

# Environmental Health and Trading Standards Division Contaminated Land Strategy

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# BLAENAU GWENT COUNTY BOROUGH COUNCIL CONTAMINATED LAND STRATEGY

EXECUTIVE SUMMARY

- a source of contamination in, on or under land and which has the potential to cause significant harm or pollution to controlled waters;
- a pathway, the route by which the source is or is likely to cause significant harm to the receptor
- a receptor, such as people, livestock, property or controlled waters, that could be affected if exposed to the contaminant.

Once this significant pollutant linkage is established the local authority will be responsible for ensuring that a suitable level of remediation is completed on the land concerned. In areas of land defined as special sites the contaminated land would be passed to the Environment Agency for their enforcement.

Blaenau Gwent County Borough Council has a long history of heavy industry, including coal and mineral extraction and iron and steel manufacture. These industries were spread throughout the borough and as a result there is likely to be a

# Chapter 1

## CONTAMINATED LAND

- To undertake urgent remediation action where there is imminent danger of serious harm.
- To determine if specific sites are contaminated;
- To act as enforcing authority for all contaminated land which is not designated as a "special site" (for which the Environment Agency is the enforcing authority).
- Identify and notify the appropriate persons involved with the land including the Environment Agency.
- Ensure that the appropriate remediation takes place.
- Manintain a public register of regulatory action.

The Environment Agency will be responsible for providing information on the progress of the contaminated land regime through the production of the 'State of Contaminated Land' report. It will also act as a consultee for local authority's inspection strategies and will provide information provide specific advice in relation to the pollution of controlled waters, and inspect land on behalf of the local authority, which if it were to be determined as contaminated land is anticipated to be designated as a special site.

#### 1.2 INTERACTIONS WITH OTHER REGIMES

Existing planning legislation and pollution control will interact with the Part IIA strategy.

- Planning Regime Land contamination is a material planning consideration and the implications of contamination are considered in planning applications and Unitary Development Plan designation;
- Integrated Pollution Control Integrated Pollution Prevention & Control Scheme (IPPC), applies to certain industrial processes and is enforced by the Environment Agency and local authorities;
- Waste Management Licensing the disposal and processing of waste;
- Pollution of Controlled Waters (not arising from land) where a pollutant is discharged directly into controlled waters and does not originate from land, the Water Resources Act 1991 will apply.

#### 1.3 THE DEFINITION OF CONTAMINATED LAND

Contaminated land is defined under Part IIA as:

"Land which appears to the local authority to be in such a condition, by reasons 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".

Harm is defined in section 78(a) of the EPA (1990) as "harm to the health of living organisms or other interference with the ecological systems of which they form a part and, in the case of man, includes harm to his property".

The statutory guidance provides clear guidance upon what harm is considered significant. In order to meet this definition, contaminated land must affect the receptors listed in the guidance, i.e. human beings, property, certain ecological systems and controlled waters. Examples of significant harm as given in the guidance, include death, disease and birth defects. A copy of the table from the guidance regarding significant harm is given in Appendix A.

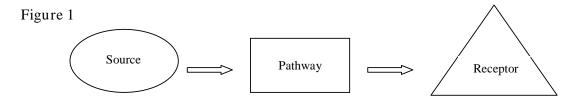
The guidance describes the conditions required for there to be a 'significant possibility of significant harm'. Those are given in Appendix B. The following factors should also be considered when deciding whether the possibility of harm being caused is significant:

- The nature and degree of harm.
- The susceptibility of the receptors to which the harm might be caused, and
- The timescales within which the harm might occur.

#### 1.4 THE CONCEPTS OF RISK ASSESSMENT & POLLUTANT LINKAGE

The new definition of contaminated land is based upon the concept of risk assessment. A risk assessment, which identifies the pollutant linkage <u>must</u> be undertaken before a site is designated as contaminated land. The pollutant linkage is represented in Figure 1 and consists of:

- a source of contamination in, on or under land which has the potential to cause significant harm or pollution to controlled waters;
- a pathway the route by which the source is or is likely to cause significant harm to the receptor
- a receptor such as people, livestock, property pr surface water, that could be affected if exposed to the contaminant.



