
TORFAEN COUNTY BOROUGH COUNCIL

Planning & Public Protection Service

Contaminated Land Inspection Strategy

June 2006
Version 5

EXECUTIVE SUMMARY

Part IIA of the Environmental Protection Act (EPA) 1990, as inserted by Section 57 of the Environment Act 1995, places a statutory duty on Torfaen County Borough Council to “cause its areas to be inspected from time to time for the purpose of identifying Contaminated Land”. Part IIA came into force in Wales on 1st July 2001 and represents a “new” regulatory framework for the identification and remediation of historically Contaminated Land. The Welsh Assembly Government has also issued Statutory Guidance for implementing the new Contaminated Land regime in Wales.

This Contaminated Land Inspection Strategy has been prepared by Torfaen County Borough Council to fulfil its legal obligations under Part IIA of the Environmental Protection Act 1990.

This Strategy document was formally adopted and published by the Council in October 2002 after which it was submitted to the Environment Agency Wales. It details the arrangements and procedures the Council will use to inspect potentially Contaminated Land in Torfaen and also provides a timescale over which the work will be conducted. The strategy lays out how the information gathered during the inspection process will be managed and provides for liaison with other organisations and communication with the wider community in order to achieve its aims.

With regard to the assessment of Contaminated Land, procedures are proposed with prioritisation to be given to the protection of human health. The strategy also describes work already done by the Council since the strategy was first published in 2002 and identifies areas of further work.

This current version of the strategy document was revised following changes in national legislation in 2006. The next major review of this strategy is due in October 2007.

DEFINITION OF CONTAMINATED LAND

The legal definition of Contaminated Land is provided in Section 78A(2) of Part IIA of the Environmental Protection Act 1990. It states:-

“Contaminated Land is any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that-

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

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GLOSSARY OF TERMS AND DEFINITIONS

ABBREVIATION	DEFINITION
Appropriate Person	Defined in section 78A(9) EPA 1990 as: “any person who is an appropriate person, determined in accordance with section 78F..., to bear responsibility for anything which is to be done by way of remediation in any particular case.”
Brownfield site	A site that has been generally abandoned or underused where redevelopment is complicated by actual or perceived environmental contamination. Only a small proportion of brownfield sites will meet the definition of contaminated land
Building	Any structure or erection, and any part of a building, including any part below ground, but not including plant or machinery comprised in a building.
CLEA	Contaminated Land Exposure Assessment, a methodology for carrying out a risk assessment. CLEA guidelines are specifically related to risk assessment for human health
Contaminant	A substance which is in, on 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	These include a) inland waters (river, streams, underground streams, canals, lakes and reservoirs) b) groundwaters (any water contained in underground strata, wells or boreholes) c) territorial waters (the sea within three miles of a baseline) d) coastal waters (the sea within the baseline up to the line of highest tide, and tidal waters up to the fresh water limit)
DETR	Department of the Environment, Transport and the Regions
DoE	Department of the Environment (Now superseded by DEFRA)
EAW	The Environment Agency Wales
Ecological system effect	Significant harm of a type listed in Table A of Appendix A
Eco-system	A biological system of interacting organisms and their physical environment
EPA 1990	The Environmental Protection Act 1990
GIS	Geographical Information System
Greenfield site	Undeveloped land in its original or natural state
Groundwater	Any water in underground strata, wells or boreholes
Harm	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.
Human health effect	Significant harm of a type listed in Table A of Appendix A
ICRCL	Interdepartmental Committee on Remediation of Contaminated Land
Pathway	One or more routes or means by which a receptor is a) being exposed to, or affected by, a contaminant, or b) could be so exposed or affected
Pollutant linkage	The relationship between a contaminant, a pathway and a receptor
Pollution of controlled waters	“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
Receptor	Either; a) a living organism, a group of living organisms, and ecological system or a place of property which i) is in a category listed in Table A (see Appendix A) as a type of receptor, and ii) is being, or could be, harmed by a contaminant or b) controlled waters that are being, or could be, polluted by a contaminant
Remediation	Generally accepted as being 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 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 of a person to a substance with the potential to cause harm: and b) the magnitude (including the seriousness of the consequences)
Significant Harm	Means any harm which is determined to be significant in accordance with harm defined in Table A (see Appendix A)
Significant pollutant linkage	A pollutant linkage that 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 is determined to be significant in accordance with the statutory guidance (see Appendix B)
Special site	Defined in the Contaminated Land (Wales) Regulations 2001 as; any contaminated land designated due to the presence of: <ul style="list-style-type: none"> • Waste acid tar lagoons • Oil refining • Explosives • Integrated pollution control sites • Nuclear sites
Substance	Any natural or artificial substance, whether in solid, liquid, gaseous or vapour form

CHAPTER 1

INTRODUCTION

On the 1st July 2001, Part IIA of the Environmental Protection Act (EPA) 1990 came into force introducing a new regime for the regulation of Contaminated Land in Wales. Its main purpose is to provide an improved system for the identification of land that is posing unacceptable risks to health or the environment, and for securing remediation where such risks cannot be controlled by other means. Local Authorities are the primary regulators for Part IIA and this Contaminated Land Inspection Strategy has been prepared by Torfaen County Borough Council to fulfil its legal obligations under these provisions. It details the arrangements and procedures that the Council will use to inspect land in Torfaen for contamination.

1. TORFAEN COUNTY BOROUGH COUNCIL'S MISSION & CORPORATE AIM

This document has been prepared within the context of the council's overall aims and policies.

The council's mission statement is:

"To improve the overall quality of life in Torfaen significantly and continually."

Further, the Planning & Public Protection Service's key aim is to:

"Significantly enhance and protect the built and natural environment, thus contributing to the increased health and wellbeing of all who live, work in, or visit the area. We will seek to ensure that all development is sustainable."

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

The council's approach to local government consistently emphasises the need to be open and accountable for its actions. This document is therefore made available to businesses developers and all interested sections of the community.

1.1 General Policy of Torfaen County Borough Council

The Contaminated Land Regime is a powerful tool in applying sustainable practices in land-use planning and the effective minimisation of pollution effects through the principles of risk assessment. As a result, significant environmental controls are now in place to prevent pollution occurring at source, and the contaminated land regulations aim to deal with pollution that has arisen from the unregulated industrial activities of the past.

The identification and remediation of contaminated land compliments several of Torfaen County Borough Council's corporate objectives:

- to promote sustainable development and the re-use of 'brownfield' sites
- to provide a clean and safe environment
- to improve the health and wellbeing of local people

Sustainable development underlies much of the rationale behind the contaminated land regime. Dealing with contaminated land effectively is an inherent part of sustainable practices and the existence of contaminated sites serves to highlight the UK's past failure to deal with land use in a sustainable manner. The council's urban regeneration policy is founded on sustainable practices and aims to ease the development pressure on greenfield sites. This acknowledges that such sites are a finite and important natural resource. By actively encouraging brownfield redevelopment and urban regeneration, contaminated sites will be redeveloped and contamination itself will be remediated to a standard that makes it suitable for its proposed end use.

The Welsh Assembly Government's Planning Guidance requires local authorities to re-use previously developed land for development in preference to greenfield sites, since in most cases, this will prove to be the more sustainable option. It is thought that the majority of contaminated land sites encountered within Torfaen will be dealt with through the development control process.

Torfaen County Borough Council's Unitary Development Plan (UDP) outlines those sites that have the potential for urban regeneration. Accordingly, certain UDP policies relate to the re-use of brownfield sites within Torfaen.

The Council presently incorporates a number of policies that recognise the inter-relation of the economy, the community and the environment. These are combined in the Local Agenda 21 Strategy. This broad agenda recognises the central idea of managing resources in such a way that in meeting today's needs, we do not compromise the ability of future generations to meet their needs.

1.2 Objectives of the Strategy Document

The following represent the key objectives of the Council with respect to this strategy document:

- to ensure that the requirements of the statutory guidance are met in producing and implementing the strategy;
- to ensure that a strategic approach is followed as set out in paragraph 2.9 of the statutory guidance;
- to inform all stakeholders of the Council's intentions;
- to provide information for the Environment Agency to carry out its report into Contaminated Land.

1.3 Objectives of the Council in Respect to Contaminated Land

The following represent the key objectives of the Council with regard to the management of Contaminated Land:

- to adopt a “rational, ordered and efficient approach” to its inspection strategy ensuring compliance with, and enforcement of the legislation;
- to adopt an ordered and prioritised way to deal with the legacy of Contaminated Land using a “suitable for use” approach;
- to ensure procedures are in place for public access to information, providing it does not breach confidentiality;
- to promote public consultation and liaison with local businesses, voluntary and community groups on an ongoing basis to encourage members of the public to work in partnership on issues pertaining to Contaminated Land;
- to avoid the problem of “blight” in relation to Contaminated Land by ensuring that redevelopment of sites taking place in the County Borough deals effectively with any land contamination, and that procedures are in place for the provision of information to developers and the public;
- to encourage the development of brown field sites;
- to promote voluntary remediation by the original polluter;
- to address the liability issues associated with the Councils existing and past ownership of land.

1.4 Regulatory Context

The regulation of Contaminated Land has been under development since the early 1990's. Consultation on the Government's 1993 White Paper entitled "Paying for our Past" aimed to gain "preliminary conclusions" by looking at a series of seven issues related to Contaminated Land. These were primarily concerned with Government policy objectives, the Statutory framework, relationship with common law, identification of people liable for clean up, strict liability, the role of public sector bodies and providing markets with information. In November 1994 the Government announced the outcome of the consultation exercise, a report entitled "The Framework for Contaminated Land". This policy document sets out the broad future strategy for dealing with Contaminated Land principles including the "suitable for use" approach and prioritisation for the most urgent cases.

Part IIA of the EPA 1990, as inserted by Section 57 of the Environment Act 1995, places a statutory duty on Torfaen County Borough Council to:

"cause its areas to be inspected from time to time
for the purpose of identifying Contaminated Land"

Part IIA came into force in Wales on 1st July 2001 and represents a "new" regulatory framework for the identification and remediation of historically Contaminated Land. The Secretary of State for Wales has also issued Statutory Guidance for implementing the new regime in Wales - (*National Assembly for Wales Statutory Guidance on Contaminated Land, November 2001*).

This guidance requires the Council to adopt a "strategic approach" in inspecting their land and to describe and publish this in a written strategy by 1st October 2002.

Central Government has stated aims and objectives for this new regime, which are:

- to identify and remove unacceptable risks to human health and the environment;
- to seek to bring damaged land back into beneficial use and;
- to seek to ensure that the cost burdens faced by individuals, companies and society as a whole are proportionate, manageable and economically sustainable.

(Annex 1, para. 26, DETR Circular 02/2000)

These objectives underlie the "suitable for use" approach towards the remediation of Contaminated Land, which the Government considers the most appropriate approach to achieving sustainable development in this field.

The regime for Contaminated Land is set out in the Environmental Protection Act 1990, Part IIA, Sections 78A to 78YC. The provisions of the Act are supplemented by the Contaminated Land (Wales) Regulations 2001 (SI 2001, No. 2197 (W.157)), DETR Circular 02/2000 and National Assembly for Wales Statutory Guidance to Enforcing Authorities in Relation to the Implementation of Part IIA of the EPA 1990 (November 2001).

1.4.1 **The Role of Torfaen County Borough Council**

The prime regulatory role under Part IIA of the Environmental Protection Act 1990 rests with Local Authorities as they have well established responsibilities for enforcing statutory nuisance provisions in relation to land contamination and acting as lead authorities on land use planning.

Torfaen County Borough Council has the following roles under this new regime:

1. to cause its area to be inspected to identify Contaminated Land;
2. to determine whether any particular site is Contaminated Land in accordance with the statutory definition;
3. to act as the enforcing authority for all Contaminated Land which is not designated as a “special site” (the Environment Agency will be the enforcing authority for special sites).

As an enforcing authority, the Council has four main tasks concerning areas of Contaminated Land found within Torfaen:

1. to establish who should bear responsibility for the remediation of the land (the “appropriate person” or persons);
2. to decide, after consultation, what remediation is required in any individual case and to ensure that such remediation takes place, either through agreement with the appropriate person(s) or by serving a remediation notice on the appropriate person(s) if agreement is not possible or, in certain circumstances, through carrying out the works themselves;
3. where a remediation notice is served, or where the Council itself carries out the work, to determine who should bear what proportion of the liability for meeting the costs of the work;
4. to record certain prescribed information about its regulatory actions on a public register.

