollution if it did occur. This should include consideration of whether the pollution would be likely to cause a breach of European water legislation, or make a major contribution to such a breach.

(c) The estimated timescale over which the significant pollution might become manifest.

(d) The initial estimate of whether remediation is feasible, and if so what it would involve and the extent to which it might provide a solution to the problem, how long it would take, what benefit it would be likely to bring and whether the benefits would outweigh the costs and any impacts on local society or the environment from taking action.

It then sets out, in a similar way to the approach outlined for human health considerations, four categories that sites should be placed in, with Category 1 being sites where there is a strong and compelling case for considering that there is SPOSP through to category 4 where it is considered that there is no or a low risk.

2.6 **Radioactivity**

Following extensive national consultation undertaken in July 2005 the contaminated land regime was extended to include radioactive contamination. This was enabled by the Radioactive Contaminated Land (Enabling Powers) (England) Regulations 2005 that came into force in January 2006. The main objective for extending the Part 2A regime to include radioactivity is to provide a systematic way to identify and remediate land where contamination is causing a lasting exposure of humans to radiation. Any land determined as contaminated land by virtue of radioactivity will be dealt with by the EA under the designation as a special site. This does not apply in respect of harm to any other receptor of pollution or controlled waters.

3 Characteristics of Shropshire Council Area

3.1 Population and Economy

Shropshire is a diverse, large and largely rural Council with a population of 292,800(2008) and a land area of 31,950 hectares. Map 1 shows Shropshire in its regional setting. Shropshire has strong links with the neighbouring unitary council, Telford & Wrekin. The eastern part of Shropshire also has strong connections with the West Midlands conurbation. Parts of North Shropshire have strong links with the Potteries and with towns in south Cheshire, and are also influenced by Merseyside and Manchester. Oswestry, the second largest town in Shropshire, has strong links with adjacent areas within Wales. The southern and western parts of the County are generally more remote and self-contained and have been identified as a Rural Regeneration Zone.

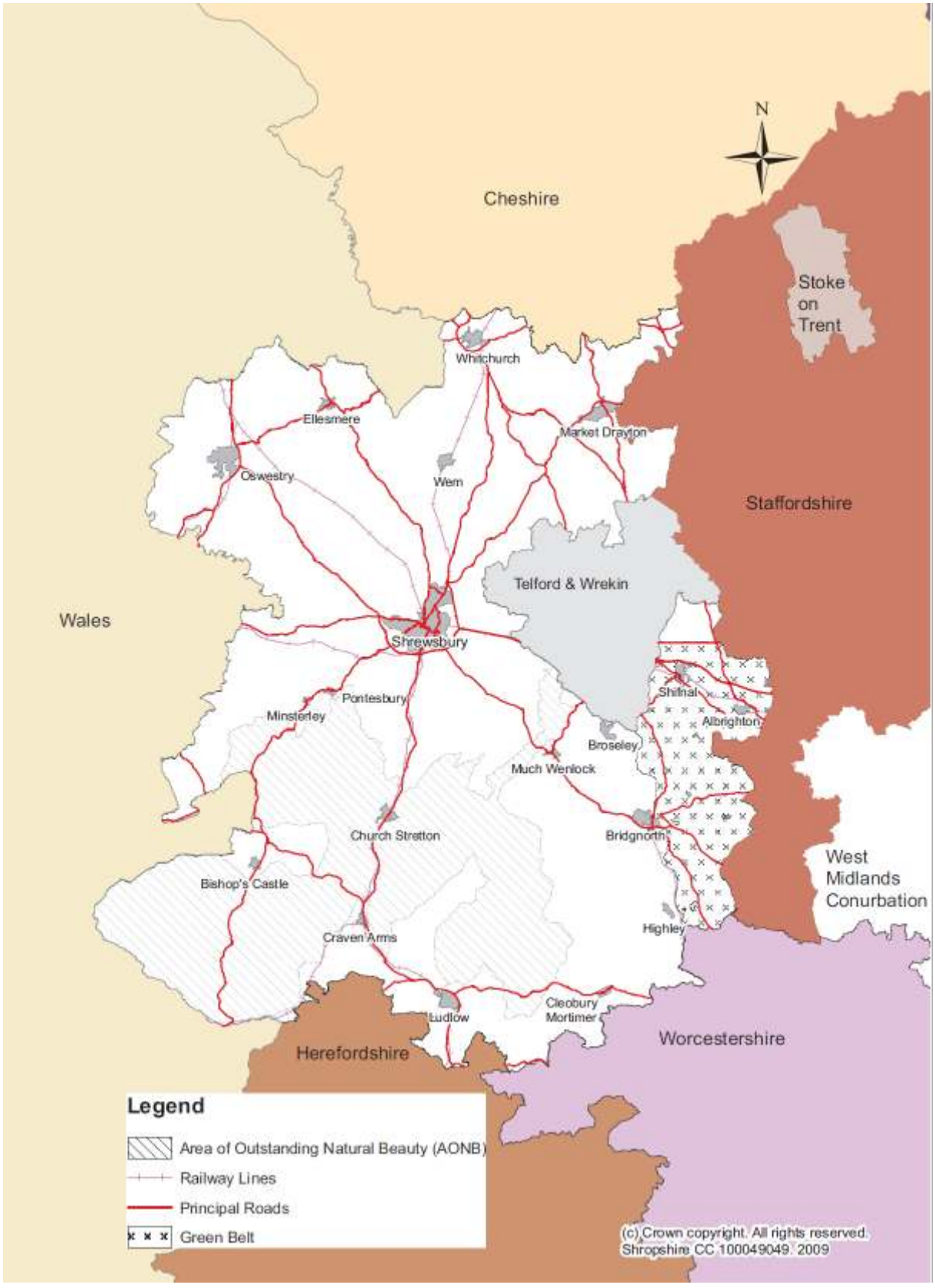
With a total population of 292,800 (2008) and only 0.9 persons per hectare, Shropshire is one of the most sparsely populated counties in England. Shrewsbury is the county town and the largest settlement and contains about a quarter of the total population. It is the main commercial, cultural and administrative centre for Shropshire, with a catchment that extends into mid Wales.

The main Market Towns of Oswestry, Bridgnorth, Market Drayton, Ludlow and Whitchurch are much smaller and together contain about 20% of the total population. They provide a range of facilities and services for their resident communities and surrounding rural hinterlands. There are a further 13 smaller Market Towns and Key Centres. Outside the Market Towns and Key Centres, the population is spread widely and sparsely with many small settlements, hamlets and dispersed dwellings within the countryside. Overall, around 36% of the population live in rural areas.

The characteristics of Shropshire's labour force and economy, in part, reflect the rural nature of the County, with a traditional dependence on agriculture and related sectors and comparatively low employment in knowledge based industries. In 2007, 136,200 residents aged 16+ were in employment in Shropshire or elsewhere.

Shropshire has a predominantly small business economy, with 87% of businesses employing 10 or fewer staff. The service sector accounts for over three quarters (77.9%) of all jobs. Employment in agriculture (3.6%) and construction (6.3%) is higher than national and regional averages. There are a small number of major employers in manufacturing and food processing, whilst the public sector is a large employer through the health service and local government.

Shropshire is an important area for mineral resources and has a significant mining heritage. Shropshire's mineral resources are supplied to both local markets and the wider area, particularly in the case of crushed rock and fire clay, where materials supply both regional and national markets. The aggregates industry is the most active sector and Shropshire currently supplies sand and gravel resources sufficient to meet the entire target for the sub-region, which includes Telford and Wrekin.


N
Cheshire
Stoke on Trent
Whitchurch
Ellesmere
Market Drayton
Oswestry
Wem
Staffordshire
Telford & Wrekin
Wales
Shrewsbury
Shifnal
Albrighton
Pontesbury
Minsterley
Broseley
Much Wenlock
Church Stretton
Bridgnorth
West Midlands Conurbation
Bishop's Castle
Craven Arms
Highley
Cleobury Mortimer
Ludlow
Worcestershire
Herefordshire
Legend
Area of Outstanding Natural Beauty (AONB)
Railway Lines
Principal Roads
Green Belt
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3.2 **Historical Development**

Until the 18th Century, Shropshire was an agricultural county particularly famous for sheep. However the development of the mining and iron industry in the north of the area lead to dramatic changes in the locality. In the rural areas the agricultural industry has been subject to well-documented changes resulting in progressive loss of employment. More recently the economy of the area has been more service industry dominated but the area has an extensive rural hinterland with agriculture still the principal land use.

The presence of extensive mineral deposits has had a significant impact on the industrial heritage of Shropshire. Historically coal has been worked in many parts of the area. In the Shrewsbury coal field the mines were all in the upper coal measures, and were widely dispersed. Most were small, shallow and isolated, with the most productive pits in the areas bounded by Hanwood, Exfords Green, Pontesford and Westbury. In the north west of the area coal mining stimulated the growth of large villages at St Martins, Weston Rhyn and Gobowen and there were also deposits worked in Trefonen and the Morda valley. The largest mine in this part of the area, Ifton Heath closed in 1968. In the south of the area Highley, Broseley and Alveley were also major coal mining areas, the last of which closed in the 1960's. New industrial development concentrated on former coal industry sites has developed over the years.

Quarrying and mining have been part of the culture and landscape of Shropshire for centuries. The limestone outcrops in the south west have been extensively mined and quarried over several centuries for stone and minerals. At Llanymynech limestone was calcined in kilns for generations to produce lime for agricultural purposes, the best known survivors being the Hoffman Kilns. In the Shropshire Hills to the south mineral extraction continues on a significant scale. The summit of Titterstone Clee has been ravaged by huge quarries from which valuable stone for road construction has been produced.

Mining for lead, copper and barytes was undertaken around Westcott, Minsterley and Huglith and Snailbeach and associated industries grew such as lead processing both in Shrewsbury and Pontesbury.

Since the earliest days of aviation, there has been an impact on the district. Flying training at RAF Shawbury goes back to 1917. In the Second World War there was a rapid growth of flying activity and support services as new airfields were established throughout the area in support of the war effort. Four airfields are still in operation today at R.A.F. Shawbury, Cosford, Tern Hill and Sleap with others at Rednal, Stanmore Childs Ercall, Ollerton, Atcham, Condover, Leaton, Nesscliffe and Prees Heath now disused or redeveloped as industrial estates. The airfields at Shawbury and Tern Hill house the Tri-Service helicopter station.

Away from the urban centres historically brick and tile works, saw mills, smithies and quarries were established. There were blast furnaces at Kenley, Upton Forge and Attingham Park. Malting and tanning was a rural occupation until these industries migrated towards the towns.

In view of this industrial heritage, the main areas of concern within Shropshire are connected with the following:

- Landfill Sites (closed and open)
- Mining of Coal and other minerals
- Aircraft and military camps
- Refuelling Tanks
- Railway infrastructure and supporting industries
- Agricultural waste (foot and mouth pits)
- Industrial Estates
- Scrap Yards/Foundries
- Tanneries
- Gas Holding Stations/former town gas works
- Former Timber Yards

Appendix 1 includes a short summary of some of the historical developments in the main towns of Shropshire that have influenced the local industrial heritage.

3.3 **Geology**

Shropshire has an interesting and diverse geology with rocks representing most of the major divisions of geological time. In terms of their distribution (outcrop) the strata occurring in the county can be broadly divided into three zones:

1. a zone of relatively younger deposits (Permo-Tiassic and Quaternary) in the north and east;
2. an intermittent central band of Carboniferous strata, and
3. a zone of older rocks (Lower Palaeozoic and Pre-Cambrian) occurring in the South and West.

This is shown in Map 2. Table 3.2 overleaf also summarises the main mineral resources in Shropshire. Appendix 2 includes further detail on the local geology of Shropshire.

