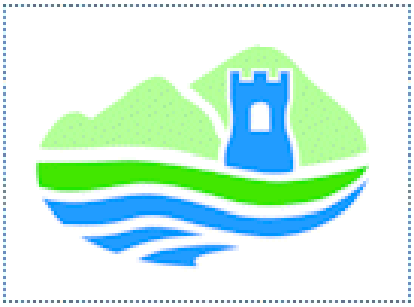
Contaminated Land Strategy



Neath Port Talbot County Borough Council
October 2005

PART 1 – PART IIA, ENVIRONMENTAL PROTECTION ACT 1990

EXECUTIVE SUMMARY

Part IIA of the Environment Protection Act 1990, was introduced in Wales on July 1st 2001, until this time there had been no strategic approach to the identification of contaminated land. Land contamination had always been addressed during redevelopment or when the risk has manifested itself. Since 2001, all local authorities have a duty to inspect their areas, locate and ensure the remediation of all statutory designated contaminated land.

The councils main objectives of the inspection strategy are outlined in Figure 1 below:-

Figure 1: Key Objectives of Strategy

KEY OBJECTIVES OF STRATEGY:-

1. To set out our procedures to ensure compliance with, and enforcement of the Contaminated Land Regulations.
2. To ensure a co-ordinated approach to the issue of contaminated land within the Local Authority.
3. To address the liability issues associated with the councils existing land holdings and minimise the risk of obtaining any new liabilities associated with land acquisitions.
4. To ensure that during the redevelopment of new sites, land contamination issues are dealt with effectively and at an early stage of the planning process.
5. To ensure that procedures are in place for the provision of information to the public, developers and other departments of the council as required.
6. To encourage market confidence in the redevelopment of brownfield sites within the borough and promote the re-use of previously developed land.

Neath Port Talbot County Borough Council's first Contaminated Land Strategy, adopted in September 2002, outlined a programme for identifying and inspecting contaminated land. This document is produced following a review of the first three years of the strategy being in operation

The acquisition of new software has enabled the council to improve processes and carry out a risk based approach to contaminated land identification. This now ensures that the most important sites are dealt with first.

The majority of the amendments have been made to Chapter 4 to reflect this change of approach.

Council owned land will continue to be treated in the same manner as all other land holdings within the borough. It is recognised that some sites may be identified outside this general approach to inspection and may require urgent attention. These sites will be dealt with as they arise.

Although the Local Authority is the lead regulator it works in close partnership with the Environment Agency and other organisations where necessary.

Neath Port Talbot Council maintains a public register of regulatory action in relation to contaminated land.

Chapter 1 - Introduction

Neath Port Talbot County Borough has inherited a legacy of land, which has been affected by post industrial, mining or waste disposal activities and therefore has a potential to be contaminated. This chapter provides an overview of the contaminated land regime and how the inspection strategy contributes to the council's corporate policies.

1.1 Background

Local Authorities formerly dealt with contaminated land under statutory nuisance provisions, (Part III of the Environmental Protection Act 1990). To prevent future contamination from occurring and to deal with any existing contamination posing a threat to human health or the wider environment, it was recognised that a new regime was required.

In July 2001, Part IIA of the Environmental Protection Act 1990 came into force, introducing a new regime for the regulation of contaminated land in Wales. The main purpose of Part IIA is to provide a legal structure for the identification of land posing unacceptable risks to human health or the environment, and for securing remediation of such land. It is based upon a set of principles, which include 'suitable for use' standard of remediation, the 'polluter pays' principle for allocating liability and a 'risk based approach' to the assessment of contaminated land.

The Council's approach to local government consistently emphasises the need to be open and accountable for its actions. This document has been presented as a consultation draft and made available to all interested sections of the community, businesses and developers.

1.2 Regulatory Context

Part IIA of the Environment Protection Act 1990, inserted by Section 57 of the Environment Act 1995 places a duty on Local Authorities to inspect their area for contaminated land.

Section 78A(2) defines contaminated land for the purpose of Part IIA as:

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

(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;.."

This definition reflects the intended role of the Part IIA regime, which is to enable the identification and remediation of land on which contamination is causing unacceptable risks to human health or the wider environment. Therefore, any land may be polluted, but unless it is causing significant harm or has a potential to cause significant harm to a receptor as defined in the regulatory text it may not be contaminated land. For a site to meet the definition of contaminated land, a significant pollutant linkage must be established. A significant pollutant linkage means a pollutant linkage, which forms the basis for a determination, that a piece of land is contaminated. It consists of three parts: -

- A **source** of contamination in, on or under the ground which has the potential to cause harm or to cause pollution of controlled waters
- A **pathway** is one or more routes or means by, or through, which a receptor is a) being exposed to or affected by a contaminant or, b) could be so exposed or affected by a contaminant.
- A **receptor** of a type specified in the regulations (i.e. human beings, controlled waters, property, ecological systems etc)

The local authority is the principle regulator and is responsible for: -

- Preparing and publishing inspection strategies for their areas, within 15 months of the date of implementation
- Inspecting individual areas of land to determine whether any meet the statutory definition of contaminated land
- Agreeing with the environment agency which areas of Contaminated Land should be designated as “special sites”
- Enforcing remediation for those areas of Contaminated Land that are not designated as “Special Sites” and,
- Maintaining public remediation registers

Under Part IIA the Environment Agency has a mainly supporting role, providing assistance and site specific guidance to local authorities, particularly with respect to cases of water pollution. The Agency acts as the enforcing authority for “special sites”. The Agency also has a duty to prepare from time to time a report on the state of contaminated land in Wales.

Special Sites are defined in full in the Contaminated Land (Wales) Regulations 2001. These are sites that meet the definition of 'contaminated land' and fall within one of the descriptions given in the regulations, which include: certain water pollution cases, industrial cases i.e. tar lagoons, oil refining, explosives, certain IPC sites, nuclear sites and

land owned by the Ministry of Defence. This is defined in more detail in the Contaminated Land (Wales) Regulations 2001.

1.3 Local Authority Policies

Neath Port Talbot County Borough Council is committed to working towards continually improving the quality of life within the borough. The contaminated land inspection strategy contributes to the Councils Corporate Policies and has a significant contribution to the long-term vision of a "Green Industrial Area". The strategy complements the following council policies and strategies:-

- **Agenda 21**

The Government is committed to sustainable development which is about meeting the needs of the present without compromising the ability of future generations to meet their own needs. Local Agenda 21 is the primary policy tool for implementing the principles of sustainable development. Contaminated land is one of the greatest burdens left by previous generations, limiting the availability of land for today's development needs. Neath Port Talbot Council has produced an Agenda 21 Strategy, which integrates the sustainable development principles into its activities and decision-making processes. The contaminated land strategy complements this philosophy as it facilitates the regeneration of land to reduce harm to health and the environment and reintroduce previously unusable land into the development process.

- **Community Plan**

The part IIA regulations aim to protect humans and the wider environment, and subsequently improve the health and quality of life of communities within the NPT Borough. It is therefore a key contribution to the community plan in relation to the health and quality of life, it will also improve the land bank encouraging redevelopment and hence aiding the economic prosperity of the area.

- **Environment Strategy**

The Environmental Strategy is the Authority's corporate contribution to the overall aims and objectives of the Community Plan in respect of its environmental aspirations. In addition to addressing local environmental issues, it also represents the Council's contribution to tackling global problems. The Environment Strategy's main vision is to create a cleaner, healthier, safer and richer environment, and therefore ensuring that all feasible steps are taken to improve the environment and reduce any adverse environmental impacts arising from its activities, this includes the identification and remediation of contaminated land.

- **Unitary Development Plan**

The Local Government (Wales) Act 1994 requires all authorities in Wales to prepare a Unitary Development Plan (UDP) for its geographical area. The purpose of the UDP is to guide development, conservation and the use of land within the county borough. In allocating land for development, preference is given to previously used land, relieving the pressure of development on green field sites and encouraging the redevelopment of these more difficult sites. It is possible that some of these sites will be on contaminated land or

on sites where the history suggests a risk of contamination. The reclamation or treatment of contaminated land may require planning permission either in its own right or as part of a proposal for development. The UDP contains a range of policies both promoting the reclamation of contaminated land and also ensuring that relevant issues are appropriately addressed.

- **WDA Land Reclamation Programme**

Neath Port Talbot County Borough Council aims to work in partnership with other organisations, and their programmes, where there is the potential for overlap with the Authority's responsibilities under Part IIA EPA 1990. Of particular relevance is the WDA Land Reclamation Programme, which is available to both the Public and Private sectors, where the Agency's objective is to secure beneficial reuse of derelict land through reclamation. This task is seen by the Agency as central to the regeneration of the Welsh economy. For grant purposes, derelict land is defined as "land so damaged by past industrial or other activity that it is incapable of beneficial use without treatment". The site must, therefore, have had some type of development previously which has ceased and is in need of clearing or reclaiming before any further development or use can take place. The grant does not extend to sites that have dereliction of natural origin, or sites that are covered by enforceable restoration conditions or statutory requirements (including remediation notices). The WDA will, however, consider grant aiding any additional eligible works necessary to achieve complete reclamation of a contaminated site for a defined new use. The WDA evaluates all applications with a view to local needs, value for money, priority of the project and budget availability for such projects in the financial year in which the grant is paid.

