

Forest of Dean
District Council

Contaminated Land Inspection Strategy

June 2001

FODDC Contaminated Land Inspection Strategy Executive Summary

Under new regulations, the Council is required to inspect land in its District for contamination. A strategy must be submitted to the Department of the Environment, Transport and the Regions by July 2001, detailing how the authority will take a rational, ordered and efficient approach to this inspection.

The Council's priorities in dealing with contaminated land will be:

1. To protect human health
2. To protect controlled waters
3. To protect designated ecosystems
4. To prevent damage to property and designated historic sites
5. To prevent any further contamination of land
6. To encourage voluntary remediation
7. To encourage re-use of brownfield land

This list is presented in priority order and in all cases will have regard to significance and likelihood, as required by the regulations.

A five-year programme of inspection will be undertaken, running from April 2001 to April 2006. An inspection programme based on population-density is proposed, with the largest towns being inspected first, followed by the smaller towns and villages. Priority will be given to inspecting land owned by the Council and land scheduled for development in the Council's Local Plan. Controlled waters and protected areas of the environment will be also be examined and a final prioritisation exercise undertaken to establish the order in which problem sites should be cleaned up.

It is recognised that some sites may be identified outside this general approach to inspection that will require urgent attention. These sites will be dealt with as they arise. The Council will support parties wishing to undertake voluntary remediation and will encourage re-use of brownfield land for development in preference to greenfield development.

The District Council is the lead regulator on contaminated land but, wherever necessary, the Council will work in partnership with other organisations particularly the Environment Agency. Detailed consultation has been undertaken with Parish Councils and all statutory consultees between November 2000 and May 2001.

The regulations set clear criteria that must be met before land can be formally designated as contaminated land. The Council must also maintain a public register that must contain only certain information. The expectations of some members of the public will not be met by the powers local authorities may exercise under contaminated land legislation.

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1 INTRODUCTION

The Forest of Dean District Council is required to inspect land in its District for contamination under new regulations that came into force on the 1st April 2000. This strategy details how this inspection will be undertaken.

1.1 FODDC corporate aims

The Inspection Strategy is presented in the context of the District Council's Corporate Plan, which gives the Council's mission statement.

Our mission is to work with the community and all organisations in the Forest of Dean to ensure that the area is revitalised and the quality of life improved.

The Forest of Dean District Council will achieve its mission by implementing policies that will:

- Result in a thriving local economy
- Ensure a protected and sustainable environment
- Promote the social well-being of the community

Regeneration in its widest sense is at the heart of this strategy.

To deliver these policies successfully the Council will need to be forward-looking and flexible.

Land contamination has significant impacts on both the environment and the economy so these policy areas are therefore key considerations in developing this Inspection Strategy.

The Council's approach to local government consistently emphasises the need to be open and accountable for its actions. This document was therefore presented as a consultation draft and made available to all interested sections of the community, businesses and developers. All comments received were considered before finalising the strategy. The Council's Environmental Services and Housing Committee approved submission of an amended version of the consultation draft in April 2001.

1.2 A Corporate Approach to Contaminated Land

The Contaminated Land Inspection Strategy has been drawn up within the Council's corporate framework and with reference to other key policies in this area.

1.2.1 District Local Plan

The District Council is required to lay out its plans for permitting development in its area in a District Local Plan. The Local Plan must support sustainable development and therefore includes a strategic aim to re-use brownfield land as a priority. A number of areas of past industrial use throughout the District have therefore been highlighted as

future development areas and this has knock-on implications for the Council's contaminated land work.

1.2.2 Land regeneration strategy

The Council has previously adopted a Land Regeneration Strategy for 2000 – 2003. The primary purpose of this strategy to direct the Council's work with the South West of England Regional Development Agency, which is currently focussing on regeneration of former colliery sites.

1.3 Regulatory context

Contaminated land regulations have been under development since the early 1990's. Following consultation on a 1993 White Paper entitled "Paying for our Past", The Environment Act 1995 inserted a new section (Part IIA) into The Environment Protection Act 1990. Another period of detailed consultation followed this enabling legislation, and the regulations and statutory guidance finally came into force in April 2000. It is the introduction of this new regulatory regime, generally referred to as the Part IIA regime, that has prompted the production of this strategy document.

1.3.1 The roles of the District Council and the Environment Agency

Local authorities have been given the primary regulatory role under the Part IIA regime. In this instance, local authorities refers to district and borough councils, rather than county councils. This reflects the existing responsibility of the District Council to control statutory nuisance and complements its role as the local planning authority.

The local authority has a duty:

- To cause their areas to be inspected for contaminated land
- To determine whether any particular site meets the statutory definition of contaminated land
- To act as the enforcing authority for all contaminated land, unless the site meets the definition of a "special site" (in which case the Environment Agency will act as the enforcing authority).

The Environment Agency has a secondary regulatory role in assisting local authorities, providing site-specific local guidance, dealing with "special sites" and publishing periodic reports on the state of land contamination nationally. Appendix C gives further details on the criteria to be used in designating a special site and thus the delineation of responsibility between the local authority and the Environment Agency.

1.3.2 Defining contaminated land

A legal definition of contaminated land is given in Section 78A(2) of Part IIA of the Environmental Protection Act 1990.

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

- (a) significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) pollution of controlled waters is being, or is likely to be caused

Section 78A(5) requires the regulatory authority to act in accordance with guidance issued by the Secretary of State in determining significance and likelihood.

1.3.3 Dealing with contaminated land

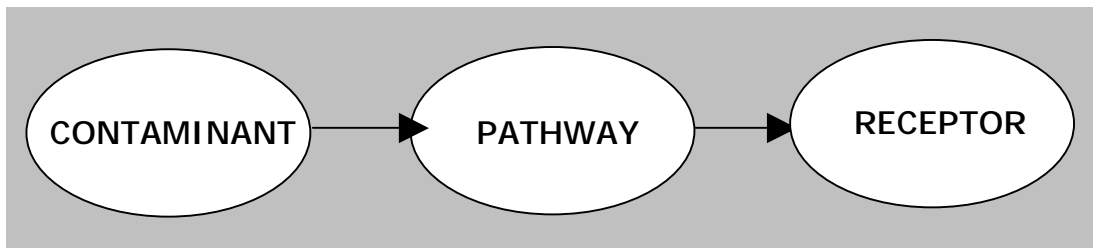
If an area of contaminated land has been identified, the approach for dealing with it will be the same regardless of whether the local authority or the Environment Agency is the regulator. There are four main stages to this approach:

- i. To establish who is the “appropriate person” to bear responsibility for the remediation (or “clean-up”) of the land.
- ii. To decide what remediation is required and to ensure that this occurs, through:
 - o Reaching a voluntary agreement
 - o Serving a remediation notice, if agreement cannot be reached
 - o Carrying out work themselves, in certain circumstances
- i. To determine who should bear what proportion of the liability for meeting the costs of the work
- ii. To record certain information about regulatory action on a public register.