Torfaen County Borough Council was also required to produce and publish a strategy document by October 2002, detailing how it will deal with Contaminated Land in its area. The Council is also required to keep this written strategy under periodic review.

(Chapter 2. Para's 2.11-2.12, National Assembly for Wales Statutory Guidance on Contaminated Land).

In developing its strategic approach, Torfaen County Borough Council consulted the Environment Agency and other appropriate public authorities, such as the Welsh Development Agency, Countryside Council for Wales, and Cadw. Once published, a copy of the strategy was sent to the Environment Agency.

1.4.2 The Role of the Environment Agency

The Environment Agency have four principle roles with respect to Contaminated Land under Part IIA of the EPA 1990. These roles are:

- to assist local authorities in their contaminated land work, particularly in cases where water pollution is involved;
- to provide site-specific guidance to local authorities on Contaminated Land;
- to act as the “Enforcing Authority” for any land designated as a special site (the descriptions of land which are required to be designated in this way are prescribed in regulation 2 of the Contaminated Land (Wales) Regulations 2001); and
- to publish periodic reports on Contaminated Land.

In addition to the above, the Agency can also make an important contribution to the inspection of land, including (1) the provision of information, (2) provision of specific advice where it has particular expertise (i.e. in relation to the pollution of controlled waters) and (3) inspection of land on behalf of the Council, which if it were to be determined as Contaminated Land is anticipated to be designated as a Special Site.

The Environment Agency has inherited the Contaminated Land Research Programme previously run by the Department of the Environment. The Environment Agency will continue to carry out technical research and, in conjunction with the Department of the Environment, Food and Rural Affairs (DEFRA), publish scientific and technical advice.

1.4.3 Liaison between Torfaen County Borough Council and The Environment Agency

Torfaen County Borough Council will consult with the Environment Agency Wales on the preparation of this strategy document.

Both the Council and the Agency are committed to liaise fully with each other to ensure that the requirements of this strategy are met.

The Council will use the SOCL forms provided by the Environment Agency for use in the collation of information for the ‘State of Contaminated Land Report’.

1.5 **Definition of Contaminated Land**

The legal definition of Contaminated Land is provided in Section 78A(2) of Part IIA of the Environmental Protection Act 1990. It states:-

“Contaminated Land is any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that-

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

Section 78A(5) requires the Local Authority to act in accordance with guidance issued by the National Assembly for Wales (now the Welsh Assembly Government) in determining significance and likelihood.

The assessment of “significant harm” is subject to further guidance and is referred to 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”.

(EPA 1990, S. 78A (4))

Harm is only considered significant if it is of a specific type outlined in the National Assembly for Wales Statutory Guidance Document, Chapter 1, Table A. This table is reproduced in this document in Appendices Two and Three.

1.6 Pollutant Linkages

For a site to meet the statutory definition of Contaminated Land, a Pollutant linkage must be established. A pollutant linkage consists of three parts:

1. SOURCE – A source of contamination may be considered as a “substance which is in, on or under land that has the potential to cause harm to one or more receptors or to cause pollution of controlled waters.”
2. PATHWAY – A pathway may be considered as “one or more routes by, or through, which a receptor is being, or could be, exposed to or affected by a contaminant. Typical pathways may include migration in ground water, surface water run-off or infiltration, inhalation, dermal contact and ingestion”.
3. RECEPTOR – A receptor can be considered as either “a living organism, a group of living organisms, an ecological system or a piece of property which..... is being, or could be harmed, by a contaminant or controlled waters which are being, or could be, polluted by a contaminant.”

Therefore a pathway for contamination must be shown to exist between a source of contamination and a receptor. This relationship is fundamental to the risk-based approach for dealing with Contaminated Land.

1.7 Risk Assessment

Current best practice in the UK promotes a risk based approach to dealing with both soil and groundwater contamination. The principal aim of the approach is to ensure protection of human health and the environment in a thorough, transparent and cost-effective manner.

The risks posed by an identified pollutant linkage can often be mitigated by removing the source of contamination, treating the source of contamination, blocking the relevant pathway(s) or by protecting the receptor.

The widely recognised approach to risk assessment is a four stage process, namely:

- Hazard Identification (which contaminants are important);
- Exposure Assessment (where do the contaminants go, who might be exposed and how);
- Toxicity Assessment (determining numerical indices of toxicity for evaluating risk);
- Risk Assessment (estimating the magnitude of risk and the uncertainty of the estimate).

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

1.8 Development of the Strategy

1.8.1 Environmental Health Team – Planning & Public Protection Service

The principal responsibility for the preparation of this Corporate Strategy Document, and for the implementation of subsequent actions including the identification, inspection and securing the remediation of Contaminated Land under Part IIA of the Environmental Protection Act 1990, lies with the Environmental Health Team within the Planning & Public Protection Service.

Officers within the Environmental Health Team have delegated authority from the Council to undertake the necessary investigations, samples, and where appropriate, enforcement.

1.8.2 Contaminated Land Working Group

This Inspection Strategy is a corporate document and it is recognised that there are other sections of the council that have necessary skills, knowledge and information essential to ensure that the content of this strategy and its required actions are consistent with the advice contained with the Statutory Guidance.

The council has therefore set up a Contaminated Land Working Group. This group is made up of officers from Environmental Health, Development Control, Building Control, Regeneration Services and Legal Services.

1.9 The Strategic Approach

In accordance with the National Assembly for Wales Statutory Guidance, Torfaen County Borough Council has adopted a strategic approach to deal with Contaminated Land within its area. The statutory guidance states that this approach should:

- be rational, ordered and efficient;
- be proportionate to the seriousness of any actual or potential risk;
- seek to ensure that the most pressing and serious problems are located first;
- ensure that resources are concentrated on investigation in areas where the Council is most likely to identify Contaminated Land; and

- ensure that the Local Authority efficiently identifies requirements for the detailed inspection of particular areas of land.

(National Assembly for Wales Guidance, Chapter 2, para, 2.9)

The strategic approach adopted by Torfaen County Borough Council will also reflect local circumstances.

The Contaminated Land Working Group plays a major role in ensuring this strategic approach by overseeing the preparation and development of the strategy document as part of the consultative process by directing the implementation of the strategy and by co-ordinating actions with respect to council owned land.

Within the council there is also work being undertaken to identify ‘brownfield’ sites suitable for redevelopment to meet the Torfaen’s future housing need. Officers responsible for this work are liaising with the Environmental Health Team to identify links with land being investigated under this strategy and to ensure a consistent approach.

1.10 **Consultation in Preparation of This Strategy**

In addition to wide internal consultation both via the Contaminated Land Working Group and through other council departments, the following external organisations have been consulted on the preparation of this strategy:-

The Welsh Assembly Government
 The Environment Agency Wales
 The Welsh Development Agency
 The Countryside Council for Wales
 CADW
 The Food Standards Agency Wales
 Newport City Council
 Blaenau Gwent County Borough Council
 Monmouthshire County Council
 Caerphilly County Borough Council

Torfaen County Borough Council is committed to involving local people in its decision making processes and comments have been sought and taken into account from local residential and business communities.

1.11 **Objectives of the Strategy**

With the production of this document, Torfaen County Borough Council is fulfilling its statutory duty to prepare a Contaminated Land Inspection Strategy.

The document is a statement by the council of:

- the manner in which it intends to carry out its inspection responsibilities;
- the internal policies and procedures that it takes into account; and
- the internal and external arrangements that are in place.

These all contribute to demonstrate how the council will meet its statutory duty in accordance with the National Assembly for Wales' Statutory Guidance. The council is also required to provide information with regard to Contaminated Land in its area to the Environmental Agency Wales for inclusion in their periodic reports on Contaminated Land.

Chapter 3 of this document provides specific information on the aims and objectives of this Strategy Document.

CHAPTER 2

CHARACTERISTICS OF THE TORFAEN AREA

2. This Chapter describes the background to the County Borough of Torfaen and provides an explanation as to how the characteristics of the area influences the Council's approach to inspection for Contaminated Land, thus allowing for a fair comparison to be made between Councils that share similar local characteristics.

2.1 Geographical Location

Torfaen can be found just off the M4 in South East Wales and is the most eastern of Welsh valleys. The County Borough of Torfaen was established in 1996 following local government re-organisation and is the 15th largest unitary authority in Wales.

Torfaen County Borough is bounded by Monmouth County Council to the North and East, Newport City Council to the South, and by the County Borough Council's of Blaenau Gwent and Caerphilly to the West. (See figure 2.1)

2.2 Size and Population Distribution

Torfaen comprises a varied, 12 mile long valley from Blaenavon in the North to Cwmbran in the South and covers an area totalling 126 square kilometres thus making it the third smallest Council in Wales. It has an estimated population of 91,000 (2004 mid-year population estimates) which is made up of the three urban areas of Blaenavon (6,100); Pontypool (36,900) and Cwmbran (48,000). More than half of the County Borough's total population and housing stock are located in Cwmbran. The Council is made up of 25 wards and has a total housing stock of approximately 38,780.

2.3 Brief Description/History

The Afon Lwyd, or Grey River, was originally known as Torfaen which means 'stone breaker' and the term stems from the rapid and destructive power of this tributary of the river Usk. It is from this river that the County Borough derives its name.

The area's manufacturing reputation was established as early as the 16th Century when the Eastern Valley was renowned for its ironmaking, mines and tin-plate manufacture. The development of Blaenavon and Pontypool in particular was based upon the exploitation of iron and coal. As these industries declined, so too did the dependent valley communities. The challenge therefore for the north of the County Borough is to reverse the social and economic decline of the area through promoting its industrial heritage. Indeed, the 18th Century Iron Works at Blaenavon was awarded World Heritage Status in November 2000.

In contrast, Cwmbran in the south has been a focal point for growth since its designation as a 'new town' in 1949. Cwmbran is Wales' only new town and the sixth largest in the principality. The early to mid years of its evolution witnessed major housing developments and growth in population. The latter years of its development were characterised by industrial development and the promotion of the area as a key location for inward investors due to its M4 corridor location.

Cwmbran is home to some of today's most advanced electronics, automotive and engineering companies from the UK and overseas and the location of Torfaen with its excellent communications links are important factors in the area's continuing success.

2.4 Current Land Use Characteristics

The heavy industrial activities that characterised the area have now largely gone and are replaced by light manufacturing industries and the service sector. Numerous industrial and trading estates are present throughout the County Borough, the largest of which being:

- Gilchrist Thomas (Blaenavon)
- South Pontypool & Polo Grounds (New Inn)
- Mamhilad Park Estate (Pontypool)
- Springvale (Greenmeadow, Cwmbran)
- Court Road (Llantarnam, Cwmbran)
- Ty Coch (Ty Coch, Cwmbran)
- Llantarnam Park (Llantarnam, Cwmbran)

Noteable industrial premises that remain within the County Borough include:

- Doncasters plc, Blaenavon
- Trico Ltd, Pontypool
- Shanks Chemical Services Ltd, New Inn, Pontypool (formerly Rechem)
- Merritor HVBS, (formerly Girlings) Cwmbran
- Knauf Insulation Limited, Cwmbran (formerly Owens Corning Alcopor UK Ltd)
- Crane Process Flow Technology Ltd, Cwmbran (formerly Alfa Laval Saunders Ltd)

Cwmbran Town dominates the south of the County Borough and occupies the whole bowl of Afon Lwyd valley. It covers an area of approximately 3 square miles and has a pedestrianised town centre at the hub of the residential development.

2.5 **Torfaen County Borough Council Owned Land**

The Council owns various areas of land within the County Borough including housing estates, education sites, parks and open spaces as well as some areas of derelict land designated for economic development. Many such brownfield sites are known to be contaminated to varying degrees and will feature highly on the Council's priority list when strategy implementation begins.

Given its size, the County Borough has a relatively large Council housing stock. In 2001, 27% of the total housing stock in Torfaen (38,780) was rented from the Council or social landlord, compared to 19% for Wales overall.

2.6 **Current and Past Industrial History**

2.6.1 *South Torfaen*

Unlike most towns, Cwmbran did not grow slowly or haphazardly over a long period of time. Its creation came about after the New Towns Act of 1949 and in less than fifty years, a scattering of small villages has been transformed into a busy town of over 50,000 people.