1.4 Development of Strategy

Local authorities are required to take a strategic approach to inspect contaminated land in its area. The 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 the council efficiently identifies requirements for the detailed inspection of particular areas of land

This strategy was developed to meet these requirements, through the Neath Port Talbot Contaminated Land Steering Group. This group includes all internal and external parties that have an interest in the strategy (i.e. Environmental Health, Development Control, Technical Services, Economic Development, Estates, Legal Section, WDA and The Environment Agency Wales).

Chapter 2 - Characteristics of Local Authority Area

The causes and impacts of land contamination in the UK vary greatly between regions depending largely on the industrial activity, land use and environmental sensitivities. This Chapter presents an overview of the Neath Port Talbot characteristics and the key factors which influence the inspection strategy.

2.1 Introduction

The County Borough extends 20 miles in a NW-SE direction between Gwaun-Cae-Gurwen in the Amman Valley to Kenfig and 15 miles in a NE-SW direction from Pontneathvaughan at the head of the Neath Valley to Crymlyn Burrows on the shore of Swansea Bay. It covers a total area of 44,217 hectares.

Rising from sea level to 1,969 feet at Craig y Llyn in the North East, the county borough is predominantly an upland area dissected by four river valleys. A narrow coastal strip, no more than a mile wide, extends around the bay and either side of the lower reaches of the River Neath.

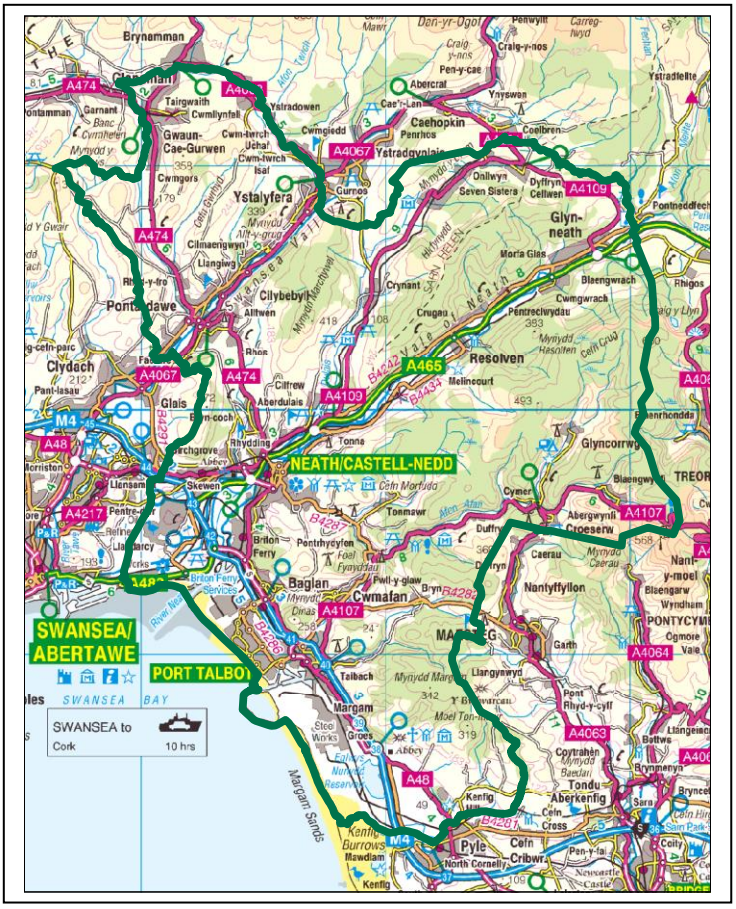


Figure 2: Map of Neath-Port Talbot

2.2 Industrial History

- **Coal Mining**

Coal has been mined on a small scale in South Wales since Roman times, but the real impetus for its development came with the use of coke to smelt iron instead of charcoal. In the first half of the 18th Century hundreds of coke burning furnaces were built in South Wales, to meet the large demand. The second half of the 18th century saw a decline in the iron industry as the use of steel became widespread but by this time it had little effect on the coal industry. Vast supplies of coal were needed for the new steam locomotives and ships and also for domestic heating and industrial purposes. By the second half of the 20th century coal production declined due to the post war depression and loss of foreign markets with a high number of South Wales collieries closing and miners losing there jobs.

- **Heavy Industry**

In the Neath Port Talbot area industrial growth began in the 16th century with copper and iron smelting, notably at Aberdulais but followed in scattered valleys settlements of Neath and Afan during the 17th and 18th centuries, as coal became suitable for the copper industry and the smelting of iron ore. Industrial take off occurred in the late 18th Century and continued throughout the 19th Century as canals then railways, together with the areas accessibility and technological developments, made it a world centre in metals manufacture and coal mining.

The smelting of non-ferrous metal ores expanded in the early 18th century, first around Neath, and later spreading to the Lower Swansea Valley, to Cwmafan and Port Talbot. In most cases these sites were influenced by physical geography considerations where small boats could carry the ore up the rivers to where coal was easily mined from the valley sides and where tributary streams provided ample water for water power and other purposes. The opening of the Tennant Canal in 1824 which provided a link between the Vale of Neath Canal and the sea at Port Tennant allowed the smelting of non-ferrous metal at Jersey Marine.

Early development of the iron industry began in South Wales due to the close proximity of iron ore and coal from the South Wales Coalfield and also local supplies of limestone; this progressed into steel production over the years. The tinplate industry developed as an off shoot of iron and steel industry, as did other industries such as several chemical works, sheet steel, gas works and engineering firms. These sites were again influenced by the geographical considerations and were consequently located near to rivers and the coastal region. Small settlements such as Neath, Port Talbot, Clydach, Pontardawe, Briton Ferry and Cwmafan became major industrial centres with the consequent immigration of workers.

2.3 Land Use Characteristics

- **Rural Areas and Countryside**

Away from the urban areas, Neath Port Talbot is also highly agricultural, supporting sheep rearing and dairying in the uplands and valleys. In 1998, there were 299 holdings, farming 17,096 ha - 39% of the County Borough area. There are also significant areas of common land situated mainly in the upland North of the Tawe Valley.

Commercial forestry is an important use of land in the area, occupying some 43% of the County Borough. The Forestry Commission began planting in Margam and Coed Morgannwg, but has since spread over large areas especially in the North East of the Borough.

The Local Authority has four country parks at the Gnoll, Margam, Afan Argoed and Craig Gwladys, together with many smaller areas of countryside that are open to the public.

- **Industrial Areas**

The coal, oil, petrochemical and metal manufacturing industries, which have dominated the area's economy and employment, have suffered substantial contraction or restructuring over recent decades. As a result, major employment has become more concentrated along the coastal belt with major sites at Crymlyn Burrows, Llandarcy, Baglan Energy Park, Margam (Junction 38) and Port Talbot Docks.

Further inland towards Neath, Pontardawe and Cwmafan small and medium sized companies dominate operating in the general manufacturing sector. These highly populated areas were once the main centres of industry. Throughout the 18th and 19th centuries iron foundries, steel manufacturing, tin plating and associated chemical manufacturing were of major importance in these small towns.

Coal mining is still important in the valley communities where small mines, 7 (working) opencast sites and coal processing/washeries provide valuable jobs. There are three active quarries in the County Borough Gilfach (Bryncoch), Gwrhyd and Cwmnantlleici (near Pontardawe).

Corus employs in excess of 3,000 and remains the largest industrial employer. The motor industry is also a key sector within the County Borough, with the Visteon (Ford) plant at Jersey Marine, while in The Neath Valley a supplier park to service the TRW plant has been created.

- **Residential Areas**

Neath Port Talbot County Borough Council has a population of 134,217 (mid 2002). Settlement is concentrated along the coast in Margam, Aberavon, Sandfields, Baglan, Briton Ferry and in the valley communities, chief of which are Gwaun Cae Gurwen in the Upper Amman Valley; Pontardawe and Ystalefera in the Tawe Valley; Crynant and Seven Sisters in the Dulais Valley; Neath, Resolven and Glynneath in the Vale of Neath; and Cwmavon, Cymmer, Glyncorrwg and Aber/Blaengwynfi in the Afan Valley. In addition,

there is considerable settlement above the valleys at Cimla, Bryncoch, Rhos and on the route west from Neath Abbey and Skewen.