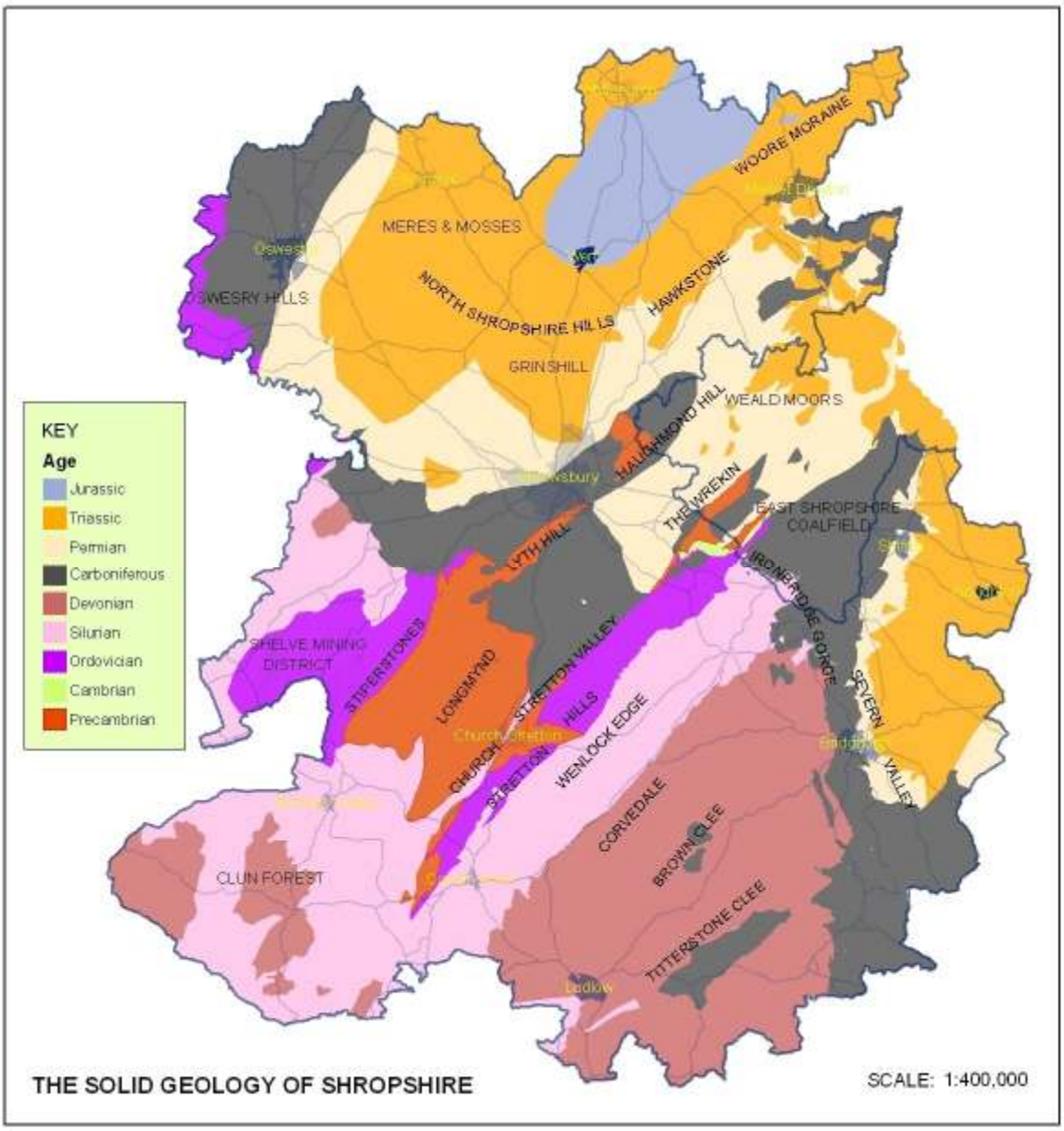

KEY
Age
Jurassic
Triassic
Permian
Carboniferous
Devonian
Silurian
Ordovician
Cambrian
Precambrian
MERES & MOSSES
WOORE MORAINE
OSWESTRY HILLS
NORTH SHROPSHIRE HILLS
HAWKSTONE
GRINSHILL
WEALD MOORS
HALGHMOND HILL
THE WREKIN
EAST SHROPSHIRE COALFIELD
LYTH HILL
IRONBRIDGE GORGE
SHELVE MINING DISTRICT
STIPERSTONES
LONGMYND
STRETTON HILLS
WENLOCK EDGE
CHURCH STRETTON
SEVERN VALLEY
CORVEDALE
BROWN CLEE
CLUN FOREST
TITTERSTONE CLEE
Ludlow
THE SOLID GEOLOGY OF SHROPSHIRE
SCALE: 1:400,000

Table 3.2 - Summary of Mineral Resources in Shropshire

System and Age (million years)	Occurrence
Recent (Holocene)	Alluvial (river) deposits are worked for sand and gravel at Bromfield and peat was dug a Whixall Moss.
Quaternary (<2 my)	Widespread glacial sands, gravels and clays especially in the north. Sand and gravel currently worked near Ellesmere and Condover.
Tertiary (2 – 65)	Sediments of this age are absent.
Cretaceous (65 – 135)	Sediments of this age are absent.
Jurassic (135 – 200)	Limited outcrop around Prees.
Permotriassic (200 – 280)	Extensive outcrop of sandstones, conglomerates and mudstones in north and east Shropshire. Sandstones yield building stone which is currently worked near Wem.
Carboniferous (280 – 370)	Extensive outcrop from east to north west in a discontinuous arc. Coal measures yield coal and associated fireclay formerly mined in 5 small coalfields. Overlying strata yield brickclays worked south of Bridgnorth. Underlying limestones worked previously for lime (e.g. Ironbridge). Dolomitic limestones worked for roadstone (e.g. at Llynclys nr Oswestry). Dolomite (an igneous rock) is also worked for roadstone at Clee Hill nr Ludlow
Devonian	Extensive outcrop of Devonian 'Old Red Sandstone' in South East Shropshire. Formerly worked for building stone.
Silurian (415 – 445)	Wide outcrop of limestone, siltstone and mudstone in South Shropshire. Limestones yield roadstone (Wenlock Edge) and building stone (Corvedale).
Ordovician (445 -515)	Varied sequence of sedimentary & volcanic rocks outcropping in Church Stretton Valley & West Shropshire. Yielding roadstones nr Minsterley (siltstone) & Llanyblodwel (volcanic) nr Oswestry
Cambrian (515 – 590)	Restricted occurrence of sandstones, shales and quartzites in Central Shropshire.
Pre-cambrian (>590)	Main outcrop at the Longmynd nr, Church Stretton (grits, siltstones and shales). Grits worked for roadstone at Bayston Hill and Haughmond.

3.4 **Hydrology**

The main rivers in Shropshire are the Severn and its tributaries and the Teme and its tributaries. In the north of the area three additional principal rivers the Dee, the Tanat and the Vyrnwy and also the Perry, Roden, Tern and the Morda also run through the area.

There are many lakes and pools, the larger ones being at Ellesmere and Bomere. In the north of the area there is a large service reservoir at Llanforda, a commissioned service reservoir at Penygwelly and larger amenity lakes at Llynclys, Rhyddwyn, Aston, Brogyntyn, Halston and Quinta.

Public drinking water is abstracted at Shelton by Severn Trent Water and Hampton Loade by South Staffordshire Water plc. The largest reservoir in the area is at Chelmarsh which is operated by South Staffordshire Water plc.

The Shropshire Groundwater Scheme is an Environment Agency scheme to top up flows in the Severn. Large quantities of water stored naturally underground in the permo-triassic sandstone formation underlying much of North Shropshire are used. The scheme consists of a number of boreholes linked by pipelines to outfalls on the rivers Perry, Roden, Tern and Severn.

Geological strata which contain groundwater in exploitable quantities are termed aquifers, whereas rocks which are largely impermeable and do not readily transmit water are termed non-aquifers. There are numerous groundwater abstractions serving private water supplies for properties and approximately 31 groundwater sources are utilised by Severn Trent Water for water supplies throughout Shropshire.

All groundwaters are controlled waters but it is convenient to subdivide permeable strata into two types; highly permeable (major Aquifers) and variably permeable (minor aquifers). The former having greater capacity to transmit contaminated recharge entering at their surface than the latter. The vulnerability of these aquifers to surface contamination depends on both the thickness and permeability of the superficial deposits and the depth of ground water. The area contains significant quantities of groundwater which is used extensively to provide water for agriculture, industry and local domestic supply. Heavy abstraction has resulted in falling groundwater levels and had an adverse impact on watercourses and wetlands. Groundwater contamination by nitrates from agriculture is also a significant issue and a large part of north eastern Shropshire has been designated as a Nitrate Vulnerable Zone.

Additional detail is included in Appendix 3.

Certain localities in Shropshire are at risk from flooding and in some areas this is a significant constraint to development. In addition to the River Severn and its tributaries, runoff has increased as agriculture has intensified and we have built more roads and houses, which has degraded the natural permeability of the landscape and reduced its capacity to retain water. In Shrewsbury for example, development over the years has encroached on to the flood plain and there are approximately 400 residential and commercial properties at risk from flooding, as well as major transport routes through the town. Downstream, a small part of Ironbridge and properties in Bridgnorth are also at risk. There are 4473 properties in a flood zone 3 and a further 12042 properties in flood zone 2.

3.5 **Landscape, biodiversity, geodiversity, land use and historic environment**

Shropshire is a predominantly rural county with a varied landscape covering an area of 319,736 hectares (3,197 square kilometres or 1,235 square miles).

The great diversity of underlying rock types means that Shropshire possesses one of the richest and most varied landscapes in England. The countryside ranges from the gently undulating landscape in the north through the low lying fertile valleys of the meandering River Severn and its tributaries to the distinct hills and open, windswept moorlands of the south. Shropshire has high levels of geodiversity. There 300 regionally important geological sites and rock representing all but two of the recognised divisions of geological time.

The varied physical landscape has influenced the county's agricultural, industrial and cultural development. The Shropshire landscape is a key economic asset creating not only an attractive place to live and work but also an important tourist destination. The nationally designated landscape of the Shropshire Hills Area of Outstanding Natural Beauty (AONB) covers 23% of the county in the south.

Shropshire's natural environment supports a wide range of habitats, including the ancient woodlands along Wenlock Edge, the upland heathlands on the Stiperstones and the Long Mynd and the lowland raised peat bog at Whixall Moss. The richness of biodiversity within Shropshire is reflected in the number of non-statutory sites designated for nature conservation. National Nature Reserves (NNRs), Sites of Special Scientific Interest (SSSIs) and non-statutory Wildlife Sites together cover approximately 6% of the land area. Approximately 7% of the land area of Shropshire is covered by woodland which includes a higher than average proportion of ancient woodland.

Under the European Habitats Directive, six areas have been identified as Special Areas of Conservation (SACs). Sixteen sites in northern Shropshire fall under two RAMSAR designations, recognising their international status under the International Convention on Wetlands. Many biodiversity designations continue across administrative boundaries and benefit from a cross boundary approach.

3.6 **Historic Environment**

Shropshire possesses a rich and important historic environment. Heritage assets range from Bronze Age ring ditches and Iron Age hill forts, to a major Roman city at Wroxeter, Offa's Dyke and important areas of industrial and archaeological interest, including part of the Ironbridge Gorge World Heritage Site and the Pontcysyllte Aqueduct and Canal World Heritage Site.

The richness of Shropshire's historic environment is reflected in the number of designated heritage assets. There are 6,849 listed buildings, 437 Scheduled Ancient Monuments, 34 Registered Historic Parks and Gardens (including 3 which are cross-border) and a Registered Historic Battlefield. The wider value of historic landscapes and townscapes is recognised through the designation of 120 Conservation Areas in Shropshire (including the centres of many of the Market Towns), together with the wealth of non-statutory designated heritage assets recorded on the Historic Environment Record.

3.7 **Climate Change**

Climate change is recognised as possibly the greatest threat facing the world today. Impacts that have been identified for Shropshire include: higher temperatures, with potentially a 4^{o}c increase by 2080; increased winter rainfall of up to 20% by 2080; and decreased summer rainfall of up to 30% by 2050. These changes are expected to result in building and infrastructure damage from extreme weather events, loss of biodiversity and landscape character, and impact on agricultural practices leading to increased water demand and increased health risks from higher summer temperatures.

4 Shropshire Council Strategy: Overall Aims

4.1 **Progress to Date**

In developing its strategic approach, the Council has paid due regard to its local circumstances and the information currently available and has been informed by progress in implementing the 2009 strategy. This has enabled consideration of the following aspects with a rational, ordered and efficient approach as specified within the DEFRA Contaminated Land Statutory Guidance 2012:

- available evidence that significant harm or pollution of controlled waters is actually being caused;
- the extent to which human and ecological receptors and controlled waters are likely to be distributed within different parts of the authority's area;
- the extent to which those receptors are likely to be exposed to a contaminant as a result of the use of the land or the geological and hydrogeological features of the area;
- the extent to which information on land contamination is already available;
- the history, scale and nature of industrial and military activities which may have contaminated the land in different parts of the authority's area;
- the nature and timing of past redevelopment in different parts of the authority's area; and
- the extent to which remedial action has already been taken by the authority to deal with land-contamination problems, or is likely to be taken as part of Shropshire Council's Local Plan and Development Plan for its area.

A total of 4,391 sites of potential concern have been identified throughout Shropshire and these have been sub-divided into the three operating areas as follows:

Northern	1,194
Central	1,209
Southern	1,988

These sites have been identified following a screening review of coarse data and do not represent an indication of the extent of actual contaminated land in Shropshire but identify potential sites of concern. The sites will require further investigation to establish whether they meet the statutory definition of contaminated land and determine any action to be taken by the appropriate agency.