Brought into being to overcome shortage of housing in South Wales after the 1939-45 war, Cwmbran now covers the whole bowl of the Afon Llwyd Valley, in size approximately three miles square. At the hub of the residential development, a pedestrianised Town Centre has been built, with shops, offices, theatre, library, bus station and free parking for 3,500 cars. The Afon Llwyd runs from North to South through Cwmbran and for much of its length a pleasant green area has been preserved for public use as parkland, school grounds and recreational areas. Viewed from the surrounding hills, the town presents a pleasant prospect, with many trees to distract the eye from its industrial estates and a variety of architectural styles to soften its angular shopping centre.

Cwmbran takes its name, "Valley of the Crow", from one of the original villages which had its own thriving shopping centre before the new town was created. The Afon Llwyd (Grey River) has for long carried the main lines of communication between the port of Newport and the industrial towns in the northern part of the valley. Two railways, a canal and the river itself were obstacles to be crossed in linking the different parts of the new town, while the only main road ran through the village of Croesyceiliog.

Fifty years ago then, this was a largely rural area of rich farm land set between Mynydd Maen (458m) to the west and rolling hills to the east, with a population of about 8,000. There was already a range of industries around Cwmbran, with many people travelling daily to work in factories and engineering works and the prospects seemed good for continued high employment and for further development.

Industrial activity in this area has a long history, for coal was being dug from outcrops along the western mountain in the late 17th Century and the Forge Hammer forge was built in about 1800. By then, the problem of transporting heavy goods from the hinterland of Monmouthshire had been solved by the building of the canal between 1792 and 1796.

New industries were sited beside it and tramways were built to link it to established works. For fifty years, the Monmouthshire Canal played an important part in the valley's prosperity, but the coming of the railways saw its decline. The first line between Newport and Pontypool was opened in 1852. Both coal and iron industries were then thriving and the latter half of the 19th Century saw Cwmbran's fortunes in good health.

Tinplate works, brick works, chemical works and a new deep coal pit at Upper Cwmbran were just some of the industries which gave employment for hundreds of men.

However, the twenties and thirties saw much hardship, with the closure of Cwmbran Colliery and workers being laid off at GKN and other local works. It was the needs of war that brought new life to industry and paved the way for the creation of Cwmbran as we know it today.

The Cwmbran Development Corporation was given the task of constructing the New Town. Its first priority was to build houses, both for works who were making long daily journeys to their jobs near Cwmbran and for the employees of the Corporation, some of whom moved from other parts of Britain.

Roads now not only link all parts of the town, but new through-routes have been built on the eastern and western sides, the latter along the line of one of the former railways. A new railway station on the remaining (South Wales to Hereford) line serves the town, and the canal, once in danger of being obliterated, is now being developed for leisure use.

The town centre is now owned by Prudential Assurance and is almost completely roofed-over. Along the western by-pass, out-of-town stores have been built and on the site of the former GKN works is the Springvale Industrial Estate.

Though the valley is now home to thousands more people than it was fifty years ago and although the former scattered villages between Newport and Pontypool have become part of an urban area, each one retains some of its earlier individuality.

2.6.2 *North Torfaen*

The source of the Afon Lwyd is near the hamlet of Garn-yr-erw on a peaty moorland plateau at an altitude of nearly 1,500 feet. In the late 18th Century, the only inhabitants to be found in this lonely spot at the head of the Afon Llwyd, were scattered sheep farms. All this was to change when three entrepreneurs; Thomas Hopkins from Staffordshire, Thomas Hill and Benjamin Pratt from Worcestershire appeared on the scene.

They realised that the surrounding hills contained all the raw materials necessary for iron making i.e. ironstone, coal (for coking) and limestone which meant that this would be an ideal location to establish an industrial undertaking.

They leased 12,000 acres of land from the Earl of Abergavenny and spent £40,000 on the construction of an ironworks. In 1790 the first two furnaces started producing pig iron which was initially transported to Newport by mule.

Six years later the Monmouthshire Canal was opened between Newport and Pontnewynydd. This was then linked with the Blaenavon Ironworks by a six mile tram road.

By 1800 a small town with one thousand inhabitants had developed close to the ironworks, which also continued to expand. Within the next ten years it boasted a bank of five furnaces capable of producing over 10,000 tons of pig iron per year. In 1812 a forge was established at Garnddyrys on the south side of the Bloreng, and a new tramroad constructed to enable the iron to be transported via Llanfoist Wharf on the Brecon and Abergavenny Canal where the toll rates were more favourable.

The Napoleonic Wars created a need for heavy artillery and cannonballs, which caused the demand for iron to soar and during that period a considerable number of pits and levels were opened up in the vicinity of Blaenavon to enable large quantities of ironstone and coal to be extracted. But the ironworks still provided the main source of employment and it was not until the second half of the 19th Century that coal mining replaced it in importance. In due course the Blaenavon Iron and Coal Company was operating sixteen collieries as well as their ironworks.

In 1860 the original ironworks at North Street was superseded by a new plant on the other side of the valley at Forgeside where a small, virtually self-contained, village grew up around the new ironworks. Here there was more room for expansion and the new plant was linked by steam railway to Pontypool and Newport. The old tramroad/canal system which had provided good service for fifty years immediately became obsolete.

It was at Forgeside that Sydney Gilchrist Thomas and his cousin Percy Carlyle Gilchrist conducted experiments that made it possible to use phosphoric ores in the basic steel-making process, which revolutionised production, particularly in Germany and America.

Blaenavon's days of ironmaking ceased when the local ore supplies became exhausted and the establishment of steelworks near the coast relied on imported ores. The last furnace at Forgeside was dismantled in 1938.

In recent years the landscape to the north of the town has been recognised as an industrial heritage site of international importance where the history of the ironmaking process has been well preserved. In November 2000, the 18th Century ironworks was awarded world heritage status.

A substantial ironworks was also built at Abersychan for the manufacture of Merchant bars and it became known as the British Ironworks, remaining in production until 1876.

The history of transport in this valley is particularly fascinating and at Talywaun a very fine viaduct, built on a gentle curve, by the railway engineer, John Gardner, provides a fine memorial to the Pontypool to Blaenavon Railway which was opened in 1854 by the Monmouthshire Railway Company, as an extension of their line from Newport.

Pontypool is situated at the surprising altitude of 450 feet above sea level and it appears wedged into the bottom of a steep valley.

Its history goes back much further than Blaenavon, for in Norman times it was known as Le Pool and no doubt takes its existing name from a bridge that was built in early times over the Afon Llwyd.

Ironmaking was first carried out here on a small scale in 1425 but the town became an important industrial centre in the 16th Century when Richard Hanbury came here from Worcester to exploit the mineral wealth of this area.

The Hanbury family were the first major ironmasters in South Wales and they played a very important part in the history and development of this town. Capel Hanbury built Pontypool Park House in 1690-1720 and it was extended in 1779-1861.

Major John Hanbury (1664-1734) was the pioneer of the tinsplating industry and the rolling mill was invented by his agent Thomas Cooke who came from Stourbridge. This was an important development which replaced the labour-intensive process of manually hammering out wrought-iron bars into sheets.

Thomas Allgood, a Northampton man, who was employed as manager of the Pontymoel works discovered a durable and inexpensive method of applying lacquer to tinplate. The process was later developed by his son Edward, who set up a business in Trosnant to produce Pontypool Japanned ware in 1732. Snuff boxes and trays decorated in gold formed the main part of the early production and it was not long before Pontypool became world famous for its Japan ware. Archdeacon Coxe, who came here in 1799 even ventured to prophesy that Pontypool would soon become a second Birmingham.

Pontypool Park is certainly an excellent facility for the town and over the years it has been the venue for many remarkable festivities. These have included celebrations for the Golden Jubilee of Queen Victoria in 1887, tightrope walking by the famous Blondin and the National Eistedfodd of Wales was held there in 1924.

2.7 Protected Locations

Torfaen County Borough Council's biodiversity includes a wide range of habitats and species, many of which are protected. The following summary gives a brief overview of the range of site designations and also identifies specific sites within the Torfaen area.

2.7.1 Quality of Historic Built Environment

There are 5 Conservation Areas within the County Borough:

- Blaenavon Town Centre (area 17ha/170063sqm)
- Cwmavon (area 19.38ha/193813sqm)
- Pontypool Town Centre (area 9.61ha/96063sqm)
- Upper Cwmbran (area 15.97ha/159688sqm)
- Llantarnam (area 29.38ha/299250sqm)

Additionally there are:

- 199 listed buildings
- 15 Scheduled Ancient Monuments
- 2 Landscapes, Parks and Gardens of Special Historic Interest in Wales
- 1 Inclusion on Consultation Register of Landscapes of Historic Interest in Wales
- 1 World Heritage Site
- 105 Tree Preservation Orders

2.7.2 **Quality of Landscapes and Natural Habitat**

There is considerable diversity within the County Borough in terms of landscape and ecology, ranging from open moorland and ancient woodland to species-rich lowland grassland.

This diversity is encompassed within a number of statutory and non-statutory designations in the Torfaen Local Plan.

Number of National statutory designations

- 3 Sites of Special Scientific Interest (SSSI's) - Bloreng, Llandegfedd Reservoir, Henllys Bog, designated through the provisions of the Wildlife and Countryside Act 1981 due to outstanding nature conservation value.

Number of non-statutory designations

- 2 Green Spaces - (areas of open countryside designated to prevent coalescence of settlements)
- 4 Special Landscape Areas - (areas of high quality landscape value)

2.8 **Key Water Resource/Protection Issues**

The water and utility company Dwr Cymru provide the majority of the County Borough's public water supply. The Council is responsible for the monitoring and inspection of 80 private water supplies with the majority of these located around the rural periphery of the County Borough.

The Environment Agency Wales has identified a Groundwater Source Protection Zone (SPZ) within the County Borough. SPZs are areas over which recharge is captured by an abstraction borehole. SPZs 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 1 – Inner Protection Zone
- Zone 2 – Outer Protection Zone
- Zone 3 – Total Catchment

In addition, a fourth zone, a ‘Zone of Special Interest’ may also be defined.

The ‘Pinhay Spring’ SPZ is located at the southern most tip of the County Borough in Croes-y-mwyalch, Llantarnam. Only a small proportion of this SPZ falls within the Torfaen area as the majority lies within the administrative boundaries of Newport City Council, to the east of Malpas. Special consideration will be given for the protection of groundwater where a contaminative use is operational in this area.

2.9 **Known Information on Contamination**

Particular areas of the County Borough have been historically linked with industrial usage such as coal extraction and iron and steel production. There are also areas of land that are known to be old landfill sites, both commercial and domestic. A handful of gas works are also present throughout the Torfaen area.

A lot of information relating to land contamination within Torfaen has been documented through the development control process. Site specific investigations land quality reports are often required as a planning condition in areas where there is knowledge of previous contaminating uses. Any remedial measures required are then detailed and kept on file for future reference. Examination of planning files will therefore form an integral part of the Contaminated Land inspection process.

The presence of heavy industries within the Blaenavon, Pontypool and Cwmbran areas of the County Borough has led to large areas of made ground containing a variety of elevated concentrations of metals and hydrocarbons. The specific location of many of these areas are known to the Council and the majority of these will be addressed through the development control process.

Information currently held does not suggest that these sites are ‘Contaminated’ in accordance with the statutory definition and therefore will not warrant action under the Part IIA regime. However, it is important to note that such sites may well be determined as Contaminated at a later date as new information comes to light and/or to reflect amendments to statutory guidance.

2.10 **Broad Geological and Hydrogeological Characteristics**

The Torfaen area is characterised by a variety of landscapes which are greatly influenced by their underlying geology. The county lies on the eastern side of the South Wales coalfield which roughly forms a bowl shape. The rock units of the Coal Measures series tend to outcrop in north-south running bands along the eastern edge of this bowl.

The youngest rock units lie on the west side of the county and pass from the Pennant Sandstones of the Upper Coal Measures to the interbedded mudstones, siltstones and coal seams of the Middle and Lower Coal Measures. The Carboniferous Limestone lies between the Coal Measures and the older mudstones of Devonian and Silurian age to the east.

Overlying the majority of the area are Quaternary deposits consisting mainly of Till or Boulder Clay which is generally a yellow/grey sandy clay containing clasts ranging in size from gravels to boulders. In general, the boulder clay grades into glacial sands and gravels towards the valley bottoms. Areas of peat often occur at higher levels while the valley floors often contain alluvium deposited by rivers.

