

MONMOUTHSHIRE COUNTY COUNCIL

**Environment Directorate**

**Community Protection Section**

Contaminated

Land

Inspection

Strategy

September, 2002

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This Contaminated Land Inspection Strategy has been prepared by Monmouthshire County Council to fulfil its legal obligations under Part IIA, Environmental Protection Act 1990. It details the arrangements and procedures that the Council will use to inspect potentially contaminated land in the County.

The document, currently in draft form, details the overall aims and objectives of the strategy and provides timescales for achieving priority actions. It also provides for review of the document. The Strategy lays out how the information, gathered during the inspection process, will be managed and what action, if any, would be taken after interpretation of the inspection results. It also provides for liaison with other organisations and communication with the wider community in order to achieve its aims.

In accordance with The Welsh Assembly Government (W.A.G.) guidance it is the Council's intention to take a rational, ordered and efficient approach to the inspection.

A five-year programme of inspection will be undertaken, running from September, 2002 to April, 2007. 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. Controlled waters and protected areas of the environment will also be examined and a final prioritisation exercise undertaken to establish the order in which sites found during the inspection process should be remediated.

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 County 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 will be undertaken with Community Councils, the Brecon Beacons National Park (B.B.N.P.) and all statutory consultees. Details are provided of contacts at the County Council who are dealing with the inspection strategy.

The legislation and statutory guidance 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 certain information.

It is important to note that:

- This document is an inspection strategy to ascertain whether any contaminated land, as defined by the legislation, is to be found in the County and is not a report on the present level, if any, of such land, and
- Within this document the term "contaminated land" means land which has been defined as contaminated land in accordance with the definition contained in Section 78A(2) of the Environmental Protection Act 1990. It does not mean land that might have been considered to be contaminated under any previously held understanding of the term nor necessarily land on which a potentially contaminating process has taken place.

This Contaminated Land Inspection Strategy (usually referred to as the Strategy in this document) has been prepared by Monmouthshire County Council (the Council) to fulfil its obligation under Part IIA of the Environmental Protection Act 1990 (E.P.A. 1990). This requirement came into force on 1st July, 2001 under provisions of the Contaminated Land Regulations (Wales) 2001 (the Regulations).

The Council's approach to dealing with any contaminated land in the County emphasises the need to be open and accountable for its actions. The document was first published as a draft for consultation in July, 2002 and copies circulated to those persons and organisations listed in Appendix III and IV. The responses received from this consultation exercise resulted in the Strategy being amended.

The Strategy details how the inspection of land in the County will be undertaken. The information received as a result of the inspection process will have to be managed and interpreted to ensure appropriate action, if any, is taken under the terms of Part IIA.

It is important to note that this is not a report on the state of contaminated land in Monmouthshire but deals with the strategy to inspect for such land as defined in the Regulations.

Appendix III set out the enforcement policy of the Environmental Health Section. Section 78P (2) of the Act requires that the County Council not only take into account the statutory guidance issued by the Assembly on matters of enforcement but also any hardship which the recovery of costs may cause to a person from whom the cost is recoverable.

Land contamination should be considered more generally in the wider context of Monmouthshire County Council's declared policies and objectives as well as published plans relevant to this topic. Prevention of further contamination is also an important factor in this Strategy.

Public access to information on contaminated land will be secured by provision of a Public Register (paragraph 5.11 refers) and through the consultation procedure carried out in the publication of this Strategy.

A critical aspect of consultation is the involvement of community groups and businesses and details are given in Appendix IV of non-statutory consultees.

## 1.1 Statutory Guidance and Technical Advice on Contaminated Land

Statutory Guidance (the Guidance) was issued in November 2001 to the Councils in Wales by The Welsh Assembly Government (W.A.G.) in relation to implementation of Part IIA of the E.P.A. 1990 concerning:

The Definition of Contaminated Land - Chapter 1 sets out guidance issued under Section 78A(2) and (5);

The Identification of Contaminated Land - Chapter 2 sets out guidance issued under Section 78B(2);

The Remediation of Contaminated Land - Chapter 3 sets out guidance issued under Section 78E(5);

Exclusion from, and Apportionment of, Liability for Remediation - Chapter 4 sets out guidance issued under Section 78F(6) and (7); and

The Recovery of the Costs of Remediation - Chapter 5 sets out guidance issued under Section 78P(2).

In May, 2001 a local authority guide to councils in England was issued jointly by the previous D.E.T.R. [now D.E.F.R.A.] and the Environment Agency entitled Contaminated Land Inspection Strategies, Technical Advice for Local Authorities.

The guide set out a procedure for the formulation of inspection strategies, and was intended to assist local authorities in fulfilling their statutory obligations and complying with the underlying principles of the Part IIA regime. It was not intended to be mandatory, but provided advice to local authorities on good practice in developing and writing an inspection strategy.

The W.A.G. has suggested that local authorities in Wales utilise the document in writing their Contaminated Land Inspection Strategies. This advice has been followed in compiling Monmouthshire County Council's Strategy.

## 1.2 Monmouthshire County Council Corporate Aims and Key Objectives

The Strategy should be considered in the context of the County Council's Improvement Plan for 2002 - 2003.

The Plan lists the Council's aims and values. One of the Key Corporate aims is "to ensure that people and communities enjoy a good quality of life, now and in the future by protecting, maintaining and using responsibly the natural assets and resources of the area". The aim goes on to state "we will work with others to help create a clean, green and sustainable environment in Monmouthshire".

One of the key values that should run through everything the Council does is the need to promote sustainable development. These Corporate aims and values are promoted by the production and implementation of a Contaminated Land Strategy.

## 1.3 Monmouthshire County Council Local Agenda 21 Strategy

As stated above Monmouthshire County Council has sustainable development as one of its core values which should underpin everything we do as a local authority. To help achieve this goal, the first version of Monmouthshire's Local Agenda 21 Strategy was published in

2000, and following consultation with people who live in the County the final version was published in March, 2002. This local action plan sets out how we are going to work towards a more sustainable future for Monmouthshire.

One of the 13 themes is Pollution, and the vision for this theme is as follows:

"Local, national and global pollution is limited to a level which the natural environment can cope with, without damage. Air, soil, water and noise pollution are all decreased, resulting in a cleaner, healthier environment for everyone."

The Council's Contaminated Land Inspection Strategy will play a vital role in working towards this vision.

#### 1.4 Regulation of Contaminated Land

Contaminated land regulation has been under development since the early 1990's. Consultations on a 1993 White Paper : "Paying for our Past" resulted in Part IIA being inserted into the E.P.A. 1990. This amendment introduced a new regulatory regime and the requirement for Councils to produce a contaminated land inspection strategy.

#### 1.5 The Role of Monmouthshire County Council

The prime regulatory role for contaminated land rests with local authorities and complements existing functions under statutory nuisance powers and their role as a planning authority.

The Council has a duty:

- (a) to cause its area to be inspected to identify contaminated land,
- (b) to determine whether any particular site meets the statutory definition of contaminated land,
- (c) to act as enforcing authority for all contaminated land unless the site meets the definition of a "special site" (see paragraph 1.6 below and Appendix 1).

#### 1.6 The Role of the Environment Agency (E.A.)

The E.A. will make an important contribution to the inspection of land in the following manner:

- (a) the provision of information,
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- (b) provision of specific advice where it has particular expertise (i.e. in relation to the pollution of controlled waters, rather than general contaminated land issues), and
  - (c) inspection of land on behalf of the County Council, which if determined as contaminated land is anticipated to be designated as a Special Site (i.e. a potential Special Site).

It is important to note that the E.A. does not identify contaminated land sites. This is the role of Monmouthshire County Council.

The E.A. will however act as the enforcing authority for any contaminated land designated as a Special Site and will publish periodic reports on the state of contaminated land in Wales.

#### 1.7 Defining Contaminated Land

A legal definition of contaminated land is given in Section 78A(2) of Part IIA of the E.P.A. as:

"any land which appears to the local authority, in whose area it is situated, to be in such a condition, by reason of substance 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"

and Section 78A(5) requires that the local authority shall act in accordance with guidance issued by the W.A.G.' (see paragraph 1.2).

#### 1.8 Pollution Linkage

In addition to the requirements set out in the previous sub paragraph, for a site to meet the definition set out in the Act of contaminated land, a 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 presents, a significant possibility of such harm being caused, and
- (iii) a receptor of a type specified in the Regulations.

#### 1.9 Receptors

The receptors recognised in Part IIA as being potentially sensitive to harm are:

- (i) Human beings
- (ii) Ecological systems or living organisms forming part of a system within certain protected locations, including

- Sites of Special Scientific Interest (S.S.S.I.'s)
- National Nature Reserves
- Marine Nature Reserves
- Nature Reserves
- Special Areas of Conservation (S.A.C.'s)
- Special Protection Areas (S.P.A.'s)



- Candidate S.A.C.'s
  - Ramsar Sites
  - Areas of special protection for birds.
- (iii) Property in the form of buildings, including
- Ancient Monuments
- (iv) Property in other forms
- Crops
  - Livestock
  - Home-grown produce
  - Owned or domesticated animals
  - Wild animals subject to shooting or fishing rights
- (v) Controlled Waters
- Surface waters (e.g. rivers, lakes, streams)
  - Drinking water abstractions
  - Source protection zones
  - Groundwater - private abstractions
  - Groundwater - major aquifers

#### 1.10 Harm

It should be noted that the Guidance sets out specific advice on what local authorities should consider as "harm" to a receptor and when such harm should be considered "significant".

#### 1.11 Risk Assessment

If the three components of the pollutant linkage set out in sub paragraph 1.6.2 are shown to exist, a risk assessment will have to be undertaken. In the Guidance the risk is identified as a combination of:-

- (i) the probability, or frequency, of occurrence of a hazard; and
- (ii) the magnitude and seriousness of the consequences if the predicted event actually occurs.