1.3.4 Pollutant Linkages and Risk Assessment

For a site to meet the definition of contaminated land, a significant pollutant linkage must be established. A pollutant linkage consists of three parts:

- i. A source of contamination in, on or under the ground
- ii. A pathway by which the contaminant is causing significant harm (or which presents a significant possibility of such harm being caused)
- iii. A receptor of a type specified in the regulations



The guidance lists those receptors recognised as being potentially sensitive:

- Human beings
- Ecological systems or living organisms forming part of a system within certain protected locations, including:
 - Sites of Special Scientific Interest (SSSIs)
 - National Nature Reserves
 - Marine Nature Reserves
 - Nature Reserves
 - Special Areas of Conservation (SACs)
 - Special Protection Areas (SPAs)
 - Candidate SACs
 - RAMSAR sites
 - Areas of special protection for birds
- Property in the form of buildings, including:
 - Ancient Monuments
- Property in other forms
 - Crops
 - Livestock
 - Home-grown produce
 - Owned or domesticated animals
 - Wild animals subject to shooting or fishing rights
- Controlled waters
 - Surface waters (e.g. rivers, lakes, streams)
 - Drinking water abstractions
 - Source protection zones
 - Groundwater – private abstractions
 - Groundwater – major aquifers

If the three components of the pollutant linkage exist, a risk assessment will be undertaken to determine the likelihood of harm being caused and the likely nature and extent of the harm caused if the predicted event actually occurred. An area of land can only be designated contaminated land if a significant risk has been proven.

1.4 Development of the strategy

All local authorities are required to take a strategic approach to inspecting land in its area for contamination.

The statutory guidance requires that the approach adopted should:

- Be rational, ordered and efficient
- Be proportionate to the seriousness of any actual or potential risk
- Seek to ensure the most pressing and serious problems are located first
- Ensure that resources are concentrated on investigating areas where the authority is most likely to identify contaminated land
- Ensure that the local authority efficiently identifies requirements for the detailed inspection of particular areas of land.

This strategy was developed to meet these requirements. Particular reference has been made to “Contaminated Land Inspection Strategies - Technical Advice for Local Authorities” issued by the Department of the Environment, Transport and the Regions. The Strategy has been prepared in a number of stages:

- i. A draft strategy for consultation was prepared by FODDC’s Environmental Co-ordinator, who is the Council’s lead officer on contaminated land (September - October 2000)
- ii. The Council’s internal Contaminated Land Working Group was commented on this consultation draft. This Group is made up of officers from Environmental Services, Development Control, Forward Plan,

Building Control, Regeneration Services and Legal departments (October 2000).

- iii. The consultation draft was submitted for approval to the Council's Housing and Environmental Services Committee (November 2000).
- iv. Comments were invited on the consultation draft from formal consultees and informal consultees, including other sectors of the community and businesses. Parish Councils are seen as particularly important sources of local information and a proactive consultation exercise was undertaken to involve them (November – April 2000).
- v. Comments were reported back to Environmental Services and Housing Committee in April 2000 and approval given for minor additions to the consultation draft before submission.
- vi. A final version of the strategy was submitted to the Environment Agency (June 2001).

2 CHARACTERISTICS OF THE FOREST OF DEAN DISTRICT

This section gives the background to the Forest of Dean District and an explanation of how this influences the Council's approach to inspection for contaminated land. It will also enable fair comparison with other authorities.

2.1 GEOGRAPHICAL LOCATION

The Forest of Dean District lies on the boundary between England and Wales. It occupies the western part of Gloucestershire, bounded by the Malvern Hills in the north, the River Wye to the west and the River Severn to the south and east.



Figure 1: Map of the Forest of Dean District

2.2 BRIEF DESCRIPTION / HISTORY

The character of the Forest of Dean District is inexorably linked to the character of its land. The District is a predominantly rural area with four main towns. The statutory Forest of Dean forms the centre of the District, lying on the Dean plateau in the south.

The District's inhabitants have historically exploited the rich natural resources of the area, particularly for timber, water, stone, coal, mineral ores and soils. Sites of historic heavy industrial use are scattered throughout the District, as are much smaller scale sites where stone, coal and minerals have been exploited.

2.3 SIZE

The District Council's boundaries encompass a much wider area than just the statutory Forest of Dean. The District covers an area of 203 square miles or 526 square kilometres.

2.4 POPULATION DISTRIBUTION

As of 1998, the population of the District was estimated at 78000 with approximately 40% of the inhabitants living in the four major towns:

Town	Population
Lydney	8200
Cinderford	10000
Coleford	10000
Newent	4500

2.5 LAND OWNED BY THE DISTRICT COUNCIL

The District Council has limited land holdings in the District, mostly held by the Council's Planning department. In specific instances, the Council may actively pursue the purchase of derelict land and redevelop this to improve the overall quality of an area.

The Council's Housing department owns around 62 acres of open space ground, spread throughout the District, which is used primarily for recreation. The Housing department also owns a further 10 acres of ancillary land and garage forecourts. This ancillary land may include areas such as footpaths and unadopted roads.

2.6 CURRENT LAND USE CHARACTERISTICS

The main use of land in the District, other than for residential use, is for agriculture and forestry. Current industrial activity is generally restricted to a number of small-medium size industrial estates, with only a handful of large manufacturing operations. The large-scale coal and mineral exploitation of the past has been run down in recent times and superseded in importance by the rock quarries operating in the area.

2.7 PROTECTED LOCATIONS

The biodiversity of the District is one of its major natural assets. The District boasts:

- parts of two Areas of Outstanding Natural Beauty (AONB), the Wye Valley and the Malvern Hills
- three RAMSAR sites, namely Walmore Common, the Severn Estuary and the Upper Seven Estuary, which are also classified as Special Protection Areas under the European Community Directive on the Conservation of Wild Birds
- three Candidate Special Areas of Conservation (c. SAC's) to be designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora – namely the Wye Valley Woodlands, the Wye Valley and Forest of Dean Bats Sites and the River Wye – with the Severn Estuary being considered as a fourth possible SAC
- two National Nature Reserves (NNR's) declared under National Parks and Access to the Countryside Act 1949 or the Wildlife and Countryside Act 1981 – namely Highbury Wood, Newland and part of Lady Park Wood, Staunton
- forty-seven Sites of Special Scientific Interest (SSSI's)

In addition to these sites that have received statutory designations, Gloucestershire Wildlife Trust list 214 key wildlife sites and 37 regionally important geological sites.

English Nature have expressed particular concern about the potential for contaminated land investigation and remediation to impact on:

- the underground mine sites which are home to internationally important populations of greater and lesser horseshoe bats
- important grassland habitats which have developed through natural colonisation of former industrial sites, particularly long-standing waste ground and spoil heaps.

Good levels of consultation have already been established with English Nature in dealing with contamination problems in mine workings and it is envisaged that these will continue throughout this inspection process. The issue of rare species flourishing in contaminated areas (e.g. containing high levels of metals) is not unique to this District and in dealing with such sites the Council will follow examples of good practice established in other parts of the Country.

2.8 KEY PROPERTY TYPES

As well as its rich natural environment, the District has a rich historic environment with 1450 Listed Buildings, 55 Ancient Monuments and 26 designated Conservation Areas. The County Sites and Monuments Record contains information on over 2600 entries of archaeological interest in the Forest of Dean District and there are also a number of historic parks and gardens.