- **Protected Areas**

Within the County Borough there are a number of special nature conservation areas that have become designated areas for their international, national and local importance. These areas are designated receptors as outlined in Appendix 2, Table 3. These nature conservation designations can be statutory (e.g. SAC's, SSSI's, NNR's) or non-statutory (e.g. LNR's, SINC's).

- Special areas of conservation (SAC's) are designated under the EU Habitats and Species Directive as part of a network of sites of European importance. In Neath Port Talbot we have three SAC's - Crymlyn Bog, including Pant-y-Sais (part of), Coedydd Nedd a Mellte (part of) and Kenfig (part of).
- Sites of Special Scientific Interest (SSSI's) are designated under the Wildlife and Countryside Act 1981, as being of nature conservation importance and are examples of some of the best sites of our wildlife habitats, geological features and landforms. In Neath Port Talbot we have 19 SSSI's.
- National Nature Reserves (NNR's) are areas of national importance for nature conservation; these are regarded as prime examples of SSSI's. There are two NNR's in Neath Port Talbot: Pant-y-Sais and Crymlyn Bog. Crymlyn Bog is also designated as a Ramsar site - a wetland of European importance. A small part of Kenfig National Nature Reserve falls within NPT.

Other designated areas within the borough that are not listed as a receptor in the guidance but are however, important local features are as follows:-

- Local Nature Reserves (LNR's) are designated by the Local Authority, in conjunction with CCW, on land owned/managed by the Local Authority. Neath Port Talbot has one LNR, the Swansea Canal above Ynysymeudwy.
- Other Reserves: The Wildlife Trust reserves in NPT are Graig Cilhendre (near Pontardawe), Melincwrt Falls, Blaenant y Gwyddyl (Glynneath), Coed Gawdir (Aberdulais) and Llyn Fach (neat Hirwaun). The Woodland Trust has three reserves in Neath Port Talbot at Dyffryn Woods, Graig Fawr and Tyn yr Heol.

2.4 Key Property Types

Neath Port Talbot County Borough Council has 391 buildings (2005) which are listed as being of special architectural or historic interest.

2.5 Redevelopment History and Contamination Issues

The closure of BP Llandarcy Refinery in 1998 and parts of BP Chemicals, Baglan Bay has created two of the largest 'brownfield' regeneration areas in the UK (445 and 757) hectares respectively. BP is working with NPTCBC and the WDA to help bring the land forward for development and reinvigorate the areas economy.

The former refinery is the subject of an Urban Village proposal in the UDP with 4,000 houses allocated for development by 2026. The development would be an example of sustainable development and would also include employment provision, a range of services and infrastructure to serve the community including much enhanced public transport.

Baglan Energy Park is the UK's single largest development site. It has seen significant historical industrial use, and has therefore required remedial measures to allow the safe re-use of land. Baglan Energy Park has been developed in two phases as part of a long term programme to regenerate Baglan Bay into a site capable of attracting inward investment and creating new job opportunities and new housing. Developed in partnership by Neath Port Talbot County Borough Council, BP Chemicals and the Welsh Development Agency, the site is already occupied by major commercial developments including a gas fired 500 MW power station, a new paper mill development (Intertissue), and a number of buildings demonstrating the best in design, energy efficiency and environmental performance.

The Land Reclamation Programme funded by the Welsh Development Agency in partnership with NPTCBC has a number of sites on its work programme that are known or perceived to be contaminated such as Aberavon Gas Works and Neath Abbey Wharf.

Even though the population of NPTCBC has gradually decreased over recent decades, there has been a continuing demand for housing resulting in a number of new residential developments within the county borough. Recently the population has shown signs of beginning to increase and as a result the size of the proposed allocation in the UDP has been increased. Some of these developments have been built on areas of contamination i.e. former iron works, tinplate works and brewery sites and have therefore required remedial measure prior to development. This is in keeping with the government's target of 60% of new dwellings to be built on 'brownfield' or 'recycled' sites over the next ten years.

A considerable proportion (75%) of the sites identified in the NPTCBC Unitary Development Plan (UDP) for future housing have been classed as 'brownfield' sites. Redevelopment of such sites will require site investigations to determine whether any contamination exists and remediation carried out where necessary.

2.6 Key Water Resources

The four main Rivers in Neath Port Talbot are the Afan, Dulais, Neath and Tawe which all flow NE-SW to Swansea Bay: ridges of high forest or moorland separate them all. In the Northwest, the County Borough is bounded by the westward flowing River Amman and the SouthEast flowing Twrch, which meets the Tawe at Ystalyfera. The River Kenfig is located on the boundary of Neath Port Talbot and Bridgend; it flows south to Kenfig Hill before turning westward to pass north of Pyle, through sand dunes into the sea.

Three Canals that run through the Borough are:-

- The Neath Canal runs 13 miles from Glyn Neath to Giants Grave (Briton Ferry). It joins the start of the Tennant Canal at Aberdulais to Port Tennant. Part of the Neath Canal between Resolven - Glyn Neath and Neath – Tonna have been restored for recreational use. The restoration for leisure and navigation of a further section of the canal between Tonna and Ynysarwed will commence in the Autumn of 2005.
- The tenant Canal runs from port Tennant to Aberdulais. It runs alongside and forms part of Crymlyn Bog which is a Special Area of Conservation.
- The Swansea Canal (15 miles) runs alongside the River Tawe from Heneuadd near Ystalyfera to Swansea. The Northern section of this canal has now been replaced by road, while sections from Pontardawe to Ynysmeudw and Godre'r Graig is managed as a local Nature Reserve.

The three canals are used to supply water to industry.

There are approximately 137 private water supplies in the county, 4 of which are commercial, 133 domestic. These water supplies are routinely tested by Neath Port Talbot Council as required under the Private Water Supply Regulations (1991) or on request.

Dwyr Cymru Welsh water supplies the public drinking water in Neath Port Talbot. There are no abstractions within the borough for public supply and therefore no source protection zones, however, there are abstractions for industrial and agricultural use.

British Steel is the largest industrial user of water, having around 90% of the total licensed amount for industry, this uses a large proportion of the water in the lower reaches of the Afan, Kenfig and Ffrwd Wyllt. The Eglwys Nunydd reservoir is used as a balancing reservoir for abstracted and recirculated water used in the industrial processes at Corus.

Only small quantities of water are abstracted within the Borough for agricultural purposes, as upland areas comprise mainly of rough grazing land and forestry. Livestock watering is widespread since unimpeded access to watercourses for livestock is commonplace throughout much of the area.

The main reason for adverse water quality issues within the borough are due to abandoned mine workings and the associated discharges of acidified, iron rich water. This is an increasing problem in Wales generally, and evident across parts of Neath Port Talbot. Two major minewater remediation projects have been undertaken to deal with this problem in the Neath Port Talbot Borough: the River Pelenna project and the Blaenant/Ynysarwed project. Both are being managed by Neath Port Talbot County Borough Council and the Environment Agency, with funding from the EU LIFE fund, the WDA, the Welsh Office, The BOC Foundation for the Environment and the Coal Authority.

Some parts of the Rivers within Neath Port Talbot are also affected by surface water acidification, this is caused by acidic deposition from the atmosphere and influenced by land management practices.

2.7 Geology

Neath Port Talbot County Borough lies mostly in Upper Carboniferous rocks of the South Wales Coal Field, this forms a large synclinal basin trending East West with many subsidiary folds and numerous faults. The coal measures comprise rhythmic sequences of mudstones, siltstones, grits, fireclays and clays. The Neath Port Talbot area is predominantly Upper coal measures made up of the pennant sandstone's and alternating shale's and coal horizons. The South Wales Coal Field is underlain by Carboniferous Limestone and Millstone Grit, which are exposed in escarpments at the margins of the coal field. The very southern part of the Neath-Port Talbot area comprises rocks of the Triassic Mercia Marl Group, poorly exposed beneath drift.

Within the coalfield, faulting is widespread. The Neath Valley Disturbance shows extensive surface faulting, which is an important NE-SW trending structural zone of fault deformation.

Peat deposits are widespread across the North of the borough, on acid soils of the Pennant plateau, especially north of the Avon Valley and eastwards towards the Rhondda Valleys. Further South, the peat is confined largely to hollows.

More recent deposits occur in the river valleys where the narrow channels are filled with post glacial outwash sands and gravels (e.g. Pontardawe, Neath, Port Talbot). Blown sand also extend as a coastal strip of dunes from Swansea Bay South Eastwards across to Kenfig Burrows. This area previously formed the largest dune system in Europe.