Land can only be designated contaminated land if a significant risk has been proven.

#### 1.12 Development of the Strategy

In carrying out inspections under Part IIA of the E.P.A. 1990, the Council will adopt a strategic approach. The Guidance says that the approach should:

- (a) be rational, ordered and efficient,

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

This Strategy has been developed to meet these requirements.

### 1.13 Procedure and Timetable for Development of the Contaminated Land Inspection Strategy

- (a) This draft Strategy for consultation has been prepared by the Specialist Environmental Health Officer who is the Council's lead officer on contaminated land in the Community Protection Section of the Environment Directorate. (September, 2001 - January, 2002).
- (b) Other officers of the Council concerned with contaminated land issues have commented on this draft. These include divisions of the Environment Department, including Planning and Building Control, together with Legal Services (Chief Executive's Unit). (May, 2002).
- (c) The agreed draft will be submitted to the Council's Environment Cabinet member in June, 2002.
- (d) The agreed consultation draft arising from (c) above will be circulated inviting comments from consultees. Community Councils are seen as a particularly important source of local information on possible contaminated land in their area. Details of other consultees are in Appendix II
- (e) Any comments received as part of the formal consultation referred to at (d) will be considered. Any accepted corrections or amendments will be made to the draft Strategy. A final version will be presented to Environment Cabinet member in September, 2002 so that the Strategy can be submitted to W.A.G. and copied to the E.A. by end of September, 2002.

## 2. Characteristics of Monmouthshire

### 2.1 Geographical Location

Monmouthshire County Council is located in south-east Wales. It lies on the Welsh border and is bounded by the Forest of Dean District Council, Herefordshire County Council, Powys County Council, Blaenau Gwent County Borough Council, Torfaen County Borough

Council and Newport County Borough Council. The landscape is varied and comprises high hill ranges and a predominantly rural area of countryside with market towns. The County covers an area of 852 sq. km. (329 sq. miles). The Brecon Beacons National Park (B.B.N.P.) covering 120 sq. km. (46 sq. miles) and is situated in the north of the County. Much of the Lower Wye Valley within the County is designated as an Area of Outstanding Natural Beauty (A.O.N.B.).

## 2.2 History of the County

Monmouthshire has a rich a varied history dating back to before Roman times, due to its important geographical position as a border county. The Roman invasion of AD 43 saw the beginning of documented history in Monmouthshire and created several forts at Abegavenny, Monmouth, Usk with an associated garrison at nearby Caerleon.

Following the retreat of the Romans and the Norman invasion the area saw a rise in Christianity in the area.

Conflicts between Welsh rulers and Marcher lords saw the fortification of towns and the development of castles across the County such as major castles at Chepstow, Caldicot, Raglan and Abergavenny with smaller castles throughout the area.

By the Act of Union of England and Wales in 1536, Wales was incorporated into the new system of English shires and Monmouthshire had representation in Parliament for the first time.

With the onset of the industrial revolution, and the expansion of the iron and coal industries in South Wales, infrastructure was continually improving with the construction of the Brecknock and Abergavenny canal and the introduction of Brunel's South Wales railway linked to the Great Western railway which provided a link to England.

## 2.3 Population Distribution

As at mid 2000 the (estimated) population of the County was at 87,433 with approximately 50% living in the five towns

Town	Population
Caldicot	9,784
Abergavenny	9,493
Chepstow	9,422

Monmouth	7,724
Usk	2,113

based on 1991 Census

#### 2.4 Land owned by the County Council

The Council owns various areas of land within the County including housing estates, sites of some commercial businesses and industrial estates, parks and open spaces. In certain instances where the opportunity arises, and in collaboration with, the Welsh Development Agency, the Council may purchase land for reclamation or development and to improve the quality of the area in which it is situated.

#### 2.5 Current Land Use Characteristics

The main use of land in the County, other than residential, is agriculture and forestry. Current industrial activity is restricted to a number of small to medium sized industrial estates and a limited number of separately established manufacturing companies. The majority of industrial estates and companies are located in or adjacent to the main settlements in the County, i.e. Caldicot, Chepstow, Abergavenny and Monmouth.

Coal mining, previously carried out in the north west part of the County in Llanely Hill, ceased in 1930. The consequences of this activity are mentioned in paragraph 2.10 (h) of the Strategy.

#### 2.6 Protection of the Natural Environment

Increasingly the international importance of the County's habitats, flora and fauna are being recognised. The Rivers Usk and Wye have been put forward to Europe as candidate Special Area of Conservation. In 1995 the Government designated the Severn Estuary as a Special Protection Area (S.P.A.) under the E.C. Birds Directive, and listed the site as a Wetland of International Importance under the Ramsar Convention (a "Ramsar Site"). The site is also a candidate Special Area of Conservation (C.S.A.C.). In addition five additional sites have candidate status: River Usk; River Wye; Wye Valley Bat Roosts; Usk Bat Sites; Sugar Loaf Woodlands; and Cwm Clydach Woodlands. The Wye Valley Woodland is also being considered as a candidate S.A.C. The Council have stated that they will afford the designated area the appropriate protection in accordance with international obligations.

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Work is currently underway to produce the Monmouthshire Biodiversity Action Plan which will identify actions to be carried out by the relevant organisations or groups to protect and enhance priority species in the County.

CADW (the Welsh Historic Monuments Executive Agency) compiles a register of landscapes, parks and gardens and lists 42 in the County. In a register of landscapes of Outstanding Historical Interest, Blaenavon, the Gwent Levels and the Lower Wye Valley are listed.

#### 2.7 Conservation and the Historic Environment

There is much evidence of human occupation from the prehistoric to modern day surviving in the County. Neolithic burial places are among outstanding memorials of the prehistoric period. The County has three examples of these chambered tombs, Thornwell (Chepstow), Gaer Llwyd (four miles north of Caerwent) and Heston Brake (Portskewett). Megaliths set up at this time include standing stones at Trellech and Grey Hill, near Llanfair Discoed, amongst others.

Fortified settlements from the Iron Age or earlier period have been investigated at Llanmelin, near Llanfair Discoed, and Sudbrook. There are also several promontory forts, camps of simple banked enclosures and hill tops barrows.

The four hundred years of Roman occupation left the County with more than a transitory mark; a civil town was set up at Caerwent, the only Roman walled town in the Principality. Other centres were at Abegavenny, Usk and Monmouth and many camps and sites of Roman farmsteads have been found.

The coming of the Normans after the middle of the 11th Century brought the Romanesque style of architecture, apparent in the early castles and many of the County churches. The ruins of Llanthony and Tintern Abbeys are reminders of this period.

Medieval castles in the County exhibit a variety of styles and in most of them original design is still apparent. The fortresses of the greater barons were the first to be constructed, Chepstow or Striguil Castle being the earliest with Monmouth a close second. Abergavenny and Usk followed next with Caldicot being added at a later date.

Up to the late 15th Century most habitations were built of timber, but with a period of peace in the Welsh borderland, the building of many residences of stone occurred. This resulted in many semi-defended habitations of wood being replaced by houses of stone, some of which remain to this day.

There are many mansions of a later period that add to the architectural interest including Mathern Palace, St. Pierre, Itton and Clytha. Some of the industrial heritage of the County can still be seen in many places. Most of the industry of this period was based around water-powered mills, such as those in Whitebrook.

There are thirty Conservation Areas, made under the provisions of the Civic Amenity Act 1977, in the County.

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Buildings of architectural and historic interest, which are considered worthy of preservation, are included in statutory lists compiled by the W.A.G. At the 1st January, 2001 there are a total of 1,767 listed buildings in the County:-

Grade I	49
Grade II*	146
Grade II	1,548

There are also a further 212 locally listed buildings. These are of local architectural importance and may be placed on the statutory list if they are threatened. Ecclesiastical buildings are given the Grade A or B in decreasing order of importance. There are 1 Grade A and 12 Grade B buildings of this description in the County.

## 2.8 Geological Characteristics of the County

The County's geology is characterised chiefly by the presence of Old Red Sandstone. Of the lithological groups within this system the Red Marl Group is most widespread. It consists of dark red mudstone or marl with subordinate sandstone. The mudstones contain calcareous nodules occurring either as a conglomerate or as thin bands of impure limestone.

Coal measures are present in the north western rim of the County, particularly at Llanelly Hill.

There are large reserves of sand and gravel in the Usk Valley stretching from near Glangrwyney in the North to Tredunnoch in the South, passing near to Gilwern, Govilon, Llanfoist, Abergavenny, Llanellen, The Bryn, Llanfair Kilgeddin, Bettws Newydd, Usk and Llangybi.

An outcrop of carboniferous limestone extends east north eastward from Magor and Penhow to Chepstow and Tintern and hence north eastward across the Wye Valley into Gloucestershire. A large proportion of the limestone is of dolomitic composition and is quarried for aggregate.

The coastal strip, averaging one to two miles, consists of low lying areas of marine alluvium and silt overlying rocks of the Triassic age, red and green marls (Keuper Marl), limestone conglomerates and breccias.

## 2.9 Information on Land Possibly Affected by Contamination

This part of the Strategy concerning the manner in which the Council will consider information on possibly contaminated land already in its possession or available from previous published sources:

- (i) The Council holds some information on land affected by contamination or land on which a previous potentially contaminating process has taken place. Much of this information has been made available as part of the development control process through planning applications made to the Council in recent years.

If the development has been proposed on land where past use may have resulted in contamination, the Council has often requested a site investigation as a planning condition. If the development proceeded on such sites, remedial work will often have been carried out to improve site conditions. Conditions may be attached to any planning permission. County Council planning application records will therefore form a valuable resource during the inspection process.

