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Contaminated land in Wales

Friends of the Earth Cymru briefing

About us

Friends of the Earth Cymru is committed to protecting the environment and promoting a sustainable future for Wales. We are part of the most influential environmental campaigning organisation in the UK which is part of the most extensive environmental network in the world, with over 75 national organisations across five continents. We support a unique network of local groups who campaign in communities across Wales.

Summary

Thanks to a growing number of media stories, documentaries, podcasts and docudramas such as Netflix's Toxic Town, people in Wales are becoming increasingly aware of the harmful consequences of our toxic legacy. But, due to a lack of funding, resources and expertise, and other issues besides, contaminated land is not being identified, assessed and remediated. That's why Friends of the Earth is calling for more funding, better information, stronger legislation, and improved regulation to protect people's health and that of the natural world.

The scope and scale of the contamination problem

The scale of Wales's contamination problem is worryingly murky, despite over three decades of studies. As early as 1988, a survey by the Environmental Advisory Unit of the University of Liverpool for the Welsh Office identified 749 contaminated sites in Wales[4]. By 2013, a survey of local authorities by Natural Resources Wales in 2013 identified more than 10,300 contaminated sites – finding Benzo(a)pyrene, lead, and arsenic at over 60% of these.

Research by Friends of the Earth Cymru in 2025 revealed over 45,000 sites of potential contamination, including old industrial areas, landfills and quarries[5]. Amongst these sites are at least 1,300 abandoned metal mines and over 1,500 disused landfills[6]. If rates of potential contamination and risk found by Friends of the Earth are replicated across all Welsh local authorities, this could equal over 90,000 potential sites requiring classification and investigation.

In response to the 2013 Welsh Government consultation on contaminated land found "The lack of data at a National level was considered to be significantly hindering the Welsh Government's ability to understand the extent and nature of contaminated land across Wales." More than a decade later, the situation has not improved. Government, local decision makers and the public deserve to know the scope and scale of contamination in the land beneath their feet – and effective action will depend upon a clear picture of the problem.

Impacts and costs of contamination

Health: Recent research indicates 6% of the population in Wales live near land contaminated by historic metal mining, associated with lead pollution. Toxic levels of lead have been found in farm

[4] The dataset has been digitized and can be found in the national archives.
[5] Total figure includes those identified by the 11 councils with publicly available Land Contamination Strategies containing the results of initial scoping and two additional Local Authorities who provided this data in response to a FOE request.
[6] Data from Natural Resources Wales in 2021, analysed by Greenpeace, found dangerous chemicals such as mustard gas and cyanide buried underneath over 1500 disused landfill sites across Wales.

eggs. There is no level of exposure to lead that is known to be without harmful effects. High levels of lead can lead to coma and death, and lower levels can lead to cognitive impairment. Babies and young children are particularly susceptible.

Forever chemicals – per- and polyfluoroalkyl substances (PFAS) and Polychlorinated Biphenyls (PCBs) - have been linked to a variety of health issues including increased risk of cancer, liver damage, reproductive problems, and immune system impairment. From the late 1960s to 1980s, when it became clear that PCBs were harmful, Monsanto dumped this toxic waste in disused quarries in a ring 10-15 miles around Cardiff and Newport. Last year BBC Podcast, *Buried: the Last Witness* showed that PCBs levels near where toxic waste was dumped in the past were hundreds of times higher than average levels.

Wildlife: Our industrial legacy poses an ongoing threat to livestock and wildlife, from historic lead mines which have poisoned horses and cattle during floods, to forever chemicals which bio-magnify up a food chain. Recent research found PFAS in every otter tested across England and Wales, while the UK killer whale population is threatened with collapse in the next 100 years due to PCB pollution. At a time when 1 in 6 species are at risk of extinction in Wales, it is vital we tackle chemical pollution before we lose more species.

Economic: Heavy metal contamination has well documented economic consequences. Research in Glasgow found that children exposed to lead in-utero performed less well in their exams at age 16, while a 2023 World Bank study linked every microgram of lead per decilitre of blood with a drop of 2 IQ points. For the over 200,000 children in the UK suffering from lead contamination, with blood lead levels above 5µg/dL, this could equate to a lifetime drop in earnings of at least 20%. The World Bank also notes that cardiovascular diseases linked to lead poisoning cost high-income countries 3.8% of GDP.

The failings of the contaminated land regime

Outdated and missing strategies: Local Authorities must publish a Contaminated Land Inspection Strategy, which should be updated every 5 years. Our research of publicly available inspection strategies revealed that many councils are partially or entirely failing to deliver on this requirement and demonstrated an alarming postcode lottery of action and inaction.

