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Consultation Document

Scoping Paper

A Strategic Overview of Contaminated Land in Wales

Date of issue: **21 June 2013**
Action required: Responses by **13 September 2013**

Overview

This is a targeted consultation which seeks your views on how the Welsh Government should take forward contaminated land issues in Wales.

How to respond

Please complete the Consultation Response Form attached and return it to us by 13 September 2013 either by email or post, using the contact details below.

Further information and related documents

Large print, Braille and alternative language versions of this document are available on request.

This document and the response form can be found online at : http://www.wales.gov.uk

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Data Protection

How the views and information you give us will be used.

Any response you send us will be seen in full by Welsh Government staff dealing with the issues which this consultation is about. It may also be seen by other Welsh Government staff to help them plan future consultations.

The Welsh Government intends to publish a summary of the responses to this document. We may also publish responses in full. Normally, the name and address (or part of the address) of the person or organisation who sent the response are published with the response. This helps to show that the consultation was carried out properly. If you do not want your name or address published, please tell us this in writing when you send your response. We will then blank them out.

Names or addresses we blank out might still get published later, though we do not think this would happen very often. The Freedom of Information Act 2000 and the Environmental Information Regulations 2004 allow the public to ask to see information held by many public bodies, including the Welsh Government. This includes information which has not been published. However, the law also allows us to withhold information in some circumstances. If anyone asks to see information we have withheld, we will have to decide whether to release it or not. If someone has asked for their name and address not to be published, that is an important fact we would take into account. However, there might sometimes be important reasons why we would have to reveal someone's name and address, even though they have asked for them not to be published. We would get in touch with the person and ask their views before we finally decided to reveal the information.

Contents

1. Introduction

Purpose

This scoping paper is intended to provide a brief review of the issues relating to contaminated land in Wales and focuses on the risks, the legislation and other drivers for dealing with it at a strategic level. The document seeks the views of key stakeholders in order to help shape the future policy direction of the Welsh Government.

It was prepared in conjunction with Natural Resources Wales and

- sets out the nature and extent of the problems as known;
- identifies the issues that are likely to arise in the future as a result of current practice; and
- explores the areas where changes need to be considered to ensure the correct tools are available to deal with land contamination and the risks posed.

The Paper is divided into five Sections

1. Section 1 sets out the **background and history of contaminated land** in Wales.
2. Section 2 sets out the **key issues** including the extent of contaminated land, health risks, metal mines and climate change.
3. Section 3 sets out the **legislative drivers** underpinning contaminated land issues in Wales.
4. Section 4 provides an overview of **other factors** affecting or managing contaminated land in Wales.
5. Section 5 sets out a series of questions for stakeholders.

Scope

The focus of this paper is on land defined as "contaminated land" under Part 2A of the Environmental Protection Act 1990 ("Part 2A")[1] or land that has entered the planning system to deal with the contamination, but may otherwise satisfy the legal definition under Part 2A.

We acknowledge that the term "contaminated land" can have different meanings to different sectors. Certainly, the most specific definition is that introduced under the contaminated land regime in Part 2A. This sets a series of criteria based on an assessment of the likely risk of harm or pollution occurring, with the local authority as the decision-maker responsible for determining if the definition has been met. As a result the term "contaminated land" is reserved in a regulatory context for land that has been investigated by the local authority and meets this legal definition.

As a wider catch-all term the phrase "land contamination" is sometimes used to denote land that contains substances that *may* be a risk to health or the environment but have not, as of yet, triggered determination under Part 2A. An example of this would be land that is being dealt with under another regime, such as planning, or land that has not yet been inspected by the local authority. There are also terms such as "brownfield" that can often conjure an image of former industrial and derelict land, but may also refer to current industrial sites or simply vacant areas. However, in planning terms brownfield is normally synonymous with "previously developed land," which is simply land that has had some development on it. It is not necessarily industrial and may not be derelict, abandoned or contaminated.

Audience/Key stakeholders

In preparing this paper it is recognised that a wide range of organisations are active stakeholders in dealing with contaminated land and it is important to understand their role. These stakeholders will include land owners, land users, developers, industry and statutory bodies such as local authorities, Natural Resources Wales, Ministry of Defence.

