



# **Contaminated Land Inspection Strategy 2011 - 15**

**Prepared in fulfilment of Part IIA of the  
Environmental Protection Act 1990 (s.78B)**

**West Somerset Council Environmental Health and Licensing  
Contaminated Land Inspection Strategy 2011 to 2015**

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**Portfolio Holder Statement**

West Somerset Council recognises the need for a strategic approach to the identification of contaminated land. This is outlined within this inspection strategy.

The aim of the strategy is to ensure that by reason of substances in or under the land, where an unacceptable risk to human health or the environment occurs or is likely, that these risks are reduced to an acceptable standard.

I am encouraged that the strategy aims to prioritise sites by contaminants and receptors particular to this district. It is important that our strategies concentrate on local circumstances, which could affect local people.

The advantage of taking forward this strategy for the next five years is to help to reduce costs by removing any uncertainty related to contaminated land, and hence increase the long-term affordability of housing in our community. By ensuring that these risks are reduced to an acceptable standard means that development can proceed in a safe and affordable manner and it makes best use of the resources we currently have.

I'm glad also that the delivery of this service will help to support public confidence where a development occurs on previously used sites, known colloquially as brownfield land and is recognized as a key environmental component for this service delivery.

Finally, through the use mapping technology we are enhancing the effective use of information held by the council. This will ultimately benefit the customer providing accurate technical data, giving comfort that the council has dealt with sites effectively.

Cllr Turner

Portfolio Holder for the Housing and Community

## **West Somerset Council Environmental Health and Licensing Contaminated Land Inspection Strategy 2011 to 2015**

### **Executive Summary**

In April 2000 new legislation was introduced with the aim of providing an improved system for the identification and remediation of contaminated land (Part 2A of the Environmental Protection Act 1990).

It is West Somerset Council's duty to implement and enforce this legislation. The Council is required to inspect the district 'from time to time' with a view of identifying any land, which may be contaminated. This inspection strategy provides the framework as to how the Council will reach this decision. Where land is determined as contaminated (as defined by legislation) the Council has powers to ensure that remediation is carried out.

*Contaminated land is defined 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, significant harm is being caused or there is a significant possibility of such harm being caused; or pollution of controlled waters is being, or is likely to be caused"*

The procedure of identifying this land must follow a "rational, ordered and efficient" approach (Defra, 2006) which aims to identify the most pressing, and serious problems first. This strategy provides this procedure under which any land containing potential contaminants, gets prioritised for inspection.

Potential contaminated land sites have already been researched in-house using various data sources (Appendix 1) and these sites have been plotted to the Council's Geographical Information System (GIS). Because of uncertainties with delineating site boundaries many of these sites are represented by point data. Because of the risk of off-site migration of contaminants protection zones are plotted around these sites. To ensure that the information is kept up to date, these details are continually reviewed and updated.

Potential sites are prioritised for inspection using the Dept of Environment's guidance document (DETR, 1995). Some sites given the range and type of contaminants present

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have been categorised by a risk rating (Appendix 2). This mechanism is new and is intended to make the scoring matrix more robust.

This strategy also, identifies a number of key sensitive receptors in the district, which have been given a hazard rating, to reflect the vulnerability of certain sensitive or critical receptors in the area (Appendix 3).

Where a potential contaminant and receptor are in close proximity, the likelihood of a pollution pathway is then assessed (Fig 1). There can be occasions when a contaminant and critical receptor are present at one site, however if the likelihood of a pollution pathway is considered negligible, the land is unlikely to be considered contaminated. By following this qualitative process, means only sites and receptors most likely to pose an unacceptable risk will be targeted for more detailed inspection.

Currently, no sites have been found where the contamination was significant enough for the site to be classed as “contaminated land”. Where sites are determined as contaminated land, they will be added to the Council’s public register if voluntary remediation cannot be secured.

A summary of the key duties is given in Appendix 4. Reported against these criteria are the Council’s achievements to date. A review of these achievements has identified the need for new targets to be introduced. These have become new service level standards. This strategy proposes new specific and measurable targets for this period under review (2010 to 2015) and these are set out in Appendix 5 (Objectives), which in summary are;

- To inspect **50 sites of potential concern each year**
- To carry out a more detailed assessment on the **Category-2 sites to ensure the risk is reduced to an acceptable level (7 sites)**
- To respond to **environmental information requests** (data searches) as soon as possible and **within 20 days**.

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### **Inspection Strategy; The Approach 2011 – 2015;**

#### **Introduction;**

The contaminated land regime is derived from Part IIA of the Environmental Protection Act 1990, being inserted by section 57 of the Environment Act 1995. The Statutory Guidance (DETR Circular 02/2000) came into force with effect from 1 April 2000 for the identification and remediation of contaminated land.

#### **Background;**

The need for this service arises because previously there had been a gap in the effective regulation of potential sites of contaminated land. Effective regulation is essential to support public confidence in new development on brown-field land and also to identify any unacceptable risks in existing land, so avoid the risk of blight arising from uncertainty, leading in some cases to economic and social disadvantage.

The Urban Task Force (Rogers, 1999) and the Urban White Paper (CLG, 2000) recommended that wherever possible brownfield land should be re-developed ahead of other less developed areas. This is a principle based on re-use of existing resources and bringing land back into beneficial use. It can be recognised as a fundamental element in the delivery of sustainable development in the area.

This strategy can be viewed during normal office hours at the Council offices, library, Exmoor National Park offices or on the [Council's website](#).

#### **Progress with Contaminated Land;**

This Council published its original contaminated land strategy in 2001 (Appendix 4) which set out how land that merited detailed individual inspection will become inspected. One of the key aspects of this strategy is to reduce the sites of potential concern down to a more manageable list (CIEH, 2007).

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For the second period of review (Contaminated Land Strategy 2006-9) the number of potential contaminated land sites in the district generated in-house was 784 sites. The information used to generate this dataset has come from a number of sources (Appendix-1) and wherever possible it has followed guidance issued by the British Geological Survey (2000). At the end of the 2006 to 2009 period the total number of sites has reduced to a more manageable number (647 sites) through further inspection and re-assessment of the data.

As a result of previous assessments there are 7 sites at the commencement of this strategy period that may not be suitable for present use or environmental setting (category 2 sites).