Land possibly affected by contamination is also identified through the development plan process, e.g. when researching the suitability of sites for potential housing or employment uses.

- (ii) In accordance with the Protocol on Land Contamination between the Local Government Association and the E.A., the Council has been provided with a CD Rom that contains detailed environmental information. Table I lists the contents.

Table I

Activities or source of possible contamination which require consideration in the Strategy	Details provided by E.A.
Catchment Plan showing location of water courses, settlements, etc.	LEAP boundaries, available at 1:50,000 scale
Landfill sites	Active Landfill Sites at 1:10,000 Other known Landfill Sites at 1:50,000
Bathing Waters	Bathing Water Quality
Water Abstraction	Licensed Water Abstractions
Discharge Consents	Active Licensed Water Discharges Revoked licences
River Quality Objectives	GQA Biology and GQA Chemistry
Waste Management Licences	Licensed waste disposal/processing sites
IPC & IPPC authorisations	Sites under IPC (Integrated Pollution Control) & IPPC
Licensed Nuclear Sites	Sites under RAS (Radioactive Substances) control
Source Protection Zones	Areas for which Groundwater Protection zones are in force

Notes: 1) Full descriptions of each section are included in a Microsoft Access database on the CD Rom. This database can be used to view information relating to copyright, Version dates, any restrictions on use, data quality (see Note 4 below), column descriptions etc.

2) The data is supplied in G.I.S. format (Arcview Shape Files) and data formats which can be imported into Microsoft Excel or Access if required.

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3) The data includes the whole of Wales (political boundary), plus areas that the Environment Agency Wales has operational responsibility. It will be necessary for the Council to retrieve data sets within the County or adjacent to its boundaries if relevant to the inspection strategy.

4) The data provided has been collected from E.A. records during December, 2001. Data must be used with some caution as not all the data has been subject to detailed quality assurance. It is the current best data set available to the E.A. and it is important to note that data quality assurance is an ongoing process within the Agency. Some of the data is time variable as new licenses/consents are issued,

surrendered or amended. The E.A. have stated that a revised data set will be made available in the future.

- (iii) The Council's Community Protection section hold records of pollution incidents and reports of land contamination arising from complaints, inspections and environmental monitoring which environmental health staff have been involved in recent years.
- (iv) Sites of past and present petroleum storage tanks in the County have been compiled.
- (v) In August, 1988 the Welsh Office published a report "Survey of Contaminated Land in Wales" (I.S.B.N. 0 86348 828 5) which gave details of some sites in the Council's area, e.g. previous industrial sites using chemicals associated with land contamination, sewage works etc.
- (vi) The previous Monmouth Borough Council received a list of former gas work sites in that district provided by British Gas Properties p.l.c.
- (vii) A report was commissioned jointly between the previous Monmouth Borough Council and the Ministry of Defence in 1994 into the condition of land at R.A.F. Caerwent. The brief was to undertake a study into the dereliction, geological and ecological issues associated with the previous operation at the base, to assess the cost of any remedial work and to evaluate the potential of the site for new uses. Some site investigation and an ecological survey was undertaken at that time. The report was submitted to the joint committee in 1995. The report by Veryards, consulting engineers in Cardiff, detailed contaminating processes carried out at the site and noted certain geological features which could result in pathways for contamination.
- (viii) As previously noted in the section of the Strategy dealing with the geology of the County, coal extraction has historically taken place in the north western section of the County. The Coal Authority Mining Record Office provided in December, 1999 a list of such sites.

## 2.10 Key Water Resource Protection Issues and Hydrogeological Characteristics

Within Monmouthshire the rivers Usk and Wye represent the major source of water abstraction. From sampling carried out by the Environment Agency, the river quality of both is predominantly categorised as 'very good' or 'good'. Protection of the high standards of river quality from contamination is therefore a major objective of the inspection strategy. The rivers are amongst the premier salmon fishing rivers in England and Wales and both also support a wide variety of the species of fish, plants, invertebrates and mammals that are of European significance. A number of sites of Special Scientific Interest in the County depend to some extent on groundwater seepage and flow. Therefore any contamination of groundwater in this locality could have an impact not only on the groundwater but also possibly on surface water at these protected locations.



Located to the south east of the County, the Carboniferous Limestone is considered to be a major aquifer and is classified as such under Policy & Practice for Protection of groundwater (E.A., 1998) and an important source of industrial and public water supply.

Much of the Gwent Levels is designated in the Adopted Local Plan as a Coastal Protection Zone (aimed at protecting the coastal landscape). A Severn Estuary Strategy has also been drafted to consider the social, economic and nature conservation interests of the estuary and surrounding coastal lands.

There are 15 Source Protection Zones (S.P.Z.) in the County. S.P.Z.'s are areas over which recharge is captured by an abstraction borehole. S.P.Z.'s are designated by the Environment Agency and are delineated to protect potable water supplies against the polluting effects of human activity. Three zones are normally defined around each selected groundwater source, i.e. a borehole, well or spring. The three zones are defined as Zone I - Inner Protection Zone, Zone II - Outer Protection Zone, Zone III - Total Catchment. In addition a fourth zone, a 'Zone of Special Interest' may also be defined.

There are approximately 1,100 private water supplies in the County which are monitored by the Environmental Health section of the Council. There are a total of 629 surface water abstractions licensed by the E.A. in the County.

## 2.11 Action Already Taken to Deal With Land Contamination

Monmouthshire County Council, which has only been in existence since re-organisation of Local Government in 1996, has not undertaken any remedial action to deal with contaminated land (as determined in the Act). As outlined in the Strategy and in the Council's U.D.P., the Council has encouraged development on derelict land/brownfield sites.

## 3. The Aims of the Monmouthshire County Council's Inspection Strategy

The reasons for writing this strategy are outlined in Section 1. Details of how the Council will meet its objectives are given in this Section, by prioritising actions, setting specific objectives and identifying milestones.

### 3.1 Priorities

The Council proposes to prioritise inspection of land in the County according to the degree of potential contamination present and the sensitivity of identified receptors. Prioritisation will be given to towards the protection of human health and a risk-based approach will be used. The Council will also take into account information provided by the E.A. on the vulnerability of controlled waters. Table II shows the Council's priorities and will aid decision making in this task.

## Table II

<p>The Council's priorities in dealing with contaminated land will be:</p> <ol style="list-style-type: none"><li>1. To protect human health</li><li>2. To protect controlled waters</li><li>3. To protect designated eco-systems</li><li>4. To prevent damage to property</li><li>5. To prevent any further contamination of land</li><li>6. To encourage voluntary remediation</li><li>7. To encourage re-use of brownfield land</li></ol> <p>This list is presented in priority order and in all cases will have regard to significance and likelihood of the land being contaminated with the meaning of Part IIA of the Act.</p>
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### 3.2 Strategic Approach

In developing and adopting its strategic approach the statutory Guidance (see para. 1.2) requires the County Council to consider the following:

- (a) any available evidence that significant harm or pollution of controlled waters is actually being caused;
  - (b) any receptor listed in Table III;
  - (c) the extent to which any of these receptors is likely to be exposed to a contaminant, for example as a result of the use of the land, or of the geological and hydrogeological features of the area;
  - (d) the extent to which information on land contamination is already available;
  - (e) the history, scale and nature of industrial or other activities which may have in different parts of its district led to contamination of land;
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- (f) the extent to which remedial action has already been taken to deal with land contamination problems, or is likely to be taken as part of an impending re-development; and
  - (g) the extent to which other regulatory authorities are likely to be considering the possibility of harm being caused to particular receptors or the likelihood of any pollution controlled of waters being caused.

### 3.3 Risk Assessment - Potentially Sensitive Receptors

Table III reproduced from the Guidance shows receptors to be considered when inspecting land for contamination under Part IIA of the Act and can be compared with Table II when considering priorities.

## Table III

RECEPTOR	LAND USE TYPES
Human Beings	Allotment Residential with garden Residential without gardens Schools or nurseries Recreational/parks, playing fields open spaces Commercial/industrial
Ecological systems or living organisms forming part of a system within protected locations	European sites, SAC's, SPA's National Nature Reserves, SSSI's Ramsar sites, Nature Reserves
Property in the form of buildings	Ancient Monuments, Listed Buildings
Property in other forms, i.e. crops, livestock, home grown produce, owned or domestic animals, wild animals subject to shooting or fishing rights	Agricultural land, Allotments and Gardens, Forestry areas, other open spaces, rivers, lakes, etc.
Controlled Waters	Surface Waters Drinking Water Abstractions Source Protection Zones Groundwaters - Private Abstractions, Major Aquifers

Table III details the type of receptors that the County Council is required to consider and their potential locations. There is no guidance available which gives priority to these receptors, however, the County Council has considered that it is appropriate to rank them as in the Table.

The receptors will be investigated in light of their proximity to any land identified in light of its existing or former potentially contaminative use. The significance of the risk to the receptors will be considered in light of the descriptions of significant harm and the condition for there being a significant possibility of significant harm which are contained in Part C of Chapter I of the statutory Guidance.

This process forms the back bone of the County Council's risk assessment for contaminated land.

It should be noted that in the event of an incident leading to contamination the initial response will be in accordance with the Council's existing emergency procedures. However any longer term contaminative efforts will be assessed, prioritised and dealt with under this Strategy.

(i) Human Beings

The County Council is required to ensure that its strategic approach is proportionate to the seriousness of any actual or potential risk. The Council considers that risk to human receptors has the highest priority. The human health effects include death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions. Exposure to a contaminant can be via inhalation, ingestion, direct physical contact, or other physical injury, for example from explosion. Such exposures can take place in a variety of situations which can have an influence on the vulnerability of exposed persons, for example in the home, at school, at work, in

hospital or at recreation and is illustrated under "Land Use Types" (column 2) in Table III,

(ii) Ecological Systems

Ecological systems listed in Column 2 of Table III, will be considered for the possible effects of contaminated land. Significant harm to an ecological system is defined as harm which results in an irreversible adverse change, or in some other substantial adverse change, in the functioning of the ecological system within any substantial part of that location; or harm which affects any species of special interest within that location and which endangers the long-term maintenance of the population of that species at that location.