[1] http://www.legislation.gov.uk/ukpga/1990/43/part/IIA

Natural Resources Wales

Natural Resources Wales became fully operational on 1 April 2013 and brought together the functions of the Countryside Council for Wales and the Welsh devolved functions of the Environment Agency and the Forestry Commission. The body was legally established on 9 July 2012 to enable it to undertake preparatory work prior to it becoming fully operational. The functions of the new body include the Environment Agency's previous role in respect of contaminated land in Wales i.e. it is responsible for special sites and will provide the Welsh Government with appropriate technical advice.

Section 1 – Background and history of contaminated land in Wales

The identification and management of contaminated land has been subject to the specific statutory regime of Part 2A of the Environmental Protection Act (1990) for several years. Part 2A is supplemented by Statutory Guidance that was originally produced in 2001 and subsequently amended in 2006. A revised version of the Statutory Guidance, along with amendments to the 2006 Regulations, came into force in April 2012[2]. The revisions are intended to prioritise sites that pose the most serious risks, thus making the Part 2A regime more effective in safeguarding human health and the environment. This will allow local authorities and land owners to target their resources more effectively.

The identification, investigation and, if appropriate, determination of and remediation of contaminated land is currently a requirement on local authorities under the provisions of Part 2A. As a requirement of the previous Statutory Guidance each of the 22 local authorities have prepared a Contaminated Land Inspection Strategy, which should be updated or replaced to reflect the current Statutory Guidance. In addition, under Planning Policy Wales 2011, local authorities should indicate in their Local Development Plans known areas of contamination. Local authorities are also required under Part 2A to report on progress to inform a regular State of the Environment Report by the Environment Agency/Natural Resources Wales as requested by Government. To date, only one report relating to Wales has been published by the Environment Agency (2009[3]).

Between 2005 and 2011 the Welsh Government provided £11 million of funding to local authorities and Environment Agency Wales through the discretionary Contaminated Land Capital Funding Programme. This money was used to assist in taking forward work under Part 2A on the investigation and/or remediation of potentially contaminated sites. During this period 218 projects across Wales were awarded funding, with the vast majority for site investigation and the remainder for remediation. The programme was withdrawn in April 2011 due to a significant cut in capital funding received by the Welsh Government.

[2] http://wales.gov.uk/topics/environmentcountryside/epq/contaminatedland/guidance2012/;jsessionid=v88lQnmZwH9FtNkKSnB1R0pf22XZx122GTMnBRwTSvFXvt7ZcHYp!-1773180747?lang=en
[3] http://wales.gov.uk/topics/statistics/headlines/environment2010/100722/?lang=en

Section 2 – Contaminated Land in Wales – Key issues

2.1 Extent of contaminated land

Wales has a substantial legacy of land contamination, which has mainly been caused by historical industrial activity. Land contamination is particularly associated with ex-industrial land and ex-landfills, some of which were redeveloped without being cleaned-up before legislation was introduced in the mid-1990s. However, it is difficult to obtain a clear picture of the extent of the problem across Wales due to lack of site specific knowledge and up to date information on the number of sites being dealt with either under Part 2A or by other methods such as the planning system. Limited focused surveys on the extent of land affected by contamination have been conducted in Wales since 1988, when the Welsh Office funded a survey to provide a record of potentially contaminated sites.

The key findings of subsequent land contamination surveys are provided below.

- An Environment Agency study in 2005 “Indicators for Land Contamination” identified criteria for classifying contaminated sites and was validated using a number of case studies. The report contains data for Wales and estimated that 24,200 hectares of land might potentially be at risk of contamination. This value was derived from estimating the distribution of historical industrial practices and the land used from the examination of historical records (i.e. Ordnance Survey maps). According to the report 5,400 hectares of this land in Wales was identified through the various mechanisms of planning, voluntary action, Part 2A or other associated environmental regulation as being affected by contamination, while a further 5,000 hectares of land in Wales was estimated as being remediated.

- In 2009 the Environment Agency published its second State of the Environment Report entitled “Dealing with contaminated land in England and Wales”. This used local authority data provided up until the end of March 2007, and summary figures are included in the table below.