### **Outline of this inspection strategy;**

The inspection strategy should reflect local circumstances and in particular any available evidence that may help with the decision that land could become determined as contaminated land. The initial stage of this review is to consider the history and scale of industrial activities in the area, which could potentially lead to areas of contaminated land.

### **History and scale of development**

West Somerset is a rural district covering approx. 72,720 hectares and includes over two thirds of Exmoor National Park and The Quantock Hills AONB. A large proportion of the remaining countryside is designated as a Special Landscape Area (SLA) and includes Sites of Special Scientific Interest (SSSI), County Wildlife sites (CWs) and Special Areas of Conservation (SAC).

Minehead is the most populated town. The name 'Minehead' is Celtic and is similar in origin to the Welsh *mynydd* (mountain), reflecting the prominence of North Hill, which shelters the settlement at its base, immediately next to the sea. The Luttrell family acquired much of the land around Minehead in 1375 and it remained part of their estate until recent times. Up until the 15<sup>th</sup> century Minehead's economy was mostly based on

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farming and as the trading route down the Bristol Channel developed in the mid 16<sup>th</sup> century, shipping and the woollen industry became the main sources of income. Minehead became the Staple Port for Somerset and it was compulsory for all traders to have their wool and cloth weighed there.

Tourism became an important industry with the connection of the railway to Minehead in 1874 and rapid expansion then proceeded during Victorian days and up to present times. Butlins premier resort was built during the post war period and is a popular holiday destination. Recent decline in the tourism and farming industries have been partially offset with the area becoming a popular for retirement that has resulted in land becoming relatively expensive with an impact on redevelopment and housing.

The town of Watchet being situated on the coast has relied on its harbour and docks and was a vital port for the transportation of goods and minerals, especially iron ore from the nearby Brendon Hills and for papermaking.

From the early eighteenth century, South Wales was the destination of nearly all the ores produced in the South West. Other cross-channel links included the importation of limestone to the Exmoor kilns and a certain amount of coal for steam engines. During the 1850's it was however, beginning to make more sense to take the coal to the ore source and with the development of a number of kilns for smelting. The West Somerset Mineral Railway was built in the 1860's to serve the iron mines on the Brendon Hills and opened from Watchet Harbour to Comberow. The expansion in production during this time was partly caused by the discovery of the Bessemer process (steel production) and the need for low phosphate iron ore, which was particular to the Somerset ore. Modification however, to the Bessemer process in 1879 allowed the production of steel to be independent on phosphate composition and introduced iron ore from other sources to feed the expanding South Wales steel works. The mines on Exmoor and the Brendon Hills declined shortly afterwards. In recent years, Watchet has gained a new marina and is now used for pleasure craft and deep-sea fishing.

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Outside of Minehead & Watchet, developments include extractive-industries, such as the quarry at Treborough providing a local source of slates. Since its abandonment the quarry has been in-filled. A number of former landfill sites occur in the district.

The railway from Taunton to Minehead was closed in 1971 and was shortly taken on by The West Somerset Railway and a single track now runs from Minehead to Bishops Lydeard for steam locomotives. There are disused lines, for example along the southern part of the district (Dulverton, Brushford and South Molton) and the Old Mineral Line.

### **Hydrogeology;**

The geology of the area is described in two publications (BGS, 1999, 1975) with a geochemical and geophysical investigation carried out (BGS, 1987). The geophysical survey highlighted a magnetic anomaly trending WNW-ESE traversing the Brendon and Exmoor hills, virtually corresponding with areas of previous metaliferous activity.

In the Brendon Hills haematite and siderite were reported with some mines giving up to 0.5% Cu in the form of finely scattered chalcopyrite or malachite. The mines of central Exmoor again were mainly in the form of haematite and some siderite but with some mines reporting higher concentrations of Cu (up to 1%), for example at Wheal Eliza, Simonsbath.

It is worth noting from the report that pockets of near surface mineralisation were found and that the mineralisation tended to follow lithology around the Ilfracome/Morte Slate boundary with pyrrhotite observed on cleavage plane coatings.

Geochemical surveys were also performed on stream sediments to examine the distribution from the aeromagnetic anomaly and also to identify any base metal mineralisation. The report highlighted local anomalies in copper, antimony and uranium. Antimony (Sb) had been added to the Council's private drinking water chemical suite as a result of this survey, but has since been removed, as Sb has not been found.

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**Hydrogeology**

The hydrogeology of West Somerset aquifers is explained below, starting with the oldest first (Table 1). There are some major aquifers present in the area, which are important local resources of groundwater. To reduce the vulnerability and risk posed by groundwater sources listed below, this strategy proposes to assign hazard weighting (given in Appendix-3) for these critical receptors.

One of the principal local water resources in the area is the minor Devonian aquifer. The groundwater derived from these minor aquifers generally displays a mixed permeability, where water flow follows fractures / joints / bedding but also with a proportion of recharge through the matrix. Localised folding and faulting can promote inconsistencies within the unsaturated zone, which can lead to perched water and can be an additional parameter to consider in the vulnerability of the formation to pollution. Superficial deposits (alluvium) can also increase the vulnerability of any site to pollution, and which will be considered on a site-by-site basis.

Table: 1

<b>Formation</b>	<b>Characteristics / Identification</b>	<b>Hydrogeology</b>	<b>Dominant Flow Mechanism</b>
Alluvium	Pathway for river base flow	Minor / Non Aquifer	Inter-granular
Mercia Mudstone	Mudstone of variable thickness	Non-minor aquifer	Some fracture flow
Otter Sandstone	Sherwood Sandstone Group	<b>Major Aquifer</b>	Intergranular
Budleigh Salterton Pebble Beds	Sherwood Sandstone	<b>Major Aquifer</b>	Intergranular
Littleham Mudstone	Aylesbeare Group	Aquiclude	Some fracture flow
Vexford Breccias	Aylesbeare Group	Minor aquifer	
Wiveliscombe Sandstone	Lower Permian Sandstone	<b>Major aquifer</b>	Intergranular
Pilton Beds	Slates with thin sandstones and interbedded limestones	Minor aquifer	Mixed
Pickwell Down Sandstones	Sandstone siltstones and slates	Minor aquifer	Mixed
Morte Slates	Frequency of fractures/cleavage important	Minor aquifer	Mixed
Ilfracombe Beds	Interbedded limestones with slates (Treborough)	Minor aquifer	Mixed
Hangman Grits	Comprises major headlands	Minor aquifer	Mixed

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The soil classification of the Devonian minor aquifers, places them in a high to intermediate vulnerability to leaching pollution. The soils tend to be of a sandy/quartzitic composition and of shallow depth, therefore providing little attenuation to potential pollution.