The industrial heritage of the area is particularly rich and there are a number of industrial buildings and conservation areas, which enjoy statutory protection principally because of the past industrial use. However, investigation of past industrial use forms a key part of the contaminated land inspection strategy. It is recognised that investigation of site which may include valuable historic assets will have to be tailored on a site-specific basis to minimise disruption and ensure that no new pathways are created by the investigation process. These factors will also need to be taken into account when designing any remedial work which may be required.

2.9 KEY WATER RESOURCE / PROTECTION ISSUES

The water companies Severn-Trent and Welsh Water supply the majority of the District's drinking water.

The District Council regularly inspects the quality of 180 private drinking water supplies in its area. Around 70 of these supplies are concentrated in the Aylburton area, supplied by the privately owned Aylburton reservoir.

2.10 KNOWN INFORMATION ON CONTAMINATION

The Council holds some information on contamination in the District, primarily submitted as part of the development control process. If development is proposed on an area of land where past use may have resulted in contamination, the Council will often request a site investigation as part of a planning condition. If development proceeds on these sites, remedial works will often have been carried out to improve the site conditions. Planning records will therefore form a valuable resource during the investigation process.

During the extensive consultation period before these regulations came into force, the Council worked closely with Forest Enterprise and the Environment Agency in correlating information on potentially contaminated sites within the statutory Forest. The information gathered will have to be examined in the light of the final regulations but this effort should also provide an important information resource.

2.11 CURRENT AND PAST INDUSTRIAL HISTORY

The Forest has a unique industrial history. A casual visitor to the area would probably be unaware that the Forest had been a centre of large-scale industrial activity in fairly recent history. Towns such as Cinderford have grown out of industries that have exploited the land resources. The past one hundred years has seen a decline in the traditional heavy industries of mining and manufacturing, replaced by smaller scale light industry. Tourism is now

the basis of a large part of the local economy and many key tourist attractions are based on former industrial activity.

2.11.1 COAL MINING

Coal deposits underlie much of the core forest sandwiched between sandstone and clays. The seams lie close to the surface, cropping out in various locations and often running at shallow angles to the surface. Exploitation of these seams is believed to have occurred in the Forest on a small scale since Roman times and rose in importance during the 18th century.

In the early days of the industrial revolution, small pits proliferated and shafts were initially only of shallow depth or dug into the sides of hills (drift mining) as the coal seams (or “delfs” as they were known locally) rose to the surface.

An individual known as “The Gaveller” was responsible for leasing mining rights on behalf of the Crown. Specific areas of land allocated for mining within Forest boundaries are known as “gales”.

Larger pits became more common throughout the 19th century. In 1904, the Gaveller was authorised to amalgamate gales and forty-four were grouped into seven large areas to be exploited on a large scale. Deeper shafts were sunk and mined for steam coal but as depths increased so did the cost of pumping out groundwater from the mine workings. After the Second World War, the coalfield became less economically viable and the last big pit closed in 1965.

The majority of the coal reserves are now believed to have been worked out. The Forestry Commission has taken on the role of the Gaveller in the area and the Deputy Gaveller deals with day-to-day mining issues. Freemining continues on a small scale with around a dozen small pits still being worked, generally as a part-time activity.

2.11.2 IRON ORE MINING

Mining of iron ore is likely to have begun in the District as early as 500BC as the surface outcrops of ore bearing limestone would have allowed mining by hand. Evidence of iron working by the Romans has been uncovered in and around Lydney dating from around 300AD. In medieval times, the region was regarded as the largest iron-working district in Britain. The pits left on the surface from small-scale iron ore extraction are known as “scowles”. Many of these scowles are alleged to have been infilled with various materials and this will be an important issue throughout the Council’s investigations.

During the 17th century, blast furnaces using charcoal from Forest timber operated at locations where water could be used to power the bellows. By the end of the century, eleven of the twenty-four furnaces working in England and Wales were located in the area.

The ore of the District did not easily lend itself to the coke-blast furnaces being introduced by 1800 leading to a downturn in the local iron industry. The problem was solved by the 1820's, leading to large coke blast furnaces being built at Parkend and Cinderford. Deeper shafts were sunk and output rose rapidly to a peak in 1879. The industry eventually declined due to the gradual exhaustion of economically viable deposits and the importation of cheap foreign ores.

As well as the scowles on the surface of the land, extensive underground mines exist beneath the centre of the Forest of Dean which support important populations of horseshoe bats (designated as SSSI's and proposed for designation as Special Areas of Conservation).

2.11.3 STONE AND LIME

The earliest use of stone in the District was probably for buildings and roads. The Old Red Sandstone, the Drybrook Sandstone and the lower beds of Pennant Sandstone in the coal measures provide building stone. Road stone is provided by carboniferous limestone occurring near the edge of the Forest.

Burning limestone with coal in kilns to produce quicklime and slaked lime was an important business before the introduction of cement and artificial fertilisers. As well as their agricultural use, these products were widely used for mortar and plaster. The kilns were located primarily around the limestone outcrop and around 150 sites are believed to have survived, often with several kilns together.

Quarrying remains an important activity in the District with large quarries currently operating in Clearwell & Stowe Hill, Drybrook and Stowefield. Smaller operations can be found at the Wilderness Quarry, Bromsberrow Sand & Gravel and Great Berry Quarry.

2.11.4 OTHER HEAVY INDUSTRIES

TINPLATE WORKS are known to have operated around Redbrook before the end of the 18th century at a site believed to have initially been a copper works. Other tinplate works were located at Hawkwell, Parkend, Lydbrook and Lydney.

FOUNDRIES AND ENGINEERING WORKS supported the rail infrastructure of the District's heavy industries.

WIREWORKS Lydbrook is known to have wireworks where cable making occurred prior to the First World War.

CHEMICAL FACTORIES where wood was distilled to form acids and alcohols were widespread throughout the Forest, with a large site at Cannop Crossroads.

CHARCOAL BURNING and TANNING have also occurred throughout the District at various times.

RAILWAYS once networked the Forest, providing an infrastructure to transport the goods produced by the heavy industries. Only the Chepstow to Gloucester line (via Lydney) is currently operational and some of the old railway lines have been converted to cycle paths, particularly in the core Forest.

2.12 GEOLOGY

The strata of the Forest of Dean lie like a nest of saucers, with smaller ones resting on top of larger ones. The saucers are not all circular. At the northeast end they appear pulled outwards as they are also to the west. Also to the west, the River Wye cuts down through some of the strata, exposing them as cliffs and beds.

Most of the rocks found in the Forest of Dean are carboniferous (or coal-bearing). The layers of coal are overlain by sandstone and mud layers. The sandstones make concentric ridges in the Forest of Dean, whilst the thick mass of coal seams between them tends to form a valley. The coal measures produce poor soils and this is probably the reason why the Forest of Dean has never been extensively farmed.

Carboniferous limestone occurs beneath the coal measures. These layers contain no coal, but have a top band of sandstone (the Drybrook Sandstone) and are important because of their high iron content.