Key statistics from the State of Environment Report 2009 (Wales only) for the period September 2001 to March 2007

- An estimated 6,500 inspections had been undertaken by local authorities in order to determine whether a site met the definition of contaminated land under Part 2A.
- 8 of the 22 local authorities reported they had determined 122 sites as being contaminated land under Part 2A.
- Local authorities provided estimates of the proportion of sites that had been dealt with using different methods since Part 2A was introduced and these were:
  - 11% of contaminated sites were managed voluntarily
  - 79% of contaminated sites were managed via Planning
  - 10% of contaminated sites were managed via Part 2A
- 4 Part 2A Contaminated Land sites (including one special site) have been remediated.
- Local authorities were asked to report progress with their Inspection Strategy and 55% had reported they had made Good progress whilst 45% reported there had been poor or little progress.
- There were 5 requests for Special Site investigations and this covered approximately 10 hectares of land.
- 72% of local authorities had inspected less than 10% of their area.

This data suggests local authorities may be inconsistent in their approach to the inspection of potentially contaminated sites across Wales.

2.2 Health risks

Demonstrations of direct causal relationships from a particular contaminated site to human harm are rare. Instead, risk assessments are used based on an understanding of the toxicology of the contamination present, combined with knowledge of the exposure of people to that contamination. These assessments are at the population level rather than that of the individual. Nonetheless, risks to health from contaminated land sites can be demonstrated and the effects will vary

depending on the toxicology of substance, exposure routes and the individual. Symptoms may range from acute to chronic conditions, for example, the low risk of simple non specific skin complaints from hydrocarbons to the higher risk of carcinogenic substances such as polycyclic aromatic hydrocarbons.

The previous Statutory Guidance for Part 2A did not explain how local authorities should decide whether a significant possibility of significant harm (SPOSH) to human health exists. The revised Statutory Guidance aims to address this issue by aiding local authorities in the decision making process by setting out categories of harm that should be considered to be significant harm to human health.

The new (revised) Statutory Guidance published in April 2012 provides clarity on how generic assessment criteria (GACs), which are scientifically robust and produced by reputable organisations, should be used appropriately for screening sites early in the risk assessment process. They should not however be used in isolation when considering individual sites.

Additionally GACs set out a cautious estimate at which concentrations of a substance in soils are considered to pose no risk to health or, at most, a minimal risk to health. Further technical tools and guidance are currently being developed to help support the Statutory Guidance, for example the research project being undertaken to develop technical guidance for Category 4 Screening Levels, which aim to aid regulators in the assessment of risks posed to human health.

2.3 Abandoned Mines

Whilst not generally captured by any regulatory contaminated land processes (two metal mine sites have been determined under Part 2A) there are additional sites in Wales that should potentially be considered in the wider scope of this paper, for instance the Metal Mine Strategy for Wales[4] has identified the top 50 highest profile former metal mining sites. Similarly, Natural Resources Wales has identified in excess of 100 water bodies that would be judged at risk of failing quality requirements under the Water Framework Directive[5]. Natural Resources Wales, in support of the Mining Waste Directive[6], has currently identified 12 sites covering 262 hectares that cause adjacent water courses to fail Environmental Quality Standards for in excess of 500 metres downstream.

Since 2002 Environment Agency Wales have completed 12 scoping studies, 3 wider catchment studies, 5 feasibility studies, operated 2 pilot treatment plants together

[4] http://www.environment-agency.gov.uk/cy/ymchwil/llyfrgell/cyhoeddiadau/33845.aspx
[5] http://www.environment-agency.gov.uk/research/planning/33362.aspx
[6] http://www.environment-agency.gov.uk/business/sectors/116582.aspx

with partial remediation work at 2 metal mine sites. Match funding secured from Europe has recently allowed for full remediation to take place at 1 scheme.

2.4 Climate Change

The impact on contaminated sites brought about by any climate change will inevitably vary with each site and cause. However, it is important the potential consequences are not overlooked. For example, an increase in rainfall or flooding may lead to increases in leaching of contaminants from sites. Increases in temperature may affect the microbial fauna and flora we rely on to naturally degrade some pollutants. Increases in temperature may also make some pollutants more mobile (for example tars or other hydrocarbons), whilst dry periods may increase the volatilisation of pollutants or raise additional dust bearing contaminants. Alternatively, a warming climate may alter people's behaviour and increase exposure to some contaminants, for example by encouraging more home grown vegetables or simply increasing the time spent outdoors and subsequent exposure to potentially contaminated soil.