Situated in parts of the district are lower Permian basal breccias, conglomerates and sandstones, which are classified as a major aquifer (Wiveliscombe sandstone) and they tend to be in hydraulic continuity with overlying Vexford Breccias. In the Porlock basin, the Luccombe Breccias outcrop and they are thought to be of Permian in age. A strong magnetic anomaly is associated with the soils in the Porlock basin, reflecting high levels of iron containing minerals.

Towards the southern area of the district, Carboniferous limestones outcrop and by their nature are more permeable than the Devonian strata and are more susceptible to potential contamination owing to the larger hydrogeological source area and fracture flow regime. Associated with the limestones are deposits of galena, the main lead mineral, which has attracted mining activity.

In accordance with the DWI 'Manual on Treatment for Small Water Supply Systems, the application of private water source protection methodology for those abstracting less than 250 m<sup>3</sup>/d has been evaluated and concluded that a default 50metre radius zone is probably the only option for protection of small water sources. This will be used as basis for inspection and assessment of risk.

### **Part-2A and the planning system**

The Government's policy (Defra, 2006) on contaminated land centres on the need to deal with potential sites "voluntarily" or through the normal course of development. This strategy also recognises that it is planning system, rather than Part-2A, which will be used to encourage remediation of land affected by potential contamination. The idea is that remediation will often be funded by redevelopment, and the planning system provides the means to secure appropriate investigation and remediation. By following this approach, Part-2A measures are held in reserve for sites where there is no suitable voluntary action.

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Planning Policy Statement 23: Planning and Pollution Control (CLG, 2004) explains the relationship between the planning and contaminated land regimes. The standard for remediation is at a level where land cannot be capable of being determined as contaminated land under Part-2A. Soil guideline values are used as precautionary standard against which potential sites can be assessed.

### **Hazard Identification**

The approach taken as set out by this inspection strategy is to prioritise former land uses (and sites) by type and range of contaminants, which could be present. Land uses have been categorised (Appendix 2) according to hazard rating (hazard score from 1 to 10). This approach allows the Council to target inspections where the most hazardous pollutants are likely to be present and also, provides a degree of consistency on the inspection procedure.

Furthermore, the guidance also requires the Council to consider the extent to which any specified receptors are likely to be found in the district. Because the main populated areas are Minehead, Williton and Watchet, the focus of this inspection strategy is to target inspections in these areas. The remainder of the population tends to be distributed throughout the many villages and smaller settlements, and these areas will follow once the main settlements are inspected.

Critical receptors have been identified (Appendix 3) and have assigned hazard scores to reflect the vulnerability of these groups or receptors in this district. For example, because of the extent of drinking water supplies in West Somerset (both public abstractions and private springs and wells) these have been assigned a raised rating to help the prioritisation and assessment procedure.

### **Regulatory requirements;**

The duty of inspection under Section 78B (1) requires every local authority to 'cause its area to be inspected from time to time for the purpose of;

- a) Identifying contaminated land; and

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- b) Enabling the authority to decide whether any such land is land which is required to be designated as a special site'

Appendix 4 provides a summary of the principal duties to enable this Council to fulfil its role under parts (a) and (b) above.

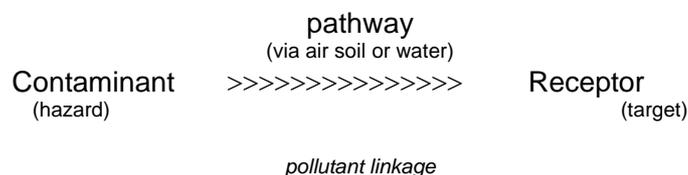
**Risk assessment;**

Before land can be determined as contaminated land, a significant pollutant linkage must be identified. The approach taken in this strategy is to combine the hazard, receptor and pathway scores and compare this to defined priority categories as given in Appendix-6. The prioritisation process is based on the DETR's Contaminated Land Research Report-6 (DETR, 1995).

A contaminant – receptor – pathway (CRP) calculation characterises the risk posed by each site. Risk is defined as the *'combination of the probability or frequency of occurrence of a defined hazard and the magnitude of the consequences of the occurrence'* (Environment Agency, 2004).

Sites, which are not considered suitable for their present use and environmental setting (Priority Category 2 and above) following this CRP calculation will be taken forward for more detailed assessment. Fundamental to this assessment is the contaminant-pathway-receptor model.

Figure 1; Explanation of a Pollution Pathway;



According to Defra (2006) for sites requiring more detailed assessment, a scientific and technical assessment of all the risks based on an *appropriate and authoritative scientific risk assessment* should be carried out. To ensure a consistent and robust approach to

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this assessment process, detailed quantitative assessments will need to be carried out which also follow the UK approach (e.g. CLEA v1.06 and SNIFFER, Environment Agency (2003)).

The detailed quantitative risk assessments will include the following sources of information;

- Pollution incidents,
- Details of historic land use and planning history,
- Any site investigation surveys/reports
- Permitted processes (issued under Part I of the Environmental Protection Act 1990)
- Sites designated under Planning (Hazardous Substances) Act 1990 and Planning (Hazardous Substances) Regulations 1992 and Planning (Control of Major Accident Hazards) Regulations 1999 (SI 981)
- Sites notified under the Control of Major Accident Hazards Regulations 1999 (SI-743)
- Any licences issued under Explosives Act 1875

The Council's GIS system is used to manage and assess all of these environmental spatial datasets.

Where evaluation of all available data suggests a significant pollutant linkage may exist, it may be necessary to visit the site and carry out some form of on-site testing, or take away samples for analysis. The Council's authorised officer will where possible carry out these intrusive investigations, subject to equipment limitations. Where specialist equipment is needed consultancy services may need to be procured.