Information held by the Council is accessible on the corporate GIS system. This primarily comprises purchased historical information such as OS maps and Landmark historic land use epochs. Information on sites which are protected and sites which have landscape, biodiversity, geological, historical or archaeological significance are also held by the authority and are available via GIS. Information gathered from both the Council's own records and from the Environment Agency relating to landfills is available for cross-reference. As part of recent service redesign a specific post has been created in Public Protection & Enforcement to co-ordinate the management of all environmental data and to provide a gateway for organisations seeking to access and use this data.

4.2 **Declared Contaminated Land in Shropshire**

There have been a total of 16 sites declared as contaminated land under the Part 2A provisions of the EPA in Shropshire. 9 of these sites were located in the central area; 2 in the northern area and 5 in the southern area.

In the central area 1 of these sites was affected by previous lead mining operations and was remediated to open space standards in 2006. A further 8 residential sites were in a cluster again around previous lead working operations and remediation of these sites was completed in 2008.

In the northern area 2 residential sites were affected by the pollution of controlled waters due to discrete contaminant sources and leaching and migration into shallow groundwater of PAH's associated with a former creosote works. However subsequent assessment of these sites based on the revised definition of contaminated land in respect of controlled waters has concluded that the sites do pose significant pollution of controlled waters and have been undetermined.

In the southern area 1 residential site was affected by the presence of benzo[a]pyrene in near surface soils associated with a former gasworks and remediation was completed in 2012. A further 4 residential sites are also affected by the presence of benzo[a]pyrene in near surface soils associated with another gasworks and the remediation of 1 of these sites was completed in 2012.

4.3 **Strategy Objective**

The existence of contamination represents a threat to the sustainable development of the country as a whole. The purpose of the contaminated land regime is:

d) to identify and remove unacceptable risks to human health and the environment;
e) to seek to ensure that contaminated land is made suitable for its current use; and
f) 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 Objective of this strategy is:

> to protect human health and the environment by identification of potentially contaminated sites that require detailed individual inspection in a rational, ordered and efficient manner and using a risk-based approach to ensure a proportionate, manageable and economically sustainable response to contamination and remediation

This will ensure that the Council focuses resources on identifying and securing remediation of those sites with the greatest potential risk to human health or the environment. The Part 2A approach to securing remediation of land should only be applied where no other appropriate alternative solution exists.

4.4 **Strategy Priority Action Areas**

Three priority action areas have been adopted to secure delivery of the objective as follows:

Priority Action Area 1

Ensure that the Council carries out its statutory duties in relation to inspecting and securing remediation of contaminated land in Shropshire by collecting and evaluating intelligence on land conditions and through the development and implementation of effective and adequate procedures.

Priority Action Area 2

Identify and secure remediation of sites, including land in the ownership of the Council, where an unacceptable level of risk is being caused to human health and the environment.

Priority Action Area 3

Encourage the voluntary remediation of contaminated land (for example through the planning system).

A detailed operational action plan focused on these action areas will be produced for delivery of the strategy and will be included as Appendix 4 in the final strategy.

4.5 **Consultation and Liaison**

All information on contaminated land and other issues relating to potentially contaminated land will be held within the Public Protection and Enforcement Group. The Council will undertake to liaise and establish formal links with all statutory consultees named in government guidance. Effective communication within the relevant sections of the Council and external bodies will aid the effective development of the strategy both initially and over time.

External bodies with which liaison will be appropriate:

- Environment Agency
- English Nature
- Food Standards Agency
- Health Protection Agency
- English Heritage
- DEFRA

The key functional internal consultation will involve strategic and development management aspects of development planning to ensure compliance with current planning policy and effective application and implementation of the strategy to individual planning applications and strategic and forward planning. Legal advice will also be taken to ensure compliance with statute and legal guidance.

The Council is a member of the regional the West Mercia Contaminated Land Group. The group is a forum of local authorities within the locality including Powys, Dudley, Telford & Wrekin, Herefordshire and Worcestershire Regulatory Services. Representatives from the Health Protection Agency and the Environment Agency are also represented on the group. The Council will co-operate with all neighbouring authorities.

The Council will explore ways to effectively liaise with stakeholders and develop communication streams to ensure that the information is made widely available to developers and the public. Aspects of this communication are discussed in Section 6 below.

5 Procedures

5.1 **Statutory Obligations**

Under Section 78B(1) local authorities are obliged to adopt a strategic approach to inspect their area in order to identify contaminated land which merits individual inspection. In fulfilling this obligation, they should:

a) be rational, ordered and efficient;
b) be proportionate to the seriousness of any actual or potential risk;
c) seek to ensure that the most pressing and serious problems are located first;
d) ensure that resources are concentrated on investigation in areas where the authority is most likely to identify contaminated land; and
e) ensure that the local authority efficiently identifies requirements for the detailed inspection of particular areas of land.

5.2 **Roles & Responsibilities**

The work plan included in Appendix 4 will be managed and responsibility for ensuring effective delivery is vested in the Public Protection & Enforcement Group. Enquiries relating to potentially contaminated sites will be handled by the Environmental Protection & Prevention Team who will respond to such enquiries within 5 working days of the initial enquiry. Data from such enquiries will be incorporated into the contaminated land database for future reference. Any legal or enforcement action will be discussed with the Council's legal advisors.

5.3 **Overview of Procedures**

The procedures involved in inspection of potentially contaminated land, determination, apportionment of liability and remediation are complex and detailed in Part 2A of the EPA. The strategy is largely focused on making the initial assessment of potentially contaminated land and considering whether land meets the statutory definition. However it is necessary to briefly consider the subsequent steps after the initial prioritisation. Figure 5.1 below outlines the main stages involved in assessment, determination and remediation of contaminated land under Part 2A of the EPA.


Screening Assessment
Identify pollutant linkages
Prioritise sites for further assessment
Stage 1 - Collation of Documents
Review data already available
Consider whether Special Site
Stage 2 - Visual Inspection of Site
Evaluate data and characterise site
Prepare conceptual model
Preliminary Risk Assessment
Stage 3 - Intrusive Investigations
Site geotechnical survey
Groundwater and soil samples
Stage 4 - Qualitative Risk Assessment
Collect sufficient information to either declare
as contaminated or re-prioritise
Stage 5 - Determination
Identify Appropriate Persons
Written determination as Contaminated Land
Stage 6 - Identify Liability Groups
Review Appropriate Persons to establish
Liability Groups
Stage 7 - Establish Remediation Actions
Identify appropriate remediation scheme
Apportion liability between liability groups
Stage 8 - Serve Remediation Notices
Secure compliance and validate remediation works
Council remediate land – recover costs and assess hardship

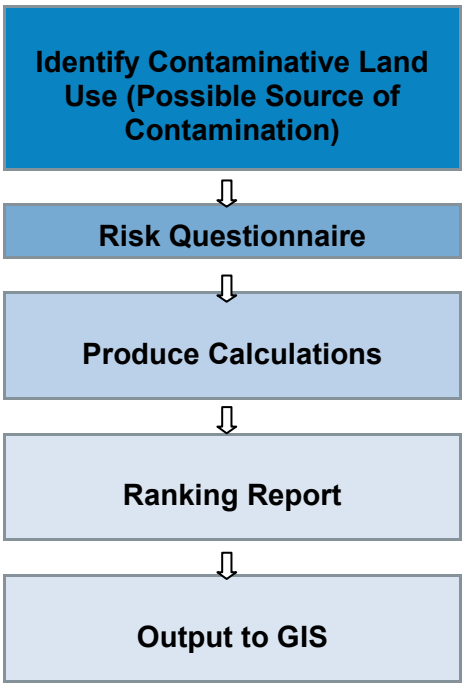
5.4 Prioritisation of Sites

In order to effectively collate and assess large amounts of data about sites across Shropshire in a rational, ordered and efficient manner and to ensure that land which merits detailed individual inspection is ranked to address the most pressing and serious problems first Shropshire Council has applied bespoke software developed by ESI Ltd (Prioritiser Database). This is a Microsoft Access file and is embedded in the Council's GiS system. This software allows identification and ranking of potentially contaminated sites and forms the basis of our prioritised inspection strategy.

The software enables flexible and readily updated instant ranking and prioritisation of sites based on the approach within this strategy. As new environmental information becomes available and is added to the system, the model is updated. The ranking approach is clearly structured and can be adapted to reflect specific local knowledge and issues in the risk ranking system and ensuring a robust and effective inspection strategy.

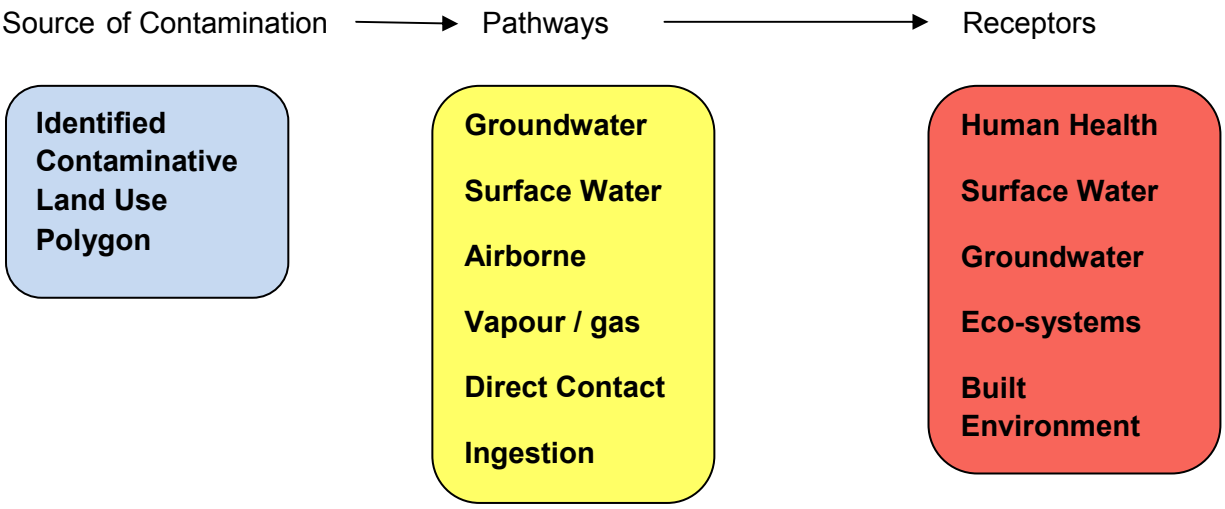
The software is used to assess the potential environmental risks posed by a site that has been under a contaminative land use at some time in the past. The system imposes a rigid, traceable and defensible screening procedure on each site under consideration. The output of the risk-screening tool is a score that reflects the risk posed by the site based on an assessment of the possible Source-Pathway-Receptor linkages present on the site. Each site score is then compared to the others and ranked according to the value of the score. Sites with a higher score demonstrate a higher potential environmental risk.

This model allows officers to prioritise sites in the absence of detailed or complete site specific information. The model is illustrated below:



5.5 **Operation of Prioritiser Database**

Shropshire Council's potential sources of contamination have been identified primarily from purchased Landmark data, Environment Agency historical landfill information and data held by the former County and District Councils. The following shows the sources, pathways and receptors that are included in the assessment.



For each potential contamination source a questionnaire is completed and a unique Site Identifier assigned. The risk ranking is based on answering 23 questions for each site and the questionnaire is grouped by each type of receptor. In addition, a professional judgement score (PJS) allows adjustment of the pre-assigned scoring within the programme where new or site-specific information dictates that site's priority should be adjusted to reflect this information. This will only be used in very limited cases where local knowledge suggested that the default scoring mechanism does not effectively reflect risk.

The prioritisation ranking report generates the following three items:

1. A tabular ranking report including the following:
   - Rank for each site
   - Location information
   - Overall site score
   - Score for each receptor type
   - Whether the Site is entirely within the District boundary
   - Professional judgment comments and score

2. A chart showing the distribution of overall source scores.

3. A report detailing the source and receptor weighting scores applied to generate the overall Site scores and ranking.

5.6 **Undertaking Detailed Inspections**

Following initial site screening, it may be necessary to undertake further and more detailed assessment of some sites where a potential contaminant linkage has been identified. Data acquisition will occur in three stages and between each stage a re-assessment of the site risk will be undertaken. The key issue at each stage is to determine whether sufficient evidence exists to either determine the site as contaminated or re-prioritise (remove to a lower risk category) based upon the revised risk assessment. On completion of Stages 1 and 2 of the procedure a Site Characterisation can be completed and at this stage the need for intrusive site investigation can be determined. The three stages are as follows:

Stage I - The collation and evaluation of documentary evidence
The initial site screening and prioritisation will gather valuable information relating to potential pollution linkages on a subject site. If the site is prioritised for inspection more detailed information will be required on the component of the potential linkage. Information will be requested from a variety of sources including regulatory bodies, site users and council records with the express aim of compiling sufficient information to assess the level of risk posed. This information will be compiled in a desk study and the level of risk will be considered. The Council will also need to establish the ownership of the land and will review Council records to establish any ecological or historical value.