There are areas of land contamination located on eroding or low-lying coastlines. Processes of coastal erosion and sea flooding have, over the years, resulted in waste from some sites being deposited on the foreshore or seeping into the coastal and marine environment, potentially resulting in a range of impacts such as adverse effects on public health and safety or undesired physical, chemical and biological impacts on the natural environment.

These effects are likely to be experienced more frequently as a consequence of the impacts of climate change, especially with sea level rise.

In Wales there is also a high reliance on private water supplies. The implications of climate change may increase the importance of Wales' small groundwater aquifers and water supplies, and their vulnerability to pollution, including that from land contamination.

2.5 Communities

The redevelopment of brownfield land can be complicated by real or perceived contamination and this can present a problem to the active-living community.

Left unattended, brownfield land may lower the quality of life for residents, with the risk of polluted soil and groundwater affecting the quality of the local environment. At

the same time, many of these neighbourhoods may suffer from a shortage of greenspace for parks, playgrounds, gardening, natural open-space areas and walking.

The catalyst for revitalising brownfield sites is often provided for by development, which can result in social benefits such as the provision of housing and economic benefits associated with employment opportunities. The benefits of greenspace, in contrast, frequently appear less tangible.

However, converting brownfield properties into green spaces offers a potential solution to improve the natural environment by addressing contamination, as well as helping transform communities into healthier human environments that provide more venues for walking, recreation, and other physical activities.

Section 3 – Legislative Drivers for dealing with land contamination

3.1. General

Our overarching driver for dealing with contamination is the protection of human health and the environment. This is expressed through a variety of legislative and commercial reasons for taking action to deal with land contamination. It is significant that the contaminated land regime under Part 2A was in many ways intended as a regime of last resort with a firm emphasis placed on encouraging those responsible to undertake remedial work through other routes. Indeed, the introduction of Part 2A has encouraged major industries and landowners to voluntarily inspect land to understand their liabilities. However, the extent of this voluntary remediation is not formally recorded. This emphasis, coupled with the relatively high values of land in many areas, has encouraged site owners to make full use of these other routes, notably under the planning process. The redevelopment of sites under the planning process can provide a source of funding for any investigation and remedial work.

3.2 Part 2A Environmental Protection Act (1990)

This legislation was designed to deal with land that is contaminated to such an extent that it constitutes an unacceptable level of risk for people or the environment. The legislation is supported by Statutory Guidance produced in 2012 by the Welsh Government for Wales. The 2012 Statutory Guidance does not introduce major new changes to the regime but merely fine tunes the existing regime. The guidance is intended to be clearer and simpler and provides clarity to various aspects of the regime, particularly the legal definition of contaminated land. The lead regulators under the Part 2A are local authorities who are responsible for dealing with most sites, although Natural Resources Wales is responsible for “special sites”. Descriptions of land required to be designated as a special site can be found in the Contaminated Land (Wales) Regulations 2006.

Any necessary remediation is undertaken by those responsible for the contamination (conforming to the principle of “polluter pays”), usually through a voluntary agreement with the regulator, but where no agreement can be reached a Notice may be served, requiring those responsible to remediate the land according to the notice. Overall, the aim of Part 2A is to remove the unacceptable risk for the current use of the land. Part 2A also provides a strong driver for market based solutions to

contamination problems by encouraging site owners to proactively address their sites rather than waiting for regulatory action.

In some cases it may not be possible to identify those responsible for the remediation or those operators/individuals no longer exist. In 2005 the Welsh Government introduced the Contaminated Land Capital Projects Funding Programme to provide additional funding to such "orphan sites". Between 2005 and 2011, £11 million of capital funding was made available to both local authorities and Environment Agency Wales via this grant scheme. In 2005-2006 £1 million was allocated to this grant scheme, with £2 million being available in each subsequent year. During this period 218 projects across Wales were awarded funding, the vast majority for site investigation, with the remainder being for remediation. However, it was always the case that this was a discretionary fund to assist local authorities in carrying out their statutory obligations and the underlying principle of the policy is the polluter should pay. Whilst funding is not currently available, this decision may be reviewed should there be a change in the current economic climate.