Appendix 7 sets out the record keeping procedure needed for a determination and formal notification. It explains within this procedure that appropriate persons will be provided with written explanations for the test of exclusion and apportionment. Appendix 8 sets out the tests, which will be followed for liability and enforcement.

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### **Roles and responsibilities;**

The delivery of the contaminated land function falls under the service delivery of the Environmental Health and Licensing Team. The enforcement approach will follow the Regulators' Compliance Code (BERR, 2007) and also the Council's adopted Enforcement Concordat (BERR, 1998).

It is delivered under the corporate priority of Housing and Well-Being, but also contributes to the Environment priority.

A close working relationship is sought with colleagues in Building Control, for example for works in relation to Approved Document C, and also planning colleagues (both WSC and Exmoor National Park Authority) where development occurs on brownfield land. Specific service plans identify delivery mechanism within each team and procedures are in place for recommending conditions or advisory comments on individual planning applications.

The Environment Agency is responsible for investigating special sites (as defined by the regulations) but only after the Council has formally determined the land as contaminated.

The Environment Agency also provides technical assistance / guidance on the pollution of controlled waters. Agreed protocols (LGA, 2000) should be followed between this Council and the Environment Agency.

### **Risks associated with this Strategy**

Certain service-specific risks that score 'medium' or 'high' on the Council's corporate risk register must be incorporated in relevant service plans to mitigate this risk. This strategy explains some of the main risks below;

a) Accuracy and availability of the data; One of the principal risks associated with this strategy, is of not accurately identifying all potential contaminated land sites in the district.

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To mitigate this risk of non-identification effectively, there must be easy access to relevant information, such as those listed in Appendix 1. If access to relevant data is difficult because of risk of increased uncertainty with any particular site, a higher risk score will be assigned.

Risks associated with non-identification is potentially minimised further as land quality data is recorded to the Council's mapping (GIS) system. This leads to more accurate and efficient use of resources and ability to work with partners more effectively.

Furthermore, in terms of development control when possible contamination is *known* or *suspected* the responsibility should fall to the developer (Defra, 2006) to identify previous risks of contamination and provide this information on the Planning 1-APP Form. However, in many cases this is not provided and therefore through consultation between Environmental Health and Planning any issues can be identified.

b) Enforcement; There is a risk associated with enforcement work owing to resources / time needed to investigate and costs to the Council. Although, the initial costs for a determination would to be borne by the Council, it can reduce this risk by obtaining funds from Defra's Capital Grant Programme. However, Defra advise that funding is for those sites considered to be greatest national priority and that reasonable enquiries should be made to find a liable party to pay for the remediation of a site. Therefore, an important part of this strategy will be the keeping of accurate records to identify according to the regulations appropriate persons and liability groups. This follows polluter pays principle and reduces the risk that the site will become an orphan site (orphan linkages are explained on p.37).

Further reducing risks associated with enforcement, in some cases the Environmental Damage (Prevention & Remediation) Regulations 2009 can be used, which impose obligations on operators of economic activities requiring them to prevent, limit or remediate environmental damage. The Regulations make operators of activities, which cause serious damage financially liable for that damage (the 'polluter pays' principle).

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Once areas of land are designated *special sites*, which include contamination by radioactive isotopes, these become the responsibility of the Environment Agency and are subject to separate funding programmes.

c) Complaints: Whilst the data generated by this inspection strategy is not in the public domain (s. 143 of the Environmental Protection Act 1990 never enacted), specific written requests for individual sites can be made under the Environmental Information Regulations 2004 and subject to the Council's data protection policy and any relevant exemption under these regulations.

Complaints generally relate to the potential for contaminated land. For example as a result of an environmental search, it may be suggested by consultants that the land or site may be contaminated. The Council aim to reduce the risk of property blight as a result of such a search, through clear explanation of the hazards and risks involved. For example, this may include details of site investigation reports previously carried out.

### Conclusion:

This contaminated land strategy by targeting inspection in areas where the highest risk contaminants and receptors are most likely to be present, should be able to identify areas of land, which meet the definition of contaminated land and also, which follows the guidance.

This strategy by concentrating on new development and targeting inspection in the small areas where potential contamination is likely will help to ensure resources are placed where they are most needed and also, associated risks to health and the environment are reduced to an acceptable standard.

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References:

1. Defra, 2006, Circular 01/2006, Part 2A Environmental Protection Act 1990
2. BGS/Environment Agency 2000, Guidance on the use of digital environmental data. BGS Technical Report WE/99/14, NGWCLC Technical Report NC/06/32
3. BGS, 1999, The Minehead district – a Concise Account of the Geology, British Geological Survey
4. BGS, 1975, British Regional Geology South-West England 4<sup>th</sup> Edition, British Geological Survey
5. BGS, 1987, Geo-chemical and geophysical investigations in Exmoor and the Brendon Hills (Report No.90), British Geological Survey
6. LGA, 2000, Working Better Together
7. CLG, 2004, Planning Policy Statement 23; Planning and Pollution Control
8. BERR, 2007, Regulators' Compliance Code
9. BERR, 1998, Enforcement Concordat
10. Defra, 2004, CLAN 3/04, Guidance Notes (Section 86 of the Water Act 2003)
11. Environment Agency, 2004, Model Procedures for the Management of Land Contamination CLR 11
12. DETR, 1995, CLR-6, *Prioritisation & Categorisation Procedure for sites which may be Contaminated*
13. CIEH, 2007, Contaminated land - Local Authority Guide to Part IIA of the Environmental Protection Act 1990, ISBN 13: 978-1-904306-69-6
14. Rogers, 1999, Towards a Strong Urban Renaissance, Report from the Urban Task Force.
15. CLG, 2000, Urban White Paper, Our Towns and Cities; The Future – Delivering an Urban Renaissance
16. Wilson & Card, 1999, Reliability and Risk in Gas Protection Design, Ground Engineering, 32, 2, pp 32-36, EMAP.