It is considered that both proving the pollutant linkage and meeting the definition of significant harm will be difficult, thus it is likely that although all of the Blaenau

Gwent County Borough must be inspected for contaminated land, it may be that only a few sites will fall into the definition of contaminated.

### 1.5 IDENTIFYING CONTAMINATED LAND

The definition of contaminated land is based upon the principles of risk assessment. Risk assessment is undertaken by initially establishing the form and concentration existing for any discovered substances on the identified area of land.

## HAZARDS RESULTING FROM CONTAMINATED LAND

## Table 3 List of Contaminant Types and Examples

- 1. (Other) those not classified below
- 2. Acids

Sulphuric, hydrchloric, nitric, hydrofluoric,

- 3. Alcohols toluol, xylol,
- 4. Alkalis caustic, soda,
- 5. Amines Analine,
- 6. Aromatic Hydrocarbons
  Benzene, ethylbenzene, phenol, toluene,
  xylene, cresol, catechin, resorein,
  hydroquinone,
- 7. Asbestos

Actinolite, amostie (brown), anthophyllite, chrysolite (white), crocidolite (blue), tremolite,

- 8. (Biological Agents) not designated as substances
- Chlorinated Hydrocarbons

   dichloroethane, dichloromethane, tetrachloromethane, tetrachloroethane, thrichloromethane, vinyl chloride, monochlorobenzene, dichlorobenzol, trichlorobenzol, tetrachlorobenzol, pentachlorobenzene,
- 10. Coal Tar Coal tar (creosote),
- 11. Coking Works Residues
  Coal tar (creosote), phenols, cyanide

(free/complex), sulphur (sulphide/sulphate),

# 1.6 A STRATEGIC APPROACH TO INSPECTION

#### Chapter 2

#### GENERAL POLICY OF THE LOCAL AUTHORITY

#### 2.0 INTRODUCTION

The development of the contaminated land strategy has been formulated within the overall policies and aims of the Blaenau Gwent County Borough Council.

#### 2.1 CORPORATE AIMS

Blaenau Gwent County Borough Councils Mission Statement is

"To provide services which enhance the quality of life of the people of Blaenau Gwent".

Within this context the key relevant priorities from the authorities community plan are:

- Equality of opportunity
- Opportunities for lifelong learning
- Opportunities to earn a living
- Access to effective, appropriate and integrated social and health care services
- A safe, healthy and fair environment for all residents
- A decent home for all residents of Blaenau Gwent
- Leisure opportunities for all residents.

#### 2.2 EXISTING CONTROLS TO ADDRESS CONTAMINATED LAND

#### 2.2.1 PLANNING POLICIES

Planning Policy Wales 2002 provides the basis for land contamination and development in Wales. The planning policies adopted by Blaenau Gwent County Borough Council and contained in the emerging Unitary Development Plan define the current controls imposed on developers where land is known or suspected to be contaminated. The aim of these policies is to ensure that the development of contaminated land is 'suitable for use' and that the physical constraints on the land are taken into account at all stages of the planning process. The present system often requires that the developer provide the Planning Authority with sufficient information on the proposed site to assess its contamination status and to ensure that remedial gGvOGKG6nSKUvbU,TN6

document to take into account objections to the draft document and any changes in legislation.

followed. Blaenau Gwent County Borough Council will liaise with the HSE to ensure that no duplication of safety controls occur during remediation work.

## 2.2.6 STATUTORY NUISANCE

Until the introduction of Part IIA legislation, the statutory provisions of Part III of the Environmental Protection Act 1990 were the traditio

# 2.4.2 DEVELOPMENT BRIEFS AND SUPPLEMENTARY PLANNING GUIDANCE

Both the adopted local plan and emerging UDP recognise the need to underpin policy by producing a Development Brief. This could include site specific supplementary planning guidance. The supplementary planning guidance will provide a clear framework for the future development controls of the site and will be subject to the usual consultation process and resolution of the Council.

It is clear that the reclamation policies contained in the UDP will be closely linked with Part IIA. However, it should be noted that the sites identified by the WDA for reclamation may be derelict and/or contaminated but not in accordance with the legal definition contained in the Part IIA legislation.