Stage 2 - Visual Inspection of the site
During the initial site prioritisation some site visits may have taken place. However, it is only following the collation of a desk study that a targeted site walkover can be conducted; taking into account all previously identified sources, pathways and receptors. It may be necessary at this stage to inform the site owner, if know, that the site has been prioritised for inspection.

Stage 3 - Intrusive Investigations
The need for an extent of any intrusive investigation is determined based upon the Site Characterisation and risk assessment carried out in the previous stages. The Council may engage consultants to undertake the analysis of this data and preparation of the scope of investigation and a site investigation protocol. In addition this will involve potentially significant costs and the necessary budget will need to be secured (this may be from the Council resources for smaller investigations but is likely to involve seeking DEFRA funding for more complex investigations). Limited soil or water sampling may be undertaken without the need for extensive intrusive works. A full site investigation may involve considerable disruption to normal site activities and inconvenience to site users. Therefore it is necessary to plan such exercises carefully and with full cooperation of all persons involved. This may include where appropriate, contact and liaison with additional stakeholders i.e. on a ‘Site of Special Scientific Interest’ (SSSI), the Council must also consult with Natural England and for certain historic sites English Heritage and the Council’s Historic Environment Team.
Upon completion of intrusive investigations, carried out by or on behalf of Shropshire Council, the authority must ensure that all sites are restored to their pre-investigated state.

5.7 **Enforcement**

The procedure for dealing with contaminated land laid out in the EPA is outlined in Figure 5.1. However, before resorting to formal enforcement action the Council will endeavour to reach a satisfactory solution by positive intervention first – provision of guidance, support, advice and issuing informal warnings. Where a positive outcome is not reached voluntarily, the Council will review the options for enforcement action in accordance with the adopted Enforcement Policy, the stated aims of this strategy and relevant legislation.

The Council has powers of entry to land subject to a magistrates warrant if the consent of site owner is not forthcoming in allowing entry onto a site or residential premises for inspection purposes.

In respect of treatment of contaminated land the Council has a duty to serve a remediation notice on the appropriate persons where the clean-up of a site is not agreed voluntarily or where no agreement is reached in relation to remediation action. In any case, where enforcement action is taken, the Council follows the following four key principles:

Transparency – we will aim to ensure that the nature of, and reasons for, enforcement action to be taken by the Council are explained in a clear manner.

Fairness & objectivity – we will treat everyone equally and fairly and will ensure that decisions are not influenced by the colour, race, nationality, ethnic or national origin, gender, religion, marital status, age, sexual orientation or disability of the offender, complainant or witnesses.

Proportionality – we will aim to ensure that any action taken relates directly to the actual or potential risk to health, safety, welfare or the environment

Consistency – we will take consistent action to ensure that similar issues are dealt with in a similar way

Sustainability – the action taken must meet the objective sustainability test including consideration of beneficial impacts and potential burdens on the person who will bear the financial costs.

5.8 **Appropriate Persons for Remediation and Cost Recovery**

The strategic policy in respect of environmental damage is that the polluter should pay and therefore the person who put the contamination there in the first place should bear the cost for the problem to be resolved. However the person who caused the pollution originally is often no longer existing and hence the legislation provides for apportionment of responsibility. Section 78F states there are three parties (“appropriate persons”) that may become the potential recipients of a remediation notice (and hence responsible for remediation of the site or bearing the costs should the Council carry out works in default or for emergency purposes).

These three classes of persons are:

Class A - person responsible for the pollution taking place (causing or knowingly permitting the contamination)

Class B – if a Class A person cannot be found then the owner or occupier of the land

Class C - For orphan sites with no Class A or B person, the local authority.

The most equitable solution would be for the original polluter of the site to be the recipient of the remediation notice. If there is more than one polluter of a site, where for example the site has had a long history of different contaminative uses, then the enforcing authority has to decide what apportionment each person should pay for remediation works. Although the primary responsibility for the cost of the remediation rests with the person who caused or knowingly permitted the contamination if they cannot be found after reasonable inquiry, a residual responsibility falls upon owners and occupiers of the land. They are not however liable for any works relating to the pollution of controlled waters (these are classed as orphan sites and hence responsibility for remediation falls to the local authority).

If a remediation notice is served on an appropriate person (Class A or B) but is not complied with, then the local authority will bear the costs of the clean-up themselves and can then seek to recover those costs from the appropriate persons. However in making any cost recovery decision, the enforcing authority should have regard to the following general principles:

a) The authority should aim for an overall result which is as fair and equitable as possible to all who may have to meet the costs of remediation, including national and local taxpayers.
b) The “polluter pays” principle should be applied with a view that, where possible, the costs of remediating pollution should be borne by the polluter. The authority should therefore consider the degree and nature of responsibility of the relevant appropriate person for the creation, or continued existence, of the circumstances which lead to the land in question being identified as contaminated land.

In general the enforcing authority should seek to recover all of its reasonable costs. However, the authority should waive or reduce the recovery of costs to the extent that it considers this appropriate and reasonable, either:

a) to avoid any hardship which the recovery may cause to the appropriate person or

b) to reflect one or more of the specific considerations set out in the statutory guidance (Section 8(b), 8 (c) & 8(d)) with reference to:

- Commercial enterprises
- Trusts
- Charities
- Social housing landlords
- Owner/occupiers

When deciding how much of its costs it should recover the Council will consider whether it could recover more of its costs by deferring recovery and securing them by a charge on the land in question under section 78P (EPA 1990). Such deferral may lead to payment from the appropriate person either in instalments (EPA s78P (12)) or when the land is next sold.

In judging the extent of a waiver or reduction in costs recovery from an owner/occupier Shropshire Council will use its cost recovery policy that is based on an approach comparable to that used for housing renovation grants (HRG). The HRG test determines how much a person should contribute towards the cost of necessary renovation work taking into account income, capital and outgoings. The Council has adopted a policy on cost recovery and this is attached as Appendix 6.

5.9 **Sites Within Council Ownership**

In addition to being the enforcing authority within its area, the Council also owns large areas of land, some of which may be potentially contaminated. The three classes of persons who may be defined as “appropriate persons” who are responsible for re-mediating the contaminated land have been outlined in section 5.8 above.

As a landowner (and the Enforcement Authority) the Council could be any one of the three. Details of land in Council ownership will be consolidated and The Shropshire Asset Management Plan will be used to manage the property portfolio. The portfolio includes operational property used in the direct delivery of services (for example, offices, storage sites, leisure facilities), non-operational property which is not used in the direct delivery of services (for example investment office space, sites for development), land sites that do not fall within the category of public open space or amenity land, such as woodland, grazing land, garden land and other sites.

It is recognised that some of the local authority’s landholdings may be contaminated due to their past industrial history. These potentially contaminated land sites will be risk assessed in accordance with the adopted prioritisation strategy and will hereon be treated as any other site of potential contamination and will be addressed according to its prioritised ranking.

5.10 **Interface with the planning process**

Securing remediation through the planning regime as land is brought forward through commercial redevelopment proposals offers an effective and sustainable method of securing remediation of land and securing environmental standards fit for final end use. The interface with the planning regime is a key mechanism in protecting new development from previous contamination and securing remediation to acceptable standards.

This strategy will be regularly reviewed against the objectives of the Local Development Framework (LDF). In this way consistency throughout all of the Council’s strategies relating to contaminated land can be achieved. The LDF will be a key document in determining planning policy objectives for the assessment of planning applications.

The LDF highlights several Strategy Objectives with Core Strategies that reflect these objectives. By considering contaminated land through the planning process the following Strategy Objectives can be supported:

Strategic Objective 1: Support development of sustainable communities which are thriving, inclusive and safe
In order to ensure communities are safe it is imperative that the land on which they live is not likely to cause any adverse health effect or detrimental effect to buildings.

Strategic Objective 2: Develop Market Towns and Key Centres as more sustainable settlements
This is likely to include the development of brownfield sites. By removing contaminated land risks at the planning stage future land use options are broadened.

Strategic Objective 4: provide and maintain a sufficient supply of housing land in sustainable locations, prioritising the use of brown field sites
Core Strategy 5: protect the countryside and Green Belt land runs parallel to this objective. The planning process can be used to encourage development in a way that ensures that historical contamination is remediated and brownfield land is used rather than Green Belt land being needlessly considered.

Strategic Objective 10: Ensure all developments respond to their local context and create safe places
In order to ensure places are safe historic contamination of the land must be considered and can be addressed at the planning stage.

Strategic Objective 11: Ensure the built, natural and historic environment is protected, enhanced and where possible restored
Historically many industries have potentially contaminated land. By considering historic contamination the environment can be enhanced and potentially restored.

The remediation of brownfield sites supports the above objectives. This is mirrored by the **National Planning Policy Framework** (NPPF) which promotes the reuse of previously developed land. Due to historic land uses causing potential contamination to not only the land on which they were situated but potentially surrounding land and groundwater, brownfield sites may require remediation prior to development. By careful consideration at the planning stage it is possible to advise developers in order that appropriate remediation takes place. In this way developers voluntarily remediate land.

The NPPF states that as a minimum any land remediated should not be capable of being determined as contaminated land under Part 2A of the EPA 1990. The overall effect of this approach results in an ever decreasing proportion of Shropshire having the potential to be classed as contaminated land in future. The NPPF states a presumption in favour of sustainable development and states that sustainable development is about positive economic, environmental and social progress. It states that developments must be prevented from contributing to or being put at unacceptable risk from soil pollution and that development's should protect and enhance soils. It also states that the aim of development is to minimise pollution on the local and natural environment.

In order that the Council meets its national obligations with regard to planning set out in the NPPF and its local Strategy Objectives and Core Strategies in relation to contaminated land a mechanism has been developed to ensure contamination is considered at the planning stage. Screening tools and historical data maps have been developed which are used to identify any likely land contamination on or adjacent (or within 250 metres in the case of landfill sites) to the proposed development. If the proposed development meets the above criteria this triggers consultation with Public Protection and Enforcement through a single point of contact to assess and comment on the application as necessary. In addition to the screening tools, Public Protection and Enforcement review the weekly planning lists in order to consider each planning application which has been received and validated to assess whether any need further consideration in respect of potential contaminated land.

It is essential that potential contamination is considered as early as possible in any redevelopment planning to minimise delays and additional, unexpected costs and also to optimise the remediation of the site within the broader redevelopment programme. The Council encourages developers to make contact as soon as possible before any formal applications are submitted to discuss potential contamination issues where there are any suspicions or indications that this may be an issue with a development. Where potential contamination issues have been identified the Council will work with developers to identify the most effective remediation options and will seek to condition any planning permission to secure remediation.

During the development Public Protection and Enforcement will support the developer in delivering the agreed scheme and will carry out appropriate and proportionate checks in order to verify the information provided by the developer. This may involve scrutinising technical reports, liaising with the relevant parties throughout in order to establish clear lines of communication and potentially visiting sites to check on progress and certain elements of any remediation scheme. This will ensure transparency for both the developer and future occupiers of the site.

5.11 **Special Sites**

The Council's role as a regulator will not extend to sites that are deemed to be "special sites". These are sites that contain certain types of contaminants (e.g. acid, tars, etc), are occupied by a certain agency (e.g. Ministry of Defence sites) or are exposed to a certain industrial use (e.g. nuclear sites) as specified in the EPA. The primary responsibility for taking action in such cases will rest with the EA. Where sites that may potentially be special sites are identified these will be notified to the EA.

6 Communication & Information Management

6.1 Communication Principles

Shropshire Council recognises that the issues relating to contaminated land are both wide ranging and complex and will require the identification and engagement of a wide range of stakeholders. The strategy recognises the need to liaise and communicate effectively both internally between officers and members and between external bodies including statutory bodies, agencies, business, land owners, householders, voluntary bodies, community groups and the wider general public.

The following is a summary of the key principles of the communication strategy.

Regulation – Part 2A of the EPA 1990 is the key legislative tool that guides all local authorities in the work related to contaminated land. The Council will act in line with the legislative requirements and will aim to achieve positive outcomes by voluntary agreement

Community Participation – although the Council is the lead regulator on contaminated land it will (subject to confidentiality issues) continue to involve all key stakeholders in developing solutions to contaminated land issues and be open and transparent in the consultation process when dealing with specific sites.