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### **Appendix 1; Data Sources**

The following data sources have been searched to develop the Council's historic land-use database;

1. **Kelly's Trade & Thomson Directories;** Information held at the Public Library and Somerset Records Office, Taunton
  
2. **Landfill sites;**
  - Register of landfill sites pre 1974 (information obtained from British Geological Survey)
  - Somerset CC (Waste Authority)
  - Taunton reference library
  - Environment Agency (Licensed waste management facilities)
  
3. **OS County Series GIS Maps;** The following historic maps are available on the Council's GIS
  - Epoch 1 1846 to 1901
  - Epoch 3 1900 to 1949
  - Epoch 5 1945
  
4. **Planning Maps;** Former planning OS-paper maps (with hand drawn development proposals), are held digitally on file-store. These maps pre-dated the current electronic planning system (pre-1999). The maps are not available as one geo-referenced layer but saved by individual file type.
  
5. **Planning files;** Former planning files are held either as hard copy (for example in the Council's depot), held on microfilm (1974 – 1982) or held electronic (from 1999 onwards). There is a small charge for persons wishing to conduct a planning history search against a particular site.
  
6. **Sites storing Petroleum;** Trading standards (SCC) hold records on current Petrol Stations and also former disused and/or decommissioned sites

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**7. Interviews;**

- Mr M. Ireland (former Council engineer / surveyor)
- Mr P Gannon (Building Control Manager)

**8. Somerset Historic Environment Record** (Somerset County Council)

**9. Heritage Gateway;** English Heritage project has [on-line records](#) of local and national historic environmental data, including brown-field sites.

**10. Miscellaneous sources;**

- Exmoor's Industrial Archaeology (Exmoor Books 1997)

**11. GIS datasets;**

- Natural England (Sites of Special Scientific Interest (SSSI) and Special Conservation Areas (SACs)
- Environment Agency landfill data

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### Appendix 2; Main sources of contaminants

In accordance with the statutory guidance (Defra, 2006) in developing a strategic approach it is necessary to consider; the history, scale and nature of industrial or other potentially contaminative uses. The principal land uses below have been prioritised by type and range of contaminants, which could be present (as set out below) and hazard scores have been assigned to these groups. Before a site becomes determined as contaminated land a thorough site-specific assessment will be carried out.

#### High Priority (Hazard CRP 7 to 10)

Asbestos manufacture and distribution  
Manufacture of Fertiliser  
Metal – lead works  
Oil, petroleum and gas refining and storage  
Pharmaceutical Industries  
Waste Disposal sites (*see note below*)

Explosive industries  
Gas manufacture and distribution  
Military Land  
Pesticides Manufacture  
Tar Bitumen and Asphalt Works  
Chemical works (general)

#### Medium Priority (Hazard CRP 5 to 8)

Coal storage depot  
Disinfectants manufacture  
Electricity production & distribution  
Engineering- general and heavy  
Former marsh  
Manufacture of glass  
Leather tanning and dressing  
Metal – non ferrous (except lead)  
Metal - electroplating  
Motor Vehicles: maintenance & repair  
Paper & packaging products (manufacture)  
Pipelines (transport via)  
Printing works  
Road haulage  
Saw milling and timber treatment  
Sewage treatment  
Unknown filled ground (pit, quarry, pond marsh, river, dock etc)

Dry-cleaners  
Dyes and pigments (manufacture)  
Transport support and depots  
Factory or Works (use not specified)  
Fuel: retail sale of automotive fuel  
Hospitals  
Transport manufacturing and repair  
Metal - Iron and Steel works  
Mining areas and spoil heaps  
Motor Vehicle maintenance and repair  
Paint, Varnish & Ink manufacture  
Plastic goods manufacture  
Railway land  
Rubber products and processing  
Scrap Yard  
Textile manufacture and products

#### Low Priority (1 to 5)

Airports  
products  
Cement, lime & plaster products (manufacture)  
Dockyards and wharfs  
Film processing (major)  
General Quarrying

Animal slaughtering and animal by-  
Brewing and Malting  
Clay brick & tile manufacture  
Food processing – major  
Former filled sand and gravel pits  
Quarrying of sand & clay

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**Appendix 2 (continued)**

**Note;** Waste disposal sites are a potentially significant source of risk, especially those, which operated before the licensing requirements (Control of Pollution Act 1974). All closed landfills in the District will be identified and their association with any specified receptors considered in detail.

Current and closed landfills present risks caused by the gases given off from the decomposition of the materials within. The primary gases are methane and carbon dioxide, with traces of VOC's. Recent guidance moves away from trigger levels to a risk based approach based gas flow rate and percentage of gas by volume (Wilson & Card 1999). Quantitative assessments and gas flow rates will therefore need to be determined following current guidance (for example CIRIA 665) during a site investigation and will need to be conducted over a sufficiently long period of time. The surrounding soils may also contain toxic substances and corrosive compounds that can attack building materials.

Gassing sites are also subject to the Buildings Regulations 1991 (Approved Document C) which requires that buildings within 250 metres or within the likely influence of a landfill, further investigation should be made to determine what, if any, protective measures are necessary.

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**Appendix 3; Receptors**

**Population;** The population of West Somerset area is 35,400 (mid 2007, National Statistics) and the 3 principal towns are Minehead, Williton and Watchet. The remainder of the population tends to be distributed throughout the many small rural villages and smaller settlements.

**Critical receptors;**

- 1. Human health;** Allotments, schools, nurseries, and hospitals will be given critical risk rating of between **Hazard rating 8 to 10** to reflect vulnerable groups. The potential for persons either living on or frequenting a potentially contaminated site will be considered in every case, but priority will be given to the sites with infants (less than 6 years old).
- 2. Private water supplies;** For any private drinking water supply situated within 50m of a potential contaminated land site and in hydraulic continuity the risk will be scored **Hazard 10**. Private drinking water sources will be mapped to the Councils GIS to allow spatial assessment. Some analysis already may have been carried out at a private drinking water supply, and careful scrutiny of these analyses will be required to identify any unusual result.
- 3. Public water supplies;** Where a possible contaminated land site is situated within 400m of a public drinking water abstraction the risk will be rated between **Hazard 7 to 10** (less than a private supply because it is likely the water company will have record of sampling and analysis and against a range of contaminants). Wessex Water abstracts groundwater from a number of locations with source protection zones delineated by the Environment Agency. All public water supply abstractions will be identified by location (additional information can be obtained from the Wessex Water).
- 4. Site of Special Scientific Interest;** Ecological system effects either notified by Natural England or evident from complaints or from the site history will be scored **Hazard 5** and above to reflect risks to these sensitive habitats / receptors.
- 5. Buildings;** A large proportion of the district falls within a Radon Affected area. This means for many new developments radon protection measures will be

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installed or have been installed. Risks to buildings will generally be lower than the receptors identified above (**Hazard rating 2-3**)

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**Appendix 4; Summary of Key Duties;**

1. To prepare an **inspection strategy**, which was required by July 2001 setting out how the Authority intends to inspect its area for the purpose of identifying contaminated land.