2.8 Hydrogeology

Aquifer vulnerability maps published by the environment agency, designate all areas of the borough as a Minor Aquifer, important both for local supplies and contributing to base flow of rivers, that will often emerge as springs at the base of the sandstone horizons. Groundwater flow within the Lower Coal Measures is expected to be of low to moderate permeability and via fracture flow. Along the coastal belt blown sands, marine sands and marine alluvium deposits are present, these deposits are expected to be of high permeability

2.9 Influential Factors

From an appraisal of both current and historical land use, the Neath Port Talbot borough has a varied industrial past dating back to the 16th century. In summary industrial activity has been focused in the following areas:-

- Urban areas of Neath, Port Talbot, Pontardawe, Cwmafan and Ystalyfera.
- Scattered settlements along the Neath, Afon and Swansea Valleys
- along the coastal belt of Swansea Bay

It is commonly accepted that humans are the most sensitive environmental receptors, therefore in the highly populated urban areas where heavy industrial activity has taken place, the people who live and work here are considered to be the Borough's most sensitive risk group.

Chapter 3: Strategy Aims, Priorities and Timescales

To enable a strategic approach to inspection the council has outlined its overall aims, key priorities and timescales that will be achieved through the implementation of the strategy. This chapter also explains how Part IIA interacts with other regimes.

3.1 Overall Aims

Land contamination has significant impacts on both the environment and the economy. As a regulator, land owner and planning authority Neath Port Talbot Council is presented with a number of responsibilities as a result of legislation and government guidance. The overall aims with regards to contaminated land are;-

- to identify, remove and prevent significant harm occurring from contaminated land to people, property, animals and the environment
- to promote re-development of brownfield sites
- Development control procedures are in place to deal with contaminated land effectively throughout the planning process
- Manage and/or reduce the councils liabilities as a landowner or occupier with regards to contaminated land issues

Each of the aims is supported by more detailed objectives, as previously outlined in the Executive Summary.

3.2 Interaction with other regimes

In addition to powers under Part IIA, Environmental Protection Act 1990 there are a number of other statutory regimes that can deal with contamination dependant upon the source of contamination and the current, proposed or historical use of the land. Neath Port Talbot Council will ensure that land contamination is dealt with under the most appropriate legislation. The other statutory regimes are summarised below:-

- **Planning**

When considering development proposals, the planning authorities role is to ensure that all material planning considerations, which can include the actual or possible presence of contamination are satisfactorily addressed. When considering an application, where contaminated land is invloved the planning authority will identify specific measures to be undertaken prior to redevelopment, these requirements will be imposed by a set of conditions attached to the planning permission. The main objective of the conditions is to ensure suitable investigation work is carried out and that the land is remediated to a standard that is suitable for the proposed end use.

- **Building Control**

Building work is subject to Building Control under the Building Regulations 2000 (as amended). The approval process is carried out by Building Control bodies, which include the Local Authority Building Control Officers and authorised Approved Inspectors.

Under Schedule 1 of these Regulations Part C regulates building work undertaken on sites with contaminants.

Regulations C1(2) and C1(4) require reasonable precautions to be taken to avoid danger to health caused by contaminants.

It should be noted that contaminating substances in the ground have the potential to attack building materials and may lead to a breach of Part A of the Regulations which relates to structural safety.

- **IPPC (Integrated Pollution Prevention and Control Directive)**

A number of industrial premises are subject to regulatory controls under IPPC, the purpose of this Directive is to achieve prevention and control of pollution arising from a range of industrial activities through an IPPC permit.

Applications for a permit will require information about the condition at the site of the installation (including ground conditions). A further site report will be required before the IPPC permit is surrendered to determine whether contamination has occurred during the period of the permit. If any such contamination has occurred, the permit holder will be required to restore the land to the condition it was in before the IPPC authorised activities commenced.

- **Waste Management licensing**

The Environment Agency is the direct regulatory authority for waste management activities; it interacts with the contaminated land regime in a number of ways. Anyone who deposits, recovers or disposes of controlled waste must do so either; within the conditions of a waste management licence, or within the conditions of an exemption from waste licensing and must not cause pollution of the environment, harm to human health or serious detriment to local amenities.

- **Water Resources Act**

The Environment Agency regulates discharges to controlled waters (e.g. rivers and streams) for which discharge consent is required. These usually stipulate that discharge should be free of polluting matter, but may also set limits on the concentrations of specific substances with a requirement to monitor and report the quality of the discharge.

Where groundwater is polluted, but there is no "pollutant linkage" to existing land contamination, the Environment Agency has the powers under Section 161A of the Water Resources Act 1991 to serve a "works notice". This may be served to ensure that pollution of controlled waters is remediated by the party who caused or is knowingly permitting the pollution to occur.

It is the Government's intention that Part IIA should be complimentary to the existing regulatory regimes. Remediation of contaminated land should be enforced preferentially through these means, with enforcement through Part IIA only as a last resort.

3.3 Priority Actions and Timescales

Neath Port Talbot Council has outlined its main priorities with the appropriate timescales in Table 1. The priorities can be seen as a set of actions that will help the authority to achieve its overall aims and objectives.

The development and implementation of this strategy is an iterative process. It is therefore likely that priorities and objectives will change as the council's knowledge and understanding of contaminated land issues within the Neath Port Talbot Borough increases through information acquisition.

Table 1: Priority Actions and Timescales

Action	**How Actions will be achieved**	
Internal and External Liaison Mechanisms	▪ The strategy has been prepared through the council's contaminated land working group. This group is comprised of representatives from all relevant departments of the council and external bodies that have an interest/input to the inspection strategy. ▪ Continue effective liaison between members of the contaminated land working group to gain specialist advice when required and ensure a well rounded strategy.	▪ March 2001 – To date
Develop and Maintain Geoenviron Contaminated Land Database	▪ Complete the transfer of historical land use data (i.e. potentially contaminated sites) onto the geo-environ database. This will be continually updated as new information becomes available. ▪ Collate and transfer receptor information onto the geo-environ database i.e. human receptors, controlled waters, designated ecological systems, properties in the form of buildings and ancient monuments, this will involve:- i. gaining information on current land use from site visits and other sources within the council (i.e. GIS layers, aerial photographs)	September 2005 November 2005

	ii. Transfer of Part IIA information supplied by the Environment Agency and information from other council departments in Arcview format i.e. geology.	
Prioritise Sites for Further Investigation	▪ All sites will be prioritised using computer software. This is a two stage prioritisation process based on the source-pathway-receptor concept of risk assessment. This is outlined in Chapter 4.	▪ Stage 1 - Dec 2005 ▪ Stage 2 – April 2006
Undertake Investigation of High Priority Sites	NPTCBC aims to investigate 4 high priority sites per year. This number may vary annually depending on the available budget and level of investigation required.	• Rolling programme due for completion April 2015
Take Action on Urgent Sites	▪ Throughout the process of prioritisation and inspection, if any sites are strongly suspected 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 cause, they will be dealt with as a matter of urgency.	▪ Ongoing
Establish procedure for making information available on the Contaminated Land Public Register	▪ Look into the possibility of providing contaminated land register in electronic format. ▪ Liaison with IT department.	▪ February 2006
Review Contaminated Land Inspection Strategy	▪ The inspection strategy will be reviewed every 3 years.	▪ Next Review 2008
Internal and External Consultation	▪ The inspection strategy will undergo internal and external consultation as outlined in Chapter 7.	▪ August 2005
Modify Strategy	▪ Following consultation of the strategy, comments received will be noted and where necessary amendments will be made. ▪	▪ September 2005
Adopt and Publish Strategy	▪ Once the strategy has been consulted on and modified as necessary it will be sent to Cabinet Committee for approval and then formerly adopted by the council for publication.	▪ 13th October 2005

3.4 Inspection Timetable and Funding

The Statutory guidance does not detail how quickly the work under Part IIA must be completed, other than requiring the inspection strategy document to be published within 15 months of the issue of the guidance. It does, however, require each Authority to set out what it considers appropriate timescales for inspection of different parts of its areas.

NPTCBC aims to investigate 4 high priority sites per year on a rolling programme, therefore aiming to complete the inspection process of high priority sites in 2015.

However, this is not a definitive timescale as potentially contaminating sites are continuing to be identified as more information is gathered, there is also a possibility that a number of these sites will be dealt with earlier than expected through other channels such as Development Control as a result of developers bringing forward development proposals. Neath Port Talbot Council recognises that action may be necessary on urgent sites brought to the Authority's attention outside the inspection programme, these sites will be dealt with accordingly.

It is possible that significant sums of money may be required to make more detailed investigation of these sites. The cost of each investigation will vary dependant on such factors as the size, nature and geology of the site. It is therefore difficult to quantify the overall expenditure that will be required, and what the full inspection of the Borough will reveal and how much further work it will necessitate. There will, therefore, be need to identify sums in the annual budget for future site assessments. The Authority will also seek grant funding from relevant European, National and regional bodies as well as the private sector.

The Welsh Assembly Government has recently introduced the Contaminated Land Capital Fund (WCLCF) to Wales, this provides support for capital expenditure to local authorities and Environment Agency to assist them in meeting certain responsibilities for investigating and remediation of contaminated land. The capital fund will operate as a grant scheme. Local authorities and Environment Agency Wales apply (bid) to the Welsh Assembly for support, and the bids are decided in accordance with the National Assembly for Wales guidance “Remediation of Contaminated Land “November 2001.