Partnership Working – through our involvement in external and internal partnerships the Council will establish and maintain a joint approach and find joint solutions to shared problems.

A Strong Customer Focus – we will strive for high customer service standards including informing customers of how their enquiries will be handled and what level of service they can expect.

Performance Management –the whole aim of the strategy is around achieving outcomes in line with the Council's overall objectives and priorities such as better health and wellbeing; progress towards outcomes will be regularly monitored and reviewed to ensure we are focussing on the right priorities. This will help us in our endeavour to continuously improve

Accountability – progress on the Action Plan will be reported to our key stakeholders and Members of the Council. The procedures for information management, general liaison and communication as well as land inspections will be regularly reviewed.

Openness, Fairness and Transparency – the Council recognises the need for building up trust before it is needed and will aim to do so by being open and transparent when dealing with the public. All communication activities will be well planned and set out in clear language, timely and in line with the needs of the audience

Effective liaison and communication is of fundamental importance to the effective implementation of the Strategy and management of contaminated land. Liaison will allow effective participation of potential stakeholders.

6.2 **Site Specific Communication**

Each site will warrant a specific tailored approach with its own remediation and consultation requirements. In drafting a site specific communication strategy the Council will follow the general risk communication principles and will involve all relevant key partners throughout the process allowing sufficient time for response.

In addition to the key risk communication principles outlined above, the Council will aim to ensure that all communications meet the following objectives:

1. timely communication to build trust and understanding during all key stages in the investigation/remediation process
2. explain clearly the reasons for communication and consultation as well as to provide a sufficient level of technical information to enable better understanding of the process and regime, build trust and confidence
3. identification of and communication with all the appropriate agencies and building a relationship in advance
4. the message is vital – to be tailored specifically for each case factoring in and being sensitive to individual circumstances and maintaining an open and transparent approach.
5. each communication strategy will require a different approach, format, a degree of flexibility and adequate resources.

6.3 **Internal Communications**

The challenge of potential issues the authority may face will require flexible, joint working between officers within the Council. The Council recognises the importance of effective liaison between all relevant persons within its own organisation. The strategy recognises that all relevant persons are identified and their respective roles defined in relation to contaminated land. It is envisaged project groups comprising of different representatives from relevant sections will be established as required. The groups will be flexible in response to the issues being addressed.

6.4 **External Arrangements for Liaison and Communication**

The Council has already made formal consultation arrangements with the statutory consultees prescribed by the Act and will consult with such bodies as required. The Environment Agency has special responsibility relating to contaminated land. A close working relationship has already been established and will be maintained.

Other external bodies with which liaison will be appropriate are:

Natural England
Food Standards Agency
English Heritage
Health Protection Agency

The Council will consult with bodies or persons as appropriate when considering remediation of contaminated land sites where there is a possibility of significant harm to a prescribed receptor. The process of consultation will be initiated at the earliest opportunity in the investigation when key receptors being investigated. It is envisaged this would occur in the phase I (desktop) part of the investigation process.

The Council will take adverse human health, nuisance, biodiversity and other environmental impacts into account when assessing the practicability of any investigation or remediation programme. However, when considering sites in categories 2 and 3 the Council will also weigh up other wider socio economic considerations as set out in the section which explains about the revised statutory guidance. Where there are complex health impact issues further advice will be sought from the Health Protection Agency.

Contaminated land issues are of concern to the general public. This concern can be heightened when these issues directly affect people. However, the complexity of the issues surrounding contaminated land can lead to misconceptions and conflict development. The Council's actions will be proportionate to the seriousness of the risk. However, there is a perception that all risk should be eliminated and this can be exacerbated by the uncontrolled release of information. Therefore, the management of information to ensure effective communication can be of primary importance when dealing with contaminated land. The Council recognises the importance of open dialogue with the public. We will also intend to integrate the strategy with other areas of the Council work, in particular where there is an interface with the public. The Council will remain committed to ensure people's concerns are fully addressed and this can only be achieved through utilising the most effective means to facilitate this.

6.5 **Information Management**

Information relating to contaminated land will be in two main forms:

a) Information relating to land which is not 'contaminated' under the provisions of Part 2A but the condition of which may still be of interest to the general public
b) Land which is 'contaminated' according to the definition under Part 2A

Information under a) will be readily available upon request; this may be in paper form or held on GIS.

Requests for information on contaminated land from the public will be dealt with as follows:

1. Personal visit to the office without prior arrangement – every effort will be made to provide the information the same day.
2. Personal visit with at least 48 hours notice – the information will be made available the same day.
3. Request for information in writing – reply within 10 working days.

A reasonable charge will be made for the provision of such information.

Information on sites under b) will be held on a public register in accordance with Part 2A which will include the following:

- Site Information
- Remediation Information
- Special Sites
- Appeals Against A Remediation Notice
- Appeals Against A Charging Notice
- Convictions
- Confidentiality

The register will be held on paper/computer based systems with easy access for the general public/interested parties. The Register will not contain information on previous contaminative land uses and other research documents used in the investigation of potentially contaminated land. The Council will ensure that no information relating to the affairs of an individual or business, matters of national security or commercially confidential information is included.

6.6 **Dealing with Complaints and Enquiries**

Where an enquiry is received it will be passed to Public Protection & Enforcement for an initial assessment of the work involved.

If it has not been included in the initial correspondence, a detailed breakdown of the information required is requested. This generally comprises a list of questions. The relevant officer will then estimate the length of time required to collate the information and will provide a cost for provision of the information based upon the Council's agreed charging scheme. Once payment has been received, the information is gathered and a reply compiled.

On receipt of a service request in writing (a request to address any matter relating to contaminated land that is alleged to be a hazard to health or the environment) it will be logged on the appropriate IT system. The request will be allocated to an officer for an initial appraisal who will undertake appropriate inquires to determine the severity of the matter, using available statutory guidance, current best-practice and professional judgement. This may include a site visit where deemed necessary.

Written acknowledgement of the request will be sent to the customer, explaining initial findings. Initial contact with the customer will be made in no more than 5 working days of receipt of their request. If a customer chooses not to give his/her name the request will be listed as anonymous. Such requests will be acted on at the discretion of the Professional Officer leading on contaminated land work. Where a request is made by a person relating to land that is not affecting themselves the Council will not be under any obligation to keep that person or persons informed of progress, though it may do so as a matter of courtesy. Should it be necessary to undertake further detailed site inspection, this will be undertaken in a manner consistent with the perceived level of risk within the context of the overall Contaminated Land Strategy.

If the information gathered suggests that significant harm to human health or significant pollution of controlled waters is likely, the site will be dealt with as an immediate priority. If this is not the case the site will be assessed and dealt with as part of the routine prioritisation process. If the site should be dealt with under an alternative regulatory regime the matter will be passed to the appropriate persons and the customer informed accordingly.

7 Review Procedures

Part 2A of the EPA requires Councils to inspect their areas from time-to-time in order to identify land which may fall within the definition of contaminated land. As land use across the district is not static, the Council recognises that the strategy document and any conclusions reached during the Risk Assessment phase will have to be regularly reviewed.

The following triggers will be used for reviewing inspection decisions:

a) Proposed changes in the use of land.
b) Unplanned changes in the use of the land (e.g. persistent, unauthorised use of land).
c) Unplanned events, e.g. localised flooding/landslides; accidents/fires/spillage's where consequences cannot be addressed through other relevant environmental protection legislation.
d) Reports of localised health effects which appear to relate to a particular area of land.
e) Verifiable reports of unusual or abnormal site conditions received from business, members of the public or voluntary organisations.
f) Responding to information from other statutory bodies.
g) Responding to information from owners or occupiers of land and other relevant interested parties.

This strategy has been reviewed as outlined in the Work Plan in Annex 4 of the previous Strategy. The revised strategy does not specify frequency of review but suggests that the strategy should be reviewed at least every 5 years. The Council proposes to review progress on the work plan as detailed in Appendix 4 annually and this review will also consider the need for a wider strategic review. It is intended to carry out a formal review no later than 2018.

However, there may be other developments that trigger an earlier review such as :

- Further revision of the legislation or guidance.
- Establishment of significant case law or other precedent.
- Revision of guideline values for exposure assessment.

Appendix 1 – Historical Context

This Appendix 1 a short summary of some of the historical developments in the main towns of Shropshire that have influenced the local industrial heritage

Shrewsbury

Shrewsbury is the historic Medieval County Town of Shropshire and can be traced back to the Roman Era. In Saxon times the town was important enough to have five churches, three hospitals including a leper colony and a mint. From the thirteenth century the town's trade was mostly in leather and skins, but by the fifteenth century wool and woollen cloth was more important. Shrewsbury itself became an established market town with maltsters, millers, brick-makers drapers and tanners. Shrewsbury has a legacy of canals and railways, timber yards, coachbuilders, wagon works, textiles, lead smelters and foundries.

Shrewsbury was a river port, a place of transhipment and a centre for the Council of Wales until the arrival of the railway in 1848 led to the rapid decline of canal, river and coach traffic. This however broadened Shrewsbury's function as a centre for industry, commerce, administration, education and health resulting in the town's employment structure being largely dominated by service industries.

Oswestry

Oswestry developed as a railway town, becoming the headquarters of the Cambrian Railway and the town also contained a locomotive engineering works and an extensive system of sidings for the storage and distribution of goods. This has left an industrial legacy to the local workforce and to the character of the town.

The economy of the town suffered greatly in the 1960's with the closure of the railway works which coincided with the loss of a major employer in the large Park Hall Army Camp. In response a number of industrial estates were established and the last three decades have seen the development of a wide employment base with food packing, clothing, cold storage, road haulage, and metal fabrication industries being particularly well represented.
Much of the current industry is located on the periphery of the town. This includes longstanding woodworking industry and metal industries.

Bridgnorth

Bridgnorth was founded in 1101 and throughout the Middle Ages Bridgnorth remained Shropshire's second town, largely due to the castle and its strategic location, which made the town a place of military importance.

The town developed through the Middle Ages and was home to many prosperous trades; cloth manufacture was perhaps the most common. The Severn was one of England's busiest waterways carrying a great volume of cargo and Bridgnorth became an important trading town. Barge and boat building remained an important industry for the district for many years, despite the development of rail transport in the mid 1800's. In the late 18th Century the forging and founding of

iron laid the foundations of an engineering industry whilst many long established industries continued to flourish, including tanning, gun making, malting, brewing, lace making, cloth and carpet making. From the 16th Century onwards Broseley prospered through its rich mines of coal and earthenware salt and tar were also manufactured.

Market Drayton
Market Drayton dates back to Roman times. Most large scale manufacturing is of recent origin, including Muller Dairy which uses local dairy produce, Dussek Campbell chemical works (now closed) and Palethorpes food manufacture, to name but a few. The primary local industry has been associated with dairy and arable farming throughout the last century.

Ludlow
Ludlow has served as the market town and centre for the south of the area for many years again the surrounding area being dominated by agriculture. Farming, and to a lesser extent forestry, play a very important part in the area's economy and there are many firms in the District which are associated with agriculture such as agricultural machinery manufacturers and repairers, grain and feed supplies, poultry processing and local livestock markets.

Appendix 2 – Geology of Shropshire

The three main areas of Shropshire can be characterised as follows.

i. **Northern**

The area displays a wide range of geology with many different rock types. The upland area to the extreme West and South West of the region is predominantly Carboniferous Limestone forming the distinctive west-facing escarpment of Llanymynech hill. Adjacent to this is a band of Millstone Grit which is a coarse sandstone which has in the past been quarried as a building material at Sweeney Mountain.

The areas around Oswestry extending up to the North of the region are Coal Measures which form the Southern limit of the North Wales Coalfield.

The drift geology of the North Shropshire Plain comprises predominantly fluvioglacial deposits of boulder clay, sand and gravel. The solid geology is dictated by relatively young soft rocks of less than 300 million years old and which form low lying land, hence the term plain. The district is split into three distinct areas due to the presence of three faults known as the Axial, Brockhurst, and Hodnet faults. These faults have created the outcrops at Pim Hill, Grinshill, and Hawkstone, which are Triassic period Keuper Waterstones, and the Grinshill and Ruyton Sandstones. To the south east of the Hodnet fault lie the area's oldest rock formations from the Upper Coal Measures, to the Red Marls and sandstones of the Keele Beds. These are underlain by carboniferous Limestone from the same period. The area in between the Axial and Hodnet faults is dominated by the Pebble beds, Keuper Waterstones and Red and Green Mudstones of the Lower Keuper Marl. These outcrop throughout this area, apart from the south, where glacial deposits return to the landscape.