3.3 Town and Country Planning Act 1990 (As Amended)

The Town and Country Planning system is a common mechanism involved in dealing with land which is contaminated. Development on a site or re-use of a site for a new purpose can normally provide both the access to the land and it may be possible to fund investigation and remediation works. The Local Planning Authority (LPA) is responsible for making decisions on the development and use of land. As part of this they would ensure that all physical constraints on the land are taken into account and that a proposed development or use is suitable.

Planning Policy Wales (Section 13) makes clear that:

"13.7.1 Planning decisions need to take into account:

- *the potential hazard that contamination presents to the development itself, its occupants and the local environment; and*
- *the results of a specialist investigation and assessment by the developer to determine the contamination of the ground and to identify any remedial measures required to deal with any contamination.*

13.7.2 Where significant contamination issues arise, the LPA will require evidence of a detailed investigation and risk assessment prior to the determination of the application to enable beneficial use of land. Where acceptable remedial

measures can overcome such contamination, planning permission may be granted subject to conditions specifying the necessary measures. If contamination cannot be overcome satisfactorily, the authority may refuse planning permission."

Proposals requiring planning are submitted to the LPA who may then consult with others before deciding whether to approve the plans and, if approval is granted, any necessary conditions relating to remediation measures should be attached to the consent.

A site owner may decide to undertake remediation work on a voluntary basis and quite often will require planning permission to do so.

3.4 Water Resources Act (1991)

Under this Act Natural Resources Wales is responsible for protecting controlled water (surface water and groundwater) from pollution. Where Natural Resources Wales suspects that pollution may be occurring, it has powers to investigate the nature and effect of the pollution. If pollution of controlled waters is known to be occurring, for example from historic contaminants in the land, then Natural Resources Wales can serve a Notice (under section 161) requiring the responsible person to carry out work to stop the pollution.

Should a site owner be unwilling to carry out the work Natural Resources Wales may decide to undertake the work themselves and charge the costs back, for example by placing a charge against the land payable when it is sold.

However, section 161 notices were envisaged to be mainly used for relatively small capital cost works. In relation to Welsh interests it is also worth noting that they cannot be used to deal with pollution knowingly permitted by any person from mines abandoned on or before 31 December 1999. It should be noted that, the changes to Part 2A and the Statutory Guidance did not make any changes to the operation of this Act. Simply, Part 2A, has been modified to clarify that Part 2A only applies in cases of significant pollution of controlled waters, or in cases where there is significant possibility of such pollution occurring.

3.5 European Directives

Recently, the existing UK regulations have been joined by a number of European Union Directives on the environment, for which land contamination at both a site and catchment scale may need to be considered. Perhaps most relevant is the proposed Soil Framework Directive [7]which, if adopted, would introduce EU rules for contaminated land. The Welsh Government are watching developments with the Soil Framework Directive closely and feeding in comments via our counterparts in UK Government.

In addition, the Environmental Liability Directive[8], which has now been implemented in Wales through the Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009, supplements the liability regime contained within existing environmental protection legislation, such as the Environmental Protection Act 1990.

The Water Framework Directive (WFD) aims to take a holistic approach to managing the water environment and ensure that we balance ecological, social and economic values in decision-making.

As the Competent Authority for implementation of the WFD, Natural Resources Wales are responsible for drawing up the River Basin Management Plans (RBMPs) in accordance with the principles and steps of the planning process set out by Welsh Government and Defra guidance to the Environment Agency.

The first RBMPs were approved by the Minister (and for cross-border plans also the UK Secretary of State) in December 2009. In Wales, the first RBMPs show that in 2009 only 33% of our water bodies were at 'Good', and that by 2015 this would improve to 41%. Our ambition is to achieve 50% and work towards the delivery of objectives for Protected Areas such as Natura 2000[9] sites and Bathing Waters.