NPTCBC will identify the need for application of capital funding on a site by site basis.

NPTCBC will work closely with landowners /polluter to encourage voluntary action and remediation of sites designated as contaminated land. However, this will not be possible with all sites, for example the site may be an orphan site (no class A or class B person can be found) and therefore the enforcing authority will bear the cost of any remediation.

It should be noted that these arrangements relate specifically to the Council’s enforcement role and not that as land owner. Should land in possession of the Council be identified as contaminated land then funding of remediation will be considered on a case by case basis. In the event of significant costs being involved it may again be necessary to identify the need to apply for available grants.

CHAPTER 4 - Prioritising Sites for Inspection

As outlined in Chapter 2 using our knowledge of Neath Port Talbot it has been possible to identify areas where industrial activity has been concentrated. However this is a very broad view of the borough and not a site specific focus. Using the prioritisation system below, we have identified individual sites where contamination is likely to be present.

4.1 Information Collection

The primary source of information on historical land use has come from 6 inch County Series Maps and post 1950 Ordnance Survey Maps The maps can be accessed at Neath & Port Talbot Central Libraries and Swansea City Council Archives section. Information has also been collected from local authority records, local publications, Trade Directories, petroleum officer for the Neath Port Talbot area and the Environment Agency for Wales. The Authority also holds a range of historic OS maps on its GIS systems.

The information gathered is administered under Geoenviron a software package developed by Geokon Ltd. This is an environmental data management system broadly designed for the registration and management of various types of environmental data. One of the modules within the software is dedicated to managing information related to the identification, risk assessment and remediation of contaminated land. A third party GIS (Geographical Information System) software is integrated into Geoenviron allowing the data to be spatially displayed as layers on top of OS maps.

The Geoenviron database also holds information on potential pathways and receptors from other organisations that is relevant to the identification of contaminated land. This includes: -

- Information supplied by the Environment Agency Wales for Part IIA purposes - Landfill Sites, Bathing Waters, Water Abstraction, Discharge Consents, River Quality Objectives, Waste Management Licenses, IPC & IPPC authorisations and Licensed nuclear sites.
- Published information on solid and drift geology from the British Geological Survey & LA Planning Dept.
- Published information on aquifer vulnerability and soil types from the Environment Agency for Wales Vulnerability Maps.
- Location of Environmentally sensitive areas i.e. SSSI's, Nature Reserves from Countryside Council for Wales.
- Current Land Use - LA Records. i.e. surface water courses, allotments, schools.
- Information on site investigation and site remediation reports held by Neath - Port Talbot County Borough Council.
- Catchment plan showing location of surface water courses, allotments, schools etc.

4.2 Site Prioritisation

Due to the complex industrial history of Neath Port Talbot borough is not practical to evaluate and investigate every single site that has been identified as potentially contaminated.

A rational and systemic approach to prioritise sites needs to be applied. Hence sites where pollution linkage is considered likely will be given higher priority so they can be investigated first.

The prioritisation of potential contaminated land sites is implemented using Geoenviron, which uses a system based on the Source-Pathway-Receptor concept to assess risk.

The prioritization is split into two stages. The Stage 1 assessment involves hazard ranking sites based on their historical industrial uses and the receptor's sensitivity. The Stage II procedure involves refining the assessment from Stage I by carrying out an exposure assessment.

The Stage I assessment can be carried out very rapidly, providing that source and receptor information is available. The assessment produces a priority listing of sites for each type of receptor considered.

The Stage II assessment involves refining the priority listing obtained from Stage I by carrying out a pathway or exposure assessment to determine whether or not a potential pollutant linkage exists. The priority listing arrived at after Stage II can be used to make informed decisions as to which sites should be investigated further under the Part IIA regime. In cases where more detailed information has been provided regarding a special site and fed into the Stage II assessment the information yielded may be sufficient to enable a decision to be taken whether a site should be determined as contaminated land.

Further information on the prioritisation system is available on request from the Contaminated Land Team on 01792 512687 or e-mail e.k.jones@npt.gov.uk.

Sites that require urgent remediation will be dealt with as and when they occur.

4.3 Reducing Priority of Sites

Sites where land contamination will be, or is already being addressed through other regimes will take lower priority for inspection.

CHAPTER 5 - Programme for Detailed Inspection

Following prioritisation of potentially contaminated sites the process of 'determination' will be progressed. Each identified site will be subject to detailed inspection. This inspection will assess significance of pollutant linkages associated with each site.

5.1 Objective of the Detailed Inspection

The objective of the Detailed Inspection is to obtain sufficient information about contaminants, pathways and receptors relating to a specific site, such that the significance of pollutant linkage[s] can be assessed, in order to determine whether a site meets the definition of 'Contaminated Land' as detailed in Part IIA of the Environmental Protection Act 1990.

5.2 Progressing with Detailed Inspection

It is anticipated that the sites ranked highest (i.e. representing greatest potential risk) will be the first to undergo Detailed Inspection. It is however noted that during the inspection process, sites representing a more immediate risk may come to the attention of NPTCBC (i.e. pollution incidents, development pressures). If such sites are strongly suspected of causing significant harm, they will be dealt with as a matter of urgency.

5.3 Liaison and Communication

Prior to the Detailed Inspection, liaison and communication will be required to be undertaken with all stakeholders associated with the site. These may include for example;

- Owners,
- Occupiers,
- The Environment Agency Wales (EAW),
- Countryside Council for Wales (CCW),
- Glamorgan Gwent Archaeological Trust,
- Cadw,
- Other appropriate bodies for example the Local Health Board, National Assembly and Welsh Development Agency.

Consideration will also be taken as to whether communication with the wider community would be appropriate. This may be necessary when previous history/contamination may be known to the community or where the site includes community buildings or public open space.

Specifically the EAW will be contacted when there are potential risks to controlled waters, or when a site is likely to be designated as a special site.

Consultation with Glamorgan Gwent Archaeological Trust and Cadw will be undertaken when archaeological remains or landscapes of historic interest are present. Should this be the case then a formal archaeological assessment may be required prior to any intrusive investigation or remediation works. Where nationally important remains exist, there will be a presumption in favour of their preservation in situ and a Scheduled Monument Consent gained from the Welsh Assembly Government.

Liaison with site owners and occupiers will be undertaken by NPTCBC. Liaison with the other statutory and non statutory consultees will be managed by NPTCBC on a site specific basis.

5.4 Investigation of Potentially Contaminated Site

The inspection of a prioritised site will be undertaken in accordance with the phased and strategic manner outlined in Paragraph 2.20 of the National Assembly Guidance to Enforcing Authorities. These stages are detailed below.

- Phase I – Preliminary Assessment (Desk Top Study)
- Phase II – Site Visit / Reconnaissance
- Phase III – Intrusive Investigation.

All works will be undertaken in accordance with industry best practise with due regard of all recognised and relevant guidance. Additionally the works will be undertaken with due consideration of the environment. Should it be identified that that proposed works have the potential of causing environmental harm then alternative methods of works should be investigated. If no such methods are available then appropriate mitigation measures should be incorporated into the works to manage and reduce the potential risk to an acceptable level.

During the inspection process if it is suspected that a site may be defined as a 'Special Site' then the EAW will be consulted. If following consultation the site is confirmed as such a site, responsibility for completion of the Detailed Inspection will be transferred to the EAW.

5.5 Preliminary Assessment (Desk Top Study)

The aim of the preliminary assessment is to obtain further information relating to potential pollutant linkages identified during the initial site screening and prioritisation process, in order to allow the potential risks identified during the prioritisation process to be reassessed.

The desk top study develops a preliminary Conceptual Site Model (CSM) and provides an initial qualitative assessment of the risks associated with the site, based on assessment of the source pathway and receptor relationships. In developing the CSM the following will be considered.

- Past and current uses of the site,
- Past and current uses of the surrounding area
- Geology, hydrogeology, and hydrology of the site and surrounding area,
- The presence of potential sources of contamination on and in the vicinity of the site,
- The presence of potential sensitive environmental receptors for example site users, ecological receptors, and controlled water, and
- All potential pathways associated with the site.

Additionally the desk top study will enable informed decisions to be made on health and safety precautions during site visit and the need for specialist assessment, for example, if there are ecological or archaeological considerations.

5.6 Site Visit / Reconnaissance

If the Preliminary Assessment indicates that potential pollutant linkages are associated with the site then a site visit will be undertaken to validate the preliminary CSM.

The site visits will either be undertaken with the owners consent or through the use of the council 'Statutory Powers of Entry' under Sections 108 of the Environmental Protection Act 1995.

During the walkover, evidence for the presence of contamination will be noted. This may include for example vegetation die off, changes in vegetation type, surface staining, strongly / unusual coloured materials and presence of Made Ground. The site visit will also consider any potential constraints which may affect intrusive investigation e.g. limited access, above ground services, or proximity of sensitive land uses.