In terms of the broad hydrogeological characteristics of these strata, most of the county lies on minor aquifers, although the Carboniferous Limestone is classed as a 'major aquifer'. Although, in places, glacial clays may afford protection to the underlying aquifers, large areas of both the major and minor aquifers are classified by the Environment Agency as being of 'high vulnerability to pollution' due to the shallow and/or coarse textured nature of the overlying soils. Refer to Groundwater Vulnerability 1:100,000 MapSeries Sheet 36 - Gwent, South & Mid Glamorgan). The British Geological Survey (BGS) geological, groundwater vulnerability and soil maps also provide useful reference material.

Torfaen has only one river, the Afon Llwyd, that flows for 12 miles from North to South through the County Borough and eventually joins the river Usk just South of Ponthir in Caerleon.

2.11 Redevelopment History and Controls

The Council has always encouraged the development of brownfield sites wherever practicable and used planning conditions to ensure that an appropriate assessment is carried out to identify possible contamination.

There has also traditionally been close collaboration between the Environmental Protection and Planning Control Services. This close working relationship will be strengthened with the implementation of the Part IIA regime.

2.12 Action Already Taken to Deal With Contaminated Land

There are several sites within the County Borough with have a history of contaminative uses that have since been remediated to a standard that makes them suitable for use. Specific examples include the Riverside Housing Development in Pontypool and the Coed Camlas Housing Development in New Inn. Prior to development, the sites were not suitable for use due to underlying hotspots of inorganic contaminants. Close liaison with the developers, consultants and the Council through the planning process provided for a remediation scheme to be drawn up which served to minimise the risks to site workers and the eventual residents of the land.

In other cases, problems of land contamination have been addressed through economic development initiatives. Examples being the Gilchrist Thomas and Abersychan Industrial Estates which were built on previously contaminated land.

CHAPTER 3

THE TORFAEN COUNTY BOROUGH COUNCIL INSPECTION STRATEGY: OVERALL AIMS

3. The overall aim of Torfaen County Borough Council with regard to Contaminated Land is to protect human health, prevent harm to the environment and ensure that land contamination within its area is dealt with satisfactorily.

3.1 **Torfaen County Borough Council's Priorities**

The Council will prioritise inspection of areas according to the degree of potential contamination present and sensitivity of identified receptors. Prioritisation is biased towards the protection of human health and a risk-based methodology will be adopted when assessing the acquired information.

A prioritised list of the Council's aims can be set out as follows.

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

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

3.2 **Work already undertaken by the Council**

The council has already undertaken a significant amount of work in preparation for the implementation of the new regime. In 2003, The Department for the Environment purchased a series of historic land use data sets from Landmark Information Group. The information is held in a format which is entirely compatible with the Authority's Geographical Information System (GIS) and has allowed the Department to identify those areas of land that have a history of contaminative land uses. A database was subsequently developed to store this information.

3.2.1 Information Collection

Digitised historical OS maps covering the County Borough of Torfaen have been purchased from Landmark Information Group Ltd in order to enable historic land uses to be identified. The identification of historical activity was initially identified from paper maps, which was extremely time consuming.

Further research has also been carried out in the form of consulting the local Record Office and in drawing upon the local knowledge of well established members of the community to assess additional information about potentially contaminated sites.

3.2.2 Geographical Information System

The Council currently uses the GDC Plan Web software package. This system is compatible with digital OS mapping and, when obtained, will allow data to be stored in a series of 'layers'. Areas of potential contamination from historical land use can then be highlighted by drawing a polygon and basic information can also be added such as location and name of the works. Copious quantities of paper-based records were accrued by the council during the 1990's and has provided the basis for the information in existence today. All of this geographical data has now been transposed into the GIS system once the digital OS maps.

3.2.3 Land Use Database

A land use database using Microsoft Access has been developed to store information relating to potentially contaminating sites within the County Borough. Details about the site can be added to the system such as the nature of the process carried out there, descriptions of former land uses, dates of operation and ownership. Records of pollution incidents and results of sampling exercises can also be easily entered onto the database for each site.

Amendments of additions to the database are only carried out by trained personnel so as to ensure that important information is not inadvertently lost. Other Departments within the council will be able to request information from the database through a liaison procedure to be established within the council.

3.3 Torfaen County Borough Council Targets

When this strategy document was initially published in 2002, the council aimed to complete the assessment of all potentially contaminated land over a five year period (April 2003 – March 2008), however due to staffing issues and a lack of dedicated resources, this timetable has been reviewed to better reflect the Council's capabilities. The latest version of the timetable is provided in Chapter 4. To date, of the 1800 potential contaminated sites initially identified, 800 have been risk assessed. This assessment is ongoing and will involve carrying out further research into potential sites and reviewing information as and when it becomes available as described in Chapter 7.

3.4 Objectives and Milestones

The council will set out its strategic approach in accordance with paragraphs 2.9 and 2.10 of the National Assembly for Wales statutory guidance.

3.4.1 Assessment of land for which Torfaen County Borough Council may be the ‘appropriate person’.

These are areas within the County Borough that the Council may have responsibility for under Part IIA EPA 1990. Such land may fall into the following categories:

- Land with sensitive uses, e.g. schools and allotments
- Problem sites owned or inherited by the Council that may have been linked to waste management or industrial usage
- Land for which the Council may no longer be the landowner, but may have been partly responsible for an historical activity that has caused potential contamination.

The Council recognises that the assessment of land for which Torfaen County Borough Council may be the ‘appropriate person’ is an important part of the development of the strategy, and is important for public confidence that Council owned land investigation is clearly documented within the process. The Council, within the inspection strategy, will examine internal records to establish areas of land for which the Council may be responsible for, both currently, and in the past. This has been allocated to run alongside the inspection works and will be an ongoing exercise.

It is considered appropriate that these types of sites are subjected to investigation (and if necessary, remediation) as a priority, this follows the Council’s general approach to ‘putting its own house in order’ before expecting others to following suit.

Furthermore, the Council will not assess its own land any differently to other land within the County Borough.

3.4.2 Evidence of Actual Harm or Water Pollution Collated and Reviewed

Actual harm will be determined with reference to Tables A and B as shown in Appendices 3 and 4 taken from the National Assembly for Wales Statutory Guidance Chapter 1, Part C. These tables detail categories of significant harm and also what constitutes significant possibility of significant harm.

The council will as part of its inspection process assess each potential site for water pollution with reference to ground water vulnerability issues. The Council intends to liaise closely with the Environmental Agency Wales on this matter. If the Council is made aware of harm or water pollution issues, it will have regard to procedures set out in Chapter 5 and to the definitions of significant harm shown in Appendices 3 and 4.

3.4.3 **Identification of Receptors Outlined in Table A (Appendix 3)**

A 'receptor layer' on the GIS system has been established to show all receptors outlined in Appendix 3.

This allows layers of contaminants and receptors to be superimposed to identify possible links between the two. This information is maintained and amended by officers within the Environmental Health Team.

3.4.4 **Assessment of Risk to Identified Receptors**

The risk to receptors is assessed within a risk prioritisation model. This prioritises the level of risk in relation to the type of receptor. The council will bias the risk prioritisation model towards the protection of human health.

In recent years the Interdepartmental Committee on the Remediation of Contaminated Land (ICRCL) Guidance has provided trigger values for certain contaminants. These values are based on concentration levels for soils below which there is presumed insignificant risk to human health and other receptors, and above which there may be a requirement for some form of remediation. It should be noted that the ICRCL Guidelines are no longer appropriate for use and have been formally withdrawn.

The new Contaminated Land Report (CLR) series of guidance documents (CLR 7-10) & Soil Guideline Values (SGVs) & Toxicological (TOX) series provide regulators, developers, landowners and other interested parties with relevant, appropriate, authoritative and scientifically based information and advice on the assessment of risks arising from the presence of contamination in soils. These will be used by the Council in conjunction with the 'Contaminated Land Exposure Assessment (CLEA) 2002 software.

The CLR reports are to be regarded as 'relevant information' to assist in the assessment of 'relevant and available evidence' and for the purposes of paragraphs 1.31, 2.39, 2.44, 2.47 and 3.21 of the National Assembly for Wales Statutory Guidance.

Prior to the use of the said guideline values, due consideration shall be given to determining whether the risk assessment criteria and pathways used to derive the guideline values are appropriate for individual site specific conceptual models. An appropriate site specific risk assessment shall be undertaken where necessary.

3.4.5 Information on Possible Presence of Contamination Evaluated

Many potential sources of contamination have been highlighted from the historical mapping exercise. The council has adopted a risk scoring exercise for sites of former industrial land use using classifications in the Department of the Environment (DoE) Industry Profiles. This will allow the Environmental Health Team to prioritise areas for inspection.

Once these risk scores have been assigned for all areas of potentially contaminated land within the County Borough, the GIS system will be able to highlight the possible location of the most harmful contamination.

3.4.6 Liaison and Information Exchange

-Internally

Council personnel will be kept informed of progress on the inspection strategy by regular review meetings and internal progress meetings which are already established and will continue on a regular basis throughout the implementation of the strategy.

-With Other Parties

External consultees will normally be contacted by telephone or letter. Liaison with the Environment Agency Wales will have regard to the Memorandum of Understanding for Information Exchange.

3.4.7 Justification for Inspection of Particular Areas

Areas of contamination will be prioritised having regard to the Council's risk scoring system and the risk assessment model. Greatest regard will be had for the protection of human health. Local Authority owned land will also feature highly on the priority list.

3.4.8 Assumptions and Inspection Priorities Checked at Appropriate Intervals

The risk assessment model and the risk scoring system will be reviewed on a six monthly basis to take into account any new information that the Council has been provided with or acquired which is relevant to a site. This will ensure that the council continues to update the prioritisation of sites requiring inspection on an ongoing basis.

CHAPTER 4

PRIORITY ACTIONS AND TIMESCALES

4. This chapter seeks to outline the specific intentions of the council regarding prioritising activities and implementing timescales. The proposed approach has been developed having regard to Chapter 1,2 and 3 of this strategy.

4.1 **Priorities**

The Council will prioritise, within the proposed timetable (Fig 4.1), those activities which are necessary in order to meet the requirements of the statutory guidance.

Procedures will be focussed on identified potential pollutant linkages or sensitive exposures, on areas where there may be problems, and where there are gaps in information. The inspection strategy is biased towards the protection of human health and will concentrate resources where a receptor is likely to be affected. Chapter 3, Paragraph 3.1, provides further information on this issue.

The development and implementation of this strategy is an interactive process. It is therefore likely that priorities will change as the council's knowledge and understanding of the scale of the problem increases through information acquisition. Similarly new objectives may be identified.

4.2 **Timescales**

The Statutory Guidance issued by the National Assembly for Wales (now the Welsh Assembly Government) does not detail how quickly the work concerning the identification and remediation of Contaminated Land should be undertaken other than requiring that the strategy document is to be published before October 2002. It does however require each Local 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 work and regulatory action work as indicated in Figure 4.1.

This inspection timetable sets out a framework for the overall inspection of the Council's area in assessing potentially Contaminated Land. In developing this timetable, the Council has attempted to specify reasonable targets for completing the preliminary inspection of its area, inspecting priority 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.

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

The Council also recognises that alongside this timetable, action may commence on urgent sites brought to the 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 of causing significant harm. Resources channelled into the investigation and assessment of these sites may create delays in the general inspection programme.

The Council aims to cover the assessment of the entire County Borough area over an eight year period (April 2003 – March 2010), and will continue to assess the area on a rolling five year programme. This assessment will involve carrying out further research into potential sites and reviewing information as and when it becomes available.

Figure 4.1 Torfaen County Borough Council Inspection Timetable

	OBJECTIVE	TIMESCALE
1.	Internal Consultation Exercise on Draft Inspection Strategy	May-June 2002
2.	Draft Inspection Strategy Published	September 2002
3.	Formal Consultation on Inspection Strategy, i.e. Environment Agency, other public bodies, businesses and residential community	September 2002
4.	Adoption and Publication of Inspection Strategy	Prior to 1 st October 2002
5.	Contaminated Land Register brought into use	October 2002
6.	<ul style="list-style-type: none"> • Process of collating and recording information on a computer Geographical Information System (GIS); • Database development to enable risk assessment model to be utilised; • Develop and complete risk scoring system for potentially contaminated sites; • Compile current land use (receptor) layer; • Run risk assessment model to prioritise sites for inspection. 	October 2002 to April 2003
7.	Review of programme and review of Council's timetable for inspection.	April 2003
8.	Initial 8 year inspection of the Authority area as prioritised by the risk assessment model.	April 2003 to March 2010
9.	Annual review of programme and where necessary, revise and publish Council timetable for inspection.	October 2003, 2004, 2005 etc
10.	Re-inspection of County Borough area (on a rolling programme of five years)	July 2010 to June 2015

CHAPTER 5

PROCEDURES

5.1 Internal Management Arrangements for Inspection and Identification

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

5.1.1 Environmental Health Team

As previously stated, the overall responsibility for the preparation of this corporate strategy document, and for the implementation of subsequent actions including the identification, inspection and securing the remediation of Contaminated Land lies with the Environmental Health Team within the Planning & Public Protection Service.