#### 2.4.3 BLAENAU GWENT HEALTH ALLIANCE

Much of the current public health strategic direction emanates from 'Better Health, Better Wales' and the subsequent strategic framework document published by the National Assembly in October 1998. The recognition that environmental factors are a key influence on health will necessitate local authorities and health authorities working together both strategically and operationally. It is the intention that Part IIA will focus on the protection of sensitive receptors and the environment to enable and promote public health. The Blaenau Gwent Contaminated Land Strategy will work towards the identification and the ultimate remedia

### 2.4.6 COMMUNICATING RISKS

The council recognises that the contaminated land strategy and its potential outcome of designating land as 'contaminated' may give rise to concern to people from all parts of society; for example communities, individuals, landowners and conservation groups. It will be the policy of the council to manage and coordinate the communication of the risks relating to contaminated land to all stakeholders in a

#### Chapter 3

# CHARACTERISTICS OF BLAENAU GWENT COUNTY BOROUGH COUNCIL

#### 3.0 INTRODUCTION

Blaenau Gwent County Borough Council became a unitary authority in 1996 as a result of the combination of the district and county council functions. It covers approximately 10900 hectares of a land locked location, in the South Wales Valleys 30 miles north of Cardiff. Its population is currently in the following major conurbations.

Ebbw Vale	23931
Tredegar	15608
Brynmawr	5450
Nantyglo/Blaina	9577
Abertillery	17688

#### 3.1 HISTORY

Blaenau Gwent history over the last 200 years is steeped in the industrial heritage of iron and steel production and the deep mining of coal.

In Ebbw Vale iron making begun on the site of the Corus plant as early as 1790 and the development and expansion of the site continued to supply the needs of a growing British Empire. Tredegar also grew around the iron trade, and much of the housing which was built within the authority was used to house the thousands of immigrant workers who came to find work here.

Along with the expansion of this heavy industry came improvements in transportation with the construction of road and rail links. The use of tram roads expanded to supply the ports of Cardiff and Newport with the resources which were produced here.

Many major collieries were also sunk in Blaenau Gwent with these mines becoming the main source of employment for towns such as Tredegar, Nantyglo and Abertillery as the production of iron declined.

Over the last 25 years the decline of heavy industry within Blaenau Gwent has been progressive, culminating in the closure in July 2002 of the steel works at Ebbw Vale.

These employment opportunities have been replaced by modern industries in the manufacturing sector. Major industrial estates have been established at Tarfarnaubach at Tredegar, Rassau, Ebbw Vale, Rising Sun at Blaina, Roseheyworth and Cwmtillery in Abertillery. These have helped to establish employment in less polluting industries while the local authority works towards providing the greater skill levels which its citizens will need to compete in the technology and service sectors which will be the major employment areas of the future.

have been worked within the County Borough, combined with the Upper and Lower Ironstone series and formed the basis of the areas industrial wealth.

Abundant fossiliferous material and structural/paleogeoghical evidence is present in this sequence making identification of the ancient sedimentary environment relatively accurate.

## 4. The Middle Coal Measures

These measures crop out in a narrow poorly exposed belt around the northern rim of

through sinkholes, and the average effective precipitation is 748mm/a. It is estimated that the spring discharge is in the range 7,000 - 10,000M1/a.

The till which lines the Coalfield valleys is generally less than 15m thick. Its main hydrogeological significance is that it limits and confines recharge within the underlying formations.

Alluvium floors most of the river valleys and peat is present in the north of Blaenau Gwent Yields are less than 5 1/sfrom the river allu

3.4 HYDROLOGY
Blaenau Gwent County Borough Council has three main rivers the Ebbw Fawr, Ebbw Fach and Sirhowy. The map below outlines water courses in the South Wales area.
The Ebbw Fawr starts with several small streams and tributaries north of the Carno Reservoir in the Brecon Beacons. The Ebbw itself i

Table 4

Location	Ward	Area (Ha)	Class		
			B1	B2	B8
Crown Business Park	Sirhowy	2.21	•	•	•
Crown Avenue(East)	Sirhowy	1.13	•		

Rassau Extension (East) RKvbb61SHvOUNUU6.SBGvK,H,K61SHvOUNUU63SHvOGHMT6 S ] Tz

## 3.5.1 WASTE MANAGEMENT FACILITIES

### 3.5.2 REGISTER OF CLOSED LANDFILL SITES IN BLAENAU GWENT

The following Table 6 identifies the sites where the local authority are aware that controlled waste has been deposited in the past. These sites are no longer receiving waste, but the authority continues to monitor a number of them to ensure they do not present a risk from the venting of methane or leachate.