Old red sandstones lie beneath the limestone, giving rise to the deep red soils of Blakeney and Lydney.

Beneath the sandstone, lie banks of conglomerate – large pebbles in a sandstone matrix – which can be traced all around the edge of the Dean, except where it is buried by younger coal measures in the south-east and limestones in the south west.

A simplified order of layers could be presented as:

Supra-pennant sandstones		Carboniferous Rocks
Thick belt of coal seams		
Pennant sandstones		
Coleford High Delf coal seam		
Trenchard Sandstones and shales		
<i>A break in the succession occurs here</i>		
Drybrook Sandstone		
<i>Iron</i>		
Limestones		
Thin Sandstones		
Conglomerate		
Old red sandstones, clays and marls		

2.13 HYDROLOGY

The Forest of Dean is sandwiched between two major rivers, the River Wye on the west and the Severn Estuary on the east. Cannop Brook and Cinderford Brook feed down into the lower Severn Estuary. The River Leadon runs through the north of the District, fed by Kempley Brook, Ell Brook, Glynch Brook, Colliers Brook and Red Brook.

From sampling carried out by the Environment Agency, the river quality of the Wye and the Severn is predominantly categorised as “very good” or “good”. Protection of these high standards of river quality from contamination is therefore a major objective of the inspection strategy.

2.14 HYDROGEOLOGY

The National Rivers Authority Groundwater Vulnerability Maps provides information on the water beneath the land in the District. These indicate there is a major aquifer of high vulnerability running through the District from Staunton, through south Coleford and St. Briavels down to the River Wye at Chepstow. The remainder of the District is classified as having a minor aquifer, but with a high vulnerability.

Within the District a number of “source protection zones” exist, as designated by the Environment Agency. These are sections of the aquifer which are considered to form catchments to public water supplies and certain other private abstractions.

2.15 AREAS OF NATURALLY METAL ENRICHED SOILS

The Soil Survey and Land Research Centre based at Cranfield University have undertaken a national soil survey, sampling surface soil on a 5km grid and analysing the samples for various naturally occurring metals. The Council has published selected data from this national survey relating to the Forest of Dean District, in conjunction with neighbouring authorities in Gloucestershire, to build up a picture of background levels of metals throughout the District.

This information will be used to determine whether levels of metals in areas under investigation are due to man-made contamination or due to natural background levels, and will assist in determining clean-up criteria for contaminated sites.

3 THE FODDC STRATEGY: OVERALL AIMS

The reasons for writing this strategy were described in Section 1.4. A detailed breakdown of how the Council will meet its objectives is given in this section, prioritising actions and laying down milestones.

3.1 The Council's priorities

Dealing with contaminated land constantly throws up complex issues, often where limited amounts of information are available. For each site, the importance of these issues must be balanced in order to move forward in dealing with the problem. A prioritised list of the Council's aims has therefore been devised to aid decision-making.

The Council's priorities in dealing with contaminated land will be:

1. To protect human health
2. To protect controlled waters
3. To protect designated ecosystems
4. To prevent damage to property and designated historic sites
5. To prevent any further contamination of land
6. To encourage voluntary remediation
7. To encourage re-use of brownfield land

This list is presented in priority order and in all cases will have regard to significance and likelihood, as required by the regulations.

3.2 Work programme

The inspection process has been broken down into a series of milestones, which are described in the work programme and illustrated in Appendix A.

Stage 1 – Purchase Landmark database (March 2000)

To begin the process of investigation, the Council has purchased a set of historic ordnance survey maps in a digital format, which can be used with the Council's Geographical Information System (GIS) from Landmark Information Group Ltd. along with a database of historic land use.

The historic ordnance survey maps are from four separate time periods (or epochs)

- 1878-95
- 1901-1905
- 1920-29
- 1936.

Mapping technology was not as accurate during these times as it is currently and therefore each set of maps has been "geo-rectified" to allow them to be overlain onto current maps.

The historic land use database identifies areas of potentially contaminated land from analysis of historic ordnance survey maps, following governmental advice on the identification and classification of potentially contaminative land uses.

It should be emphasised that only a small proportion of sites subject potentially contaminated land use will meet the strict definition of contaminated land. Due to the past uses of the land, many of these sites will contain substances in, on, or under the ground, which have the potential to cause harm. However, in order to be designated as contaminated land these sites must have both a pathway by which significant harm may be caused and a receptor on which significant harm can be inflicted. If either the pathway or the receptor is missing from the pollutant linkage, the site may be land in a contaminative state but cannot be designated as contaminated land.

Stage 2 – Draft consultation strategy (April – October 2000)

A first version of the strategy has been drawn up in accordance with DETR technical guidance, which at the time of writing remains as draft guidance. Rather than await publication of the final guidance, this Council's approach will be to present a consultation draft of the strategy which can begin to involve other organisations in the process of investigation. Consultation comments can then be taken into account as the final strategy, along with any amendments forthcoming on the technical guidance.

Stage 3 – Consultation (November 2000 – May 2001)

The data sources cited later in Section 4 may not identify all potentially contaminated sites. It is feasible that an area of land might be used for a high-risk contaminative activity (e.g. waste disposal) without ever being recorded on a map. Local consultation will therefore play a major role in identifying the gaps in this database.

A programme of visits to Town and Parish Councils is therefore scheduled to occur during the consultation stage of strategy development from November 2000 to April 2001. Parish Councils will be asked to provide any relevant information or local knowledge they may possess on potentially contaminative land uses that have occurred within their parishes. A consultation charter has been agreed with the Town and Parish Councils and recently came into force, and this consultation exercise will be carried out in accordance with the charter.

Local history societies will be contacted as another potential source of information. Consultation on the Strategy will also be publicised in the local press and it is anticipated that a number of interested residents will come forward with information on past land uses.

There are also some elements of the strategy that have yet to be finalised, such as inclusion of a geological map and data on levels of naturally occurring metals in the District. These will be finalised during the consultation stage.

Stage 4 – Publish final inspection strategy (June 2001)

Provided the consultation stage runs smoothly, the strategy will be finalised during April 2001 and submitted to the Environment Agency, who will forward a copy to the

Stage 5 – Dealing with urgent sites (July – September 2001 and ongoing)

If there is any verifiable report of sites causing significant harm that are identified through consultation, the general approach to inspection will be secondary to dealing with such sites. Indeed, if there is a critical need, investigative work may have to begin before completion of final draft of the inspection strategy. The regulations recognise this scenario is realistic and the proposed approach is in line with the guidance.

This stage may include declaring some “special sites” and passing the lead regulatory role for these sites to the Environment Agency.

Stage 6 – General approach to inspection (October 2001 – April 2005)

The Council’s first priority in dealing with contaminated land is to protect human health as clearly stated in section 3.1. Land within the District will therefore be inspected in order of population density.

The largest towns will have the largest number of receptors (humans) given the highest priority by the Council. These towns are therefore at the highest risk of having all three elements of a pollutant linkage (source, pathway, receptor) of an area of contaminated land, which could cause significant harm to human health.