**Action(s);**

- (i) Strategy published (July 2001) and adopted by Council Sept 2001*
- (ii) New Strategy (2006-9) prepared and adopted by Council Jan 2006*

2. To determine whether particular areas of land are contaminated land in accordance with the Secretary of State's guidance (Defra, 2006).

**Action(s);**

- (i) A contaminated land (potential land) dataset layer has been created within the Council's corporate GIS (on-going). Information sources used to build this dataset layer are given in Appendix 1.*
- (ii) At the start of the 2006/9 strategy **784 potential sites** in the district had been identified. The decision was made to develop this data in-house, rather than purchasing information from an external company.*
- (iii) Over the 2006/9 strategy period the total number of sites has reduced to **647** through further inspection / assessment.*
- (iv) Contaminated land strategy (2006-9) set an aim of **c.80 sites** every year to be inspected over a ten-year period but to identify the most pressing and urgent ones first and by the end of this period **250 sites** have been assessed including majority of higher risk areas of land in the Minehead, Williton and Watchet areas.*
- (v) During the 2006-9 strategy **42 sites** though development control have been successfully turned from potential sites to ones where sufficient detailed information has been obtained to show that remediation is **not** required.*

3. To decide whether any contaminated land is also required to be designated as a Special Site in consultation with the Environment Agency as appropriate.

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4. To identify and notify owners and occupiers of the land, those who may be liable and the Environment Agency that the land is contaminated land and whether it is a Special Site.
5. Undertake urgent remediation action where there is imminent danger of serious harm.
6. Determine who may be liable to bear responsibility for remediation of contaminated land and what proportion of the costs they should bear.
7. Ensure that appropriate remediation takes place, either by encouraging voluntary action or, unless restrictions apply, by serving a remediation notice on those responsible
8. Take further action if remediation is not carried out or is not effective.
9. Maintain a public register containing details of regulatory action taken under Part IIA and through other means;  
**Action(s);**  
*(i) No contaminated land sites have been determined*
10. Provide information on contaminated land under Part IIA to the Environment Agency to allow preparation of the State of Contaminated Land Report.

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**Appendix 5 (Objectives)**

This strategy proposes the following specific and measurable targets for this period;

1. **Inspection frequency;** A reduced inspection frequency is now proposed by this strategy to reflect the lower risk sites remaining in the area with **50 sites of potential concern to be inspected every year.**
2. **Improve land, which may not be in a suitable condition;** Detailed assessment on land, which has been identified, as either a Category 1 or 2 sites is to be carried out. These are areas of land, which may not be suitable for its present use and/or environmental setting (with Contaminant-Receptor-Pathway matrix score of 21 and above). The standard for further assessment and /or remedial action will be to reduce the risk rating to a minimum of a category-3 status and to remove any unacceptable pollutant linkages.
3. **Development of GIS dataset layer;** The Council's contaminated land GIS dataset layer will continue to be developed and its data reviewed. By maintaining an accurate record of former land use in this format will help to ensure that any unacceptable risks are identified efficiently during the normal course of development (both for West Somerset Council and Exmoor National Park). Proposed developments will continue to be checked by the Environmental Health and Licensing Team (**104 weekly planning lists to be checked in the year**).
4. To respond to **environmental information requests** within the statutory period (20 working days), however we will endeavour, where possible, to respond sooner and advise the customer accordingly. When significant officer time is needed in responding to these requests, the Council's reasonable charge will be levied.

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**Appendix 6 (CRP Rating)**

**1. Priority Category 1 - Site likely not to be suitable for present use and environmental setting.**

*Contaminants probably or certainly present and very likely to have an unacceptable impact on receptors. Urgent assessment action needed in cases where the Council believes there is imminent danger of serious harm or serious pollution of controlled waters being caused due to a significant pollutant linkage. The Council may need to ensure that urgent remediation is carried out. It is likely that any action taken on an urgent basis will be only a part of the total remediation scheme.*

Where the Council is satisfied that there is a need for urgent remediation the following are unlikely to apply;

- a) Prior consultation and,
- b) Three-month interval between the notification to the appropriate persons and the service of the remediation notice.

If the Council believes that serving a remediation notice would not result in the remediation being done soon enough, it may decide to carry out the remediation itself. This may happen in cases where the appropriate person cannot be found. There may also be cases where the Council considers urgent remediation is needed, but the requirements of that notice have been suspended pending the decision in an appeal against the notice.

In carrying out the remediation itself the Council needs to publish a remediation statement describing the actions it has carried out. It also needs to consider whether to seek to recover the costs from the appropriate person.

**2. Priority Category 2 - Site may not be suitable for present use and environmental setting.**

*Contaminants probably or certainly present and likely to have an unacceptable impact on receptors. Assessment action needed to characterise a significant pollutant linkage and establish a technical specification for the remedial action required. Assessment action is only used for land formally identified as contaminated land.*

**3. Priority Category 3 - Site considered suitable for present use and environmental setting.**

*Contaminants may be present but unlikely to have an unacceptable impact on receptors. Assessment action unlikely to be needed whilst the site remains in present use or otherwise remains undisturbed.*

**4. Priority Category 4 - Site considered suitable for present use and environmental setting.**

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Contaminants may be present but very unlikely to have an unacceptable impact on receptors. No assessment action needed while site remains in present use or is undisturbed.

To assist in the prioritisation procedure a simple scoring system has been devised as follows:

**Likelihood of *contaminants* on the site:**

<b>1</b>	<b>most unlikely</b>
<b>5</b>	<b>good chance</b>
<b>10</b>	<b>known to be present</b>

**Existence of *receptors* within area of influence:**

<b>1</b>	<b>most unlikely</b>
<b>5</b>	<b>good chance</b>
<b>10</b>	<b>known to exist</b>

**Likelihood of impact of contaminants on receptors (*pathway*):**

<b>1</b>	<b>most unlikely</b>
<b>5</b>	<b>good chance</b>
<b>10</b>	<b>certain</b>

This preliminary process is known as a CRP (contaminant receptor pathway) assessment. Preliminary assessments may identify sites where either particular contaminants are likely or known to exist, or sensitive receptors are known to exist. No assessment should be undertaken unless both are suspected or confirmed. Where there is doubt the situation will be kept under review.