Table 6

Site	Grid Ref	Type of Waste	Date Closed
Ebbw Vale, Collage Road	SO 163,106	Rubble	1970
Ebbw Vale, Hill Top	SO 164,105	Domestic	1979
Ebbw Vale, Waun-y-Pound	SO 155,105	Domestic/Slag	1960
Tredegar, Jesmond Dene Stadium	SO 134,087	Inert	1997
Tredegar, West Hill	SO 135,097	Domestic	1980/81
Trefil, Pentwyn Farm	SO 121,000	Inert	1995
Brynmawr, Aneurin Crescent	SO 189,126	Domestic	1980
Brynmawr, Blaenant Farm	SO 199,113	Inert	1993
Brynmawr, Dunlop Semtex	SO 186,113	Industrial	1980
Nantyglo, Porters Road	SO 192,108	Ashes	1960's
Nantyglo, Winchestown	SO 182,106	Domestic	1980
Abertillary, Coedcae Ddu	SO 225,050	Domestic	1980
Abertillary, Roseheyworth Road	SO 207,052	Rubble	1960's
Cwmtillary,	SO 218,057	Rubble	1980's
Cwmtillary Colliery	SO 217,062	Rubble	1970
Tredegar, Peachaven	SO 152,073	Ashes	1960'

### 3.5.3 PROTECTED AREAS

There are currently 3 sites of special scientific interest (SSSIs) in the county borough that are protected under the Wildlife and Countryside Act 1981 from certain potentially harmful operations. The main aim of SSSI's is to identify and give protection to areas that are considered to be of national importance and to ensure that habitats and geological features remain as large and diverse as possible.

There are also 7 Scheduled Ancient Monuments within the borough. The Gwent-

# Chapter 4

# THE INSPECTION STRATEGY

**4.0 AIMS** 

As well as this ongoing inspection, where a potential site becomes highlighted for immediate attention, records will be checked as a matter of course for potential Authority ownership. The Authority will not assess its own land any differently than other land within the Borough.

# 4.1.2 EVIDENCE OF ACTUAL HARM OR WATER POLLUTION COLLATED AND REVIEWED

Actual harm will be determined with reference to Tables A and B, shown in appendices A and B taken from the DETR Circular 02/2000 Annex 3, Chapter A, Part 3. These tables detail categories of significant harm and also what constitutes significant possibility of significant harm.

The Authority will as part of its inspection process assess each potential site for water pollution with reference to source protection zones and groundwater vulnerability issues. The Authority intends to liaise closely with the Environment Agency on this matter. If the Authority is made aware of harm or water pollution issues, it will have regard to procedures set out in Section 5.0 and to the definitions of significant harm as shown as Appendices A and B.

# 4.1.3 RECEPTORS IDENTIFIED FROM TABLE A (FROM THE DETR GUIDANCE)

Once all potentially contaminated sites have been identified the receptors shown below will be identified to determine possible links between the two. This work will be completed by April 2003.

- a) Residential development with garden
- b) Allotments
- c) Residential development without gardens
- d) Schools or nurseries
- e) Agricultural land
- f) Land in amenity use e.g. Parks/Playgrounds
- g) Commercial or Industrial
- h) Protected Habitats
- i) Heritage Sites
- In addition there are also surface water and groundwater features.

### 4.1.4 ASSESSMENT OF RISK IDENTIFIED RECEPTORS

The risk to receptors will be assessed within a risk prioritisation model which will be run within the 18 months of the strategy implementation.

This will prioritise the level of risk in relation to the type of receptor. The Authority has biased its risk prioritisation model towards the protection of human health.

In recent years the Interdepartmental Committee on 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

#### 4.2 PRIORITIES AND TIMESCALES

The drafting, adoption and final publication of the inspection strategy for contaminated land needs to be completed by October 2002.