During the site visit and subject to the conditions encountered limited and discreet sampling may be completed. Typical sampling undertaken during a site visit may include, for example monitoring of vapour/gases within properties or drainage, the retrieval of surface soils, surface water monitoring or sampling of vegetation.

Information gained at this stage of the investigation will form the basis of the health and safety plan required for every site investigation.

Subject to the findings of the desk study works to supplement the site visit may also be undertaken, e.g. surveys to establish the actual presence and condition of buried services, non intrusive geophysical surveys to establish the presence of voids, tanks or buried structures.

5.7 Intrusive Investigation

If the site visit confirms that potential pollutant linkages are associated with the site then intrusive investigation will be completed. The objective of the investigation would be to collate such information as to allow the assessment of the significance of the identified

potential pollutant linkage. On completion of the investigation a decision should be possible as to the existence of the pollutant linkage and whether any of the identified linkages should be considered significant.

The investigation will take into account the information developed in the earlier stages of investigation. The intrusive investigation may include, amongst others:

- Trial pits,
- Boreholes, and
- Installation of monitoring wells.

The activities will allow solid, liquid and gas phase samples to be collected from the site.

5.8 Supplementary Investigation(s) (optional)

A review of the outcome of the main investigation may still identify aspects where there is a deficiency of information. For example, to improve the accuracy of costing for remediation may require further sampling to delineate an area of contamination or a contamination plume or more monitoring wells may be necessary to confirm the direction of groundwater flow. Where such deficiencies are identified, a Supplementary Investigation may be necessary. This will be designed to produce quite specific information and will therefore utilise targeted sampling.

On going monitoring of groundwater and ground gas wells is sometimes classed as Supplementary Investigation

5.9 Sub Contracted Work

The intrusive site work will be carried out under the terms of the Neath Port Talbot County Council term contract for ground investigation.

Prior to site investigation work a Health and Safety plan is produced to ensure the site personnel and general public are not put at risk. This is carried out for all field based site investigation and remediation activities, and not just CDM (Construction Design and Management) regulated work.

Any subcontracted chemical analysis will be carried out by a UKAS (United Kingdom Accreditation Service) and MCERT (Environment Agency Monitoring Certification Scheme) accredited test house.

5.10 Reporting

A site specific report detailing works completed, a developed CSM and an assessment of the potential and significant pollutant linkages will be prepared following the completion of each phase of works.

Each report will, following completion be reviewed by the Authorities Contaminated Land Officer to determine if further works are required.

5.11 Risk Assessment and Estimation

To establish whether identified contaminants pose a significant risk to human health, results from the site investigation will be compared with generic guideline values.

DEFRA and EA have published Contaminated Land Reports (CLR 7 – 11) to provide generic assessment of human health risks from contaminated land. The reports include SGV's (Soil guideline Values) derived from the CLEA (Contaminated Land Exposure Assessment) model. SGV's can be used to assess the risks posed to human health from exposure to soil contamination resulting from land use. They represent 'intervention values' which indicate to an assessor that soil concentrations above this level could pose an unacceptable risk to the health of site users and further investigation involving and/or remediation is required.

Guideline values relating to other receptors such as controlled waters and ecological systems will require specialist advice from the relevant bodies such as the Environment Agency and Countryside Council for Wales.

CHAPTER 6 - Procedures

This chapter outlines the procedures involved during the inspection and identification of contaminated land.

6.1 Internal management arrangements for inspection and identification

Within Neath Port Talbot County Council, the Environment Directorate has the responsibility for the implementation of Part IIA Environmental Protection Act 1990. As part of the Corporate Quality and Environmental Management Systems Section the Contaminated Land Officer is the lead officer, reporting to the Policy and Strategy Manager.

6.2 Considering local authorities interests in land

Within the Neath Port Talbot Authority, a large percentage of land holdings are within its ownership. The majority of this land is linked with potentially sensitive uses, for example schools, allotments, recreational grounds etc.

The local authority intends to be open and transparent in its approach when considering land that it owns or for which it may be responsible. Parcels of land owned by the Local Authority will be assessed on the same basis as other land within the borough. Local authority owned land is recorded and maintained in the Estates Department, Penllergaer Civic Centre, as a paper based filed system with historic details of ownership.

6.3 Information Requests

The council may receive a request for information from a member of public, business organisation or a voluntary group regarding a contaminated land issue. Information held by the department on historic land use and site investigation data and also information held as part of a planning condition is provided. A disclaimer is added to the written response making it clear that the information provided is only that available to the department at that time and encouraging the requester to make more extensive enquiries. An appropriate charge will be made for provision of the information. This is consistent with the Environmental Information Regulations 1992.

When information is provided to the authority from a third party, its status will be confirmed at the time of provision. This will provide justification where those providing the information consider it should remain confidential or subject to national security considerations. The local authority will check the status of all information before it is released.

Currently no information other than notices served is routinely given in response to land charge enquiries unless a specific additional question is raised regarding landfill or contamination information.

6.4 Complaints

The council may receive a complaint from a member of the public, business organisation or a voluntary group regarding a contaminated land issue. All complaints are dealt with by the Contaminated Land Officer. Details of complaints will be logged on the council's Flare system currently used within the Environment Directorate.

All information available on a site is collated, and will be assessed as outlined in chapter 4 to identify the presence of a significant pollutant linkage, and therefore identify the need for further investigation. If no significant pollutant linkage has been identified, the site is recorded on the GIS Database for future reference.

There may be occasions when the Authority will receive information from an anonymous source. The complaint will be recorded on the Flare system, and where warranted, an investigation made.

6.5 Designation of Sites

Once an area of land has been determined as Contaminated land by statutory definition, the council will prepare a written record to include:-

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

The Corporate Quality and Environmental Management Systems Section of Neath Port Talbot Council will then formally notify in writing all the relevant parties that the land has been declared contaminated land.

6.6 Special Sites

If land is determined to be contaminated land and it also falls within one or more of the "special sites" descriptions prescribed in the Contaminated Land Regulations, it is required to be designated as a special site. The Environment Agency will then become the enforcing authority. Where the council are aware that land it intends to investigate would, if declared contaminated land, be a special site, it will formally notify the Environment Agency. This will be done at an early stage of the process, to make arrangements for the Agency to carry out the inspection of the land on behalf of the local authority.

The Environment Agency has provided standard forms for the provision of information on special sites.

6.7 Arranging Site Access

Prior to entering a site for investigation purposes, NPTCBC will attempt to gain consent from the current site owner and/or occupier at an early stage. This will be in the form of a letter outlining the date of inspection and what it will involve. It might also require the owner to be present during inspection, to gain information on past use of site. If there is no cooperation to this request for access, the council may enter the site in line with Section 108 of the Environmental Act 1995

6.8 Powers of Entry

The local authority acting in its capacity under part IIA, has powers under section 108 of the 1995 Environment Act to obtain access to land for the purpose of investigation.

Any suitable person may be authorised by the authority (in writing) to exercise the powers within section 108. It is not necessary for that person to be an employee of the authority, which means the authority are able to authorise employees of a consultant contracted by the authority to carry out investigations for contaminated land. Where the land in question is likely to be designated as a *special site*, the authorised person may be an officer of the Environment Agency.

The powers under section 108 include;

a. entry onto land and into any premises
b. entry to include other authorised persons, equipment and materials
c. carrying out necessary examination and investigations
d. direction that premises be left undisturbed
e. the taking of measurements, photographs and recording observations/readings
f. the taking away from site, any samples of air, water or land
g. subjecting articles or substances suspected of being polluting to tests
h. taking possession of and detaining the above
i. requiring persons to answer questions
j. requiring access to records including computerised records (except documents covered by legal professional privilege)
k. requiring necessary facilities and or assistance to be given
l. any other powers contained within the regulations

Failure, without reasonable excuse, to comply with requirements imposed under section 108, or obstructing the use of the powers, can be an offence, and may lead to prosecution.

In the case of residential properties, seven days notice is required before entry by authorised persons can take place. The consent of the occupier is required, without this the authority of a warrant is needed. For non-residential properties/land the above notice is necessary only where heavy equipment is to be used for the physical sampling.

Careful consideration needs to be given to the statutory guidance which may restrict the circumstances in which the powers of entry and investigation may be exercised. The

authority would not use its powers of entry without first being satisfied that a reasonable possibility of a pollutant linkage exists at that site. Before the authority would use its powers for intrusive inspection, it must be satisfied on the basis of information already obtained, that the contaminant(s) is likely to be present and the receptor(s) is actually present or likely to be present. Powers of entry and investigation under section 108 cannot be used for speculative investigations or where adequate information has already been made available or will be within a reasonable period of time.

Chapter 7 - General Liaison and Communication Procedures

In order to co-ordinate and implement the inspection strategy effectively it is necessary to have the correct procedures in place to ensure efficiency in the consultation process and the transfer of information internally and externally to interested parties.