The four largest towns in the District (Cinderford, Coleford, Lydney and Newent) will therefore be inspected first, followed by the District’s many villages and smaller settlements, prioritised on the basis of population.

Stage 7 – Council owned land (October 2001 – April 2005)

The Council has some limited land holdings within the District. There are other areas of land within the District that the Council (or its predecessors) has owned at some stage in the past where potentially contaminative activities (e.g. waste disposal) may have occurred. The Council may also have deliberately pursued the acquisition of derelict or “brownfield” land in order to develop this and improve the overall quality of an area.

Within the general population-based approach to investigation, it is appropriate that these types of sites are subjected to investigation (and if necessary, remediation) as a priority. This follows the Council’s general approach to “putting its own house in order” before expecting others to follow suit.

Stage 8 – Local plan land (November 2001 – 2005)

As the planning authority for the area, the Council must draw up a Local Plan, specifying which areas of land should be used for which type of development. At the time of writing (October 2000), a new District Local Plan has recently been developed and is currently on deposit.

If the Council is making recommendations about land use, it is logical to undertake investigation of this “local plan land” as a priority within the general population based approach to contaminated land investigation. This land will therefore be specifically considered as each town is investigated.

Stage 9 – Threats to controlled waters, protected areas of the environment, ancient monuments and other buildings (April 2005 – April 2006)

It is anticipated that the investigation of towns and villages will bring to light information that would reveal any imminent threats posed by contaminated land to controlled waters, protected areas of the environment, scheduled ancient monument or other buildings. If the evidence demonstrates a need for urgent action, this will be taken as soon as practicable alongside the rolling programme of town-by-town inspection.

If, however, the evidence is not conclusive then these areas will be included in a specific investigation of such threats, to be undertaken once the investigation of the towns and villages is complete. This will include areas of the District with low population density such as core statutory Forest of Dean.

The Environment Agency will be informed of any potential pollution of controlled waters but the scale of the problem will determine whether the contaminated land is regulated by the EA or this Authority.

Liaison will also be undertaken with English Nature, in the case of threats to protected areas of the environment, and with the English Heritage in the case of threats to scheduled ancient monuments. The advice of these statutory bodies will also be sought if significant contamination is identified that may impact on areas that do not enjoy statutory protection, recognising the expertise these bodies have in protection of these resources.

Stage 10 – Final prioritisation (October 2005 – April 2006)

The regulations require the remediation of contaminated land sites to be prioritised. This prioritisation can only take place once all sites have been identified and this will therefore occur at the end of the investigation stage, currently timetabled for October 2005.

It is likely that a proprietary risk assessment packages will be required for this stage but it is not possible to identify a specific package at the time of writing.

4 PROCEDURES

Procedures have been drawn up to describe how contaminated land issues will be handled within the Council. This section also details the level of service the business community and members of public can expect from the Council in dealing with these issues.

4.1 Internal management arrangements for inspection and identification

Within the District Council, the Environmental Services Department has responsibility for the implementation of Part IIA EPA 1990. As part of the Environmental Protection and Health and Safety Team, the Environmental Co-ordinator is the lead officer on Contaminated Land, reporting to the Principal Environmental Health Officer and the Environmental Services Manager.

The Environmental Co-ordinator will deal the day-to-day implementation of the strategy once approved by elected members. The Environmental Co-ordinator will also be responsible for serving remediation notices, subject to consultation with the Environmental Services Manager and the Council's solicitor.

Elected members will be informed at the earliest opportunity of any plans to designate an area of Council-owned land, or land where the Council is the "appropriate" person and may be liable for remediation costs.

4.2 Considering local authority interests in land

As indicated in Section 3, investigation of Council-owned land will be carried out alongside the town-by-town inspection schedule, and this land will be amongst the first investigated in each area.

4.3 Information collection

Many sources of information will be required to identify potential sources of contamination and potential receptors. Some of the resources are detailed below.

Resource	District specific	Use
Historic maps	Digital maps purchased from Ordnance Survey (through Landmark)	To identify sources
Historic land use database	Landmark digital format working with GIS, identifying potentially contaminative land use	To identify sources
Geological maps	1:50 000 solid and drift geology maps have been purchased from the British Geological Society (Sheet numbers E250, E233, E234, E216)	To characterise pathways

Hydrogeological maps	The Groundwater Vulnerability Maps produced by the National Rivers Authority and the Soil Survey and Land Research Centre in 1993 will be used to assess the potential for contamination of groundwater (1:100 000)	To identify receptors (controlled waters)
Soil maps	A soil map of the southwest region purchased from the Soil Survey and Land Research Centre	To characterise pathways
Source Protection Zones	Areas of groundwater that receive special protection by the Environment Agency are identified on the EA website, and can be used with a GIS	To characterise receptors (controlled waters)
Environmental Health records	The District Council maintains records of complaints and investigations	To identify known information on contamination
Planning records	The District Council holds detailed planning records of development in the area, including information on ground condition presented in surveys	To identify known information on contamination
District Local Plan	A new plan has been written for adoption by the end of 2000 and is a valuable source of up-to-date information on land use	To identify receptors (particularly historic monuments and protected areas of the environment)
Integrated Pollution Control register	The Council has maintained a public register containing details of authorised industrial processes in the District since 1990	To identify sources of contamination
Waste Management Licences	The Environment Agency maintain a public register of sites licensed for waste management activities and have provided relevant information relating to sites in the District	To identify sources of contamination
Register of closed landfill sites	The Environment Agency will provide a register of closed landfill sites by the end of 2000.	To identify sources of contamination
Forest Enterprise records	Information on potentially contaminated sites has been correlated by Forest Enterprise, the Environment Agency and the District Council	To identify sources of contamination and pathways (including mine workings)
The County Archive	The County Archivist has identified a number of sources describing land-use in the District essential for researching site histories prior to the end of the Second World War when the Town & Country Planning legislation came into force.	To identify sources of contamination
Sites and Monuments Record	Sites and Monuments Record (SMR) is held by the County Archaeology section and is a record of all known archaeological sites, including scheduled ancient monuments	To identify sources of contamination and receptors

4.4 Information Management

The Council's Geographical Information System (or GIS) will be the primary tool used to manage contaminated land information. This system will be used to correlate all information and determine the proximity of potential receptors (residents, controlled waters) to sources of contamination. The GIS will be linked to an Access database, which will allow statistical information to be drawn together for reporting and comparison with other authorities.

4.5 Complaints and voluntary information provision

From time to time, the Council may receive a complaint regarding contaminated land from a member of the public, business or community group. Interested residents may also voluntarily supply information relating to land contamination that is not directly affecting themselves, their families or their property. These complaints or acts of information provision may impact on the approach to inspection and so the procedures to be adopted are detailed here.

4.5.1 Complaints

A complaint from regarding contaminated land will be dealt with following the same procedure as currently used by the Environmental Services Department to deal with statutory nuisance complaints.

All complainants may expect:

- their complaint to be logged and recorded
- to be contacted by an officer regarding their complaint within three working days of receipt
- to be kept informed of progress towards resolution of the problem.