The following timetable outlines the target dates and the actions necessary in order to achieve the objectives of the strategy. Sites, which present an imminent or potentially serious risk to receptors, will be dealt with as a priority as resources allow. As any new information becomes available regarding contaminated sites the timescales will be reviewed as appropriate. The main actions are:

- Complete the examination of historical site data and enter all information onto the GGP and land mark historical mapping system by January 2003.
- To carry out preliminary site visits and differentiate between private and authority owned sites by April 2003.
- Identifying all the sensitive receptors listed within Table A of the statutory guidance in association with the categories of potentially contaminated sites by April 2003.
- Undertake risk assessments to place potentially contaminated into priority categories for detailed inspection by April 2004. This will include local authority owned land.
- Carry out detailed investigations of sites that are probably or are certainly not suitable for the present use and environmental setting and action is needed in the short term (category 1 sites) by 2005.
- Carry out detailed investigations of sites that may or may not be suitable for the present use and environmental setting and action may be needed in the medium term (category 2 sites) by 2007.
- Undertake annual review of the inspection timescales commencing in October 2003.

## Chapter 5

## **PROCEDURES**

## 5.0 INTRODUCTION

The inspection of land for contamination is likely to generate large quantities of site specific data. In order to ensure this data is managed in an appropriate manner this chapter sets out the procedures for its use.

- 5.1 INTERNAL ARRANGEMENTS FOR THE INSPECTION AND IDENTIFICATION OF CONTAMINATED LAND
- 5.1.1 DEPARTMENTAL CONTROL

in such a way as to encourage confidence in the regime and show consistency in enforcement and Council land will be identified and dealt with in the course of activities associated with the implementation Part IIA. When such land is identified the responsibility for remediation action will rest with either the individual Department whose actions caused the contamination or that Department which owns the land. The regulatory duties of the Council will be kept clearly separate from the responsibilities that may arise as landowner or polluter. The Council supports and will encourage the voluntary remediation of land, including that for which the Council may find itself responsible.

#### 5.1.5 THE PUBLIC REGISTER

The Council is required by the Part IIA regulations to maintain a Contaminated Land Register that is accessible to the general public. The Public Register will be held at the Department of Environment & Development offices at Enterprises House, Rassau Industrial Estate, Rassau, Ebbw Vale. It will be in a paper file format and will be accessible by appointment to members of the public during hours Monday to Friday, excluding public holidays.

The information to be recorded on the contaminated

## 5.2 INSPECTION PROCEDURES

## 5.2.1 SITE PRIORITISATION

The authority will determine an organised approach to the identification of contaminated land, and will be prioritised on the following basis. This prioritisation will form the basis for more detailed investigation. The timetable for the inspection

can be determined to establish the likely presence of contaminants. This can then be

Prior to making a formal determination of Contaminated Land under Part IIA the

- The use for which the site may have been subjected in the past which in turn provides and indication of the types of contaminants which may be present,
- The hazards associated with the contaminants and the precautions that should be taken during any site visit or investigation to minimise health and safety risks for the investigators,
- The potential locations of any contaminant hot spots (high concentrations) such as storage, transfer or disposal sites,
- The location of any known spillages or leakages
- Factors affecting the possible movement of contaminants such as soil type, structure, hydraulic conductivity, depth to groundwater, site gradients and paths of least resistance (pipelines, sewers, cables etc.)
- Factors that might influence or limit the position

- Environment Agency for information on; past/current waste disposal operations (EHS), statutory nuisances on the site (EHS), past remediation (Planning and EHS)
- Industry profiles produced by the DEFRA which provide information on the processes and associated contaminants specific to particular industry types.

Following the initial collection of information, where potential contamination is suspected the desktop assessment of the information will take place to determine the priority of action for the site (see comments elsewhere on CLR6). In the event of a requirement for more substantive information this may lead to the next stage, phase (b) Site Visit. Otherwise it may be clear that the site cannot be classed as contaminated land in the context of the Environmental Protection Act (1990), Part IIA.