Officers within the Environmental Health Team have delegated authority from the Council to undertake the necessary investigations, samples and, where appropriate, enforcement. Enforcement action will be undertaken in accordance with the Planning & Public Protection Service's Enforcement Policy and in line with the Enforcement Concordat that the Council has subscribed to.

5.1.2 Development Control and Building Control Services

Development Control and Building Control Sections with the Council will be responsible for ensuring that developers of brownfield sites submit a land quality assessment report in relation to the land in question. Such reports will be considered and discussed internally by the Contaminated Land Working Group in order to assess whether any remediation schemes and/or control measures are appropriate.

The Development Control and Building Control Sections hold records and planning histories for the County Borough on paper and microfiche. Both sections will be consulted for site specific information by the Environmental Health Team as and when necessary.

5.1.3 Legal Services

Legal services will be consulted for advice regarding liabilities for remediation, identification of landowners and the content and service of remediation notices. Legal services will be involved in the decision making process from the outset if any site is likely to be designated Contaminated Land.

5.1.4 **Elected Members**

Following consultation and revisions from the consultation process, the Strategy Document was reported to the Council's Executive Member to the then Department for the Environment for approval and adoption by the Council.

Elected Members will be informed at the earliest opportunity of any plans to designate an area of Council-owned land, or land where the Council is the "appropriate person", as Contaminated Land.

Specifically, where such land is determined to be Contaminated Land, the responsibilities and liabilities of the Council will be reported to the Executive Member of the appropriate Department.

5.2 **Considering Torfaen County Borough Council's Interests in Land**

As outlined in Chapter 3, paragraph 3.4.1, the council wishes to be open and transparent in its approach to considering land that it owns and for which it may be responsible. Such areas of land will be assessed on the same basis as other land within the County Borough. Land currently owned by the Council is recorded on a GIS system and maintained by the Asset Management and Valuation Section of the Council. Additionally, some historic details of ownership are held on a paper based system. Current ownership details will be constantly reviewed to reflect any changes that become apparent. These details will continue to be maintained by the Asset Management and Valuation Section.

Significant amounts of this land comprise former landfill and industrial sites and are generally used for informal recreation. In addition to this land, there may also be land no longer in the ownership of the Council, but for which the Council will be considered to be the 'appropriate person'.

All these land holdings will be assessed in accordance with the priorities outlined in Chapter 3 and 4 of this strategy. The Contaminated Land Working Group, by involving all appropriate sections of the Council, will ensure that the Council fulfils its responsibilities as owner and 'appropriate person' for these land holdings. The group will oversee the identification and assessment of potentially Contaminated Land and ensure satisfactory remediation where it is determined to be contaminated.

5.3 **Information Collection**

The Environmental Health Team will need to access and receive information from a wide range of sources to assist in the identification and investigation of potentially Contaminated Land. The Council's own files and records will also need to be assimilated. All information stored electronically will be subject to quality control procedures to ensure that the information has been faithfully reproduced.

Chapter 9 details how this information will be managed and disclosed under the provisions of the Environmental Information Regulations 1992.

5.4 Information and Complaints

5.4.1 Dealing with Requests for Information

Environmental Health Officers within the Environmental Health Team will be the designated contact point within the Council for dealing with all information concerning Contaminated Land within Torfaen.

The Council will respond to general requests for information and will provide historical details of sites, and where information is unavailable as to the actual contaminants on the site, it will provide a standard text adopted from DoE Industry Profiles giving a list of likely contaminants that may be present on a site with a history of a particular usage.

A minimum charge may be made for information required in writing, providing the information is not deemed “confidential”.

5.4.2 Complaints

A complaint received by the Council regarding Contaminated Land will be dealt with following the same procedure as currently used by the Environmental Health Team to deal with statutory nuisance complaints.

All complainants may expect:

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

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

1. Proof of viable pollutant linkage before any formal designation, as “Contaminated Land” is permissible. This may only be possible with detailed investigation.
2. Prior consultation with interested parties before designation as Contaminated Land.
3. A minimum of a three-month period between designation and serving of a remediation notice.

4. The requirement for the enforcing authority to make every effort to identify the original polluter of the land (or Class A person).

The Contaminated Land (Wales) Regulations 2001 allows conditions (2) and (3) to be waived in extreme cases, but not conditions (1) and (4).

5.4.3 **Complaints of an Urgent Nature**

Complaints of an urgent nature i.e. cases where there is believed to be an imminent risk to public health or a serious risk of pollution to the environment, will be dealt with outside of the general prioritisation programme. In such circumstances a site investigation will be undertaken without delay, involving the Councils existing emergency 'out of hours service' where necessary.

The emergency investigation will continue until such time that the immediate risks have been adequately controlled. The matter will then continue to be investigated using standard operational procedures.

5.4.4 **Confidentiality**

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

5.4.5 **Anonymously Supplied Information**

The council does not normally undertake any investigation based on anonymously supplied information, and this general policy will be adopted for Contaminated Land issues. This policy does not, however, preclude investigation of an anonymous complaint in exceptional circumstances, i.e. where a pollutant linkage is thought likely to exist.

5.4.6 **Anecdotal Evidence**

Anecdotal evidence can be very important to a project of this kind and is useful for information that may not be documented elsewhere. However, a determination of Contaminated Land cannot and will not be made on this information alone. In all cases, officers of the Environmental Health Team will apply knowledge and experience to decide what, if any, further investigation is required following a complaint or provision of information.

5.5 Information Evaluation

5.5.1 Risk Assessment

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

5.5.2 CLEA Guidelines

The new Contaminated Land Report (CLR) series of guidance documents (CLR 7-10) & Soil Guideline Values (SGVs) & Toxicological (TOX) series provide regulators, developers, landowners and other interested parties with relevant, appropriate, authoritative and scientifically based information and advice on the assessment of risks arising from the presence of contamination in soils. These will be used by the Council in conjunction with the 'Contaminated Land Exposure Assessment (CLEA) 2002 software which was recently published by DEFRA. The Council will evaluate all information against these guidelines.

The CLR reports are to be regarded as 'relevant information' to assist in the assessment of 'relevant and available evidence' and for the purposes of paragraphs 1.31, 2.39, 2.44, 2.47 and 3.21 of the National Assembly for Wales Statutory Guidance.

Prior to the use of the said guideline values, due consideration shall be given to determining whether the risk assessment criteria and pathways used to derive the guideline values are appropriate for individual site specific conceptual models. An appropriate site specific risk assessment shall be undertaken where necessary.

Interdepartmental Committee on the Redevelopment of Contaminated Land (ICRCL) 59/83 - Guidance on the Assessment and Redevelopment of Contaminated Land, 2nd Edition, July 1987 are no longer appropriate for use and have been withdrawn.

5.5.3 Risk Assessment for Other Substances

Risk assessments may also be required for substances not covered by the CLR guidance documents. In these cases, reference may be made to occupational exposure levels issued by the Health and Safety Executive or other authoritative sources of information, such as guidelines adopted in other Countries. If such guidelines are referred to, it will be important to bear in mind the significant difference in remediation standards between the UK and the respective countries.

5.5.4 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 the “Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources”.

(EA R&D Publication 20, 1999).

Additionally, the ‘ConSim’ Groundwater model expands on the guidance contained within Environment Agency’s R&D publication 20 for issues of groundwater contamination.

5.5.5 Effectiveness of Other Regimes in Preventing or Dealing with Contamination

There are other regulatory actions that can be utilised to deal with land contamination. Overlaps with planning, water pollution and Integrated Pollution Prevention and Control (IPPC) legislation are considered the most important.

a) Statutory Nuisance

Until the implementation of Part IIA, the statutory nuisance system under Part III of the EPA 1990 was the main regulatory mechanism for dealing with Contaminated Land. The statutory nuisance regime will continue to apply to deposits of substances on land that give offence to human senses, i.e. odours, so as to constitute a nuisance. The exclusion of the statutory nuisance regime to Part IIA applies only to harm (as defined in section 78 A(4) EPA 1990) and the pollution of controlled waters (National Assembly for Wales Statutory Guidance). The investigation of statutory nuisance issues will be conducted by Environmental Health Officers within the Environmental Health Team.

b) Planning Regimes

The vast majority of Contaminated Land issues are currently addressed through the planning regime, where contamination is a material consideration. Planning Guidance (Wales) May 1996, and the associated Technical Advice Note (Wales) 20 provides the basis for land contamination and development control in the Principality.

Whilst the introduction of Part IIA will undoubtedly lead to the need for additional sites to be addressed, it is anticipated that redevelopment of brownfield sites along with the necessary planning controls will remain the primary mechanism for dealing with contaminated land in the County Borough. Furthermore, any remediation scheme agreed as a planning condition will be dealt with under planning controls and not under Part IIA.

The Environmental Health Team works closely with Development Control and Building Control on all issues relating to pollution and the current arrangements for intra-departmental consultation are believed to be sufficiently robust to encompass contaminated land issues.

The Planning policies adopted by the Council define the controls imposed upon developers of brownfield sites. Essentially these controls are in place to ensure that the level of remediation on contaminated land is sufficient so as to protect likely end users and the environment. Obviously this approach is in concert with the ‘suitable for use’ principle which the UK has subscribed to. Paragraph 5.1.2 of Chapter 5 provides further information on this process.

c) Waste Management

The principal legislation used to control the UK’s waste management regime is contained in Part II of the Environmental Protection Act 1990. The waste management functions of the council include the collection and disposal of municipal waste, recycling schemes, the provision of civic amenity sites and the management of waste minimisation initiatives. The Council is also responsible for the maintenance of four former landfill sites. Landfill gas and leachate are routinely monitored and the results from this existing programme will complement the data gathering exercises under Part IIA.

d) Water Pollution

The Water Resources Act 1991 provides the Environment Agency with the statutory power to deal with harm to controlled waters caused by land contamination. Whilst Part IIA does not revoke these powers, DEFRA have indicated that such problems should now be dealt with under the new Contaminated Land Regime. The following steps will be taken by the Council:

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

e) Integrated Pollution Prevention and Control (IPPC)

The provisions of Part 1 of the Environmental Protection Act 1990 controls polluting processes and seeks to protect all environmental media. New IPPC legislation came into force in 1999 and has introduced additional controls that requires both new and existing process operators to be held responsible for the condition of their land both during and following the closure of the process. Here, site operators are required to undertake a site condition survey prior to receiving a permit to operate. If the site condition is such that areas of the land meet the definition of Contaminated Land, then the submission of a site survey may trigger action under Part IIA.

Clearly, the information collected through IPPC applications will supplement the database of information concerning the condition of land within the County Borough. However, IPPC legislation does state that where a contaminant is already subject to IPPC control, it cannot also constitute Contaminated Land under Part IIA. Some existing processes within the County Borough will be brought under this legislation in stages over the next seven years, although it will apply to any new processes or any existing processes that are subject to a substantial change immediately.

CHAPTER 6

LIAISON AND COMMUNICATION PROCEDURES

6. This Chapter highlights liaison within the Council concerning the implementation of Part IIA and also for contact outside the council with other statutory bodies, owners, occupiers, other interested parties and also the wider community. This Chapter largely complements the procedures outlined in Chapter 5 for obtaining information from others, and specifically focuses on the way in which the Council will provide information to other parties.

6.1 Internal Liaison and communication

As stated previously, the primary responsibility for contaminated land management rests with the Environmental Health Team. This Team will deal with all enquiries from interested parties whether the enquiry be internal or external. The contact point within the Council for contact with other statutory bodies, owners, occupiers and other interested parties, and the wider community will be:

Mr Richard Marshall
Senior Environmental Health Officer
Torfaen County Borough Council
Planning & Public Protection Service
County Hall
Cwmbran
Torfaen
NP44 2WN

Telephone: 01633 648560
Fax : 01633 648062

All information relating to Contaminated Land will be held and dealt with by the Public Health Team. They will be responsible for maintaining the Contaminated Land Public Register, designating land as Contaminated Land and carrying out the inspection stage of the strategy implementation.