**Relationship of CRP score to Priority Category:**

<b>CRP Score</b>	<b>PC</b>
<b>26-30</b>	<b>1</b>
<b>21-25</b>	<b>2</b>
<b>16-20</b>	<b>3</b>
<b>10-15</b>	<b>4</b>

**Examples of CRP risk assessment:**

**EXAMPLE 1** ; Closed landfill with houses built on the site with no recognised capping

<i>Contaminant score</i>	10	(As a landfill site contaminants are known to be present)
<i>Receptor score</i>	10	(As persons are living on the site receptors are known to exist)
<i>Pathway score</i>	10	(As persons are living on the site they are potentially able to access the contamination - a pathway exists)

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**TOTAL** - **30 - PC1**  
**EXAMPLE 2** - Closed landfill site with houses built on the perimeter

<i>Contaminant score</i>	10	Landfill site contaminants are known to be present
<i>Receptor score</i>	10	Persons are living very close by receptors are known to exist within an area of influence of the site
<i>Pathway score</i>	6	Persons are living so close there may be a presumption that there is a significant possibility that the contamination could impact on the receptors, maybe landfill gas

**TOTAL** - **26 - PC1**

**EXAMPLE 3**; Closed landfill, no houses or property receptors nearby but watercourses identified on both sides of the site with leachate staining

<i>Contaminant score</i>	10	Landfill site contaminants are known to be present
<i>Receptor score</i>	10	Controlled waters within an area of influence of the site
<i>Pathway score</i>	8	It is very likely possibly certain, that the contamination on this site will access the water courses

**TOTAL** **28 - PC1**

**EXAMPLE 4**; Old derelict gas works site, no structures, no access to the public, clay geology, no significant deep aquifer, but a private water supply (PWS). Recent water results satisfactory.

<i>Contaminant score</i>	10	Gas works site contaminants are known to be present
<i>Receptor score</i>	6	Presence of critical receptor identified but it appears private drinking water supply is unlikely to be in hydraulic continuity with source
<i>Pathway score</i>	4	Adverse impact on receptor unlikely but could not be ruled out in the long term, seems satisfactory at the moment from recent sample results

**TOTAL** **20 - PC3**

**EXAMPLE 5**; Old power station site, now derelict, no structures, children play on the site, motorcyclists use it for scrambling. River adjacent and part of site a flood plain.

<i>Contaminant score</i>	8	Former power station site contaminants are very likely, including asbestos
<i>Receptor score</i>	10	Children accessing the site (critical receptors) with direct access to contaminants. The river is controlled water and could be picking up contaminants from the site during periods of flood and heavy rain
<i>Pathway score</i>	5	Chronic adverse impact on receptors possible

**TOTAL** **23 - PC2**

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**Appendix 7; The Written record of Determination and Formal Notification;**

Once an area of land has been determined contaminated by statutory definition, the Council will prepare a written record to include:

- a) a description of the pollutant linkage(s) determined, including conceptual model;
- b) a summary of the evidence which determines the existence of the pollutant linkage(s);
- c) a summary of the risk assessment(s) upon which the pollutant linkage(s) were considered to be significant;
- d) a summary of the way the requirements of the statutory guidance were satisfied.

The Council will then formally notify in writing all relevant parties that the land has been determined contaminated, these include:

- a) the owner(s)
- b) the occupier(s)
- c) those who appear to be an 'appropriate person' responsible for any remediation that may be necessary (Section 4.1c of Statutory Guidance).
- d) the Environment Agency

At the notification stage it may not be possible to identify all the relevant parties, particularly the appropriate persons. The Council will, however, act on the best information available to it at this time and keep the situation continually under review as more information comes to light.

If the Council considers at any time that contaminated land might be required to be a Special Site, it needs to first consult with the Environment Agency. Having regard to any advice received, the Council then needs to decide whether or not the land is required to be designated.

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If the Environment Agency agrees or fails to respond in time then the land will be designated a Special Site. The responsibility for securing remediation passes to the Environment Agency although the Council must complete the formal notification process.

Where agreement cannot be reached between the Council and the Environment Agency the decision will be referred to the Secretary of State.

The legislation and statutory guidance has been designed to encourage voluntary remediation. The formal notification procedure commences the process of consultation on what remediation might be most appropriate. To aid this process the Council will therefore provide as much information to the relevant parties as possible, including where available:

- a) a copy of the written record of determination;
- b) copies of site investigation reports (or details of their availability)
- c) an explanation of why the appropriate persons have been chosen as such
- d) details of all other parties notified

The appropriate persons will also be provided with written explanations for the test for exclusion and apportionment.

It may be at this stage that the Council will need further information on the condition of the site to characterise any significant pollutant linkages identified. If that is the case an informal attempt will be made to obtain this information from the appropriate persons already identified.

Once a site has been determined and is in need of remediation, it is the responsibility of the Council to decide what action is required from the three categories of remediation action outlined below.

- (i) assessment;                      used for the purpose of obtaining information on the condition of the land or waters to characterise a significant pollutant linkage

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- (ii) remedial treatment; the design of a remedial works
- (iii) monitoring action; to be carried out by the Council to achieve a standard of remediation that leaves the land in a state where it is suitable for its current use. In considering the remedial treatment action the Council will consider what monitoring actions are required to evaluate the effectiveness and durability.

The Council will also need to consider if any further remedial treatment action will be required as a result of a change occurring

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**Appendix 8; Liability and Enforcement**

Land may be determined contaminated upon the identification of one significant pollutant linkage, although more may exist on the site. Full liability cannot therefore be determined until all significant pollutant linkages on the site have been identified. When all significant pollutant linkages have been identified, each of these linkages has its own liability group. The Council will then determine which appropriate persons should bear liability for which parts of the remediation. This procedure is outlined in Chapter D of the Statutory Guidance of which the five distinct stages are as follows:

- i) Identifying potential appropriate persons and liability groups
- ii) Characterising remediation actions
- iii) Attributing responsibility to liability groups
- iv) Excluding members of liability groups
- v) Apportioning liability between members of a liability group

These procedures are complex and cumbersome. The process commences with the establishment of liability groups. All appropriate persons for any one linkage are a, 'liability group'. These may be class 'A' or class 'B' persons.