Every effort will be made to resolve complaints quickly and efficiently. The legislative framework does, however, present a number of obstacles to speedy resolution of problems:

- i. proof of a viable pollutant linkage before any formal designation as contaminated land is permissible, which might only be possible with detailed investigation
- ii. prior consultation with interested parties before designation as contaminated land
- iii. a minimum of a three month period between designation and serving of a remediation notice
- iv. the requirement for the enforcing authority to make every effort to identify "the person who... has caused or knowingly permitted a pollutant to be in, on or under the land" (or "Class A" person).

The regulations allow conditions (ii) and (iii) to be waived in extreme cases, but not conditions (i) and (iv).

4.5.2 Confidentiality

All complainants will be asked to supply their names and addresses and, if appropriate, the address giving rise to the complaint. The identity of the complainant will remain confidential. The only circumstance in which this information might be made public would be in the case of a remediation notice being appealed in a court of law and an adverse effect on the complainant's health was an important reason for the original contaminated land designation.

4.5.3 Voluntary provision of information

If a person or organisation provides information relating to contaminated land that is not directly affecting their own health, the health of their families or their property, this will not be treated as a complaint. The information will be recorded and may be acted upon. There will, however, be no obligation for the Council to keep the person or organisation informed of progress towards resolution, although it may choose to do so as general good practice.

4.5.4 Anonymously supplied information

The Council does not normally undertake any investigation based on anonymously supplied information, and this general policy will be adopted for contaminated land issues. This policy does not, however, preclude investigation of an anonymous complaint in exceptional circumstances.

4.5.5 Anecdotal evidence

Any anecdotal evidence provided to the Council relating to contaminated land will be noted, but no designation of contaminated land will occur without robust scientific evidence. In all cases, the Environmental Co-ordinator will use knowledge and experience to decide what, if any, further investigation is required following a complaint or a provision of information.

4.6 Risk Assessment

All information on substances in, on or under the ground that may cause significant harm or pollution will be evaluated against current governmental guidelines.

4.6.1 CLEA and ICRCL guidelines

A new set of guidelines – the Contaminated Land Exposure Assessment or CLEA guidelines – for chronic risk to human health are expected from the DETR shortly. Until these guidelines are available, however, the Council will evaluate all information against the guidelines issued by the Interdepartmental Committee on Redevelopment of Contaminated Land (ICRCL).

ICRCL 59/83 (2nd Edition, July 1987) - "Guidance on the assessment and redevelopment of contaminated land" - gives the most widely used set of trigger and action levels for a range of contaminants and is likely to remain a key reference document, even with the introduction of CLEA.

4.6.2 Risk assessment for other substances

Risk assessments may also be required for substances not covered by ICRCCL or CLEA guidelines. In these cases, reference may be made to occupational exposure levels issued by the Health and Safety Executive or other authoritative sources of information, such as guidelines adopted in other countries. If guidelines from other countries are referred to, it will be important to bear in mind the significant difference in remediation standards between the UK and these other countries and the different assumptions used in formulating the standards (e.g. lower organic content of the soil in this country compared with others).

4.6.3 Risk assessment for controlled waters

Advice will be sought from the Environment Agency on risk assessment if controlled waters are the receptor in a particular pollutant linkage. It is anticipated that risk assessments and remediation will be carried out in accordance with Environment Agency guidance as laid down in "Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources" (EA R&D Publication 20, 1999).

4.7 Liaison with other Local Authorities

The Forest of Dean District Council is not the only local authority beginning a process of contaminated land investigation at this time. The regulations have been applied to all local authorities in England since April 2000, followed a few months later by Scottish local authorities. The regime is also soon to be implemented in Wales. Co-operation and liaison with other local authorities is therefore important in ensuring a consistent approach to regulation and avoiding duplication of effort in establishing procedures to deal with contamination land issues.

4.7.1 Gloucestershire Pollution Group

Pollution control officers from the six Gloucestershire district authorities have a well established group of officers who deal with common issues of concern in the field of pollution control. A sub-group has been set up specifically to deal with the implementation of the new contaminated land regime which has a number of aims:

- To provide networking in support of inspection strategy development and when dealing with developers / consultants who work throughout the county
- To develop a common approach to risk assessment
- To develop a standard database format for potentially contaminative land use
- To develop a set of standards for site investigation reports
- To stage an information session in Autumn 2001 for developers, consultants and solicitors to inform them of the implications of the contaminated land regime, the standards expected by all Gloucestershire authorities and the service we may be able to offer.

4.7.2 Cross-boundary contaminated land

Neighbouring Local Authorities must also work together on cross border contamination issues where a source of contamination in one local authority's area is causing a significant risk to a receptor in another local authority's area. This is especially true when dealing with controlled waters where contamination can affect receptors over relatively large distances.

In the case of the Forest of Dean District, liaison has already been established with officers in neighbouring authorities (Herefordshire, Tewkesbury and Gloucester City).

4.8 Interaction with other regulatory regimes

There are other regulatory actions that can be taken to deal with contamination on land. Overlaps with planning, water pollution and IPPC legislation are considered the most important and are addressed here. Any issues of land contamination that may previously have been dealt with under the statutory nuisance regime will now be dealt with through Part IIA processes.

4.8.1 Planning

The vast majority of contaminated land issues are currently addressed through the planning regime, where contamination is a material consideration. While the introduction of Part IIA will undoubtedly lead to the problems of additional sites being addressed, it is anticipated that redevelopment of brownfield sites, and the associated planning controls, will remain the primary mechanism for dealing with contaminated land. Any remediation agreed as a planning condition will be dealt with under planning controls and not under Part IIA.

The FODDC Environmental Protection team currently works closely with Development Control and Building Control on all issues relating to pollution and the current arrangements for inter-departmental consultation are believed to be sufficiently robust to encompass contaminated land issues.

4.8.2 Water pollution

The Water Resources Act 1991 gives the Environment Agency powers to deal with harm to controlled waters being caused by contaminated land. While Part IIA legislation does not revoke these powers, the DETR have indicated that such problems should now be dealt with under the new contaminated land regime. The following steps will be taken:

- The Council will consult with the Environment Agency before designating any contaminated land as a result of risk to controlled waters and will take into account any comments made with respect to remediation.
- If the Agency identifies a risk to controlled waters from contaminated land, the Council will be notified to enable designation of the land and remedial action will be taken under Part IIA.

4.8.3 Integrated Pollution Prevention and Control (IPPC)

Under new legislation to regulate with pollution from industrial processes, site operators are required to undertake a site condition survey prior to receiving a license to operate. If the site condition is such that areas of land meet the definition of contaminated land, then submission of a site survey may trigger action under Part IIA. Existing processes will be brought under this legislation in stages over the next seven years, although it will apply to any new processes or any substantial change to an existing process.

4.8.4 Waste Management Licensing

Irresponsible practices in the disposal of waste onto or into land may lead to contamination. A strict regime of waste management licensing is, however, already in place and rigorously enforced by the Environment Agency. A site cannot be subjected to regulatory action under the new contaminated land regime if waste management activities are already licensed by the EA, unless the contamination is clearly unrelated to the licensed activity on the site.