As detailed in previous chapters, the Council has set-up a Contaminated Land Working Group to facilitate liaison and communication within the Council. Many of the participants within this group hold information within their own divisions/sections and have contributed to the preparation of this strategy and/or will assist in its implementation.

There have been a series of progress meetings within the Council for relevant personnel to discuss issues arising concerning Contaminated Land and formulating a common approach for the Council's strategy document. These meetings have continued now that the strategy is published to aid information exchange between departments, divisions and sections.

6.2 Liaison with other Statutory Bodies

At the local level, the Environment Agency Wales has nominated 'Area Contacts' within their Contaminated Land Team who will be the first point of contact for the Council. The Agency's contact details for the South Wales area are as follows:

The Area Contaminated Land Officer
Environment Agency Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

Tel: 08708 506 506
Fax: 02920 798555
www.environment-agency.gov.uk

The Environment Agency Wales are the primary contact for the Council for issues relating to Contaminated Land and there will be considerable opportunity for liaison with the Agency because of their complementary role to that of the Council. The Agency has been specifically consulted with regard to the content of this strategy.

Liaison with other statutory bodies and external organisations is also important for maintaining communications and keeping up-to-date with the most current information available. Chapter 1, Paragraph 1.9 details the consultee list for the strategy.

6.3 Communication with Owners, Occupiers and Other Interested Parties

Torfaen County Borough Council's approach to its regulatory functions is to seek voluntary action before taking enforcement action. This approach will be adopted for issues of land contamination. Such a policy requires effective communication with owners, occupiers and other interested parties. The Contaminated Land Officer within the Council will be the central contact point on Contaminated Land Issues and will work to keep owners, occupiers and other interested parties informed at each stage of an investigation.

6.3.1 Owners, Occupiers and Appropriate Persons

Where the Council is investigating any land, the owners and occupiers of that particular land will be contacted at the earliest stage not only to ensure that they are aware of the Council's interest but also to encourage their co-operation and exchange further relevant information. Details that owners and occupiers may be able to provide could include the names of other persons or organisations having an interest in the land; information about any known contamination, its source and the persons responsible for it; any existing proposals that may be under consideration for the land.

Owners and occupiers will also be advised of the Council's statutory role with respect to the contaminated land regime. Where it is considered necessary for a site inspection, as referred to in Chapter 7, the reasons for the inspection will be provided to the owners and occupiers of the land. If such an inspection is undertaken using statutory powers of entry then owners and occupiers of land will be advised of this. Owners and occupiers will be advised of the outcome of any inspection or intrusive investigation, and the result of any subsequent risk assessment.

Owners and occupiers will also be informed of the outcome of the Council's research to identify the appropriate persons who are liable for causing, or knowingly permitting, pollutants to be present. When identified, appropriate persons will be advised of the investigation process previously undertaken. Where the investigations lead to a determination that the land is contaminated land then the owners, occupiers and appropriate persons will be formally notified in writing of this decision and will be provided with a copy of the risk assessment on which the decision is based.

In line with the National Assembly for Wales statutory guidance, the Council will be encouraging voluntary remediation of contaminated land before resorting to any necessary statutory action. Voluntary remediation is also encouraged by legislation as any resultant materials requiring disposal to landfill will be exempt from landfill tax.

Voluntary remediation will necessitate continuing effective communication with all parties to achieve a satisfactory outcome.

6.4 Risk Communication

The Council recognises that there are certain issues with regard to Contaminated Land Management that are likely to generate a significant amount of community interest, including:-

- concerns over health effects (particularly for vulnerable people)
- economic and property effects (especially the threat of blight)
- environmental impacts arising from remediation and any associated development.

Decisions about contaminated land are not made on a purely technical basis.

There will be a variety of regulatory, commercial, financial, legal and societal factors which also affect how any particular contaminated site will be dealt with. In addition, land contamination is not just of relevance to the person who owns it.

Land, its use and condition, plays an important role in the community. A wide range of interested parties and other stakeholders, including those in 6.3 above will have concerns about contaminated land. Their views, opinions, understanding, expectations, and priorities will vary and may conflict. This means that decisions about contaminated land can be complex and often include the need to resolve conflicting views. Decisions about contaminated land, whether to take remedial action and how best to implement remediation, can affect many people. It is important that any decisions about contaminated land are defensible and transparent. The Council acknowledges that community acceptance of decisions is very important if contaminated sites are to be managed successfully and effectively.

Because the wider community may be affected by the condition of the land within its area, it needs to be informed about any risks, which are thought to exist from contamination. In addition, the 'suitable for use' approach contained within the Part IIA Regime may not provide the level of clean-up to meet public expectation.

To assist the Council in addressing these issues it will have regard to the advice and guidance contained within, "Communicating Understanding of Contaminated Land Risks", published by SNIFFER (the Scottish and Northern Ireland Forum for Environmental Research).

The Council will aim to:

- establish early dialogue
- listen to community concerns and respond sensitively
- be effective and transparent in communication by explaining the more complex and technical aspects.
- take care to explain terminology with which the general public may be unfamiliar
- make appropriate use of visual aids to assist understanding and provide raw data where helpful

CHAPTER 7

PROGRAMME FOR INSPECTION

7. Previous chapters of this strategy have described the approach that the Council will adopt in identifying areas and sites where there is potential for contamination to arise. The aim of this chapter is to outline the approach that the Council intends to adopt in carrying out detailed inspections of sites and thereby complying with paragraphs 2.18 to 2.25 of the National Assembly for Wales guidance which sets out criteria for ‘Inspecting Particular Areas of Land’.

As discussed in Chapters 3 and 4, these inspections will be prioritised to ensure that sites are inspected according to the outcome of the risk prioritisation methodology – i.e. high risk sites first. The timetable for the inspection programme is given in Figure 4.1 of Chapter 4.

7.1 Arrangements for Carrying out Detailed Inspection

The earlier processes within this strategy will assist the Council to identify land where there is a possible pollutant linkage. A detailed inspection of the land will then be necessary.

7.1.1 Purpose and Rationale

The aim of the detailed inspection of potentially Contaminated Land is to provide answers to the following questions;

- is the land or site contaminated as defined by Part IIA legislation?
- does the land fall within the definition of a special site, and therefore become the responsibility of the Environment Agency Wales?

In gathering information to allow an assessment to be made, the Council will use a number of approaches:

- the collection and review of documentary information – including the information described in Chapters 2,3 and 5 of this strategy.
- a visit to the site concerned to complete a visual inspection and gather evidence of the actual presence or absence of pollution. This may include an initial sampling of surface deposits or water that appears visibly contaminated.
- an intrusive investigation of the land. This would be a limited study, the aim being solely to determine if contamination is present and to identify the presence or absence of contaminant pathways that would allow a decision to be made.

In making a decision, the Council need only satisfy itself that there is a ‘reasonable possibility’ that a pollutant linkage exists. If at any stage the Council establishes that a pollutant linkage does not exist they need not proceed onto the next stage.

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

- British Standard 10175 : 2000 - Investigation of potentially contaminated sites
- A Framework for Assessing the Impact of Contaminated Land. Contaminated Land in Groundwater and Surface Water. Contaminated Land Research Report (CLR1)
- Guidance on Preliminary Site Inspection of Contaminated Land. Contaminated Land Research Report (CLR2)
- Documentary Research on Industrial Sites. Contaminated Land Research Report (CLR3)
- Sampling Strategies for Contaminated Land. Contaminated Land Research Report (CLR4)
- Prioritisation and Categorisation Procedure for Sites which may be Contaminated. Contaminated Land Research Report (CLR6)
- Model Procedures for the Management of Contaminated Land. Contaminated Land Research Report (CLR11)

7.1.2 **Prioritisation of Sites**

The Council will adopt the approach outlined in the DETR Guidance Document: ‘Contaminated Land Research Report No.6 (CLR6)’, for the prioritisation of potentially contaminated sites.

This procedure is based on the assessment of hazards and their potential effects on receptors. The receptors are those listed in Appendix A of this strategy. The preliminary stage of the prioritisation process will be executed by way of a desktop study based upon known information on location and current use of the site. In light of any new information, the initial prioritisation assessment may need to be reviewed and the site re-categorised. The procedure identifies four possible ‘Priority Categories’ based upon the information inputted:

Priority Category 1 – the site is probably or certainly not suitable for its present use and environmental setting. Contaminants are probably or certainly present and are very likely to have an unacceptable impact on key targets. Urgent action needed in the short term.

Priority Category 2 – the site may not be suitable for its present use and environmental setting. Contaminants are probably or certainly present and are likely to have an unacceptable impact on key targets. Action may be needed in the medium term.

Priority Category 3 – the site is considered suitable for present use and environmental setting. The contaminants may be present but are unlikely to have an unacceptable

impact on key targets. Action is unlikely to be needed while the site remains in its present use and remains undisturbed.

Priority Category 4 – the site is considered suitable for its present use and environmental setting. Constraints may be present but are very unlikely to have an unacceptable impact on key targets. No action is needed while the site remains in its present use and remains undisturbed.

The CLR6 Guidance has been designed for use in the UK and can be used to assess all types of contaminated sites and all types of contaminant. CLR6 provides a relatively quick methodology to prioritise a large number of potentially contaminated sites.

Qualified officers within the Environmental Health Team will carry out this stage of the assessment process

7.2 **Site Specific Liaison**

In undertaking detailed site specific inspections, the Council will adopt an interactive approach of liaison and consultation with all the persons and agencies concerned.

7.2.1 **Consultation/Liaison with Site Owner/Occupier**

It is the intention of the Council to liaise with current site owners/occupiers at an early stage of the investigative process. In identifying the current owner/occupier the Council shall use local knowledge, local contacts through reference to directories and other sources of information, such as:

- UK Land Registry(www.landregistrydirect.gov.uk)
- Council Records
- Trade/Telephone Directories
- Local site visits

As part of initial contact with both owners and occupiers the Council will define its role under the regulations, outline the process of assessment and request specific details of the site. In order to maintain consistency, quality and an auditable record of the assessment process, information will be requested using a standard questionnaire. The scope of such a questionnaire is defined in Figure 7.1. This will either be forwarded to the site owner/occupier or completed through telephone interview.

Figure 7.1 Scope of Questionnaire

- Current owner details
- Current occupier details
- Previous occupier details
- Site Name
- Site Address
- Site Area
- Current Use
- Details of chemicals/processes contained on site
- Previous known uses for the site
- Any previous site investigations
- Drainage and any current discharge licences
- Distance to surface water courses
- Presence of ground water abstraction boreholes

The owner will also be asked to give ‘in-principle’ agreement for an on-site walkover inspection, however, if necessary the Council will exercise its statutory powers of entry (Section 108 (6) Environment Act 1995) to complete any inspections required.

Liaison with the site owner/occupier will continue throughout the assessment processes in a sensitive and confidential manner.

7.2.2 Consultation/Liaison with Statutory and other Bodies

Consultation with other bodies is also an important aspect of making a determination as to whether land is classed as Contaminated Land. It is likely that the process of consultation will begin with initial contacts being established followed by a further discussion as the assessment process continues and more specific details regarding contamination are known. It will ensure consistency in the assessment approach and give the Council access to up-to-date site specific information as well as guidance on the technical and scientific aspects of the environmental systems under consideration.

Prior to making a formal determination of Contaminated Land under Part IIA, the Council intends to request advice from the various consultees regarding the appropriateness of other statutory powers for dealing with identified circumstances.

As previously noted, in determining whether the land is Contaminated Land the Council will consider if the land is contaminated through:

- impacts on human health
- impacts on an Ecological System
- the pollution of controlled waters, and
- effects on the quality of land and or buildings

In assessing these impacts the Council will liaise with a number of agencies and bodies including:

- Environment Agency Wales
- Countryside Council for Wales
- Cadw
- Health and Safety Executive

7.3 **Inspection Methodology**

The key stages in the inspection process to be adopted by the Council are summarised in the following sections. At all stages, a review of the available information will be completed in order to make the determination as early as possible. This approach is particularly appropriate in order that interested parties are alerted at the earliest opportunity during the inspection process as to the status of the site.

7.3.1 **Stage I: Desk Study**

Objective:

To provide the Council with a preliminary understanding of the potential environmental and health risks, determine the need for further data collection and carry out the health and safety risk assessment prior to a site visit.