APPROPRIATE PERSONS - Class 'A'; these are, generally speaking the polluters, but also included are persons who, "knowingly permit". This includes developers who leave contamination on a site, which subsequently results in the land being determined contaminated.

APPROPRIATE PERSONS - Class 'B'; where no class 'A' persons can be found liability reverts to the owner or the occupier. These are known as class 'B' persons.

The Council will make all reasonable enquiries to identify class 'A' persons before liability reverts to class B owner-occupiers.

The matter of appropriate persons must be considered for each significant pollutant linkage. Therefore where a site has had a series of contaminative uses over the years,

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each significant pollutant linkage will be identified separately and liability considered for each.

**APPORTIONMENT OF COSTS;** Generally speaking the members of a liability group will have the total costs falling on the group as a whole apportioned between them. It may also be necessary to apportion costs between liability groups if there is more than one pollutant linkage. Some members of a liability group may be exempted, this is explained below.

**EXCLUSION, APPORTIONMENT AND ATTRIBUTION PROCEDURES;** There are three basic principles which apply to exclusion and apportionment tests:

- i) The financial circumstances of those concerned have no relevance;
- ii) The Council must consult persons affected by any exclusion, apportionment or attribution to obtain information (on a reasonable basis having regard to the cost). If someone is seeking to establish an exclusion or influence an apportionment to their benefit then the burden of providing the Council supporting information lies with them.
- iii) Where there are agreements on liabilities between appropriate persons the local authority has to give effect to these agreements. In the event that the agreement would increase the share of the costs to a person, who under the hardship provisions would benefit from a limitation on recovery of remediation costs, the Council should disregard the agreement.

**LIMITATION ON COSTS TO BE BORN BY APPROPRIATE PERSONS -** There are six tests specified to identify Class 'A' groups who should be excluded from liability. These will be applied in sequence and separately for each pollutant linkage.

The exclusion of Class 'B' persons is much less complex, the single test merely excludes those who do not have an interest in the capital value of the land. Tenants therefore are excluded.

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When the Council has apportioned the costs of each remediation action and before serving remediation notices, it will consider whether any of those liable may not be able to afford it. If, after taking into consideration the statutory guidance it decides that one or more of the parties could not, it will not serve a remediation notice on any of the parties. The Council will instead, consider carrying out the work itself and produce and publish a remediation statement

### **THE ENFORCEMENT PROCESS**

Before remediation notices are served the extensive consultation process will be completed and ample encouragement given to arrive at an informal solution. The Council will do all in its power to consult the appropriate person(s), owners, occupiers etc about their views on the state of the land. This could be a difficult and most protracted process and cause delays. Where a housing estate is affected for example, it would be reasonable to expect house owners, land owners, developers, lenders, insurers, surveyors, geo-technical engineers, residents groups, etc all to have differing views according to their position.

Remediation notices are served only as a last resort (not withstanding urgent cases), and then only after this lengthy consultation process has been exhausted. Notices will be authorised after two tests are satisfied:

- a) That the remediation actions will not be carried out otherwise
- b) That the Council has no power to carry out the work itself.

If these are met the Council will serve a remediation notice on each appropriate person. It cannot be served less than three months after formal notification that the land is contaminated unless the urgent action is deemed necessary (where there is imminent risk of serious harm).

**SPECIFYING REMEDIATION;** The remediation measures will be both appropriate and cost effective employing what the statutory guidance terms, 'best practicable

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techniques' and could be achieved through removal of the source or receptor or by breaking the pathway.

The "reasonableness" of the requirements are, however, paramount, a concept which is considered at some length in the guidance. It is determined in relation to the cost of carrying out the remediation against the cost of failing to secure satisfactory remediation, such as the costs, or potential costs, resulting from the continuing pollution and also the depreciation in the value of land

### **REMEDICATION BY WEST SOMERSET DISTRICT COUNCIL**

Before the Council can serve a remediation notice it will first determine whether it has the power to carry out any of the remediation actions itself and there are five specified circumstances where this may be the case:

- Where urgent action is required
- Where no appropriate person can be found
- Where one or more appropriate persons are excluded (on grounds of hardship)
- Where the local authority has made an agreement with the appropriate person(s) that it should carry out the remediation
- In default of a remediation notice

### **ORPHAN LINKAGES**

Orphan linkages are those where it is not possible, after reasonable enquiries, to find anyone responsible for them (class A or class B persons) or, where persons can be found but they are exempted from liability for specified reasons. For example, some sites with more than one significant pollutant linkage may have liability groups for only some of the linkages leaving some orphan linkages. Exemptions apply where:

- The land is contaminated by reason of pollution of controlled waters only and no class-A persons can be found (this means class-B persons cannot be held liable for polluting water from land)

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- The land is contaminated by reason of the escape of a pollutant from one piece of land to another and no class-A person can be found
- The land is contaminated land by reason of pollution of controlled waters from an abandoned mine
- The person was acting in a 'relevant capacity' (insolvency practitioner / official receiver)

In such cases the enforcing authority should bear the cost of the remediation in accordance with Part IIA.

### **URGENT ACTION**

Urgent action can be authorised where the Council is satisfied that there is imminent danger of serious harm or serious pollution of controlled waters being caused as a result of land being determined as contaminated land. In such circumstances the procedures identified in the statutory guidance will be followed which may involve the forced entry into the premises.

The terms "imminent" and "serious" are unfortunately not defined; local authorities are advised to use the normal meaning of the words. There is, however, guidance on what may constitute "seriousness" when assessing the reasonableness of remediation.

The Council will undertake the remediation in urgent cases where it is the enforcing authority if it is of the opinion that the risk would not be mitigated by enforcement action. In the case of a special site the Council will determine the land contaminated land in accordance with the statutory procedure and then notify the Environment Agency who will then be responsible for the remediation.

In appropriate cases the Council will seek to recover costs of remediation works it has completed.