(iii) Ancient Monuments

Ancient monuments are, because of their unique historical interest, irreplaceable. It is therefore appropriate to afford them a higher priority than other buildings/premises. Occupied buildings will be dealt with under 3.4 (i) above. A building effect in relation to a scheduled Ancient Monument is structural failure or substantial damage. The latter is regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.

(iv) Livestock and other Owned or Domesticated Animals

In accordance with Table III, the County Council will consider significant harm to be: in respect to domestic pets, death, serious disease or serious physical damage. For other animals in this category, significant harm will be a substantial loss in its value resulting from death, disease or other serious physical damage.

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Monmouthshire County Council will regard a substantial loss in value as occurring only when a substantial proportion of the animals are dead or otherwise no longer fit for their intended purpose. Food should be regarded as being no longer fit for its purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a pollutant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss.

(v) Controlled Waters

The Water Resource Act 1991, Section 104 defines what is to be considered as controlled waters. In the case of Monmouthshire this will include inland fresh waters, being the waters of any lake or pond or of so much of a river or watercourse as is above the freshwater limit as well as groundwater which is water contained in an underground strata.

As noted in para. 2.10 there are 15 Source Protection Zones within the County Council's area. The protection of the major aquifer also referred to in that paragraph is of great importance in this Strategy. Other controlled waters will predominantly relate to surface water, e.g. rivers, streams and lakes. The County Council's surface waters are considered to have a generally improving water quality. To assist the continuance of this trend, land adjacent to controlled waters will be considered for the potential of a contaminant in, on, or under the land to cause pollution of waters. The County Council will liaise with the Environment Agency as early as practicably possible in such circumstances.

### 3.4 Risk Assessment - Sources of Contamination

Land within Monmouthshire will be investigated in light of its former and potential contaminative use. Rankings and risk categories will be based on the perceived risk associated with each land use. This does not necessarily mean that all sites used in the past for such purposes will have suffered from contamination as defined in the Act.

Such rankings will be used in the context of the environmental sensitivity of the individual site in question and its surroundings. For example, land with a former potentially contaminative use sited adjacent to a school, residential area, watercourse or site of nature conservation interest will be given greater priority than similar land which is not in an environmentally sensitive location.

The proximity of receptors, referred to and prioritised in Table III, to the land in question will also be considered to assist the Council to target its resources to deal first with those situations considered to give rise to the greatest risk.

In addition, areas of the County where there is a greater concentration of potential sites will, subject to the environmental sensitivities of the location, be considered as areas of priority for inspection

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The Environment Health section will also review all available information with respect to pollution incidents that have occurred, within available knowledge, and that may have had a residual contaminative effect. Again, the proximity of receptors to the land in question will be considered to assist the Council to target its resources to deal with situations considered to give rise to the greatest risk.

### 3.5 Work Programme

The Guidance does not detail how quickly the work must be completed, other than requiring the inspection strategy document to be published within 15 months of the Guidance and the W.A.G. has asked that this be 31st September, 2002. It does require each authority to set out what it considers appropriate timescales for inspection of different parts of its area. Consequently the Council has set specific targets for progression of inspection and regulatory action work as outlined in Section 3.7.6.

The inspection timetable sets out a framework for the overall inspection of the Council's area in assessing potentially contaminated land. In developing the timetable the Council has

sought to reflect reasonable targets for completing the preliminary inspection of its area, inspecting priority sub-areas/sites and implementing regulatory actions.

Clearly the programme is dependent upon many factors including:-

- financial and human resources available to the Council;
- availability/provision of information or services from third parties;
- the nature and scale of defined sites or areas subject to detailed inspection and
- progress with regulatory action.

The Council in acknowledging the impact that such uncertainties can have on programmed works, intends to review and, where necessary, publish an up-dated inspection programme. This review process will be undertaken on a regular basis.

The Council also recognises that alongside this timetable, action might commence on urgent sites brought to the County Council's attention outside the inspection programme and also on sites that have been identified as having the pollutant linkage present and which are posing a significant risk or have the possibility to cause significant harm. Resources channelled into the investigation and assessment of these sites may mean that the general inspection programme may be delayed as a result and will require re-assessment. This will be done through the periodic reviews.

The Council has no intention to consider land for which it is currently responsible or has been responsible, through ownership or management, any differently than other land within the Council's area. Any Council owned land will be considered in accordance with the priorities identified in this Section.

### 3.6 Contaminated Land Inspection Timetable

The inspection process has been broken down into a series of important stages and dates in the process and are described in the Work Programme.

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Stage 1 Examination of Available Data      November 2001 - February 2002

To begin the process of investigation the Council has purchased a set of historic ordnance survey maps from the Landmark Information Group Ltd., as which can be used with the Council's Geographical Information System ( G.I.S.)

The historic map data has been supplied for four epoch layers covering the periods 1869 - 1943 in Standard Group 4 Tiled Tiff format.

The historical land use data base identifies areas of potentially contaminated land within the meaning of the Act, from analysis of historic ordnance survey maps, following Governmental advice on the identification and classification of potentially contaminative land uses.

It is to be expected that only a small proportion of sites previously subjected to 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 It is worth emphasising that in order to be designated as contaminated land, within the meaning of Part IIA of the Act, 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 site but cannot be designated as contaminated land.

#### Stage 2 Consultation on Draft Inspection Strategy March 2002 - June 2002

(i) An internal document was drawn up by the officer in the Environment Directorate dealing with the Council's duties for contaminated land in the County. This draft document (CLIS2) was circulated within the Council to all Departments but with particular reference to Sections which would have a role or could advise on specialist aspects of the Inspection Strategy. These included:

(a) within the Resources & Customer Services Directorate;

Contract & Property Services

(b) within the Environment Directorate;

Building Control  
Environmental Health  
Construction & Projects  
Development & Traffic  
Highway Maintenance  
Countryside  
County Farms  
Development Control  
Development Plans

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(c) within the Lifelong Learning & Leisure Directorate;

Community Learning

(d) within the Chief Executive Unit;

Health & Safety  
Policy Unit  
Legal Services  
Land Charges

(e) within the Social & Housing Services;

Housing Services.

Having completed this internal consultation the advice received was incorporated into the document (CLIS3) and any necessary additions and/or amendments made.

(ii) Consultations with Outside Organisations.

The data sources cited in Section 2.10 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. Consultation therefore played a major role in identifying the gaps in this data base.

As an integral part of this stage of the consultation, copies of the draft (CLIS3) were circulated to Community Councils in Monmouthshire and the B.B.N.P. and to other consultees listed in Appendices III & IV. In particular the Community Councils and the B.B.N.P. were asked to provide any relevant information or local knowledge they might possess on potentially contaminative land uses that have occurred within their area.

Monmouthshire County Council has adopted a Corporate Consultation Strategy and the consultation undertaken as part of this Contaminated Land Strategy has been carried out in accordance with this policy. Local amenity groups were contacted as another potential sources of information (see Appendix IV). Consultation on the Strategy was also publicised in the local press and it was hoped that residents and other members of the public, persons, organisations or companies operating businesses in the county would come forward with comments or advice including information on past land uses.

The Guidance also requires that the Council should consult with appropriate public bodies such as the Environment Agency, the Welsh Development Agency, the Countryside Council for Wales and CADW and those consultees listed in Appendix III were sent a copy.

Having completed this external consultation, the advice and comments received were incorporated into the document and any necessary additions and/or amendments made.

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Stage 3 Publish the Contaminated Land Strategy (Document CLIS4)  
(Sept. 2002)

Provided the previous consultation stages are completed on schedule, the Strategy will be finalised in September 2002 and submitted to the Environment Agency. A copy will also be sent to the W.A.G. and published on the Council's internet web site ([www.monmouthshire.gov.uk](http://www.monmouthshire.gov.uk)). Appropriate local publicity will be given to the final document.

Stage 4 Dealing with Urgent Sites (September 2002 and ongoing)

If there is any verifiable report of contaminated land sites causing significant harm that are identified through consultation process, the general approach to the inspection strategy will be secondary to dealing with such sites. The Regulations recognise this possibility and this proposal is in line with the Guidance.



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

#### Stage 5 Inspections (October 2002 - October 2006)

The Council has not yet begun to actively inspect its area for the purposes of identifying contaminated land. Furthermore the development and implementation of the Strategy will be a learning process for all the parties concerned. It is therefore likely that priorities will change as the Council's knowledge and understanding of the scale, if any, of contaminated land issues increase through information acquisition.

It is therefore difficult to accurately predict the amount of work which will have to be undertaken, whether the necessary competency of staff to carry out such work will be available in-house and the time it will take to complete. It is anticipated that the Strategy will be reviewed from time to time and the timescales given in this Section updated accordingly.

The Council's first priority in dealing with contaminated land is to protect human health. (See Table II). Land within the County will therefore be inspected in order of population density.

The County towns have the largest potential number of receptors (in this case human beings) and will be given the highest priority by the Council. Towns also have the highest risk of having all three elements of a pollutant linkage (source, pathway and receptor) which could cause significant harm to human health.

The 5 towns in the County (Chepstow, Abergavenny, Usk, Caldicot and Monmouth) will therefore be inspected first, followed by the villages and smaller settlements, prioritised on the basis of population.

#### Stage 6 Council Owned Land (October 2002 - April 2006)

The Council has some land holdings within the County. There are other areas of land within the County that the Council (or its predecessors) have 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.