In addition, the contaminated land regime cannot be used to address problems of illegal dumping of waste onto land as this is already subject to regulation by the EA.

It will be important to ensure that any contaminated material generated by remediation of sites is disposed of in appropriate manner, to ensure that the problem is not moved from one site to another, and that the requirements of waste management regulations are observed in this type of operation.

5 LIAISON AND COMMUNICATION

Much of the work proposed in this strategy will be collaborative and require effective liaison with other bodies.

5.1 Statutory consultees

Contacts have already been established with officers of all statutory consultees.

Statutory consultees for the Contaminated Land Inspection Strategy are:

- Environment Agency
- English Nature
- English Heritage
- Ministry of Agriculture, Fisheries and Food
- Food Standards Agency
- South West Regional Development Agency
- Gloucestershire County Council

Each organisation will be invited to comment on the consultation draft of the strategy.

As Environment Agency operational boundaries are defined by river catchments, the Midlands Region and EA Wales offices both deal with areas of the Forest of Dean District. Following discussion with the EA, initial liaison will be carried out through the Area Contaminated Land Officer, Lower Severn Office, Midlands Region, with EA Wales officers brought in as required.

5.2 Non-statutory consultees

There is great scope for members of the public, businesses and voluntary organisations to play an important role in dealing with contaminated land in the District. The consultation exercise to be undertaken with Parish Councils has already been described in Section 2. Efforts will be made to encourage participation in the process of identifying and investigating contaminated land, recognising the valuable contribution of these sectors

Forest Enterprise, which manages a large area of land in the District, has worked proactively with the Council on issues of land contamination in the past. The records held by Forest Enterprise of past industrial activity within the Forest will be a valuable resource in identifying potential sources of information. This collaborative approach to dealing with contamination issues will be maintained and built upon.

5.3 Communicating with owners, occupiers and other interested parties

The District Council's approach to its regulatory duties is to seek voluntary action before taking enforcement action. This approach will be adopted for issues of land contamination, recognising that in many cases as much or more effective remediation can be achieved by agreement than by enforcement. The regulations provide an incentive to undertake voluntary action, in that any materials that require disposal as a result of voluntary

remediation can be exempted from landfill tax on application. This exemption does not apply to materials generated as a result of a remediation notice having been served

This approach requires effective communication with owners, occupiers and other interested parties. The Environmental Co-ordinator will be the central contact point within the authority on contaminated land issues and as such will make work to keep owners, occupiers and other interested parties informed at each stage of an investigation, regardless of whether there is a formal designation of contaminated land.

Where a formal designation of contaminated land is required, the following actions will be undertaken:

Designating an area of contaminated land

- Write to the owner and / or the occupier of the land at least 5 working days prior to designation, explaining in summary the reason for designation
- Write to the owner and / or the occupier explaining the land has been designated as contaminated land and seeking appropriate remediation without service of a notice
- If requested, dispatch a copy of the written risk assessment to the owner and / or occupier of the land within 5 working days of receipt of a request
- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of designation
- Inform the Environment Agency of the designation at the same time as the owner / occupier is informed, using the form supplied by the EA

Serving a remediation notice

- Provide a written remediation notice to the owner / occupier specifying action required
- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of notice being served

Should an urgent designation of contaminated land be required, these steps will be observed as far as practicable although some deviation from the timescales specified is to be expected.

5.4 Powers of Entry

Under Section 108(6) of the Environment Act, the Council has been granted powers of entry to carry out investigation. At least seven days notice will be given of proposed entry onto any premises, unless there is an immediate risk to human health of the environment.

5.5 Enforcement action

The Council has adopted a cross-departmental enforcement concordat to ensure consistent, fair, and transparent practices are used when taking enforcement action. Contaminated land investigations will be carried out in accordance with this Council-wide policy.

5.6 Risk communication

The complex nature of contaminated land issues does not lend itself to easy explanation to the layperson. Development of effective methods of risk communication is therefore essential.

The Council will treat any concerns raised by a member of the public seriously and with respect, recognising the importance of the issue to the individual. In all instances, the Council will recognise and try to overcome the critical barriers to effective risk communication:

- **familiarity** – increased concern about unfamiliar issues
- **control** – increased concern if the individual is unable to exert any control over events
- **proximity in space** – increased concern about nearby events
- **proximity in time** – increased concern about immediate consequences rather than long term effects
- **scale** – particularly in terms of media coverage, where one large incident appears much worse than several small incidents
- **“dread factor”** – lack of understanding can lead to stress and make further explanation more difficult

These regulations grant only limited powers to local authorities to deal with materials present in, on or under the ground. Many members of the public believe that any material that is not naturally present in the ground should be removed, especially if it is in the vicinity of their own home. It will be critical to explain this can only be done where this is a risk of significant harm, and it is to be expected that some members of the public will have difficulty accepting this.

It is important to appreciate that the expectations of some members of the public will not be met by the powers local authorities may exercise under contaminated land legislation.

5.7 The public register

Under the regulations, the Council is required to maintain a public contaminated land register. The register will be held by the Environmental Health department at the Council’s principal office at Coleford. It will be paper-based (rather than electronic) and be accessible on request by members of the public during office hours, Monday to Friday.

The regulations clearly specify the information that can be recorded on this register. This register will therefore include:

- remediation notices
- details of site reports obtained by the authority relating to remediation notices
- remediation declarations, remediation statements and notifications of claimed remediation
- designation of sites as “special sites”
- any appeals lodged against remediation and charging notices
- convictions

The public register will **not** include details of historic land use and other records used in the investigation of potentially contaminated land. These are research documents, possibly unsupported by objective evidence, and as such will not be made available to the public.

5.8 Provision of information to the Environment Agency

The Environment Agency is required to prepare an Annual Report for the Secretary of State on the state of contaminated land in England and Wales. This report will include:

- A summary of local authority inspection strategies, including progress against the strategy and its effectiveness
- The amount of contaminated land and the nature of the contamination
- Measures taken to remediate land

As local authorities are the lead regulators on contaminated land, with the EA regulating only some categories of sites, the national survey will clearly be reliant on information provided by local authorities. A memorandum of understanding has been drawn up between the Environment Agency and the Local Government Association that describes how information will be exchanged between the local authority and the Environment Agency. The Council will therefore provide information to the Environment Agency following the guidelines agreed through this national forum.

The local authority must also provide information to the Environment Agency whenever a site is designated as contaminated land, and whenever a remediation notice, statement or declaration is issued or agreed. The Environment Agency has provided standard forms allowing this information to be provided in a consistent format and the Council will adopt these to fulfil its reporting requirements.

6 REVIEW MECHANISMS

This strategy outlines the general approach to be taken in inspecting land in the District for contamination. This section will describe instances when inspections will occur outside this general inspection framework, circumstances under which previous inspection decisions should be reviewed and measures to be taken to ensure the strategy remains effective and up-to-date.

6.1 Triggers for undertaking inspection

The strategy has already recognised there may be occasions where inspections may have to be carried out outside of the general inspection framework.