Description:

A desk based assessment of all available information relating to a site's history, geology, hydrogeology, and environmental setting, together with a site reconnaissance walkover visit to ascertain site status, neighbouring land use and access, etc. Information will be considered in terms of source-pathway-receptor linkages to formulate a conceptual model of the site and make an initial assessment as to the sites status under the statutory legislation. The consultees listed above will provide a significant amount of information, however, further documentary evidence will be required, as follows:

- Historical information (maps, photographs, etc) related to the site
- Industry profiles indicating likely contamination associated with the historic use
- Geology, hydrology and hydrogeology
- Past/Present use of adjacent land
- Information from previous investigations
- Service Information

Guidance documents to which the Council will have regard to during desk-based investigations shall include:

- CIRIA Special Publication 103, Volume III: Site Investigation and Assessment (1995)
- Documentary Research on Industrial Sites, DETR, 1994, (CLR3)

7.3.2 Stage 1: Site Walkover Visit

Objective:

To provide the Council with first hand indication of the likelihood of pollutant linkages and the local environmental setting, including the presence of contamination, pathways and sensitive local receptors. Liaison with the site owner and occupiers will take place prior to the site inspection, as indicated above.

Description:

The site visit will allow the opportunity to assess and identify the potential hazards present on the site in relation to the adjacent receptors and look for details of any evidence that suggests pollution and impacts on receptors is currently taking place. The walkover also provides opportunities to collect samples if appropriate and take an initial view of the feasibility and hazards associated with further investigation if this should be required.

Key observations will be recorded on a standard inspection form in order to ensure consistency between sites, maintain quality control and provide a transparent record of the assessment. In undertaking the site visit and visual inspection the Council will pay particular attention to the Health and Safety aspects of work on potentially contaminated sites.

The scope and key observations/activities associated with the walk-over survey shall include:

- Confirmation of previous categorisation of the site based on assumed source-pathway-receptor model
- Evidence of surface contamination
- Presence of contaminants entering and/or leaving the site
- Condition of surface waters and ponds
- Presence of drainage and discharges
- Signs of distressed vegetation
- Site use/chemicals/tanks
- Location and proximity of sensitive receptors
- Boundary conditions and the security of the site
- Potential site hazards such as cables, voids, etc

- Limited sampling of surface waters and potentially contaminated materials

Guidance documents to which the Council will have regard to during a site walkover survey shall include:

- CIRIA Special Publication 103, Volume III: Site Investigation and Assessment (1995)
- Guide on Preliminary Site Inspection of Contaminated Land, DETR, 1994, (CLR2)

7.3.3 Stage 1: Desk Study Report

The Council intends to produce a desk study report for each site considered. A site specific conceptual model will also be formulated and reviewed at this stage. A model reporting style will be developed having regard to current best practice documentation. A typical report format is presented in Figure 7.2

The collated desk study information will assist the Council to:

- make an assessment as to the likely presence of pollutant linkages, and thereby a determination as to whether the site is classified as Contaminated Land, or
- design further investigations to determine whether pollutant linkages exist, and
- design the health and safety plan associated with further on-site work.

Figure 7.2 Anticipated format of Desk Study Report

1.	Executive Summary
2.	Introduction
3.	Methodology
4.	Existing Site Details
5.	History and Usage of the Site and Adjacent Land
6.	Environmental Setting
	<ul style="list-style-type: none"> • Geology • Mining • Hydrogeology • Hydrology • Ecological Setting
7.	Hazard Assessment
8.	Discussions and Recommendations
9.	References
10.	Annendices

7.3.4 Stage 2: Intrusive Investigation

Objective:

To collect sufficient data to allow the Council to:

- confirm or otherwise the presence of or likelihood of one or more pollutants existing,
- enable an evaluation of the significance of harm posed by the linkage,
- make recommendations, where necessary, for cost effective remedial measures.

Description:

An intrusive investigation typically involves the use of trial pits, boreholes and other excavation methods to gather information that allows an assessment of the ground conditions and to collect samples for chemical analysis.

The design of the investigation is based on the previous stages of the inspection process. The information from Stage 1 influences the type, location, number and depth of investigation points, as well as determining the chemical contaminants for which the samples are analysed.

Overall, the intrusive investigation provides additional detail to determine whether;

- a hazard is present on the site, and
- if pollutant pathways exist which connect these hazards to the potential receptors identified.

The Council intends to ensure that the following key factors are considered prior to and during implementation of any intrusive investigation work:-

- Health and Safety Plan to protect site workers
- Careful design of sampling pattern, density and depth to optimise knowledge of contaminant distribution and behaviour and understanding of pollutant pathways,
- Consideration of geophysical techniques to increase confidence and target resources
- Analytical schedule designed to identify likely contaminants at levels appropriate to the risk assessment
- Quality Assurance/ Quality Control procedures to confirm the validity of procedures and data used in subsequent risk assessments.

Guidance documents to which the Council will have regard to during desk based investigations shall include:

- CIRIA Special Publication 103, Remedial Treatment for Contaminated Land Volume III: Site Investigation and Assessment (1995)
- Sampling Strategies for Contaminated Land, DETR, 1994, (CLR4)

- A Framework for Assessing the Impact of Contaminated Land on Groudwater and Surface Water, DETR, 1994, (CLR1)
- CIRIA Special Publication 111, Remedial Treatment for Contaminated Land Volume XI: Planning and Management (1995)

The Council intends to produce an interpretative report for each site considered. A model reporting style will be developed having regard to current best practice documentation. A typical report format is presented as Figure 7.3

Figure 7.3 Anticipated Format of Intrusive Investigation Report

1.	Executive Summary
2.	Introduction
3.	Site Details
4.	Scope of Works
5.	Results of Investigation
6.	Risk Assessment*
7.	Conclusions and Recommendations
8.	References
9.	Appendices
	* The Council intends to present the risk assessment information in the context of a robust, scientific and objective assessment of pollutant linkages and likelihood of receptor exposure. In doing so the Council shall have regard to current best industry practice.

7.4 Health and Safety

Health and Safety is a key issue at all stages of contaminated land site inspection and assessment. Local Authority staff and any contractors and consultants employed by the Council will be required to maintain strict Health and Safety standards. Before undertaking any field work – either site inspection of intrusive investigations – the potential risks to health and safety will be considered and a risk assessment undertaken to identify the potential hazards and precautions to mitigate those hazards.

In addition to Statutory legislation, guidance documents in respect of health and safety to which the Council will have regard to during desk based and intrusive investigative works shall include:

- CIRIA Report 132. A guide for safe working on contaminated sites (1996)
- HSE, Protection of workers and the general public during the development of contaminated land (1991)

7.5 Special Sites

Under the new contaminated land legislation, certain classes of contaminated land have been termed “special sites”. The classification as a special site depends on the previous history of the site and/or on the presence of pollution linkages that result in the pollution of controlled waters.

The Council will liaise closely with the Environment Agency Wales at all stages of the inspection process, and particularly during the site specific assessment. This on-going consultation will lead to an early indication of whether a site will be classed as a special site – i.e. that it is probable that pollution of controlled waters is being caused or is likely to be caused or the site falls within one of the categories of sites deemed to be special sites, see Figure 7.4. In this event, the Environment Agency Wales can inspect a potential special site on behalf of the Council, however, the Agency will not become the regulatory authority until after the site has been determined as Contaminated Land and then designated as a Special Site.

Figure 7.4 General Classification of Special Sites

- Water pollution cases (Wholesomeness of drinking water: Surface water classification criteria: Major aquifer)
- Industrial Cases (Waste acid tar lagoons: Oil refining: Explosives: Integrated Pollution Control sites: Nuclear sites)
- Defence Cases (Land used by visiting forces: Land comprising Ministry of Defence Estate)

The Contaminated Land (Wales) Regulations 2001 defines what would constitute a special site. Regulations 2 and 3 detail the conditions where contaminated land may be designated as a special site. Regulation 3 specifically details the circumstances where a contaminated land site impacting controlled waters may be designated as a special site under the Part IIA Regime. The Environment Agency document ‘Technical Advice to Third Parties on Pollution of Controlled Waters for Part IIA of the EPA 1990’ published in 2002, will provide an important reference tool for the Council when dealing with Potential Special Sites.

Having collated and made an assessment of available documentary information and prior to undertaking an inspection of potentially Contaminated Land, the Council will make an assessment of whether the area of land in question would be designated as a Special Site if it was found to be Contaminated Land. In the case of ‘potential Special Sites’ the Council will liaise with the Environment Agency Wales with the purpose of seeking the Agency to undertake the inspection work. Where the Agency accept this assessment, the Council intends to liaise closely with the Agency during the development of inspection works.

Where the Council determines that an area of land is Contaminated Land and may be a Special Site it shall seek the assessment of the Agency in accordance with Section 78C(3) Part IIA EPA 1990.

7.6 External Consultants and Contractors

In fulfilling its duties under Part IIA the Council may consider it necessary to use private sector consultancy or contracting services. When engaging such services that Council shall ensure that the person(s) providing the service have appropriate training, experience and resources commensurate to the service required. On this issue the Council shall have regard to guidance provided in 'CIRIA Special Publication 111, Remedial Treatment for Contaminated Land: Planning and Management', and other reference material considered appropriate.

7.7 Risk Communication

The Council will integrate risk communication into its overall strategy for the inspection of contaminated land and take into account current guidance (Risk Communication: A guide to Regulatory Practice, 1999, Inter-Departmental Liaison Group on Risk Assessment) in communicating with interested persons.

The current strategy document forms a key part of the Council's communication strategy, by detailing the process and measures that will be used in the inspection and classification of land. In addition, the consultation with interested parties described above, particularly site owners/occupiers, will further enhance the communication process.

The aim of the risk communication strategy will be to:

- raise awareness and understanding of the contaminated land issue without alarming the local population and business community
- improve the understanding of the inspection and risk assessment process
- enable the effective participation and/or representation of all the interested parties in the site specific process of inspection and assessment and in making decisions about how to manage risks
- inform and protect any community deemed to be at risk from a particular site through access restriction, notices, leafleting, press notices and other consultation mechanisms
- provide opportunities for feedback through open government initiatives, local meetings, etc.
- engender support from concerned interested parties for the effective implementation of any risk management decisions.

In seeking to ensure good risk communication, the Council shall have regard to the publication 'Communicating Understanding of Contaminated Land Risks Scotland and Northern Ireland Forum for Environmental Research 1999.

7.8 Frequency of inspection/review

The Council recognises that there is a need to periodically review the outcome of inspection decisions to ensure their validity. Triggers for re-inspection/review, are likely to be varied and could include:

- Receipt of new information from statutory bodies, landowners/occupiers, other relevant parties
- Introduction of new or revisions to existing legislation or guidance documentation
- Authorised/planned changes in land-usage
- Unplanned events (e.g. localised flooding/landslides, spillages) or changes in land use (e.g. persistent access by children)
- Reports of localised adverse health effects

The Council anticipates information from Third Parties being provided, in the majority of cases, in either written or anecdotal form. There is also the potential that information may be offered anonymously. However received, the Council intends to review such information within 7 working days with the purpose of making a determination as to whether it is likely to materially affect the adopted programme for inspection or give rise to land being considered as requiring urgent remedial action.

In addition to the above, the Council intends to review the risk ranking of sites/sub-area every 6 months to ensure that the most pressing and serious problems are being addressed in light of available information. As part of such a review the Council shall have regard to any legislation or guidelines introduced since the last review and make a determination regarding the impact it is likely to have on previously assessed land as well as ongoing and future assessments. The implications of such a review process may result in significant variations to programmed works and amendments to the published strategy.

CHAPTER 8

REVIEW MECHANISMS

8. Chapter 2, paragraphs 2.13 and 2.15 (x) of the National Assembly for Wales Statutory Guidance requires local authorities to keep their inspection strategies under review. There are no fixed timetables for the review process as this will vary from one Council to another depending upon circumstances. This chapter outlines the reasons for reviewing Torfaen County Borough Council's Inspection Strategy.