## (b) SITE VISIT

A site visit to the area/site for a site walkover to obtain visual and other sensory

- Surface water
- Atmosphere above the ground surface
- Any fluids in culverts or drains
- Any contaminated structures

## The sampling will aim to

- Confirm suspected sources of contamination
- Identify unknown sources of contamination
- Determine types and concentrations of contaminants
- Determines the lateral and vertical spread of contaminants
- Provide sufficient data to determine suitable remedial measures if necessary.

## The major items to consider when determining the sampling regime will be:

- Analytical requirements e.g. criteria for representativeness and quality Assurance
- Location of sampling points on the site, e.g. the depth and frequency of sampling location
- Sampling collection mechanism, materials and methodology
- Sample handling preservation, filtration, field control samples, labelling
- Field determinations unstable species, additional sampling variable, pH, temperature, electrical conductivity, dissolved oxygen, hydrocarbons, soil gas surveys
- Sample storage preservation of sample integrity, sample custody
- Sample transportation transportation method, frequency
- Monitoring locations design, construction and performance evaluation
- Investigations records IUUT6iSBHMvMOM,T,6pSBHvObGKG6oSBHvHGUU6iSHHvNOGOTNvC

The location of sample points should also take into account those factors likely to influence the distribution (or migration) of contamination across the site. These include any history of spills, site gradients, geol

# 5.2.8 HEALTH AND SAFETY PROCEDURES

The varied health and safety procedures pertaining to contaminants will be reviewed

The Environment Agency rather that the Local Authority becomes the enforcing authority for land designated as having 'special site' status. Where there is evidence to suggest that controlled waters are being polluted by contaminated land the Environment Agency will work alongside and in consultation with the Local

## Chapter 6

#### INFORMATION MANAGEMENT

#### 6.0 INFORMATION SOURCES

A wide variety of information sources will be considered during the determination process including:

- OS and other historical maps and plans;
- Geological and environmental information and plans;
- Information provided by statutory consultees;
- Council records;
- Industry Profiles published by DEFRA.

The designation of contaminated land will be based on best available evidence.

#### 6.1 INFORMATION COLLECTION AND EVALUATION

#### INFORMATION COLLECTION

As outlined above there are many different sources of information that are relevant and useful in investigating the potential sources, pathways and receptors. Table 8 outlines the data sources that will be utilized and its use.

## INFORMATION ON HARM

The information on actual harm, or pollution of controlled waters, will be sourced from files within the Environmental Health Section, Legal and Planning SMHKb6SSHvOTKKMGHiT f rMvK

Table 8 Shows Information held within the Authority to date that will be used in Compiling in the Identification and Assessment of Contaminated Land.

Data Source	Comments	Use
OS Historical	Digital Maps covering the Borough purchased	To identify
Maps Data	from Landmark Information Group Ltd	potential
1878-1880		sources,
Data 1901		pathways and
Data 1920-21		receptors.
Landfill site	•	
Locations and		

Location of	Data obtained from Local Authority	To assess
LNRs, SINCs		potential
and SLA Sites		receptors
Local Authority	Details of land owned by the Local Authority is	To assess
owned land	held within the Estates Department. Current	potential
	land ownership is held on a GIS system and is	sources,
	maintained by the Estates Department. Historic	receptors and
	ownership is held on paper based files within	ownership
	the department	details
Location of	Data obtained from Local Authority	To assess
scheduled		potential
monuments		receptors
Council staff	Many council staff have a good local	To identify
	knowledge and are able to identify potential	potential
	sources	sources/pathway
		s and receptors
Information on	Information is held within the Authority on	To identify
Local Mining	local mining areas	potential sources
		and pathways

# 6.1.1 INFORMATION ON RECEPTORS

Receptors and potential receptors are acknowledged to be largelloe

#### 6.2 COUNCIL PROVISION OF INFORMATION

Where dealing with the general public in written or verbal form it is the policy of the Council to be open and transparent. The availability of information will comply with the Environmental Information Regulations 1992. Where a written response is required to a contaminated land enquiry, the Council will levy a reasonable charge proportional to the time taken to complete a response and any administration charges appropriate. Expedited enquiries and additional copies may incur additional fees.

#### 6.3 INFORMATION AND DATA STORAGE

The successful management of information generated as a result of the implementation of this strategy is crucial, as this data will form the basis of any decision made on declaring a site as contaminated. Government guidance on good practice for the storage and handling of this data is contained in the DEFRA document has been used the basis for the information management system to be utilised by this authority.