In consequence the Council could be what the Act calls the "appropriate person" who is liable to pay for any remediation process or is a member of a "liability group" for the significant pollutant linkage.

Secondly the Council will be responsible for remediation when no person or group can be found.

## Stage 7 Unitary Development Plan Land (November 2002 - April 2006)

As a planning authority the Council must prepare a Unitary Development Plan (U.D.P.). At the time of writing (March 2002) a new U.D.P. has recently been developed and is currently on deposit.

The B.B.N.P. has also published, as a consultation draft, a Unitary Development Plan (April, 2002).

If the Council or the B.B.N.P. is making recommendations about land use, it is logical to undertake investigation of this "development plan land" as a priority within the general population based approach to contaminated land investigation. This land will therefore be specifically considered as each area of the County is investigated.

## Stage 8 Threats to controlled waters, protected areas of the environment, ancient monuments and other buildings (April 2006 - April 2007)

It is anticipated that the investigation of towns and villages could bring to light information that would reveal any 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 hazards, to be undertaken once the investigation of the towns and villages is complete.

The Environment Agency will be informed of any potential pollution of controlled waters but the circumstances of the problem will determine whether the contaminated land is regulated by the E.A. or the Council. Only Special Sites however will be regulated by the E.A. (see paragraph 1.6 and Appendix 1).

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Liaison will also be undertaken with Countryside Council for Wales (C.C.W.) in the case of threats to protected areas of the environment and with CADW 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 9 Final Prioritisation (October 2006 - April, 2007)

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 2006.

#### 4. Procedures

The Guidance requires that procedures be drawn up to describe how contaminated land issues will be handled within the Council. This Section also details the level of service that businesses and members of the public can expect from the council in dealing with these issues.

##### 4.1 Internal Management Arrangements for Inspection and Identification

Within the County Council, the Environmental Health Section of the Environment Directorate has responsibility for the implementation of Part IIA E.P.A. 1990. As part of the Environmental Health team a Specialist Environmental Health Officer (E.H.O.) is the lead officer for contaminated land, reporting to the Environmental Health Manager.

The E.H.O. will deal with the day-to-day implementation of the Strategy once approved by elected members. The E.H.O. will also be responsible for serving Remediation Notices, subject to consultation with the Environmental Health Manager and the Council's Legal Section.

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

#### 4.2 Considering Local Authority Interests in Land

As indicated in paragraph 3.5, investigation of Council-owned and will be carried out alongside the town-by-town inspection schedule and such land in Council ownership 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:

Data Source	Comments	Use
Historic Maps	Digital maps purchased from Ordnance Survey (through Landmark)	To identify sources, pathways and receptors
Geological Maps	1 : 50 000 solid and drift geology maps are available from the British Geological Society	To characterise pathways
Groundwater Vulnerability Maps	The Groundwater Vulnerability Maps produced by the National Rivers Authority and the Soil Survey and Land Research Centre in 1993 can be used to assess the potential for contamination of groundwater (1 : 100 000)	To identify controlled waters as receptors

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Soil Maps	A soil map of the Gwent region can be purchased from the Soil Survey and Land Research Centre at Cranfield University	To characterise pathways
Groundwater Protection Zones	Areas of groundwater that receive special protection by the Environment Agency are identified on the E.A. website, and can be used with a G.I.S.	To characterise controlled waters as receptors
Environmental Health Records	The County Council maintains records of complaints, requests for service and investigations	To identify known information on contamination
Planning Records	The County Council holds detailed planning records of development in the area, including information on ground conditions presented in surveys	To identify known information on contamination
LANDMAP	The County Council's landscape assessment	Identifies particular qualities of an area for maintaining,

		protecting and enhancing the landscape
U.D.P.	A new plan has been written to be put on deposit in September 2001 and is a source of up-to-date information on land use	To identify receptors, particularly historic monuments and protected areas of the environment
E.P.A. 1990 Part I Registers	The Council has maintained a Public Register containing details of authorised industrial processes since 1990	To identify sources of contamination
Waste Management Licences	The Environment Agency maintaining a public register of sites licensed for waste management activities and have produced relevant information relating to sites in the County	To identify sources of contamination
Register of Closed Landfill Sites	The Environment Agency has provided details of closed landfill sites	To identify sources of contamination
The County Records Office	The County Records Office have a number of sources describing land-use in the County suitable for researching site histories	To identify sources of contamination
Drainage Network Plans	Held by M.C.C. and Wessex Water p.l.c,	To identify pathways
Air Photos Archive 1945 - to date	Held by W.A.G.	To identify sources and receptors
Council Staff	Many have local knowledge of potential sources	To identify sources, pathways and receptors

Reference should also be made to paragraph 2.10 of the Strategy concerning information sources.

#### 4.4 Information Management

The Council's Geographical Information System (G.I.S.) 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 (e.g. human beings, controlled waters) to sources of contamination. It is anticipated that as a result of publicity or for other reasons the Council will receive complaints regarding possible contaminated land from members of the public businesses or amenity groups. Information may also be voluntarily supplied relating to land contamination in the County not directly affecting local people or businesses. These complaints or information provision may have an impact on the approach to inspection and so the procedures to be adopted are detailed in this Part of the Strategy.

#### 4.5 Dealing with Complaints or Service Requests

A complaint or service request regarding contaminated land will be dealt with following the same procedure as currently used by the Environmental Health Section to deal with statutory nuisance complaints.

All complainants may expect:

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

Every effort will be made to resolve complaints or provide service request details quickly and efficiently. However the legislative framework presents a number of prescribed steps which will have to be taken before any remedial action can be implemented:

- (i) there has to be proof of a pollutant linkage before any designation as contaminated land is permissible, which will only be possible following a detailed investigation
- (ii) there is a requirement for the Council to identify "the persons who ... has caused or knowingly permitted a pollutant to be in, on or under the land" (or "Class A" person)
- (iii) it is necessary that there is prior consultation with interested parties before the designation as contaminated land can take place
- (iv) there is a minimum of a three month period between designation and the serving of a Remediation Notice

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

#### 4.6 Confidentiality

Persons contacting the Council will be asked to supply their names and addresses and, if appropriate, the details of the land, etc., giving rise to the complaint. The identity of the person will however remain confidential if this is requested. The only circumstance in which the information might be made public would be in the case of an appeal against a Remediation Notice where an important reason for the contaminated land designation was an adverse effect on the complainant's health.

#### 4.7 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 the condition of their property, this will not necessarily be treated as information and 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 any resolution, although it may choose to do so as general good practice.

#### 4.8 Anonymously Supplied Information

In most circumstances it is the Council's policy not to respond to anonymous complaints from the public. However with regard to information relating to potentially contaminated land, any information received will be recorded and assessed in particular with respect to

existing information on the site in question. Any further action in relation to information from an anonymous complaint will then be made at the discretion of officer concerned.

#### 4.9 Anecdotal Evidence

Any anecdotal evidence provided to the Council relating to contaminated land will be noted but no designation of contaminated land can occur without the scientific evidence and the following of legal procedures set out in the Act. In such cases, the E.H.O. will use knowledge and experience to decide what, if any, further investigation is required following such a complaint or a provision of such information.

#### 4.10 The Environmental Information Regulations 1992

It should be noted that under the provisions of these Regulations, information given to the Council regarding a particular site must be treated as confidential if the information consists of:

- (i) Personal information where an individual has not given consent to its disclosure.
- (ii) Information disclosed voluntarily by a third party who has not given consent.
- (iii) Information which would increase the likelihood of damage to the environment if disclosed.

Other information given to the Council regarding a particular site may be treated as confidential at the Council's discretion if the information consists of:

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- (i) Information affecting national security, public defence or international relations.
- (ii) Information which is or has previously been the subject of an inquiry.
- (iii) Information from internal communications or unfinished documents.
- (iv) Commercially confidential information.

In all other cases the Council will honour any obligations under the Regulations.

#### 4.11 Risk Assessment

For the purpose of identifying contaminated land, all three stages of the pollutant linkage i.e. source, pathway and receptor must be present. During each stage of data acquisition, any risk caused by the possible presence of a pollutant linkage will be identified and evaluated. This focused process is known as risk assessment.

Risk assessment is a systematic process consisting of four key stages:

1. Hazard Identification

Identification of associated problems.

2. Hazard Assessment

Assessment of the extent of the hazard

3. Risk Estimation

Determination of the potential adverse effects which may result from exposure to the hazard.

4. Risk Evaluation

Evaluation of the significance of the estimated risks.

The W.A.G. Guidance defines 'risk' as the combination of:

- (a) the probability, or frequency, or occurrence of a defined hazard (for example, exposure to a property of a substance with the potential to cause harm); and
- (b) the magnitude (including the seriousness) of the consequences.

Risk assessment techniques will be used by the Council in order to prioritise sites for further inspection and to select the most appropriate remediation actions.

#### 4.12 Risk Assessment Models

There are a number of risk assessment models currently available. These models range from simple tick boxes where site data is measured against fixed standard values for various pollutants to the modelling of more complex site specific characteristics. However, each model has a number of limitations and may not be suitable for use on particular sites in relation to different receptors. The Council's Environmental Health Section will therefore consider each site investigation report it receives, in order to assess whether the most appropriate model has been used.

(i) The C.L.E.A. Model

As part of the preparation to introduce in the U.K. the new contaminated land regime, the (previous) DETR produced its own risk assessment model for use on contaminated land. Following publication in March 2002, due consideration will be given by the Council to the Contaminated Land Reports CLR 7 - 10, the C.L.E.A. (Contaminated Land Exposure Assessment) methodology used to determine direct human health risks resulting from contaminated sites.