Triggers for undertaking non-routine inspection will include:

- **Unplanned events** – e.g. if an incident such as a spill has occurred
- **Introduction of new receptors** – e.g. if housing is to be built on a potentially contaminated site, designation of a new protected ecosystem, persistent trespass onto a site by young people
- **Supporting voluntary remediation** – e.g. a potentially liable party wishing to undertake clean-up before their land has been inspected by the local authority
- **Identification of localised health effects** which appear to relate to a particular area of land
- **Responding to information** from other statutory bodies, owners, occupiers, or other interested parties

While these occurrences may trigger non-routine inspections, if this strategy is to prove effective, they must not be allowed to significantly interfere with the milestones laid down in the general inspection framework. It will be important to consider this issue in all strategy reviews.

6.2 Triggers for reviewing inspection decisions

In addition there may be occasions where the findings of previous inspection decisions should be reviewed. This might occur, for example, if there were

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

It is important therefore that all decisions are made and recorded in a consistent manner that will allow efficient review.

6.3 Reviewing the strategy

As part of the overall quality management of this work, it is important to consider the need to review the strategy from time to time.

The strategy will be finalised following consultation during April 2001 and work will then begin in earnest on site inspection. It will be appropriate to review the

milestones in light of progress after the first full year of operation. This review will therefore take place in April 2002 and the findings will be reported to the Council's Housing & Environmental Services Committee. If there are significant changes to the strategy, it may be appropriate to carry out further annual reviews in following years.

If the strategy is found to be operating satisfactorily throughout the period of the five-year workplan, the next review date will be April 2006 when the first inspection of the District has been completed and the remediation of contaminated sites has been prioritised.

7 CONTACT DETAILS

7.1 Reporting contaminated land

The Council's Environmental Protection Team will deal with any complaint or provision of information relating to contaminated land.

Postal address: Environmental Protection Team
Forest of Dean District Council
Council Offices
High Street
Coleford
Gloucestershire
GL16 8HG

Tel: 01594 – 812417

Fax: 01594 – 812590

e-mail: environmental.health@fdean.gov.uk

Website: www.fdean.gov.uk

While the Environmental Protection team will accept all initial reports, if the matter involves development on a potentially contaminated site, it may be more appropriately dealt with through the planning process. In this case, the matter will be passed on to the Development Control section of FODDC and liaison established to ensure the condition of the site is suitable for its intended use.

APPENDIX A: INSPECTION TIMETABLE

	2000			2001			2002			2003			2004			2005			2006																			
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Purchase Landmark Database	■																																					
Draft consultation strategy	■	■	■	■	■	■	■	■																														
Consultation								■	■	■																												
Publish final inspection strategy								■																														
Deal with urgent sites								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Town by Town inspection																																						
Council-owned land									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Local plan land									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Controlled waters, protected areas																																						
Final prioritisation																																						

KEY: ■ Action timetabled for this period ■ Action may occur during this period

APPENDIX B

GLOSSARY

DETR Circular 02/2000 contains a detailed glossary of terms that provides legal definitions of terms that may be used in this Strategy. This Glossary provides an interpretation of terms used in Strategy to aid reading by the layperson.

AONB	Area of Outstanding Natural Beauty
Aquifer	A body of underground water
Brownfield site	A site that has been generally abandoned or underused where redevelopment is complicated by actual or perceived environmental contamination. Only a small proportion of brownfield sites will meet the definition of contaminated land.
CLEA	Contaminated Land Exposure Assessment, criteria for determining the risk of chronic human health effects
Contaminated land	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) pollution of controlled waters is being, or is likely to be caused
Controlled waters	These include a) inland waters (river, streams, underground streams, canals, lakes and reservoirs) b) groundwaters (any water contained in underground strata, wells or boreholes) c) territorial waters (the sea within three miles of a baseline) d) coastal waters (the sea within the baseline up to the line of highest tide, and tidal waters up to the fresh water limit
Deputy Gaveler	The Officer of the Forest Enterprise responsible for mining issues within the Forest of Dean
DETR	Department of the Environment, Transport and the Regions
Drinking water abstraction	The taking of water from a source (in this case, primarily an underground source) for drinking water
EA	The Environment Agency
Eco-system	A biological system of interacting organisms and their physical environment
FODDC	Forest of Dean District Council

GIS	Geographical Information System
Groundwater	Any water contained in underground strata, wells or boreholes
ICRCL	Interdepartmental Committee on Redevelopment of Contaminated Land
NNR	National Nature Reserve
Pathway	One or more routes by which a receptor can be exposed to a contaminant
Pollutant linkage	The relationship between a contaminant, a pathway and a receptor
Ramsar site	A site protected under an international convention on protection of wetlands of international importance, especially as habitats for waterfowl, named after the city in Iran where the convention was signed
Receptor	Sometimes referred to as "a target "– the health of a person, waters, ecosystem or property type that could be affected by contamination
Remediation	<p>Defined in the regulations as:</p> <p>(a) The doing of anything for the purpose of assessing the condition of:</p> <ul style="list-style-type: none"> i. the contaminated land in question ii. any controlled waters affected by that land; or iii. any land adjoining or adjacent to that land <p>(b) the doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land or waters for the purpose:</p> <ul style="list-style-type: none"> i. of preventing or minimising, or remedying or mitigating the effects of any significant harm, or any pollution of controlled waters, by reason of which the contaminated land is such land; or ii. of restoring the land or waters to their former state; or <p>(c) the making of subsequent inspections from time to time for the purpose of keeping under review the condition of the land or waters.</p>
Risk assessment	<p>The study of:</p> <ul style="list-style-type: none"> a) the probability, or frequency, of a hazard occurring; and b) the magnitude of the consequences
SAC	Special area of conservation

Source	A substance in, on or under the ground with the ability to cause harm
Source protection zone	Protection zones around certain sources of groundwater used for public water supply. Within these zones, certain activities and processes are prohibited or restricted.
SPA	Special Protection Area for birds
Special site	Contaminated land which meets one of the criteria laid out in the guidance for regulation by the Environment Agency (see Appendix C)
SSSI	Site of Special Scientific Interest

Appendix C

SPECIAL SITES

While the Forest of Dean District Council will be the lead regulatory authority dealing with contaminated land in its District, there may be some instances when regulation will be passed to the Environment Agency. This will only occur once the Council has designated a site as contaminated land and it meets one of the criteria of a “special site” as laid down in the guidance.

There are three categories of sites when the EA will assume regulation:

1. **Water pollution cases**, where contaminated land presents a significant risk to:
 - the wholesomeness of drinking water
 - surface water classification criteria
 - a major aquifer

2. **Industrial cases**, where the contaminated land meets the descriptions given in the guidance of:
 - Waste acid tar lagoons
 - Oil refining
 - Explosives
 - Sites regulated under Integrated Pollution Control
 - Nuclear sites

3. **Defence Cases**, where the land is currently owned by the Ministry of Defence

The statutory guidance contains more detailed descriptions of each of these categories which must be referred to before any Special Site designation can occur.

APPENDIX D
DETAILS OF STATUTORY CONSULTATION CONTACTS

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Appendix E

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