

Policy Position Statement

Contaminated Land

Purpose

The purpose of this Policy Position Statement (PPS) is to outline CIWEM's views and policy position with respect to the assessment, management, remediation and development of contaminated land.

CIWEM calls for:

1. All countries to implement policies and practice to identify land and groundwater affected by contamination in order to address and mitigate land that is causing unacceptable risks to human health and the environment.
2. All countries to implement policies, practices and controls to prevent land and groundwater from being affected by unacceptable levels of contamination in the future by appropriately regulating industrial and agricultural activities and encouraging social and corporate responsibility.
3. A risk based decision making approach to the assessment and management of contaminated land/groundwater based upon the principles of 'fitness for purpose', 'protection of the environment' and 'long term care'.
4. Land and groundwater contamination to be a material consideration in the development, or redevelopment, of land in local, regional and national planning policies throughout the world in order to ensure that development and land use is safe, sustainable and suitable.
5. All countries to adopt specific policies that prioritise the redevelopment and regeneration of previously used, derelict and 'brownfield' land in order to stimulate the sustainable reuse of such land where appropriate. This includes the provision of tax relief schemes, grant funding etc.
6. Only appropriately qualified and competent professionals to be able to provide advice on any aspect of the assessment, management, remediation, validation and development of contaminated land/groundwater.

CIWEM is the leading independent Chartered professional body for water and environmental professionals, promoting excellence within the sector.

Context

Contaminated land is a global issue and many countries have a legacy of contaminated land resulting from historical industrial activity, waste management and from the previous regeneration of land. Contamination is still occurring across the world, due to inadequate or inappropriate operational controls and regulation in industry and in the management of waste.

The presence of contamination can represent an unacceptable risk to human health or the environment:

- Human exposure to contaminants can result from the inhalation of dust, fibres or gases and vapours, ingestion and physical contact with soil and water or through food grown on the land.
- The contamination of groundwater, lakes, rivers and marine environments can be caused by contaminants in, on or under the ground which can affect water quality, ecosystems, fish and shellfish used for consumption, recreational activities and contaminate potable water supplies.
- Some contaminants may be corrosive to building materials/structures and some can pose a risk of explosion or fire.
- The contamination and/or subsequent dereliction of land can have significant financial consequences in order to address environmental liabilities and/or bring such land back into beneficial use.
- The dereliction and disuse of sites can have a negative impact on communities, affect land values, create unwanted eyesores and attract antisocial activities such as illegal dumping and vandalism as well as having a negative impact on people's health.

Around the world there are various terms and definitions used in relation to land contamination. Contaminated land/contaminated soil are general terms applied to sites that have been impacted to some degree by substances and chemicals from previous land use(s).

However, in some countries, such as the UK the term contaminated land has a legal definition to define circumstances where such land is causing or has the potential to cause significant harm to human health or other relevant receptor or significant pollution of surface waters and/or groundwater. Other terms such as 'land affected by contamination' and 'land contamination' are often then applied to describe the more general category of land where contaminants are present but usually not at a sufficient level of risk that such land could be classified as 'contaminated land' under the legal definition.

Alternatively, land affected by contamination is sometimes referred to as brownfield land (or sites) or simply brownfields, such as in the US where this also has a legal definition. Elsewhere, such as in the UK, the term brownfield is more generically used to simply define any land that has been previously developed and to distinguish it from previously undeveloped greenfield land.

Discussion

CIWEM supports the approach taken in the UK under Part 2A of the Environmental Protection Act 1990 (as amended).

CIWEM supports for example the European Union (EU) Directive on Industrial Emissions which sets out to achieve a high level of protection for the environment taken as a whole from the harmful effects of industrial activities; the EU Water Framework Directive and Groundwater Daughter Directive the latter of which seeks to control the release of listed substances to groundwater; the Landfill Directive which seeks to control the disposal of waste to landfill so as to prevent or reduce negative effects on the environment and; the Environmental Liability Directive which seeks the prevention and remedying of environmental damage.

When land is considered for development CIWEM supports, for example, the UK approach as set out in the National Planning Policy Framework which seeks to ensure that:

- UK planning policies and decision making should ensure that sites are suitable for their new use taking account of ground conditions, land instability and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation
- that land after remediation, as a minimum, should not be capable of being determined as contaminated land under UK legislation
- adequate site investigation information, prepared by a competent person, is presented in support of the above
- where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner

CIWEM calls for such policies to be implemented to prioritise the redevelopment or reuse of previously developed, derelict or brownfield land in favour of greenfield land, where appropriate, in order to:

- clean up contaminated soil and groundwater
- manage environmental risk
- revitalise neglected neighbourhoods and stimulate the local economies
- boost employment and create jobs
- enhance land and property values in the area and increase the viability of sites for redevelopment
- reduce urban sprawl and prevent the unnecessary development of the countryside
- improve public health and safety
- create public space
- increase the sustainable use of soils and protect greenfield as an agricultural resource

In circumstances where previously developed or brownfield land provides limited economic incentive for redevelopment due to such factors as location or context, or where such land is of some form of environmental value, etc then CIWEM calls for policies for such land to be

remediated and regenerated as open space, forestry, wildlife reserves, “green lungs”, etc as a long term solution to any identified contamination problems.

CIWEM considers that, when correctly applied, the appropriate and suitable reuse of contaminated soils both within a site and between sites effectively contributes to the sustainable and cost effective development/redevelopment of land. Furthermore the practice reduces the unnecessary burden to import naturally sourced or quarried products and minimises the creation of waste. The practice further assists in the reduction of associated vehicle emissions and contributes positively to a reduced carbon footprint in the development process.

CIWEM considers that all professionals involved in the advice on any aspect of contaminated land should be appropriately qualified competent, normally being Chartered members of an appropriate professional body (such as CIWEM) supplemented as necessary with other specific technical accreditations. In the UK CIWEM is a partner in the Specialist in Land Condition scheme (SiLC) which was developed to maintain a high quality, unifying, professional registration for the assessment of the condition and remediation of brownfield sites so as to fulfill the needs of public and private sectors and society as a whole.

CIWEM has an established and active Contaminated Land Network (CLN) of some 500 professionals. The network brings together government/non-government bodies, industry, academia and other stakeholders to stimulate the sharing of knowledge and good practice in the assessment, management, remediation and development of contaminated land.

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Note: CIWEM Policy Position Statements (PPS) represents the Institution's views on issues at a particular point in time. It is accepted that situations change as research provides new evidence. It should be understood, therefore, that CIWEM PPS's are under constant review and that previously held views may alter and lead to revised PPS's. PPSs are produced as a consensus report and do not represent the view of individual members of CIWEM.