The main purpose of preparing the Guideline Values is to establish whether a site poses actual or potential risks to human health, in the context of the existing or intended usage of the site. It should be noted that prior to use of the guideline values, due consideration should be given to determine whether the risk assessment



criteria and pathways used to derive the guideline values are appropriate for individual site specific conceptual models.

If contaminant concentration is below the Guideline Value, then the site is considered safe. Conversely if values are higher than the appropriate Guideline Value, then further site investigation will be required.

The advantage of the C.L.E.A. derived Guideline Values are

- they are based on risk assessment
- they specifically provide for uncertainty
- they provide an objective basis for decision making

The first set of Guideline Values cover; arsenic, cadmium, chromium, cyanide, inorganic lead, inorganic mercury, nickel, phenol, Polycyclic Aromatic Hydrocarbons (P.A.H.) and selenium. Reports are also being prepared on other substances as well.

Whilst the use of C.L.E.A. Guideline Values is not mandatory, the Council intends to utilise the model wherever possible. This consistency of approach will result in a high degree of transparency. However, in certain circumstances, for example in the case of groundwater and ecosystem protection, the C.L.E.A. model will not apply and therefore the most appropriate alternative will have to be used.

(ii) I.C.R.C.L. (Inter-departmental Committee on Re-development of Contaminated Land) Values

The I.C.R.C.L 'Guidance on the Assessment and Re-development of Contaminated Land', (2nd Edition, July 1987) is currently the most widely used model in the U.K. This document sets 'trigger' and 'action' soil target values for a number of substances, above which remedial action may be required.

4.13 Risk Assessment for other substances

Risk assessments may also be required for substances not covered by I.C.R.C.L. or C.L.E.A. guidelines. In these cases, reference may be made to occupational exposure levels issued by the Health and Safety Executive or to other authoritative sources of information, such as guidelines adopted in other countries. If guidelines from other countries are referred to however it will be important to bear in mind the significant difference in remediation standards between the U.K. and these other countries and the different assumption used in formulating the standards (e.g. lower organic content of the soil in one country compared with another).

4.14 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" (E.A. R. & D. Publication 20, 1999).

## 5. Liaison and Communication in Dealing with Contaminated Land Issues in the County

Section 3.7 (Stage 2) referred to the internal consultation of the draft Strategy clearly a number of external organisations and individuals will be involved with the County Council in the practical implementation of the Inspection Strategy. The Council has already made links with certain agencies and will be establishing further links to ensure efficient consultation, transfer of information and where relevant to ensure transfer of regulatory control of Special Sites to the Environment Agency.

### 5.1 Liaison with Statutory Bodies

To fulfil the County Council's statutory duty, the Council will establish formal liaison procedures with:

- (a) the Environment Agency, Wales,
- (b) the Countryside Council for Wales,
- (c) CADW,
- (d) the Welsh Development Agency
- (e) the Food Standards Agency, Wales
- (f) the Health & Safety Executive

Appendix III lists the details of the statutory bodies the Council will liaise with in carrying its duties to deal with contaminated land.

As previously mentioned these organisations will be invited to comment on the consultation draft of the Inspection Strategy and will also be available to advise on any proposed action by the County Council under Part IIA of the Act in dealing with land subsequently found to be contaminated.

It should be noted however that as the Guidance states (Part D paragraph 2.31) "the local authority has the sole responsibility for determining whether any land appears to be contaminated land" (under the terms of Part IIA of the Act).

### 5.2 Liaison with Other Local Authorities

Co-operation and liaison with other local authorities is important in ensuring a consistent approach to regulation and avoiding duplication of effort in establishing procedures to deal with contaminated land issues.

### 5.3 Regional Liaison

The Council is participating in meetings of the South East Wales sub-group of the joint Welsh Local Government Association and Environment Agency Wales Contaminated Land Working Group. Officers specialising in pollution control in the previous Gwent and Glamorgan authorities attend to deal with common issues concerning contaminated land.

### 5.4 Cross-boundary Contaminated Land

Neighbouring local authorities will have to 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.

The co-operation now established by the sub-group mentioned in the previous paragraph will assist in dealing with neighbouring Welsh authorities. In the case of Herefordshire and the Forest of Dean District Council to the north west of the County, arrangements have been made to ensure that a similar pattern of co-operation is established with the relevant officers.

### 5.5 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 I.P.P.C. legislation are considered the most important. Any issues of land contamination that may previously have been dealt with under the statutory nuisance regime under Part III of the E.P.A. 1990 will now be dealt with through Part IIA of the Act.

#### 5.5 (i) Planning

The majority of contaminated land issues are currently addressed through the planning regime, where contamination can be a material consideration. Whilst the introduction of Part IIA should now deal with the issue of previously contaminated land sites, it is anticipated that the re-development of some brownfield sites, and the associated planning controls will remain the primary mechanism for dealing with contaminated land. It should be noted that any remediation agreed as a planning condition will be dealt with under planning controls and not under Part IIA but should be carried out within a reasonable time frame.

The County's Environmental Health section currently works closely with development control and building control in the Environment Directorate and the B.B.N.P. on all issues relating to pollution and the current arrangements for consultation are considered to be sufficient to deal with contaminated land issues.

#### (ii) 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 W.A.G. 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 resulting in a significant risk to controlled waters and will take into account any comments made with respect to the 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 take remedial action under Part IIA.

(iii) Integrated Pollution Prevention and Control (I.P.P.C.)

Under new legislation to regulate pollution from certain industrial processes, site operators are required to undertake a site condition survey prior to receiving a permit from the Environment Agency to operate. If the site condition is such that areas of land meet the definition of contaminated land, then submission of a site survey as part of the I.P.P.C. application may trigger action by the Council under Part IIA. Existing processes which require permits will be brought under this legislation in stages over the next seven years, although it will apply immediately to any new processes covered by the legislation or any substantial change to an existing process.

(iv) Waste Management Licensing

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

## 5.6 Non-statutory Consultees

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

## 5.7 Communicating with Owners, Occupiers and Other Interested Parties

The County 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 requires disposal as a result of voluntary remediation can be exempted from Landfill Tax. 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 E.H.O. (para. 4.1) will be the central contact point within the Council on contaminated land issues and as such will 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.

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

- 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 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 E.A.

(ii) 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.

## 5.8 Powers of Entry

Under Section 108(6) of the Environment Act 1995, the Council has been granted power of entry to carry out investigations. At least 7 days notice will be given of proposed entry onto any premises, unless there is an immediate risk to human health or to the environment.

## 5.9 Enforcement Action

The Environmental Health Section has adopted an enforcement policy (Appendix III) to ensure consistent, fair and transparent practices are used when taking enforcement action. Contaminated land investigations will be carried out in accordance with this policy.

#### 5.10 Risk Communication

The complex nature of contaminated land issues does not lend itself to easy explanation to the lay-person. 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 concepts are explained in a publication by the Scotland & Northern Ireland Forum for Environmental Research on communicating risks from contamination land.

The Regulations and Part IIA grant only limited powers to the Council to deal with hazardous or potentially contaminating materials present in, on or under the ground. Members of the public may believe that any material that is not naturally present in the ground should be removed, especially if it is in the vicinity of their homes. It will be important to explain this can only be done under the powers given to the Council in Part IIA where there 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 therefore important to appreciate that the expectations of the public will not always be met by the powers the Council may exercise under contaminated land legislation.

#### 5.11 The Public Register

Under the Regulations, the council is required to maintain a public register of contaminated land. The register will be held by the Environmental Health Section at the Council's head office at County Hall, Cwmbran. It will be paper-based and be accessible

on request by members of the public during office hours, Monday to Friday. Subject to the appropriate technology being available, the Council will make provision for the register to be available in electronic form.

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

- Remediation Notices
- details of site reports obtained by the Council 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 and as such will not necessarily be made available to the public.

#### 5.12 Provision of Information to the Environment Agency

The Environment Agency is required to prepare an Annual Report for the Secretary of State and the W.A.G. on the State of Contaminated Land in England and Wales. This report will include:

- A summary of local authority inspection strategies, including progress by Councils with 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 E.A. 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 forum.

The Council 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.

#### 5.13 The Role of the Welsh Development Agency

The County Council aims to work in partnership with other organisations, and their programmes, where there is the potential for overlap with its responsibilities under Part IIA E.P.A. 1990. Of particular relevance is the Welsh Development Agency (W.D.A.)



Land Reclamation Programme, which is available to both the public and private sectors where the W.D.A.'s objective is to secure beneficial re-use of derelict land through reclamation. This task is seen by the W.D.A. as central to the regeneration of the Welsh economy. For grant purposes, derelict land is defined as "land so damaged by past industrial or other activity that it is incapable of beneficial use without treatment". The site must, therefore, have had some type of development previously which has ceased and is in need of clearing or reclaiming before any further development or use can take place. The grant does not extend to sites that have dereliction of natural origin or works that are covered by enforceable restoration conditions or statutory requirements, including remediation notices. The W.D.A. will, however, consider grant aiding any additional eligible works necessary to achieve complete reclamation of a contaminated site for a defined new use. The W.D.A. evaluates all applications with a view to local needs, value for money, priority of the project and budget availability for such projects in the financial year in which the grant is paid.

- 6. Programme for Inspection
- 6.1 Arrangements for Carrying out Detailed Inspections

The earlier processes within this Strategy will assist the County Council in identifying land where there is a possible pollutant linkage. A detailed inspection of the land will then have to be carried out in order to obtain sufficient information to:-

- (a) to provide evidence of the presence of a pollutant linkage and to determine, in accordance with the Guidance, whether the land is contaminated; and
- (b) to decide whether the land requires designation as a special site within the terms of the Contaminated Land (Wales) Regulations 2001.