7.1 External Organisations

The statutory guidance (paragraph 2.11) requires the local authority to formally consult with the Environment Agency and other appropriate public authorities, this will include:- Countryside Council for Wales, Cadw, Food Standards Agency and the Welsh Development Agency. Each organisation has been invited to comment on the consultation draft of the strategy.

At a local level the Environment Agency has nominated 'Area Contacts' within their Contaminated Land Team who will be the first point of contact for the Authority. Liaison and consultation occur: -

- where it has identified contaminated land which is, or is potentially affecting controlled waters; and
- where it has information indicating that a site will fall within the definition of a designated Special Site; and
- where it is considering intrusive investigation which may have an impact on controlled waters.

7.2 Internal Liaison and Communication

As stated previously Neath Port Talbot Council set up a Contaminated Land Steering group to facilitate liaison and communication within the Council and external organisations. Many of the council participants within this group hold relevant information within their departments. This knowledge and experience has been utilised in the preparation and review of this strategy.

Liaison with departments outside the Contaminated Land Steering Group will also occur where there is a specific need within their specialist area i.e. Leisure Services (conservation officer).

7.3 Communicating with Owners, Occupiers and other Interested Parties

Neath Port Talbot council's approach to its regulatory duties is to seek voluntary action before taking enforcement action. This approach is adopted for issues of land contamination; recognising that in many cases as much or more effective remediation can be achieved by agreement rather than by enforcement. Similarly, the party volunteering to undertake this work may do so because of financial benefits.

This approach requires effective communication with owners, occupiers and other interested parties. The Contaminated Land Officer will be the central contact point within

the authority on contaminated land issues and as such will work to keep owners, occupiers and other interested parties informed at each stage of an investigation, regardless of whether there is a formal designation of contaminated land.

Chapter 8 - Review Mechanisms

Neath Port Talbot County Borough Council has a duty to inspect the borough from time to time to identify contaminated land. In practice, this will be a continuum, balancing a systematic approach with the availability of resources. This chapter explains, why, when and how the inspection strategy will be reviewed.

8.1 Review of Inspection Strategy Document

The council has a duty to review its inspection strategy on a regular basis and to meet its statutory responsibilities. Particular matters that will be kept under review will include:

- The content of the strategy generally
- Priorities for further investigation of potentially contaminating sites
- The potential for the introduction of new receptors
- Progress on voluntary remediation
- The enforcement process generally and the identification of appropriate persons

The Corporate Quality and Environmental Management Systems Section of Neath Port Talbot Council will review the strategy every three years. The amended strategy will be sent to the organisations listed in Appendix 4 for consultation. Following the consultation period, any proposed changes will be reported to the cabinet committee and incorporated into the strategy as necessary. Reviewing the Inspection Strategy every three years is considered to be the most efficient and effective way of not only making sure the inspection strategy is up to date and reflects current practice, but also that it is realistic and achievable. The review will enable timescales and targets to be revised appropriately.

Chapter 9 - Information Management

This chapter outlines how information from the inspection strategy is to be managed, accessed and maintained.

9.1 Information and Data Management

All information, with respect to the contaminated land regime under Part IIA, Environmental Protection Act 1990 and this strategy, will be held and maintained by the Corporate Quality and Environmental Management Systems (CQEMS).

The majority of information is held electronically on the Geoenviron database, it is capable of logging all information associated with the inspection of potentially contaminated sites. The database has restricted access and therefore can only be updated and maintained by the Contaminated Land Team. Any associated information such as site investigation reports, maps etc are held as a paper based format within the CQEMS filing system.

9.2 Access to Information

Inspection information will be made available for internal departments of the local authority on request.

A copy of the Contaminated Land Strategy can be accessed at Neath, Port Talbot and Penllergaer Civic Centres and on the Neath Port Talbot website (ww.npt.gov.uk).

9.3 Contaminated Land Register

A public register is available to the public as a record of information on sites where notices have been issued or a formal remediation statement has been prepared in line with section 78(R) of the Act. This can be accessed at Neath, Port Talbot and Penllergaer Civic Centres. The register will be available Monday to Friday during normal office hours, access to the register will be provided free to members of the public although a small charge will be made for photocopying.

Arrangements to view the register can be made by contacting the Contaminated Land Team on 01792 512687 or e-mail e.k.jones@npt.gov.uk.

9.4 Provision of Information to Environment Agency

The Environment Agency is required to produce a report on the state of Contaminated Land from time to time, or as requested by the Secretary of state. The Agency has committed itself to preparing its first report by a date two years after implementation of the regime. To enable them to produce this report, the Local Authorities are required to provide the appropriate information. The local authority will receive a written request with the relevant standard forms (Annex 1, Contaminated Land Technical Report) from

the Environment Agency requesting information needed to compile the report, this will be completed and returned to the Area Contact within an agreed timescale.

9.5 Triggers for Early Review

In addition to the routine review of the strategy every three years, a change in circumstances may lead to a review of the inspection priority of an individual site (s) or the strategy as a whole.

Conditions that affect the prioritisation of sites can be triggered by:-

- Change of use of surrounding land (introduction of new receptors)
- The potential for pollutant linkages to become significant or urgent as a result of unplanned events (e.g. flooding, subsidence, spillage), or a change in circumstances
- Identification of a localised effect which could be associated with the land (identification of health effects)
- Responding to new information (information from statutory bodies, public or other interested parties)

Conditions which affect a large number of sites or the whole strategy to be reviewed include:-

- Changes in legislation and guidelines
- Significant new case law is established

Following the identification of any of the above triggers, an assessment of the impact on the overall strategy will be carried out and any amendments incorporated.

PART 2 - PLANNING

Contaminated Land and The Planning Process

Although contamination is subject to controls under Part IIA, it or the potential for it, can be a material planning consideration and should be taken into account at various stages in the planning process, including the preparation of development plans and the determination of planning applications.

When considering applications Neath Port Talbot will follow policies in the Development Plan (this includes adopted local plans and the Unitary Development Plan which has reached an advanced stage of preparation with the Public Inquiry into objections having commenced in July 2005), and WAG planning guidance (Planning Policy Wales 2002 and Technical Advice Notes). The objective of the policy regarding land contamination is to ensure that applications are conditioned to require remediation to a standard that is suitable for the proposed use.

Constraints to Development

The best way of minimising any associated risk is to ensure that any sites that may be contaminated are identified at the earliest stage of the planning process. The history of the site or nearby sites is the principle factor in determining whether a site is likely to be contaminated or not.

1.3 A question has been added onto the standard planning application form requesting developers to provide information on historical land use. This question is as follows:-
Are you aware if land has been subject to a contaminative use i.e. industrial use?
If yes then please specify a list of historical uses.

1.4 A list of planning applications is updated weekly and made available on the Neath Port Talbot Council intranet site, the Contaminated Land Officer will check the list against the contaminated land database to highlight any previous industrial use on the proposed developments, and therefore potentially contaminated land.

Where the information under 1.3/1.4 or any other information indicates a potential for contamination a scheme for dealing with contamination will be required and an assessment will be made as to whether the site can be developed in a safe manner subject to remediation. If this is the case, a condition will be imposed on any consent which will include an appropriate site investigation prior to the commencement of the development, and a remediation strategy and validation certificate prior to occupation of development. This will involve close liaison between the Contaminated Land Officer and the planning officer at an early stage of the planning process and throughout the development stage.

Planning Approvals

Where conditions are imposed on planning approvals the planning authority in conjunction with the Corporate and Quality Environmental Systems Section must ensure the conditions are complied with before development commences.

PART 3 - LOCAL AUTHORITY LAND HOLDINGS

Contamination Associated with Existing Land Holdings

With Part IIA of the Environmental Protection Act 1990, now implemented in Wales, the responsibility for enforcing the provisions of the Act falls upon individual Authorities. It will be up to each Local Authority to look at potentially contaminated sites within its area and then prioritise its investigations. Authorities however, have to be seen to be even handed in their investigations and will not be able to leave the investigations of sites in its ownership until last. They will have to be consistent in their scheme of investigation and prioritisation of sites to be examined. Where sites are found to have potentially significant levels of contamination a quantified risk assessment will have to be undertaken to determine if there is a need for remediation.

Acquisition of Land

On acquiring land the Authority will have to give careful consideration as to the possibility of contamination and each acquisition will have to be judged on its merits as to the level of investigation that is required. It is the underlying principle of the Act that where such remediation is required the original polluters of the land should pay for such remediation as proved necessary and that if the original polluters cannot be found after reasonable enquiry then, and only then does the burden of bearing the costs of carrying out these works fall upon the current owners of the land. It is important that the Local Authority's financial liability not be increased as a result of an acquisition proceeding without due consideration being given to this legislation.