The third distinct area to the north and north east of the axial fault consists of fluvioglacial deposits created from melt water of ice sheets. These meltwaters created sand and gravel deposits in the form of Kames, Eskers, and Terminal moraines. The landscape around Ellesmere has been created in such a way, leaving sand and gravel hillocks with clay lined hollows called Kettleholes. Kettleholes are usually small and steep sided with Colemere and Blakemere classic examples. Other Kettleholes were formed with clay and peat in the hollows. These formed the main mosses of Wem and Whixall and many more throughout the district.

Mineralisation has occurred in the Grinshill Sandstone and resulted in the formation of copper deposits, which were mined at Clive, Pim Hill, and Hawkstone. Lastly, quarrying has been undertaken at Grinshill, Myddle and Hawkstone for the reddish brown and pale brown Sandstone, with only the former still operational today.

ii. **The Central Belt**

Carboniferous strata outcrop in a discontinuous belt across the county, giving rise to a series of small coalfields. From north west to south east these are: the Oswestry Coalfield, the Shrewsbury Coalfield, the Leebotwood Coalfield, the Coalbrookdale/Broseley Coalfield and the Wyre Forest and Clee Hills Coalfields.

The most productive strata are the Lower and Middle Coal Measures and in particular those of the Coalbrookdale/Broseley Coalfield. Underground mining has occurred in all of the county's coalfields during the 20th century. In opencast sites the coal seams are often worked with associated refractory clays (fire clays). The coals represent the remains of trees growing in tropical swamp conditions. They often develop above sandstones formed by river deltas. The deltas advanced into lakes which are represented by clays, including brickclays which are quarried south of Bridgnorth.

Lower and Middle Carboniferous rocks occur locally beneath the Coal Measures sequence but are best developed in the Oswestry area where Lower Carboniferous Dolomitic Limestone is worked for roadstone. Dolerite (an igneous rock) intruded locally into Carboniferous rocks also provides an important roadstone resource at Clee Hill. The localised occurrence of coal, ironstone and limestone in the Ironbridge area was an important factor in the birth of the Industrial Revolution

ii. **South and West Shropshire**

A number of distinct geological periods dominate the underlying geology of the area. The distinctive orange sandstone and red marl of the Sherwood Sandstone underlie Bridgnorth town, and the area immediately to the east of the River Severn. The overlying soils are typically thin and range from sandy loam soils to sticky marl clays.

The porous sandstone rock gives rise to several major groundwater units of varying vulnerability. Four major population centres, including Bridgnorth, Shifnal, Albrighton and Cosford are located on areas which are classed as highly vulnerable aquifers.

To the west of the River Severn the solid geology becomes older and is composed predominantly of Upper Carboniferous sedimentary rocks. The central part of the area is underlain by yellow sandstones of the Upper Westphalian period. Several parts of the area are underlain by the coal measures of the Lower Westphalian period, comprising coal bands, sandstones and mudstones. This resulted in the towns of Highley and Broseley becoming important mining centres and having a marked effect on the character and condition of the surrounding land.

The south and west of the area has a variety of geology such that each hill mass has its own distinctive feature, from the volcanic hog-backs of Caer Caradoc, to the gaunt crags of the Stiperstones, the Long Mynd plateau, and the ridge and vale country around Wenlock Edge. The oldest widely-occurring rocks are volcanic lavas and ashes, formed during the Precambrian period about 650-600 million years ago. These form Caer Caradoc and many other hills on the east side of the Church Stretton Valley. Later in this period, 590-575 million years ago, Shropshire lay under a shallow sea in which sandstones and shales were laid down which now form the Long Mynd plateau. The deep valleys on the Longmynd expose the now vertical layers of rocks which were once horizontal on the sea floor.

During the Cambrian, Ordovician and Silurian periods, 570-405 million years ago the rocks formed were sandstones, shales and limestones and now form the Stiperstones/Shelve area, where the rocks are rich in naturally occurring lead ore and barytes, and the ridge and vale country stretching south east from the Church Stretton Hills. As a result, these areas have naturally mineral enriched soils. The

Clun Forest, the Long Mountain and Ludlow area are formed by Silurian rocks, and are a classic area for the study of the Ludlow Series.

During the late Silurian and Devonian period, 405-355 million years ago, the Old Red Sandstone rocks which form all of the Corve Dale and Clee Hills were formed (although the highest parts of the Clees are of Carboniferous age). Only small patches of Carboniferous Limestone and Millstone Grit occurring on the Clee Hills were formed during the Carboniferous period, 355-290 million years ago. Although this period is famous for its coal deposits, these are only evident on the top of the Clee Hills.

Appendix 3 – Hydrology of Shropshire

The hydrology can be considered for each of the three areas of Shropshire as follows:

i. **Northern**

Major aquifers exist to the south and east of the area and also along the western edge. The area encompassing Maesbury, West Felton, Rednal, Ruyton and Knockin, is underlain by Permo-triassic Sandstones which are classed as a major aquifer by the Agency, the groundwater being used for both Public water supply and Private water supply. Much of the aquifer is classed as high vulnerability as a consequence of permeable overlying drift deposits.

The Carboniferous Limestone strata to the west and south western edge of the area forms a major aquifer the water being mainly used by private abstractors for domestic and small agricultural applications. Much of the aquifer is classed as high vulnerability.

The area covering Oswestry, Morda, Trefonon, Selattyn, Weston Rhyn, Gobowen and St Martins is mainly underlain by Carboniferous coal measures.

The land to the south of Market Drayton stretching down to Weston under Redcastle through to Clive, Myddle and Baschurch forms a major aquifer. The area around Ellesmere and the eastern extreme of the area is also a major aquifer.

The water from Weston under Redcastle and to the south, is utilised by the Environment Agency and Severn Trent Water Ltd, in supplementing River Severn flows via the Shropshire Groundwater scheme. Although this area is a major aquifer it is protected by low permeability glacial deposits, which form an ideal pollution prevention barrier.

The vulnerability classification varies across the area reflecting different overlying drift deposits.

Additionally, Source Protection Zones define an aquifer catchment area from which a groundwater abstraction source e.g. borehole or spring will draw water. Protection zones have been designated around the boreholes used for the public water supply, including the Severn Trent boreholes at Rednal, Kinnerley, Mardy and Kinsall

Groundwater sources throughout the district provide mains water to most households. However, there are approximately 580 private water supplies within the area.

ii. **Central**

Within the central area the River Severn is the principal river providing the main resource of surface water. Water is abstracted for agricultural, industrial and domestic use with a main abstraction for public supply at Shrewsbury. Ironbridge power station at Buildwas is also a major water abstraction site from the River Severn.

The central area is in the main underlain by the Permo-Triassic aquifer. This is highly permeable and a major groundwater source and located in the areas north of Shrewsbury. It is also underlain in parts by a minor aquifer comprising of Carboniferous strata including Coal Measures and Enville Beds that outcrop at various locations around Shrewsbury. This minor aquifer is beneath the main part of Shrewsbury and spreads in a southerly direction across the area. Other areas of the district are classed as a non-aquifer.

Groundwater sources throughout the district provide mains water to most households. However, there are approximately 320 private water supplies within the area.

iii. **Southern**

The River Severn dominates the surface hydrology of the area and is served by a number of tributaries the main ones being the River Worfe and the Borle & Mor Brooks. The western part of the area forms part of the River Teme's catchment area from which the tributaries of the Rivers Rhea and Corve flow.

The porous sandstone rock gives rise to several major groundwater units of varying vulnerability. Four major population centres including Bridgnorth, Shifnal and Albrighton and Cosford, are located on areas which are classed as highly vulnerable aquifers.

To the west of the River Severn the solid geology is composed predominantly of Upper Carboniferous sedimentary rocks. The central part of the District is underlain by yellow sandstones of the Upper Westphalian period. Large-scale water abstraction is not possible in this area due to the nature of the rock but it can be important on a local scale and is the source of a significant proportion of private water supplies.

Silurian strata, consisting of mudstones with occasional limestone bands, underlie the Western part of the area which is used locally for private water supplies and for small public supplies of which there are some 1100 within the area.

The younger Devonian sediments of the eastern half of the area are mudstones with isolated sandstone bands. These rocks supply private water supplies and give rise to springs. These Silurian and Devonian mudstones only have a small capacity for storing water and are therefore classed as minor or non-aquifer bearing rocks. Similarly, the lower and middle coal measures around Clee Hill and the Triassic Mercia Mudstone to the eastern extremity are also classed as minor and non-aquifers respectively. There is one key groundwater protection zone situated at Walcot Pool in Lydbury North.

Shropshire Council

Appendix 4 – Operational Action Plan

No	Priority Action Area	Key Action	Target Date	Partner(s)	Owner(s)	Links to Corporate Priorities
1.	**Ensure that the Council carries out its statutory duties in relation to inspecting and securing remediation of contaminated land in Shropshire by collecting and evaluating intelligence on land conditions and through the development and implementation of effective and adequate procedures**	Write a formal procedure for information management.		Relevant divisions of the Council		
		Further develop the role of the environmental information and data management post in Public Protection & Enforcement to maintain assured data and to provide a gateway for organisations seeking to access and use this data.				
		On-going review of procedure/guidance note setting out Council's approach to consider exclusions from liability under the clauses of hardship.		Best performing Las, the EA etc.		
		Review procedure for carrying out site validation.		Planning Officers		
		Carry out an annual review of progress against the key objective and Priority Action Areas.		N/A		

		Carry out an annual review of all procedures.		Relevant divisions of the Council, private developers		
		Set up an internal Contaminated Land Working Group and produce terms of reference.		Relevant Divisions of the Council, EHOs , the EPA		
		Carry out a Strategy review and produce a progress report.	1 April 2014	N/A		
		Continue to analyse and re-prioritise the contaminated land site databases and GIS systems in terms of potential receptor vulnerability classes.		The EA, GIS Manager		
		Set up and carry out customer satisfaction surveys in relation to contaminated land work		Direct customers, local developers		
		Maintain a Public Register and ensure its availability.		N/A		

No	Priority Action Area	Key Action	Target Date	Partner(s)	Owner(s)	Links to Corporate Priorities
2.	**Identify and secure remediation of sites, including land in the ownership of the Council, where an unacceptable level of risk is being caused to human health and the environment**	Carry out 20 inspections and site characterizations of potentially contaminated land sites		The EA, DEFRA, other relevant bodies, relevant divisions of the Council, site owners/occupiers		
		Carry out 22 inspections and site characterizations of potentially contaminated land sites		The EA, DEFRA, other relevant bodies, relevant divisions of the Council, site owners/occupiers		
		Secure the funding for and carry out intrusive investigations on 4 sites identified as high risk from the prioritization and site characterization.		The EA, DEFRA, other relevant bodies, relevant divisions of the Council, site owners/occupiers		

		Ensure the production of a communication strategy for each specific site whilst adhering to the key principles of risk communication.	On-going	Site owners/occupiers, relevant divisions of the Council, the EA		
		Set up a database for remediated sites and produce a work programme/triggers for re-assessment.		Planning Officers		
		Carry out an analysis of the Council's own land portfolio to identify any potentially contaminated sites.		Property and Asset Management Team		
		Consolidate the existing maps of sites of potential concern onto GIS.		Local GIS specialist		

		Keep abreast of developments in the most cost effective and sustainable remediation techniques		Other LAs, Training of Officers		
		Respond to all contaminated land enquiries in accordance with the corporate service standards.		N/A		

No	Priority Action Area	Key Action	Target Date	Partner(s)	Owner(s)	Links to Corporate Priorities
3.	**Encourage the voluntary remediation of contaminated land (for example through the planning system)**	Promote sustainable remediation requirements to private developers through an annual Developers Forum		Private Developers Planning Officers		
		Integrate contaminated land concerns into the Public Protection project on business support and direct support for developers to encourage business growth.		Private Developers Planning		
		Consolidate and review the Guide to Developers on contaminated land development		Private Developers Planning		

		Respond to detailed consultations on Planning Applications promptly and within the agreed timescales and standards.		Planning Officers		
		Carry out training sessions for Planning Officers on relevant environmental legislation.		Planning Officers		
		Publicise the Contaminated Land Strategy following adoption through the Council's own magazine and website.		PR Team, IT		
		Carry out regular website content reviews and updates.	On-going	PR Team, IT		

		Send full copies of the Strategy to statutory consultees and neighbour LAs; make copies available at Council's Offices, local libraries and CAB offices.		N/A		

Appendix 5 – Guidance on Planning

Introduction

The purpose of this guidance is to support developers by making them aware of what information the Council may require in order to assess an application for planning permission on land that may be affected by the presence of contamination.

The Council's Approach

Government guidance recognises that land potentially affected by contamination is a material planning consideration and that the development phase is the most cost-effective time to deal with the problem.

Planning legislation and guidance places the responsibility on owners and developers to establish the extent of any potential harmful materials on their sites. The Council's duty is to ensure that owners and developers carry out the necessary investigations and formulate proposals for dealing with any contamination in a responsible and effective manner.