The nature of the detailed inspection will vary from site to site. Chapter 2 of the Guidance gives statutory guidance. The inspection may include the following:-

- (a) the collation and assessment of documentary information and other information, from other bodies and organisations relating to the particular site;
- (b) a visual inspection of the site and its environs;
- (c) limited sampling of the site, for example, of surface deposits or sampling of adjacent water courses;
- (d) the intrusive investigation of the land by exploratory excavation, bore-holes, etc., and any associated sampling.

These inspections will be undertaken in accordance with the following code of practice and guidance documents:

- British Standard 10175 : 2000. Investigation of Potentially Contaminated Sites. Code of Practice
- A Framework for Assessing the Impact of Contaminated Land on Groundwater and Surface Water. Contaminated Land Research Report (C.L.R. 1)
- Guidance on Preliminary Site Inspection of Contaminated Land. Contaminated Land Research Report (C.L.R. 2)
- Documentary Research on Industrial Sites. Contaminated Land Research Report (C.L.R. 3)
- Sampling Strategies for Contaminated Land. Contaminated Land Research Report (C.L.R. 4)
- Prioritisation and Categorisation Procedure for Sites which may be Contaminated. Contaminated Land Research Report (C.L.R. 6)
- Model Procedures for the Management of Contaminated Land. Contaminated Land Research Report (C.L.R. 11)

## 6.2 Health and Safety Requirements

Site investigations will be undertaken in accordance with the County Council's health and safety policies and procedures. Officers involved in site investigation will receive appropriate training and be provided with suitable and sufficient protective clothing. In

addition regard shall be had to the following documents in order to ensure safe working practices when undertaking site investigations.

### 6.3 Statutory Guidance to be followed when using Statutory Powers of Entry

(i) In undertaking inspections of land, officers of the Council will seek to work with the owners and occupiers of land, "appropriate persons" and other interested parties to facilitate the inspections. However, Section 108 (6) of the Environment Act 1995 gives the County Council the power to authorise a person to exercise specific powers of entry.

(ii) Chapter 2, Part C, Paragraph 2.22 - 2.25 of the Guidance provides statutory guidance to local authorities, which the Council will follow, when exercising powers of entry.

(a) Prior to carrying out an inspection using its statutory powers of entry the Council will satisfy itself, on the basis of information already obtained:

in all cases, that there is a reasonable possibility that a pollutant linkage exists on the land, and

in cases involving intrusive investigation that it is likely that the contaminant is actually present and, given the current use of the land, that the receptor is actually present or is likely to be present.

(b) Special Considerations with Respect to Intrusive Investigations

The County Council will carry out any intrusive investigations in accordance with appropriate technical procedures for such investigations. It undertakes to take all reasonable precautions to avoid harm, water pollution or damage to natural resources or features of historical or archaeological interest.

The Council will not carry any intrusive investigation under its statutory powers of entry if:

it has already been provided with detailed information on the condition of the land which provided an appropriate basis to enable it to determine whether the land is contaminated in accordance with the statutory guidance; or

a person offers to provide such information within a reasonable and specified time and then provides the information within that time period.

(iii) Sites of Special Scientific Interest (S.S.S.I.)

The statutory guidance requires the County Council to consult with Countryside Council for Wales before carrying out any intrusive investigation on any area notified as a site of special scientific interest (S.S.S.I.) The County Council will also

consult with the appropriate organisation, for example Gwent Wildlife Trust as well as the Council's own countryside and biodiversity officers with regard to such sites and other ecologically sensitive area of the County.

(iv) Sites of Historical or Archaeological Interest

Before carrying out any intrusive investigation on any area encompassing a site of historical or archaeological interest the council will consult with CADW.

(v) Controlled Waters

Prior to carrying out any intrusive investigation which may affect controlled waters the County Council will consult with the Environment Agency Wales.

(vi) Special Sites

Where land is determined by the County Council to be contaminated land and it also falls within the description of a special site contained within the Contaminated Land (Wales) Regulations 2001 then it is required to be designated as a special site (Appendix 1). The Environment Agency is the enforcing authority for special sites. In these circumstances it is prudent for the Agency to have a formal role at the earliest stage with regard to such land.

Prior to authorising or carrying out any inspection of land using its statutory powers of entry the County Council will consider whether, if the land is found to be contaminated, it would require designation as a special site. If the Council is already in possession of information indicating this then it will make arrangements for the Environment Agency to carry out the inspection on their behalf.

Where the Council considers that there is a reasonable possibility of the presence of a pollutant linkage which would necessitate designation as a special site then arrangements will be sought for the Environment Agency to carry out the inspection.

Where necessary the Council will authorise a nominated person from the E.A. to exercise the powers of entry under Section 108 of the Environment Act 1995 and carry out inspections on its behalf. Before being provided with this authorisation the E.A. must satisfy the Council that it has met the conditions for use of the statutory powers of entry outlined in 7.3 - 7.4.

#### 6.4 Appointment of Consultants and External Contractors

From time to time the County Council may need to appoint consultants or external contractors to undertake specific work with respect to contaminated land. For example, site investigations, sampling and analysis, supervision and the undertaking of site remediation works or as an expert witness. Any such appointments will be carried out

under the terms of the Council's standing orders and financial regulation for the procurement of such services.

7. Review Mechanisms

This Strategy outlines the general approach to be taken in inspecting land in the County 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.

## 7.1 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:

- (a) Unplanned events - e.g. if an incident such as a spill has occurred.
- (b) 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.
- (c) Supporting voluntary remediation - e.g. a potentially liable party wishing to undertake clean-up before their land has been inspected by the local authority.
- (d) Identification of localised health effects which appear to relate to a particular area of land.
- (e) 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 contaminated land inspection timetable. (See paragraph 3.7) It will be important to consider this issue in all Strategy reviews.

## 7.2 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:

- (a) Significant changes in legislation.
- (b) Establishment of significant case law or other precedent.
- (c) Revision of Guideline Values for exposure assessment. (See paragraph 4.7.2 (i)).

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

## 7.3 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.

Following consultation the Strategy will be finalised during October 2002 and work will then begin on site inspections. In the Council's opinion it will be appropriate to review progress of the inspection strategy after the first full year of operation. This review will therefore take place in October 2003 and the findings will be reported to the Council's

Environment Executive. 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 work plan, the next review date will be October 2007 when the first inspection of the County has been completed and any remediation of contaminated sites has been prioritised.

## 8. Contact Details

### 8.1 Reporting Contaminated Land

- (i) The Council's Environmental Health Section will deal with any complaints or enquiry concerning contaminated land.

Postal Address: Environmental Health Section,  
Environment Directorate,,  
Monmouthshire County Council,  
County Hall, CWMBRAN. NP44 2XH

Tel: 01633 644112

Fax: 01633 644105

E.mail [bernardtyson@monmouthshire.gov.uk](mailto:bernardtyson@monmouthshire.gov.uk)

Website: [www.monmouthshire.gov.uk](http://www.monmouthshire.gov.uk)

- (ii) While the Environmental Health Section 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 either Monmouthshire County Council or the B.B.N.P. and liaison established to ensure the condition of the site is suitable for its intended use.
- (iii) Any provisional information concerning the transfer of ownership of land and property (i.e. local land charges search questionnaires), should be made in the first instance to the Council's Legal Services Section, telephone 01633 644244, fax number 01633 644061 or e.mail [brendachandler@monmouthshire.gov.uk](mailto:brendachandler@monmouthshire.gov.uk).



## **Legislation and Guidance:**

The Environment Act 1995 H.M.S.O. (1995)

The Contaminated Land (Wales) Regulations 2001 H.M.S.O. (2001)

Remediation of Contaminated Land. The Welsh Assembly Government (W.A.G.) Guidance to Enforcing Authorities under Part IIA of the Environmental Protection Act 1990 (November 2001)

Contaminated Land Inspection Strategies, Technical Advice to Local Authorities D.E.T.R./E.A. (April 2000)

## **References:**

Communicating Understanding of Contaminated Land Risks. Scotland and Northern Ireland Forum for Environmental Research (S.N.I.F.F.E.R.) (1999)

Industry Profiles. Department of the Environment, (1995 and 1996)

Inter-departmental Committee on the Redevelopment of Contaminated Land (I.C.R.C.L.). Guidance Note 59/83 (1983)

W.D.A. Manual on the Remediation of Contaminated Land 1993 (under review)

Local Environment Agency Plan (L.E.A.P.)

1. The Wye Area
2. The Rural Usk Area
3. The Eastern Valleys Area. Environment Agency (2000)

## **Monmouthshire County Council Publications:**

Unitary Development Plan (Deposit Version) September, 2001

Performance Plan 2001 - 2002

Monmouthshire Local Agenda 21 2000 Strategy, Second Version, March, 2002

## **B.B.N.P. Publications:**

Local Plan. Adopted 1999

Consultation Draft of Unitary Development Plan April, 2002

Biodiversity Action Plan May 2002

## Appendix I

### Special Sites

While the Monmouthshire County Council is 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 Regulations.

There are three categories of sites when the E.A. will assume regulation:

1. Water pollution cases.
2. Industrial cases.
3. Defence cases,

Regulation 3 of the Contaminated Land (Wales) Regulations 2001 contains the legal definition of what constitutes Special Sites.

## Appendix II

### Enforcement Policy of the Environmental Health Section

The Environmental Health Section's aim of protecting the public and the environment from harmful activities and risks in Monmouthshire, is achieved through education, advice and regulating the activities of others to secure compliance with legal requirements.

Our work is transparently open, subject to necessary discretion in gathering evidence and confidentiality given to those seeking our help. Due allowance is made where difficulty with compliance is voiced.

To prevent pollution, help and guidance is given when asked by individuals, businesses, planners and others. All documents name the relevant staff and give full contact details. Where service falls below expectations, staff and the Environmental Health Manager seek to resolve complaints, and where this is not achieved complaints are referred to the Head of Community Protection.