#### 6.3.1 DATA STORAGE METHODS

Current information on contaminated land is limited to the Landmark database, which is a computer based system identifying all previous land usage within the authority. As the inspection of specific sites progresses however, much more information will be generated through surveys and sampling investigations. This information will be used

#### 6.4 GENERAL LIAISON AND COMUNICATION STRATEGIES

This section highlights liaison within the Authority concerning the implementation of Part IIA EPA 1990 and also for contact outside the Authority with other Statutory bodies, owners, occupiers, other interested parties and also the wider community.

The complex nature of the issues surrounding Contaminated Land means that it can be difficult to convey explanation to the layperson. The Authority will try to recognise and overcome the critical barriers to effective risk communication as shown below

Familiarity Increased concern over unfamiliar issues

Control Increased concern can arise where the individual is unable to

exert any control over events

Proximity in Space

# 6.4.3 LIAISON WITH OTHER LOCAL AUTHORITIES

The South East Wales Liaison Group for contaminated land has been established representing all the local authorities within its area. Its purpose is to disseminate

community of the Authority's intentions and to allow them to comment on the strategy document.

## 6.6 INSPECTION STAGE

During the inspection process the Authority may identify areas of land for which they deem to require further investigation. The Authority will co-operate with landowners to ensure that unnecessary concern is avoided and that people are made aware of the issues relating to Contaminated Land.

Once land is identified as requiring an inspection

#### 6.8.2 THE STRATEGY DOCUMENT

The strategy document, once formally published as a bound document, will be available for viewing from the Department for Environment and Development. The department will also be open to receive applications for copies, subject to a reasonable charge.

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.

## 6.8.3 PROVISION OF INFORMATION TO THE ENVIRONMENT AGENCY

Both the Environment Agency Wales and the local authorisation will hold

### Chapter 7

#### 7.1 REVIEW MECHANISMS

Part IIA of the EPA 1990 requires that the local Authority inspect their areas from "time to time" for the purpose of identifying land that may fall within the statutory definition of Contaminated Land. The Authority is also required to include in its strategy arrangements and procedures for:

Reviewing and updating assumptions and information previously used to assess the need for detailed inspection of different areas, and managing new information.

Therefore the Authority needs to consider 2 main aspects:

- a) Triggers for review of inspection decisions
- b) Timetable for review of the inspection strategy

#### 7.2 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 out-side of the normal inspection strategy timetable

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

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.

# Chapter 8

## OTHER SUPPORTING INFORMATION

## 8.1 BLAENAU GWENT COUNTY BOROUGH COUNCIL CONTACTS

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

Environmental Health and Trading Standards Enterprise House Rassau Industrial Estate Ebbw Vale Blaenau Gwent NP23 5SD

Contact Officer: Andrew Long (Team Leader Pollution and General Services)

Tel: 01495 355581 Fax: 01495 355245

E-mail:dave.cook@blaenau-gwent.gov.uk

# APPENDIX A TABLE A – CATEGORIES OF SIGNIFICANT HARM

	Type of Receptor	Desription of harm to that type of
		receptor that is to regarded as
		significant harm
1	Human Beings	Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions.
		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.
		This description of significant harm is referred to as a "human health effect".
2	Any ecological system, or living	For any protected location:

- Any ecological system, or living organism forming part of such a system, within a location which is:
  - 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 preserve 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);
  - Ant candidate Area of Special Conservation, potential Special

- Harm which results in a irreversible adverse change, or 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.

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 UHTM,6 SBUvUHTM,6 SBUvU

Protection Area or listed Ramsar site, or; Any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949. harm, the local authority should have regard to the advice of the Countryside Council for Wales and to the

# APPENDIX B TABLE B – SIGNIFICANT POSSIBILITY OF SIGNIFICANT HARM

Description of significant Harm (As defined in Table A)

	the basis of relevant infor			
		concerning:		
		• That type of pollutant linkage, or		
		• That type of significant harm arising		
		from other causes.		
		If significant harm of that description is		
		more likely than not to result from the		
3	All ecological system effects	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.		