Only 15 out of 22 councils in Wales appeared to have a strategy at all. Of these, only 4 councils (Flintshire, Rhonda Cynon Taff, Carmarthenshire and Torfaen) offered a strategy updated within the last five years. The oldest strategy dated back over two decades, to 2002, while the most recent was updated in 2024, averaging a publication year of 2014.

Lack of inspections: The precise detail of the contamination problem may be unclear, but there is significant evidence of thousands of potentially contaminated sites across Wales (see above). Our research found that some local authorities – for example Carmarthenshire and Pembrokeshire - have identified thousands of pieces of potentially contaminated land yet show little evidence of progress in categorising or assessing these and have few or no entries on their public registers. Recent analysis by BBC Wales of potentially contaminated land data from 11 Welsh councils identified 698 'high-risk' sites – including land thought to contain arsenic and lead. 84% of these have not been tested by local authorities. This means the risk associated with these sites has not been quantified or transparently identified, and remediation of land cannot take place.

Inadequate resourcing, inadequate action: Without adequate funding, it is difficult to see how councils will resource the technical and often slow process of categorisation and testing, let alone remediation. In response to this year's Welsh Affairs Committee inquiry, the Welsh Land Contamination Working Group noted "Welsh Local Authorities are aware of many areas of land requiring Part 2A assessment and if adequate financial provision were made, would progress their Inspection Strategies and would complete those assessments."

Natural Resources Wales research in 2016 found that 71% of remediation to date was funded primarily by the Welsh Government's Contaminated Land Capital Fund Scheme prior to its withdrawal in 2010/11. This impact of this shrinking financial support is to push councils towards a reliance on private developers to carry out testing and remediation, as noted in the 2023-2038 Swansea local development plan scoping report: "Restoration of contaminated land remains dependant on redevelopment projects and though some redevelopments have been undertaken in recent years, it has not been possible to verify that remediation or containment of contamination has been completed".

Limited data and poor transparency: People in Wales should have a right to know if they are living near a toxic site that could harm their health. But currently, public information is incomplete and difficult to access.

The Environment Act 1990 requires local authorities to maintain a public register of contaminated land, setting out details of any remediation notices served after a site is determined as contaminated. These should be publicly available, either online or in hard copy. Out of the 22 councils in Wales, only six currently have a public register available online, with a further two publishing a 'no entries' statement, and three offering a register only upon request. Eleven authorities provide no public information on sites of contamination at all. Following a Friends of the Earth Cymru FOI, four of these eleven responded with information on contamination that should feature in a public register – and worryingly, one council stating that their register is empty online identified 18 sites.

Where public registers are available online, there is some variation in their quality and usability. Four councils provide full details of sites under headings linked to the Act, while two provide only lists of documents which are difficult to navigate. The concept of a 'site' is defined inconsistently – sometimes by the number of properties planned for or currently occupying the site, and in other cases by the number of properties or parcels of land responsible for the contamination. In response to Friends of the Earth's Freedom of Information request, some councils also made it clear that their practice is to remove sites once they are considered remediated.

Contamination in Bridgend

- Bridgend does not have a Contaminated Land Strategy available online.
- Bridgend does not have an online public register of contaminated sites available online.
- The council did not respond to a Friends of the Earth FOI request for this information.
- Our review of publicly available information on potential contamination in Bridgend found no further data on the number or location of possible sites.

What needs to happen

For over a century, extraction, production and pollution have contaminated our land, endangering public health and slowly poisoning ecosystems. Yet for decades the scale of potential harm has been clear, and routes to clean up damage well understood. So, it is unacceptable that thousands of sites across Wales are still potentially toxic, and the public are still unable to access information about the risk or rely on the systems designed to mitigate it.

We need:

- **An independent public inquiry to assess the scale and impact of contaminated land in Wales** and review the effectiveness of the current contaminated land regime.
- **A publicly accessible, online register of contaminated land sites across Wales**, including sites under investigation.
- **Stronger legislation and regulation at a national level, to ensure effective implementation of the contaminated land regime and address historic pollution.** This should include amending the 2012 statutory guidance to compel local authorities to discharge duties and revising the guidance on contaminated land in Planning Policy Wales.

The forthcoming Environmental Principles and Biodiversity Bill should also contain measures to address legacy pollution from Wales's industrial past.

At a UK level, the government must support and properly fund Welsh Local Authorities, so that they are able to carry out their duties to identify and remediate contaminated land. This should include the introduction of a proper funding programme and/or reinstatement of the capital funding programme for part 2a sites, the extension of the England-only Brownfield Land Release Fund (BLRF) scheme to Wales, and the ring-fencing any funding provided under the Barnett Formula.

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