Our requirements and actions are targeted to be proportional to risks, circumstances and attitudes, avoiding unnecessary expense where practicable. Consistency, fairness and equitability are achieved through team meetings, reviews and by focusing on service delivery.

Our procedures are to investigate complaints and programme our visits according to a priority system that targets more severe pollution. The person responsible is informed why remedial work is required, normally by letters inviting response and, when further investigation may lead to action, explaining the consequences. Complainants are asked to assist by keeping a record of non-continuous pollution. We liaise with community organisations, other regulatory agencies and services, and encourage self-regulation by business.

Whenever there is sufficient, admissible and reliable evidence of serious pollution or persistent breaches of regulatory requirements, an enforcement notice is served. Our notices incorporate explanation of both rights of appeal and the reasons for their service. Where there are serious and/or immediate consequences from failure to comply with an enforcement notice we will apply to a magistrate for a warrant to enter premises and undertaken the work in default, such as by seizure of equipment, or seek other legal remedy, such as injunction.

We will prosecute providing there is a realistic prospect of conviction and subject to an assessment of the public interest, to prevent serious pollution recurring, punish wrongdoing and act as a deterrent to others. Before deciding on prosecution we will also take into account the offender's intent, attitude, history, ability to foresee and the effect on the community and environment. Alternatives to prosecution, such as formal caution or warning will also be considered.

## Appendix III

### Details of Consultation Contacts at Government Agencies

Richard Jones,  
Senior Conservation Officer - East,  
Countryside Council for Wales,  
4 Castleton Court,  
Fortran Road,  
St. Mellons,  
CARDIFF. CF3 0LT

Mr. P. Roche,  
CADW,  
Ancient Monuments Administration,  
Crown Buildings,  
Cathays Park,  
CARDIFF. CF10 3NQ

The Health and Safety Executive,  
Government Buildings,  
Phase I,  
Ty Glas,  
Llanishen,  
CARDIFF. CF14 5SH

Mr. G. Griffiths,  
Director of Land Reclamation,  
Welsh Development Agency,  
(South East Division),  
Q.E.D. Centre, Treforest Estate,  
PONTYPRIDD. CF37 5YR

Sarah Coe,  
Area Contaminated Land Officer,  
Environment Agency Wales,  
Abarus House,  
St. Mellons Business Park,  
St. Mellons, CARDIFF. CF3 0EY

Dr. Sarah J. Rowles,  
C.C.A.F. Division,  
Foods Standards Agency,  
Aviation House,  
125 Kingsway,  
WC2B 6NH  
Appendix III

## Details of Other Persons or Organisations Consulted

Gwent Health Authority,  
Mamhilad House,  
Mamhilad Park Estate,  
PONTYPOOL.  
NP4 0YP

Dr. A. Blake,  
Wye Valley Area of Outstanding Natural  
Beauty Office,  
Hadnock Road,  
Mayhill,  
MONMOUTH,  
Monmouthshire. NP25 3NG

K. Blackwell,  
Abergavenny Chamber of Commerce  
c/o Standby Secretarial Services,  
Nevill Street,  
ABERGAVENNY.  
Monmouthshire. NP7 5AA

A. Barnfarther,  
Chepstow Chamber of Commerce,  
Stuart House,  
The Back,  
CHEPSTOW,  
Monmouthshire.

H. Hodges,  
Chepstow Amenity Society,  
3 Mount Pleasant,  
CHEPSTOW,  
Monmouthshire.  
NP6 5PS

Mr. M. Morgan,  
The Open Spaces Society,  
2 Woodside,  
MONMOUTH,  
Monmouthshire.  
NP5 3RS

S. Hewitt,  
Forestry Authority,  
Victoria Terrace,  
ABERYSTWYTH.  
SY23 2DQ

T. Bevan,  
Monmouth Chamber of Commerce,  
c/o Singleton Court Business Centre,  
Wonastow Road,  
MONMOUTH,  
Monmouthshire.

S. Bayliss,  
Caldicot Chamber of Commerce,  
c/o Barclays bank,  
Beaufort Square,  
CHEPSTOW,  
Monmouthshire.  
NP6 5XL

N. Attewell,  
Usk Chamber of Commerce,  
c/o Home Electrical Services,  
Bridge Street,  
USK,  
Monmouthshire.

Gwent Consultancy,  
Gwent House,  
Albany Street,  
NEWPORT.  
NP9 5GH

Janet Rawlings,  
Chepstow Friends of the Earth,  
14 The Paddock,  
CHEPSTOW,  
Monmouthshire.  
NP16 5BW

Barry Greenwood,  
Abergavenny Crickhowell Friends of the  
Earth,  
3 Cefn Pendegar,  
Old Monmouth Road,  
ABERGAVENNY,  
Monmouthshire. NP7 8BU

Brecon Beacons National Park Authority  
7 Glamorgan Street,  
BRECON,  
Powys.  
LD3 7DP

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## Glossary

Note: 1 An entry in this glossary is an interpretation of a word, term or phrase provided to assist a lay person reading the Strategy. For any legal definition the Guidance or the Act will be authoritative.

2 References to section numbers refer to sections within the Environmental Protection Act 1990.

A.O.N.B.	Area of Outstanding Natural Beauty
Appropriate Person	"Any person who is an appropriate person, determined in accordance with Section 78F ..., to bear responsibility for any thing which is to be done by way of remediation in any particular case".
Aquifer	A body of underground water
Brownfield Site	A site that has been generally abandoned or under-used where re-development is complicated by actual or perceived environmental contamination. Only a small proportion of brownfield sites will meet the definition of contaminated land.
Building	Any structure or erection and any part of a building including any part below ground, but not including plant or machinery within the building.
CADW	The Welsh Historic Monuments Executive Agency.
C.L.E.A.	Contaminated Land Exposure Assessment, a criteria for determining the risk of chronic human health effects.
Contaminant	A substance which is in, or under the land and which has the potential to cause harm or to cause pollution of controlled waters.
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	Defined in Section 79a(9) by reference to Part III of the Water Resources Act 1991, Section 104 and includes:  a) inland fresh waters (rivers 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.
County Council	Monmouthshire County Council.

Current Use:	Any use which is currently being made, or is likely to be made, of the land and which is consistent with any existing planning permission or is otherwise lawful under town and country planning legislation.
D.E.T.R.	Department of the Environment, Transport and the Regions (now Department of the Environment, Agricultural and Rural Affairs (D.E.F.R.A.))
E.A.	The Environment Agency.
Enforcing Authority	(a) in relation to a special site, the Environment Agency; (b) in relation to contaminated land other than a special site, the local authority in whose area the land is situated.
G.I.S.	Geographical Information System.
Groundwater	Any water contained in underground strata, wells or boreholes.
Harm	Defined in Section 78A(4) as: "harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property".
Hazard	A property (of a substance) or situation with the potential to do harm.
I.C.R.C.L.	Inter-departmental Committee on Remediation of Contaminated Land.
Intrusive Investigation	An investigation of land (for example by exploratory excavations) which involves actions going beyond simple visual inspection of the land, limited sampling or assessment of documentary information.
Local Agenda 21	A local action plan for sustainable development, developed as a response to the Agenda 21 document produced at the 1992 Rio Earth Summit.
Owner	A person (other than a mortgagee not in possession) who either in his own right or a trustee for any other person, is entitled to receive the rack rent of the land, or where the land is not let at a rack rent, would be so entitled if it were so let.
Part IIA	Part IIA of the Environmental Protection Act 1990.
Pathway	One or more routes or means by, or through which a receptor: (a) is being exposed to, or affected by, a contaminant, or (b) could be so exposed or affected.
Pollutant	A contaminant which forms part of a pollutant linkage.
Pollutant Linkage	The relationship between a contaminant (source), a pathway and a receptor.
Pollution of Controlled Waters	Defined in Section 78A(9) as "The entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter".
Possibility of Significant Harm	A measure of the probability, or frequency of the occurrence of circumstances which would lead to significant harm being caused.
Ramsar Site	A site protected under an international convention on protection of wetlands of international importance, especially as habitats for waterfowl.

Receptor	Sometimes referred to as "a target", being the health of a person, controlled waters, ecosystem or a property type that could be affected by contamination
Remediation	Generally the carrying out of works to prevent or minimise effects of contamination. In the case of this legislation the term also encompasses assessment of the condition of the land and subsequent monitoring of the land.
Risk	The combination of: (a) the probability, or frequency of occurrence of a defined hazard (for example, exposure to a property of a substance with the potential to cause harm) and (b) the magnitude (including the seriousness) of the consequences.
Risk Assessment	The study of (a) the probability, or frequency of a hazard occurring; and (b) the magnitude of the consequences.
Sustainable Development	Development which meets the need of the present generation without compromising the ability of future generations to meet their own needs.
S.A.C.	Special Area of Conservation.
Significant Harm	Any harm which is determined to be significant in accordance with the Guidance in Chapter 1, Part C.
Significant Pollutant	A pollutant which forms part of significant pollutant linkage.
Significant Pollutant Linkage	A pollutant linkage which forms the basis for a determination that a piece of land is contaminated land.
Significant Possibility of Significant Harm	A possibility of significant harm being caused which, by virtue of Section 78A(5), is determined to be significant in accordance with the statutory Guidance in Chapter 1, Part C.
S.N.I.F.F.E.R.	Scottish and Northern Ireland Forum for Environmental Research.
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.
Special Site	Defined by Section 73A(3) as "Any contaminated land ; (a) which has been designated as such a site by virtue of Section 78C(7) or 78D(6) ..., and (b) whose designation as such has not been terminated by the appropriate Agency under 78Q(4)..." (also see Appendix 1 ).
S.S.S.I.	Site of Special Scientific Interest.
Substance	Any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour.
W.A.G.	Welsh Assembly Government.