[7] http://ec.europa.eu/environment/soil/three_en.htm
[8] http://ec.europa.eu/environment/legal/liability/index.htm
[9] http://ec.europa.eu/environment/nature/natura2000/

Section 4 – Other factors relating to contaminated land in Wales

4.1 Land Reclamation Programme

Since the mid 1970's the Welsh Development Agency, and more latterly the Welsh Government, have, through a Land Reclamation Programme, substantially funded land reclamation activities undertaken by the public and private sector on land blighted by previous industrial uses. Such work has been undertaken for a number of purposes including economic development, regeneration and health and safety.

The Welsh Government's grant regime has provided funding of some £500m since 1976, which has been applied to around 1100 sites where previous economic activity, which has now ceased, has left the land damaged. The principal focus of investment has been on health and safety threats to communities and to the environment (particularly from residual colliery spoil tips and contaminated industrial land).

4.2 Welsh Land Contamination Working Group

The Welsh Land Contamination Working Group was established in May 1999 to bring together the regulators (local authorities and Natural Resources Wales) of the contaminated land regime to ensure its smooth and effective implementation in Wales and was established under the umbrella of the Welsh Local Government Association (WLGA) and Natural Resources Wales.

The group provides a forum for discussion and resolution of issues surrounding the assessment and management of land contamination in Wales. This includes consultation over any changes to the legislation or guidance, joint training initiatives, funding and resources. It also provides a focus for the exchange of information relating to the identification and remediation of land contamination through the planning process or the contaminated land regime under Part 2A.

4.3 Research and Development

Evidence is important element to understanding the issues around contaminated land, its impact on people and communities and the needs of regulators. The Welsh Government and Defra have a number of research projects underway to support implementation of the revised Part 2A regimes.

Normal Background Concentrations

The British Geological Survey (BGS) are running a project to produce a framework for assessing normal background levels of soil contamination and a series of supporting contaminant specific Technical Guidance Sheets. Reports specific to Wales were published on 26 April 2013[10].

Category 4 Screening Levels

CL:AIRE (Contaminated Land: Applications in Real Environments) were awarded a Defra contract to develop new Part 2A related human health risk screening numbers, known as Category 4 Screening Levels (C4SL). The main purpose of C4SL will be to help local authorities identify sites that fall within Category 4 as defined in the new Statutory Guidance.

Significant Pollution of Controlled Waters Guidance

Natural Resources Wales are currently working with consultants to produce new guidance that will support local authorities in deciding whether pollution of controlled waters by contaminated land meets the new definition 'Significant Possibility of Significant Pollution of Controlled Waters. This guidance will replace the Natural Resources Wales current 'Third party technical guidance on pollution of controlled waters'.

[10] http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=17768

Section 5 – Questions

To take forward contaminated land issues in Wales and to help shape future policy decisions, there are a number of questions requiring further consideration and we would welcome your views on the following:

1. **Wales specific data**

   Is the lack of Wales specific data making strategic decision making more difficult? If so, what do you think can be done to improve the situation? Are there any Wales specific issues that need to be addressed?

2. **Guidance and Research**

   The revised Statutory Guidance is intended to be clearer and simpler, focus more effectively on higher risk sites and reduce the burden on regulators. Can more be done to assist regulators in administering Part 2A and, if so, are further technical tools/guidance required?

   What key piece of R&D is missing that would allow local authorities to make progress with dealing with land contamination issues?

   Is there a requirement for any further guidance? If so, please explain what guidance is needed, why it is needed, including what current problems it would address and how it would address them.

3. **Resources**

   Funding to deal with the contaminated land regime at the local authority level has often been an issue. Each authority has taken a different approach to how it resources local delivery and in practice this often means allocated funding for this specialist area of work is not ring fenced. Subsequently some authorities have limited or no staff dedicated to this work and this has resulted in an uneven approach as different local authorities place very different priorities on delivering their published strategies. This makes the assessment of land contamination at an all Wales level extremely difficult.

What can Welsh Government/local authorities do to ensure a more consistent approach? How can we ensure that orphan sites are dealt with appropriately?

4. Communities

Is land contamination and perceived land contamination a key issue affecting the quality of where people live and in extreme cases people's health and well being? What more can be done to raise awareness of the issues around land contaminated land and perceived contamination to engage communities?

5. Any other issues

What do you see as being the main strategic objective for contaminated land under Part 2A?

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