The principles of considering contamination during the planning process have been incorporated into the Communities and Local Government document "National Planning Policy Framework" issued in March 2012. UK policy on land contamination as set out in the Framework, as well as emphasising the government's commitment to the environmental principles of "sustainable development" and "the polluter pays", requires that existing contamination which poses a threat to health or to the environment is controlled and treated within the "suitable for use" approach.

Liaison with the Council

Where a developer is proposing to develop land that may be contaminated, it is advisable to contact the Council to discuss land contamination issues before submitting a planning application. Advice will be given on what should be submitted with a planning application and this consultation should prevent time delays and misunderstandings at a later stage in the development.

The Site Investigation Procedure

The site investigation procedure will identify the potential for contamination and identify possible areas that may require remedial works in order to make the site 'suitable for use'. The investigation can be split into three phases, although not every site will require each phase to be carried out. This allows resources to be targeted at the areas that are most likely to be contaminated. The phases may be submitted individually as separate reports or as one combined report. A checklist has been included for your information in this document.

Phase I – Desktop Study

The desktop study is the collection of information in order that the 'conceptual site model' can be established. This model considers all potential contaminant sources, pathways and

receptors, defined as pollutant linkages. The study should document the site history and identify all potentially contaminative land uses back to when the site was 'greenfield'. The conclusions of the report should contain recommendations for any progression to Phase II, if required.

Phase II - Detailed Investigation

The 'Detailed Investigation' phase is the on-site validation of the conceptual model. Through intrusive investigation, chemical testing and quantitative risk assessment to start the process of deriving Site Specific Risk Assessment Criteria or remediation target concentrations, the Phase II study can confirm possible pollutant linkages and therefore, should also provide appropriate remediation options, if required.

Phase III – Remediation Strategy/Validation Report

The remediation phase of the process is split into two sections. Firstly, the 'Remediation Statement' is a document detailing the objectives, methodology and procedures of the proposed remediation works. This must be submitted to the Council for approval before any works commence.

Secondly, following completion of the works a 'Validation Report' must be submitted demonstrating that the works have been carried out satisfactorily and remediation targets have been achieved.

NB. Failure to carry out any of the required phases to the Council's satisfaction will indicate non-compliance with the Planning Condition.

Checklist for Reports Submitted in Support of Planning Applications

The checklist provides a guide on what the Council may require when assessing the content of any site reports submitted in response to a planning proposal. If any of the items listed below are not submitted in reports then a full explanation should be included as to their omission. The reports can be submitted separately or parts 1, 2 and 3 can be submitted as a single report. In certain circumstances it may be advantageous to submit details of the remediation techniques at the same time as the site reports as these works may require a separate planning permission.

The list is not exhaustive, and as such the contents of any site reports will vary due to site-specific issues e.g. the past use of the site, nature and extent of the contamination, and the proposed end use of the site.

1. ***Desktop Reports (submit for approval prior to development works)***
   - **1.1** Purpose and aims of study.
   - **1.2** Site location and layout plans appropriately scaled and annotated.
   - **1.3** Appraisal of site history.
   - **1.4** Appraisal of site walkover survey.
   - **1.5** Assessment of environmental setting, to include:
     - Geology, hydrogeology, hydrology
     - Information on coal workings (if appropriate)
     - Information from Environment Agency on abstractions, pollution incidents, water quality classification, landfill sites within 250 metres etc.
   - **1.6** Assessment of current/proposed site use and surrounding lands uses.

1.7 Review of any previous site contamination studies (desk based or intrusive) or remediation works.
1.8 Preliminary (qualitative) assessment of risks, to include:
- Appraisal of potential contaminant sources, pathways and receptors (pollutant linkages)
- Conceptual site model.

1.9 Recommendations for intrusive contamination investigation (if necessary) to include:
- Identification of target areas for more detailed investigation.

2. Detailed Investigation Reports (submit for approval prior to development works)

2.1 Review of any previous site investigation, contamination studies (desk based or intrusive) or remediation works.
2.2 Site investigation methodology, to include:
2.3 Plan showing exploratory locations, on site structures, above/below ground storage tanks etc., and to be appropriately scaled and annotated.
- Justification of exploratory locations
- Sampling and analytical strategies
- Borehole/window sampling/trial pit logs

2.4 Results and findings of investigation, to include
- Ground conditions (soil and groundwater regimes, including made ground)
- Discussion of soil/groundwater/surface water contamination (visual, olfactory, analytical)

2.5 Conceptual site model.
2.6 Risk assessment (quantitative) – Based on contaminant source – pathway – receptor model, (to assess the consequences and likelihood of occurrence). Details of the Site Specific Risk Assessment model selected and the justification in its selection and use should be stated.
2.7 Recommendations for remediation should include all relevant information that should follow the 'suitable for use' approach (see **5**. below for definition) – based both on current use and circumstances of the land and its proposed new use.
2.8 Recommendations for further investigation if necessary.

3. Remediation Statements (submit for approval prior to works (remediation or development)) being undertaken

3.1 Objectives of the remediation works.
3.2 Details of the remedial works to be carried out, to include:
- Description of ground conditions (soil and groundwater)
- Type, form and scale of contamination to be remediated
- Remediation methodology
- Site plans/drawings
- Phasing of works and approximate timescales
- Consents and licences e.g. (discharge consents, waste management licence, asbestos waste material removal licence etc.)
- Site management measures to protect neighbours

3.3 Details of how the works will be validated to ensure that the remediation objectives have been met, to include:
- Sampling strategy
- Use of on-site observations, visual/olfactory evidence
- Chemical analysis
- Proposed clean-up standards (i.e. contaminant concentration)

4. Validation Reports (submit for approval after remediation works undertaken)

4.1 Include information as detailed in 3 above.
4.2 Details of who carried out the work.
4.3 Details and justification of any changes from original remediation statement.
4.4 Substantiating data should include where appropriate:

- Laboratory and in situ test results
- Monitoring for groundwater and gases
- Summary data plots and tables relating to clean-up criteria
- Plans showing treatment areas and details of any differences from the original remediation statement
- Waste management documentation

4.5 Confirmation that remediation objectives have been met (completion and return of attached 'Certificate of Remediation').

5. Definition of 'Suitable for Use'

UK policy for the Control and treatment of existing contamination is based on the 'suitable for use' principle. This means that remediation (clean up) is required where there are unacceptable risks to human health or the environment arising from actual or intended use of the site. In other words, each case is assessed on a site-specific basis and an assessment of risk used to determine the extent of the remedial works needed.
Within the 'suitable for use' approach, the person responsible for a site is always open to do more to a site than can be enforced through regulatory action. For example, a site owner may plan a new use for land at some time in the future that would require more stringent remediation and therefore may conclude that it would be more economic to anticipate those particular remediation requirements in the current circumstances. However, this is a judgement that only the person responsible for the site can make, but any more stringent remediation so chosen, is likely to satisfy the planning condition relating to the current development proposals

How can I assess the risks on my site?

Once detailed information about conditions on site has been collected, the risks to all receptors through all potential pathways from the sources present must be assessed. A good site conceptual model will help you identify all the pollutant linkages which may be present (and need risk assessing) and will demonstrate to us that you have considered all possibilities.

Assessment of Risk

Information on contaminants will be evaluated in the first instance using current government guidelines, or by use of prescribed risk assessment models.

SGVs

A set of soil guidelines values (SGVs) have been produced by DEFRA and the Environment Agency that gives acceptable levels of contaminants in soils depending on the land use (residential with gardens for example).

Risk Assessment for other substances

When completed, the results of the investigation should be compared against suitable criteria. In the first instance, exposure to human health will be assessed with reference to the Soil Guideline Values (SGVs). Where these are unavailable for a particular substance, it is expected that the "Generic Assessment Criteria for Human Health Risk Assessment" (CIEH/LQM) should be used. Values using the CLEA UK Exposure Model can be derived in accordance with the "acceptable risk" approach.

Risk assessment models

Whilst SGVs will be used in the first instance, to further define the risk, a risk assessment model will be used. CLEA will be the preferred option. However, other risk assessment models that adopt either deterministic or probabilistic methods of deriving the risk will also be considered.

Risk assessment for controlled waters

Where controlled waters are potential receptors in a particular pollutant linkage, then the advice of the Environment Agency will be sought. It is anticipated that risk assessments and remediation will be carried out in accordance with Environment Agency guidance as set out in "Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources" (EA. 1999)

Validation

If a planning condition had been applied to a development with respect to land contamination and a site investigation and remediation scheme has been prepared and submitted to Shropshire Council, a validation (or verification) report is also required to demonstrate compliance with the agreed remediation scheme.

This report must be submitted following completion of the remediation scheme and prior to occupation of the development. The primary aim of the report is to document all aspects of the remedial works undertaken at a development site to demonstrate that the previously identified risks have been reduced to meet remediation criteria and objectives. The report must demonstrate the achievement and effectiveness of the remediation carried out and that the site is suitable for the intended use.

The report should include details of all the actions taken at each stage of the process, from initial investigations and assessment through to undertaking remediation and its associated validation.

The validation report should be prepared by a suitably qualified and competent person in accordance with *'Model Procedures for the Management of Land Contamination, CLR 11'.* (Environment Agency 2004). It is likely the person or company with be the same as that employed to undertake the site investigation and prepare the remediation scheme. The individual or company should have suitable professional indemnity insurance and will normally be independent of the contractor / subcontractor to ensure there is no conflict of interest.

Until this report has been reviewed and approved by the local planning authority the relevant planning condition cannot be discharged.

COMMON REMEDIATION SCHEMES AND THEIR VALIDATION REQUIREMENTS

Imported topsoil

Any soil imported onto the development site from an outside source must be suitable for use. Any soil proposed to be used as part of a cover system or landscaping, which has arisen from elsewhere on the development site, should also be suitable for use and will be subject to the same requirements as imported material.

The following requirements will need to be met, in order to show that any soils brought on to the site are suitable for use and will not cause harm to human health, property, the environment or controlled waters:

- Details of the source and supplier of the soil(s) must be supplied to the Local authority;
- Soils must not be contaminated with materials such as plastics, metals, asbestos, glass, tarmac etc.;
- Analysis of these soil samples must take place in an independent accredited Laboratory.
- Sampling at a ratio of one sample for every 100 m^3 (approximately 150 tons) of material imported from a "greenfield" source or one sample for every 50 m^3 for material from an unknown or potentially contaminated source. **A minimum of three**

samples must be tested. An alternative sampling frequency will be considered if supported by appropriate justification or a risk assessment.

- The analytical suite must include a minimum of metals, speciated PAH, total TPH and pH. Analysis of additional substances may be required by the Local Authority: e.g. a pesticide suite for soils from agricultural sources;
- The results of the analysis must be compared with approved current guideline values. i.e. CLEA Soil Guideline Values, GACs, or other values that may have been previously agreed with the Local Authority; and
- The Local Authority must approve results of the analysis before the soils are placed on the site;
- Volume of imported material. This should be supported by the appropriate documentation such as purchase records.

Cover systems

A cover system involves certain areas of land of being covered by layers of soil to a pre-agreed depth. The aim of a cover system is to prevent or reduce human contact with ground that may contain contamination. Cover systems may overlie existing ground or may overlie a physical barrier or marker layer (e.g. a geotextile membrane, a physical break layer such as a layer of aggregate or a capillary break layer) that has been installed as part of the remediation scheme.

If the use of a cover system has been approved by the Local Authority as part of the remediation scheme, the following areas will require validation:

- Validation of the imported material (see above)
- Location of imported material. All locations where imported material is placed on site as part of the cover system must be catalogued and detailed in a site plan.
- The thickness of the cover system and (where applicable) installation of the barrier or marker layer. Validation can take the form of a topographic survey or a visual inspection at numerous points across the land supported by photographic evidence.
- Volume of material imported to site.

GAS PROTECTION MEASURES

The installation of gas protection measures (e.g. a gas membrane) as agreed in the remediation scheme will require the following validation:

- Details of the installation. The installation of gas protection membranes shall be overseen by a suitably qualified and experience individual, such as an approved building control inspector.
- Photographic evidence of the installation of a gas protection membrane is recommended. This should include evidence of the presence of the membrane, the quality of joints and the handling of wall cavities.
- Details of the specification of the membrane installed.
- Integrity testing of the membrane. This may be required to be undertaken in certain circumstances. This requirement should be discussed with the Council prior to installation of the membrane.