4 All animal and crop effects

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.

# Appendix C

# Reference documents

- Part IIA, Environmental Protection Act 1990
- DETR. Contaminated Land Inspection Strategies: Technical Advice For Local Authorities 2001.

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# APPENDIX D GLOSSARY OF TERMS

Brownfield Site	Land that is or was occupied by a permanent structure	
	associated fixed surface infrastructure.	
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 wh	

i) is in category listed in Table A (see Appendix A

- Carry out detailed investigations of sites that are probably or are certainly not suitable for the present use and environmental setting and action is needed in the short term (category 1 sites) by 2005.
- Carry out detailed investigations of sites that may or may not be suitable for the present use and environmental setting and action may be needed in the medium term (category 2 sites) by 2007.
- Undertake annual review of the inspection timescales commencing in October 2003.

As a result of the 2003 strategy review the following alterations have been made.

The gathering of data on the previous historical land use of all land within Blaenau Gwent has shown that there are 1607 potentially contaminated sites within the Borough. This is a significant number of sites and is far greater than that envisaged when the strategy was first implemented in October 2002. As a result a different approach to the prioritisation and inspection of these sites has been formulated and incorporated in the reviewed strategy.

A basic risk assessment has been carried out on these sites to categorise them within a High, Medium or Low risk depending on what the previous historical usage of the site was and its potential to be contaminated. This risk assessment has not considered any pathway or receptor link.

As a result the sites breakdown into the following categories.

High Risk - 51 Medium Risk - 880 Low Risk - 676

These high risk sites have been prioritised for inspection and are currently the subject of site surveys to determine if they are contaminated as defined by Part IIA of the Environmental Protection Act 1990. Their previous or current uses include gas works, landfill sites, petrol stations and military land.

As a result the inspection timetable has been amended as follows:-

Undertake source-pathway-receptor risk assessments on all medium and low risk sites, which have been categorised as such on the basis of their previous or current use. This work to be completed by December 2005.

Undertake detailed site investigations on all Category 1 sites that are probably or certainly not suitable for their present use and action may be needed in the short term by December 2005.

Undertake detailed site investigations on all Category 2 sites that may not be suitable for the present use and environmental setting and action may be needed in the medium term by December 2007.

These timescales will be subject to an annual review.

The medium and low risk sites, totalling 1556 sites are currently undergoing further risk assessment to prioritise them for detailed investigation.

This risk assessment utilises a computer software to assess the source – pathway – receptor link for each site and assigns each site a score. This score then places the sites into one of five categories. The categories are defined as:-

Category 1 - From the information provided it would appear that the presence of contamination on site is very likely to be unacceptably high. The risk of harm to the identified receptors is very probable.

Action required: Prompt, high priority action is required.

Category 2 - From the information provided it would appear that the presence of contamination on site is likely. Receptors are likely to be at risk. The current use of the site, therefore, may not be suitable.

Action required: High to medium priority in the medium term., action regarding onsite investigations depending on the ranking score c.f. the range.

Category 3 - Whilst contamination may be present on the site, from the information provided it would appear that it is unlikely that the contaminants will have a significant effect on the identified receptors. This site has more inherent risks than a Category 4 site.

Action required: Medium to low priority, site inspection maybe warranted.

Category 4 - Whilst contamination may be present on the site, from the information examined it would appear that it is unlikely that the contaminants will have a significant effect on the identified receptors.

The current use of the site presents little concern and can continue pending new information.

Action required: This is a low priority site, periodic review.

Category 5 - These sites are of negligible risk. There is no evidence of 'significant harm' or the possibility of such occurring.

Action required: Usually no further work required.

#### Outcome of Review

This review has identified the need to amend the strategy timetable, as a result of the large number of potentially contaminated sites that have been identified within the Borough. An initial risk assessment has been carried out on all potentially contaminated sites to identify high, medium and low risk sites solely on their previous use. Detailed source – pathway – receptor risk assessments are being carried out in

## **REVIEW OF CONTAMINATED LAND STRATEGY 2004**

This report has resulted from the annual review of the authorities contaminated land strategy. This review has now been completed for 2004 and has identified areas that need to be altered and improved. This has lead to alterations being made to the