Disposal/Leasing Property

Liability for remediation of contamination would cease upon the local authority disposing of the site to a purchaser who would then face a potential liability for remediation in his capacity as the current owner, this always being on the proviso that the previous owner did not cause or knowingly permit the contamination. On the question of disclosing the fact of contamination to a prospective purchaser it would appear that Prima Facie a Vendor is not obliged to make any disclosure to a purchaser in connection with the physical state of the subject land. However, the polluter will retain liability on sale unless land is sold with information, this is the Buyers Beware Principle. Although there have been proposals for the amendment of this principal such as the proposal by the House of Commons Select Committee on the Environment ('Contaminated Land') that vendors should be subject to a duty to declare information about contamination in their possession, the principle still remains. It may, however be advisable to make potential buyers aware from the outset that there are contaminants present on the site whilst stressing that the potential purchaser should obtain his own report as to the levels and areas of contamination and draw their own conclusion as to whether or not the site may be classified as contaminated land within the Act for the purpose for which they intend to use the site.

It is feasible that land leased by the Authority to another party could have potentially contaminating activities carried out upon it. Whereas this should be catered for in the agreement between both parties, as previously indicated if the original polluter cannot be found, or no longer exists the landowner becomes the person liable for the contamination and any site remediation required. Again careful consideration will have to be given as to how the Council's interests can be best protected.

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Appendix 1 Glossary of Terms and Definitions

Appropriate person: a person who is liable for the costs for any thing which is to be done by way of remediation

Class A Person: a person who is the appropriate person by virtue of having caused or knowingly permitted a pollutant to be in, on or under the land.

Class B Person: a person who is an appropriate person because they are the owner or occupier of the land in question, where no Class A person can be found.

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: defined in section 78A(9) by reference to Part III (section 104) of the Water Resources Act 1991; this embraces territorial and coastal waters, inland fresh waters, and ground waters.

Current Use: any use which is currently being made, or is likely to be made, of the land and which is consistent with any existing planning and is subject to the following qualifications:
(a) the current use should be taken to include any temporary use, to which the land is, or is likely to be, put from time to time;
(b) the current use includes future uses or developments which do not require a new, or amended, grant of planning permission;
(c) the current use should also include any likely informal recreational use of the land, whether authorised by the owners or occupiers or not
(d) in the case of agricultural land, however, the current agricultural use should not be taken to extend beyond the growing or rearing of the crops or animals which are habitually grown or reared on the land.

GIS: Graphical Information System, a computer system that can record information on to digital maps.

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."

Inspection using statutory powers of entry: any detailed inspection of land carried out through use of powers of entry given to an enforcing authority by section 108 of the Environment Act 1995.

Orphan linkage: a significant pollutant linkage for which no appropriate person can be found, or where those who might be liable are exempted.

Pathway: one or more routes or means by, or through, which a receptor:
(a) is being exposed to, or affected by, a contaminant, or
(b) could be so exposed or affected.

Pollutant: a contaminant which forms part of a pollutant linkage.

Pollutant linkage: the relationship between a contaminant, a pathway and a receptor.

Pollution of controlled waters: defined in section 78A(9) as:
"the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter."

Possibility of significant harm: a measure of the probability, or frequency, of the occurrence of circumstances which would lead to significant harm being caused.

Receptor: either:
(a) a living organism, a group of living organisms, an ecological system or a piece of property which:

(i) is in a category listed in Table 3 (Appendix 2) as a type of receptor, and
(ii) is being, or could be, harmed, by a contaminant; or
(iii)controlled waters which are being, or could be, polluted by a contaminant

Remediation notice: a notice specifying the actions which should be taken by the appropriate person by way of remediation and the timescale within which these actions are required to be done.

Remediation statement: a statement prepared and published by the appropriate person detailing the remediation actions which are being, have been, or are expected to be carried out detailing the time periods within which these things will be done.

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

Significant harm: defined in section 78A(5) of the Environmental protection Act 1990 (EPA 1990). It means any harm which is determined to be significant in accordance with the statutory guidance in Chapter A (that is, it meets the conditions set out in Table 4 (Appendix 3) for the description of significant harm.)

Significant pollutant: a pollutant which forms part of a significant pollutant linkage.

Significant pollutant linkage: a pollutant linkage which forms the basis for a determination that a piece of land is contaminated land.

Significant possibility of significant harm: a possibility of significant harm being caused which, by virtue of section 78A(5) EPA 1990, is determined to be significant in accordance with the statutory guidance in Chapter A.

Special site: defined by section 78A(3) EPA 1990 as:
"any contaminated land -
"(a) which has been designated as such a site by virtue of section 78C(7) EPA 1990 or 78D(6) EPA 1990...;and
"(b) whose designation as such has not been terminated by the appropriate Agency under section 78Q(4) EPA 1990...".
The effect of the designation of any contaminated land as a special site is that the Environment Agency, rather than the local authority, becomes the enforcing authority for the land.

Substance: defined in section 78A(9) EPA 1990 as:
"any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour."

Appendix 2 Table 3 - Type of Receptor

TABLE 2

	Type of Receptor	Description of harm to that type of receptor that is to be 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 taken to mean an unhealthy condition of the body or part of it 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. In this chapter, this description of significant harm is referred to as a "human health effect"
2.	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 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 Areas of Conservation or potential Special Protection Areas given equivalent protection; ● Any habitat or site afforded policy protection under paragraph 13 of PPG9 on nature3 conservation (i.e. candidate special Areas of Conservation, potential Special protection Area and listed Ramsar Sites) or; ● Any nature reserve established under section 21 of the national parks ad Access to the Countryside Act 1949	For any protected location: ● 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. 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 favourable conservation status of natural habitats at that location or species typically found there. In determining what constitutes such harm, the local authority should have regard to the advice of English Nature and to the requirements of the Conservation (Natural Habitats etc) Regulations 1994. This description of significant harm is referred to as an "ecological system effect"
3.	Property in the form of: ● Crops, including timber, ● Produce grown domestically or on allotments, for consumption; ● Livestock ● Other owned or domesticated animals	For crops, a substantial diminution in yield or other substantial loss in their vale resulting from death, disease or other physical damage. For domestic pets, death serious disease or serious physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage.

	• Wild animals which are the subject of shooting or fishing rights	The local authority will regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fir 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. This description of significant harm is referred to as an "animal or crop effect"
4.	Property in the form of buildings. 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.	Structural failure, substantial damage or substantial interference with any right of occupation. The local authority will regard substantial damage or substantial interference as occurring when any part of a building ceases to be capable of being used for the purpose for which it is, or was intended. Additionally, in the case of a scheduled Ancient Monument, substantial damage should be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled This description of significant harm is referred to as "building effect"

Reference: Draft National Assembly Statutory Guidance on contaminated Land (November 2000)

Appendix 3 Table 4 - Description of Significant Harm

TABLE 3

Description of Significant Harm	Conditions for there being a Significant Possibility of Significant Harm
Human Health effects arising from ● The intake of a contaminant, or ● Other direct bodily contact with a contaminant	If the amount of the pollutant in the pollutant linkage in question: ● Which a human receptor in that linkage might take in, or ● 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. Such an assessment should take into account: ● 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. The question of 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. Toxicological properties should be taken to include carcinogenic, mutagenic, teratogenic, pathogenic, endocrine disrupting and other similar properties.
All other human health effects (particularly by way of explosion or fire)	If the probability, or frequency, of occurrence of significant harm of that description is unacceptable, assessed on the basis of relevant information concerning: ● That type of pollutant linkage, or ● That type of significant harm arising from other causes Such an assessment should take into account the levels of risk which have been judged unacceptable in other similar contexts.
All ecological system 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.
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.
All building effects	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.

APPENDIX 4 CONSULTEES

- Environment Agency
- Countryside Council for Wales
- Food Standards Agency
- Cadw
- Welsh Development Agency
- The National Assembly for Wales
- All Relevant Internal Departments
- Glynneath Town Council
- Neath Town Council
- Pontardawe Town Council
- Briton Ferry Town Council
- Onllwyn Community Council
- Blaengwrach Community Council
- Blaenhonddan Community Council
- Clyne & Melincourt Community Council
- Dyffryn Clydach Community Council
- Resolven Community Council
- Tonna Community Council
- Cilybebyll Community Council
- Coedffranc Community Council
- Gwauncaegurwen Community Council
- Pelenna Community Council
- Cwmllynfell Community Council
- Ystalefera Community Council
- Crynant Community Council
- Seven Sisters Community Council
- Network Rail
- Second Site Property Ltd
- BP chemicals
- Corus
- Celtic Energy
- Farmers Union of Wales
- Forestry Commission
- Glamorgan Wildlife Trust
- Environment Centre, Swansea
- Professor Ronan Lyons
- Dr Mark Temple
- Arena Network
- Groundwork Wales
- National Trust
- RICS
- NPT Community Health
- Brecon Beacons National Park
- Council Protection of Rural Wales