MATERIAL EXPORTED OFF-SITE

Any material that is removed from the development site, either for disposal or reuse elsewhere, should be fully documented. Exported material can be considered waste and it may be contaminated. Consequently it should be disposed of appropriately and with due

regard to the contractor or developers' waste duty of care. The following aspects of exported material will require validation:

- Appropriate disposal. Supporting documentation in the form of transfer notes will be required to include details of the waste carrier and disposal (location?)
- Volume of material exported. The volume of material removed from site should be recorded and this information provided.
- Location of excavated material that has been exported. It is likely this information will have been thoroughly detailed in the remediation scheme.

VALIDATION OF HOT-SPOT REMOVAL
Where material is excavated and exported off site to remove a contamination hot-spot, the above conditions relating to material exported off-site apply, along with the requirement to validate the removal of the hot-spot. Validation samples should be taken to determine the nature and extent of any residual contamination. Samples should be taken at equally-spaced locations immediately around the perimeter of the excavated area, at the sides and at the base of the excavated area. A minimum of four samples covering the sides and base of the area are required.

LONG-TERM MONITORING AND MAINTENANCE
Long-term monitoring is not normally required where remediation has been designed to avoid such a requirement. It can be a requirement where there is a need to monitor controlled waters for a specified period after remediation has been completed to ensure contaminants are not remobilised.

If long-term monitoring is required at a site, an on-going monitoring and/or maintenance plan and associated reporting requirements must be agreed with the regulator. Following completion of all long-term monitoring and maintenance a final report must be submitted to the local planning authority demonstrating the effectiveness of the monitoring and maintenance undertaken.

Recommended Guidance

CLR11 – Model Procedures for the Management of Land Contamination. DEFRA 2004.

British Standards Institute. Investigation of Potentially Contaminated Sites – Code of Practice. BS10175 (2011).

Construction Industry Research and Information Association. Protecting Development from Methane. CIRIA Report 149 (1995).
Construction Industry Research and Information Association. Interpreting Measurements of Gas in the Ground CIRIA Report 151 (1995).
Construction Industry Research and Information Association. Risk Assessment for Methane and Other Gases in the Ground. CIRIA Report 152 (1995).
Environment Agency. Remedial Targets Methodology. Hydrogeological Risk Assesment for Land Contamination 2006.

National Planning Policy Framework (NPPF) 2012
This list is not exhaustive and there may be other relevant guidance and reference material that the applicant may wish to refer to.

Appendix 6 – Cost Recovery Policy

Purpose of Policy

To ensure that the Councils policy on cost recovery for the remediation of contaminated land is clearly set out to ensure a consistent and transparent approach when seeking to recover costs.

Background

The government's policy is that the polluter should pay therefore all the persons who put the contamination there in the first place should bear the cost for the problem to be resolved.

However the Environmental Protection Act 1990 (EPA 1990) section 78F states there are three parties that may become the potential recipients of a remediation notice and as a result there is conflict with the 'polluter pays' principle.

- The person(s) who caused or knowingly permitted the contaminating substances to be in, on or under the land in question (the polluter) (also referred to as Class A person)
- The owner for the time being of the contaminated land (Class B person)
- The occupier for the time being of the contaminated land (Class B person)

The most obvious person who should be the recipient of the remediation notice is the original polluter of the site; if you put the contamination there in the first place then you should pay to have it taken away. If there is more than one polluter of a site, where for example the site has had a long history of different contaminative uses then the enforcing authority has to decide what apportionment each (Class A) person should pay for remediation works.

Although the primary responsibility for the cost of the remediation rests with the person who caused or knowingly permitted the contamination if they cannot be found after reasonable inquiry by the regulator, a residual responsibility falls upon owners and occupiers of the land. They are not however liable for any works relating to the pollution of controlled waters, an issue covered by EPA 1990 s. 78J.

Recovery Considerations

If a remediation notice is served on an appropriate person (Class A or B) but is not complied with, then the local authority will bear the costs of the remediation themselves and can then seek to recover those costs from the appropriate persons.

The only true defence to such a recovery claim is that of hardship (EPA 1990 s.78P(2). In such cases the enforcing authority should waive or reduce the recovery of costs to the extent that the authority considers this appropriate and reasonable, either

a) to avoid <u>any</u> undue hardship which the recovery may cause to the appropriate person or
b) to reflect one or more of the specific considerations set out in the statutory guidance subsections 8(b), 8(c) and 8(d) with reference to:-

- Commercial enterprises
- Trusts
- Charities
- Social housing landlords.
- Owner/occupiers

When deciding how much of its costs it should recover the enforcing authority should consider whether it could recover more of its costs by deferring recovery and securing them by a charge on the land in question under section 78P (EPA 1990). Such deferral may lead to payment from the appropriate person either in instalments (EPA s78P (12)) or when the land is next sold.

In judging the extent of a waiver or reduction in costs, recovery from an owner/occupier the Shropshire Council will apply a cost recovery and hardship assessment based on an approach comparable with that used for housing renovation grants (HRG). The HRG test determines how much a person should contribute towards the cost of necessary renovation work taking into account income, capital and outgoings.

1.0 General Considerations

1.1 This document sets out the Council's policy considerations in relation to the recovery of costs incurred during the remediation of contaminated land.

1.2 In general terms, the Council will;

i. Seek to recover in full its reasonable costs incurred when performing its statutory duties in relation to the remediation of contaminated land.

ii. Wherever possible, apply the 'polluter pays' principle, whereby the costs of remediating pollution are borne by the polluter.

iii. Where this is not possible, seek all sources of finance (external to the Council) for remediation.

iv. Have due regard to the avoidance of hardship which the recovery of costs may cause.

v. Aim for an overall result, which is fair and equitable as possible to all who may have to meet the costs of remediation, including national and local taxpayers.

1.3 Accordingly, the Council will consider the degree and nature of responsibility of the appropriate person[1] for the creation, or continued existence, of the circumstances that led to the land in question being identified as contaminated land.

1.4 The Council will also consider whether it could recover more of its costs by deferring recovery and securing them by a charge on the land in question under section 78P of the Environmental Protection Act 1990. Such deferral may lead to payment from the appropriate person either in instalments (EPA 1990 s78P(12)) or when the land is next sold.

2.0 Information for Making Decisions

2.1 The Council will expect anyone who is seeking a waiver or reduction in the recovery of remediation costs to present any information needed to support his request within a reasonable time period.

2.2 The Council will also seek to obtain such information as is reasonable, having regard to

i. How the information may be obtained

ii. The cost, for all the parties involved, of obtaining the information; and

iii. The potential significance of the information for any decision

2.3 The appropriate person will be informed of any cost recovery decisions taken, explaining the reasons for those decisions.

3.0 Threat of Business Closure or Insolvency

3.1 In the case of a small or medium-sized enterprise[2] which is the appropriate person, or which is run by the appropriate person, the Council will consider:

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

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

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

3.3 The Council will not normally waive or reduce its costs recovery where:

i. It is clear that an enterprise has deliberately arranged matters so as to avoid responsibility for the costs of remediation

ii. It appears that the enterprise would be likely to become insolvent whether or not recovery of the full cost takes place; or

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

4.0 Trusts

4.1 Where the appropriate persons include persons acting as trustees, the Council will assume that such trustees will exercise all powers which they have, or may reasonably obtain, to make funds available from the trust, or from borrowing that can be made on behalf of the trust, for the purpose of paying for the remediation. The Council will, nevertheless, consider waiving or reducing its costs recovery to the extent that the costs of remediation to be recovered from the trustees would otherwise exceed the amount that can be made available from the trust to cover these costs.

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

i. Where it is clear that the trust was formed for the purpose of avoiding paying the costs of remediation; or

ii. To the extent that trustees have personally benefited, or will personally benefit from the trust.

5.0 Charities

5.1 The Council will consider the extent to which any recovery of costs from a charity would jeopardise that charity's ability to continue to provide a benefit or amenity, which is in the public interest. Where this is the case, the Council will consider waiving or reducing its costs recovery to the extent needed to avoid such a

consequence. This approach applies equally to charitable trusts and to charitable companies.

6.0 Social Housing Landlords

6.1 The Council will consider waiving or reducing its costs recovery if:

i. The appropriate person is body eligible for registration as a social housing landlord under section 2 of the Housing Act 1996 (for example, a housing association);

ii. Its liability relates to land used for social housing, and

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

6.2 The extent of the waiver or reduction will normally be sufficient to avoid any financial difficulties.

7.0 Specific Considerations Applying to Class A Persons

7.1 The Council will not normally waive or reduce its cost recovery where it was in the course of carrying on a business that the Class A person who caused or knowingly permitted the presence of the significant pollutants. This is because the appropriate person is likely to have earned profits from the activity, which created or permitted the presence of those pollutants.

8.0 Where Other Potentially Appropriate Persons Have Not Been Found

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

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

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

ii. If that other person could be found, the Class A person seeking the waiver or reduction of the Council's costs recovery would either:

1. Be excluded from liability by virtue of one or more of the exclusion tests set out in section 7 of the April 2012 statutory guidance, or

2. The proportion of the cost of remediation of which the appropriate person has to bear would have been significantly less, by virtue of the guidance on apportionment set out in the April 2012 statutory guidance.

8.3 Where an appropriate person is making a case for the Council's costs recovery to be waived or reduced by virtue of paragraph 8.2 above, The Council will expect that person to provide evidence that a particular person, who cannot now be found, caused or knowingly permitted the significant pollutant to be in, on or under the land. The Council will not normally regard it as sufficient for the appropriate person concerned merely to state that such a person must have existed.

9.0 Specific Considerations Applying to Class B Persons

9.1 In some cases the cost of remediation may exceed the value of the land in its current use after the required remediation has been carried out. In such circumstances, the Council will consider waiving or reducing its costs recovery from a Class B person if that person demonstrates to the Council that the cost of remediation is likely to exceed the value of the land. In this context, the 'value' should be taken to be the value that the remediated land would have on the open market, at the time the cost recovery decision is made, disregarding any possible blight arising from contamination.

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

10.0 Precautions Taken Before Acquiring a Freehold or Leasehold Interest

10.1 In some cases, the appropriate person may have been reckless as to the possibility that land he has acquired may be contaminated, or he may have decided to take a risk that the land was not contaminated. Conversely, precautions may have been taken to ensure that he did not acquire land which is contaminated.

10.2 The Council will consider reducing its cost recovery where a class B person who is the owner of the land demonstrates to the satisfaction of the Council that:

i. He took such steps prior to acquiring the freehold, or accepting the grant of assignment of a leasehold, as would have been reasonable at that time to establish the presence of any pollutants;

ii. When he acquired the land, or accepted the grant of assignment of the leasehold, he was unaware of the presence of the significant pollutant now identified and could not reasonably have been expected to have been aware of its presence; and

iii. It would be fair and reasonable, taking into account the interests of national and local taxpayers, that he will not bear the whole cost of remediation.

10.3 The Council will bear in mind that the safeguards which might reasonably be expected to be taken will be different in different types of transaction. For example, acquisition of recreational land as compared with commercial land transactions, and

as between buyers of different types e.g. private individuals as compared with major commercial undertakings.

11.0 Owner-occupiers of Dwellings

11.1 For Class B person owners and occupiers, the council will consider waiving or reducing its costs recovery where that person satisfies the Council that, at the time the person purchased the dwelling, he did not know, and could not reasonably have been expected to have known, that the land was adversely affected by presence of a pollutant.

11.2 Any such waiver or reduction will be to the extent needed to ensure that the Class B person in question bears no more of the cost of remediation than it appears reasonable to impose, having regard to his income, capital and outgoings.

11.3 Inherited property will be treated as though the property was purchased.

11.4 Where the contaminated land in question extends beyond the dwelling and its curtilage, and is owned or occupied by the same appropriate person, the approach described in paragraph 11.1 above will be applied only to the dwelling and its curtilage.

11.5 In judging the extent of a waiver or reduction in costs, recovery from an owner/occupier the Shropshire Council will apply a cost recovery and hardship assessment based on an approach comparable with that used for housing renovation grants (HRG). The HRG test determines how much a person should contribute towards the cost of necessary renovation work taking into account income, capital and outgoings.

11.6 The HRG test determines how much a person will contribute towards the cost of necessary renovation work for which they are responsible, taking into account income, capital and outgoings, including allowances for those with particular special needs. For this purpose, any upper limits for grants payable under HRG will be ignored.

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[1] An appropriate person is a person who is determined in accordance with s78F of the Environmental Protection Act 1990 to bear responsibility for anything which is to be done by way of remediation in any particular case. A Class A appropriate person is someone who caused or knowingly permitted the presence of the substance (which forms part of a linkage) in, or under the land. Class B appropriate person is someone who owns or occupies the land and may bear responsibility for anything which is to be done by way of remediation in the absence of a Class A person.

[2] A small or medium sized enterprise is considered to be a independent enterprise with fewer than 250 employees, and either an annual turnover not exceeding €50 million, or an annual balance sheet total not exceeding €43 million