The Council needs to consider 2 main aspects:

- a) triggers for review of inspection decisions
- b) timetable for review of inspection strategy

8.1 Triggers for Review of Inspection Decisions

The following are triggers or events that may occur to present a more immediate issue, which may need addressing outside of the 'normal' strategy timetable:

- proposed changes in the use of surrounding land
- unplanned changes in the use of land (e.g. persistent trespassing)
- unplanned events (e.g. localised flooding, accidents, pollution incidents, spillages)
- reports of localised health effects which appear to relate to a particular area of land
- reports of unusual or abnormal site conditions received from third parties
- responding to information from other statutory bodies

(Technical Advice for Local Authorities, May 2001, Section 5.32)

These occurrences may trigger non-routine inspections to the general inspection framework and will run alongside the strategy timetable. The strategy timetable may then be revised at the following review meeting in light of any urgent action required.

8.2 Review of Inspection Strategy

The Council will review the inspection strategy to ensure that it represents an efficient use of resources and is effective in meeting the requirements of the legislation. The initial intention is to carry out a review of the inspection strategy against the targets and timescales detailed in Chapter 4 on an annual basis. The next major review of the strategy will take place in October 2007 (refer to Figure 4.1 of Chapter 4).

The purpose of the reviews is to assess the ongoing progress and any work being carried out at the time. The reviews will also re-examine the priorities laid out in case any investigations have brought a matter to attention as needing greater priority. The Council also recognises that reviews may be required in light of new information including:

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

If any of the above points require immediate action, a review meeting will be arranged for the Contaminated Land Working Group to discuss that particular point prior to the next scheduled review. Arranging these issues will be the responsibility of the Contaminated Land Officer and to whom issues requiring urgent attention must be addressed.

CHAPTER 9

INFORMATION MANAGEMENT

9. The Council already possesses a significant amount of information about land held in paper filing systems and in electronic form. It continues to receive information on a daily basis in a variety of formats with regard to land in its area. This chapter aims to demonstrate how the Council will manage information efficiently, and with appropriate access to information including arrangements for maintaining any necessary confidentiality.

Guidance on the storage and handling of data relating to Contaminated Land is presented in the Department of the Environment document 'Information Systems for Land Contamination – (CLR5)'. Which will be used as a reference source by the Council.

9.1 Contaminated Land Register

The Council is required to maintain a register concerning the land within the County Borough that has been formally designated as Contaminated Land. The register will be stored in an electronic format, although paper copies will be maintained by the Environmental Health Team who will ensure that information on the register is kept up-to-date and valid in accordance with the relevant legislation. Other Council departments will have access to the register through the Contaminated Land Officer and will be able to request information from the register in the usual manner.

9.1.1 Dealing with Outside Requests for Information

The register will be available Monday to Friday during normal office hours from the Environmental Health Team within the Planning & Public Protection Service located at:

County Hall
Floor 4
Cwmbran
Torfaen
NP44 2WN

Access to the register will be provided free to members of the public although a small charge will be made for each copy.

9.1.2 **Confidentiality of Information**

There are certain exclusions from the register of information that may affect National Security or issues of Commercial Confidentiality. These are detailed in sections 78(S) and 78(T) of the Part IIA EPA 1990.

9.2 **The Strategy Document**

The strategy document will be available for viewing at the offices of the Planning & Public Protection Service at County Hall, Cwmbran. The Service will also be open to receive applications for copies, subject to a reasonable charge. A copy of the strategy is also available on the Planning & Public Protection Service pages of the Council's website.

Revisions to the strategy document will be issued as and when is necessary. The Council will publish amendments on a periodic basis, copies of which will be forwarded to consultees and other interested parties.

9.3 **Provision of Information to the Environment Agency**

Both the Environment Agency Wales and the Council will hold information regarding contamination issues that may be classed as essential or beneficial to the other parties in fulfilling their respective functions. The Council and the Agency will use correspondence and exchange of information in accordance with the Memorandum of Understanding, Annex C, drawn up to provide a protocol for information exchange specifically related to contaminated land issues.

Furthermore, the Council will use the SOCL forms provided by the Environment Agency for use in the collation of information for the 'State of Contaminated Land' report.

9.4 **Database and Land Use Information**

The Council are in the process of developing a land use database to enable it to log all information received in a secure format that affords a robust audit trail. The Council will also regularly back-up the information on the database to safeguard against the loss of valuable information.

CHAPTER 10

OTHER SUPPORTING INFORMATION

10.1 Torfaen County Borough Council Contacts

The principal contact with respect to this strategy document and land contamination generally is the:

Richard Marshall
Senior Environmental Health Officer
Planning & Public Protection Service
County Hall
Cwmbran
NP44 2WN

Tel: 01633 648560

Fax: 01633 648062

E-mail: richard.marshall@torfaen.gov.uk

REFERENCES

1. Part IIA, Environmental Protection Act 1990
2. DETR. Contaminated Land Inspection strategies: Technical Advice for Local Authorities 2001
3. The National Assembly for Wales. Remediation of Contaminated Land 2001
4. The National Assembly for Wales. Environmental Protection, Wales. The Contaminated Land (Wales) Regulations 2001
5. The Environment Act 1995
6. The Environmental Information Regulations 1992
7. Planning Guidance (Wales) May 1996
8. The Environment Agency, LGA, DEFRA, CIEH. Local Authority Guide to the Application of Part IIA of the Environmental Protection Act 1990
9. WDA. The Remediation of Contaminated Land. 1993
10. SNIFFER. Report SR (97) IIF. Communicating Understanding of Contaminated Land Risks. 1999
11. DoE. CLR Report No.6: Prioritisation and categorisation procedure for sites which may be contaminated. 1995
12. DoE. CLR Report No.5: Information systems for land contamination. 1994
13. Construction Industry Research & Information Association (CIRIA) 078- Building on derelict land. 2001
14. DoE. Industry Profiles
15. Environment Agency. Policy and Practice for the Protection of Groundwater: Groundwater Vulnerability 1:100,000 Map Series
16. HMSO. British Regional Geology South Wales 1970
17. Countryside Council for Wales. Sites of Special scientific Interest 1:100,000 Map Series
18. Torfaen CBC. Countryside Strategy. 1998
19. Torfaen CBC. Landscape Strategy, Volume 1, November 2001
20. Torfaen CBC. Local Biodiversity Action Plan, Volume 1&2. August 2002

APPENDIX A

TABLE A – CATEGORIES OF SIGNIFICANT HARM

(Taken from National Assembly for Wales Statutory Guidance)

	Type of Receptor	Description of harm to that type of receptor that is to be regarded as significant harm
1	Human Beings	<p>Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive function.</p> <p>For these purposes, disease is to be taken to mean an unhealthy condition of the body or a part of it and can include, for example, cancer, liver dysfunction or extensive skin ailments. Mental dysfunction is included only insofar as it is attributable to the effects of a pollutant on the body of the person concerned.</p> <p>In this Chapter, this description of significant harm is referred to as a “human health effect”</p>
2	<p>Any ecological system, or living organism forming part of such a system, within a location which is:</p> <ul style="list-style-type: none"> • an area notified as an area of special scientific interest under section 28 of the Wildlife and Countryside Act 1981; • any land declared a national nature reserve under section 35 of that Act; • any area designated as a marine nature reserve under section 36 of that Act; • an Area of Special Protection for Birds, established under section 3 of that Act; • any European Site within the meaning of regulation 10 of the Conservation (Natural Habitats etc) Regulations 1994 (i.e. Special Areas of Conservation and Special Protection Areas); • any candidate Special Area of Conservation, potential Special Protection Area or listed Ramsar site; or • any nature reserve established under section 21 of the National 	<p>For <u>any</u> protected location:</p> <ul style="list-style-type: none"> • 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. <p>In addition, in the case of a protected location which is a European Site (or a candidate Special Area of Conservation or a potential Special Protection Area), harm which is incompatible with the favoured conservation status of natural habitats at that location or species typically found there.</p> <p>In determining what constitutes such harm, the local authority should have regard to the advice of the Countryside Council for Wales and to the requirements of the Conservation (Natural Habitats etc) Regulations 1994.</p> <p>In this Chapter, this description of significant harm is referred to as an “ecological system effect”.</p>

	Parks and Access to the Countryside Act 1949.	
	Type of Receptor	Description of harm to that type of receptor that is to be regarded as significant harm
3	<p>Property in the form of:</p> <ul style="list-style-type: none"> • crops, including timber; • produce grown domestically, or on allotments, for consumption; • livestock; • other owned or domesticated animals; • wild animals which are the subject of shooting or fishing rights. 	<p>For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage.</p> <p>The local authority should regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose. Food should be regarded as being no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a pollutant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss.</p> <p>In this Chapter, this description of significant harm is referred to as an “animal or crop effect”.</p>
4	<p>Property in the form of buildings.</p> <p>For this purpose, “building” means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building.</p>	<p>Structural failure. Substantial damage or substantial interference with any right of occupation.</p> <p>For this purpose, the local authority should regard substantial damage or substantial interference as occurring when any part of the building ceases to be capable of being used for the purpose for which it is or was intended.</p> <p>Additionally, in the case of a scheduled Ancient Monument, substantial damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.</p> <p>In this Chapter, this description as significant harm is referred to as a “building effect”.</p>

APPENDIX B

TABLE B – SIGNIFICANT POSSIBILITY OF SIGNIFICANT HARM

(Taken from National Assembly for Wales Statutory Guidance)

	Descriptions of Significant Harm (as defined in Table A)	Conditions For There Being A Significant Possibility of Significant Harm
1	<p>Human health effects arising from</p> <ul style="list-style-type: none"> • the intake of a contaminant, or • other direct bodily contact with a contaminant 	<p>If the amount of the pollutant in the pollutant linkage in question:</p> <ul style="list-style-type: none"> • which a human receptor in that linkage might take in, or • to which such a human might otherwise be exposed, as a result of the pathway in that linkage, would represent an unacceptable intake or direct bodily contact, assessed on the basis of relevant information on the toxicological properties of that pollutant. <p>Such an assessment should take into account:</p> <ul style="list-style-type: none"> • the likely total intake of, or exposure to, the substance or substances which form the pollutant, from all sources including that from the pollutant linkage in question; • the relative contribution of the pollutant linkage in question to the likely aggregate intake of, or exposure to, the relevant substance or substances; and • the duration of intake or exposure resulting from the pollutant linkage in question. <p>The question whether an intake or exposure is unacceptable is independent of the number of people who might experience or be affected by that intake or exposure.</p> <p>Toxicological properties should be taken to include carcinogenic, mutagenic, teratogenic, pathogenic, endocrine-disrupting and other similar properties.</p>

	Descriptions of Significant Harm (as defined in Table A)	Conditions For There Being A Significant Possibility of Significant Harm
2	All other human health effects (particularly by way of explosion or fire).	<p>If the probability, or frequency, of occurrence of significant harm of that description is unacceptable, assessed on the basis of relevant information concerning:</p> <ul style="list-style-type: none"> • that type of pollutant linkage, or • that type of significant harm arising from other causes <p>In making such an assessment, the local authority should take into account the levels of risk which have been judged unacceptable in other similar contexts and should give particular weight to cases where the pollutant linkage might cause significant harm which:</p> <ul style="list-style-type: none"> • would be irreversible or incapable of being treated; • would affect a substantial number of people' • would result from a single incident such as a fire or an explosion; or • would be likely to result from a short-term (that is, less than 24-hour) exposure to the pollutant
3	All ecological system effects	<p>If either:</p> <ul style="list-style-type: none"> • significant harm of that description is more likely than not to result from the pollutant linkage in question; or • there is a reasonable possibility of significant harm of that description being caused, and if that harm were to occur, it would result in such a degree of damage to features of special interest at the location in question that they would be beyond any practicable possibility of restoration <p>Any assessment made for these purposes should take into account relevant information for that type of pollutant linkage, particularly in relation to the ecotoxicological effects of the pollutant</p>
4	All animal and crop effects	<p>If significant harm of that description is more likely than not to result from the pollutant linkage in question, taking into account relevant information for that type of pollutant linkage, particularly in relation to the ecotoxicological effects of the pollutant</p>
5	All building effects	<p>If significant harm of that description is more likely than not to result from the pollutant linkage in question during the expected economic life of the building (or, in the case of a scheduled Ancient Monument, the foreseeable future), taking into account relevant information for that type of pollutant linkage.</p>

DISTRIBUTION OF THE STRATEGY

1. The Welsh Assembly Government
2. The Environment Agency Wales
3. The Welsh Development Agency
4. The Countryside Council for Wales
5. CADW
6. The Food Standards Agency Wales
7. Newport City Council
8. Blaenau Gwent County Borough Council
9. Monmouthshire County Council
10. Caerphilly County Borough Council