

Regulating Contaminated Land: policy, sustainability and risk

**Philip Catney, John Henneberry,
James Meadowcroft and J.R. Eiser**

**Department of Politics, Town and Regional Planning
and Psychology**

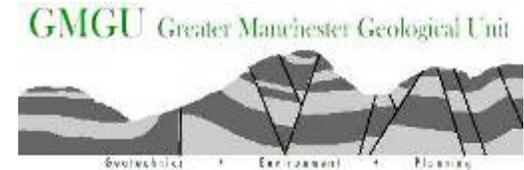
University of Sheffield



The
University
Of
Sheffield.

SUBR:IM

SUSTAINABLE URBAN BROWNFIELD
REGENERATION: INTEGRATED
MANAGEMENT



CONTAMINATED LAND: APPLICATIONS IN REAL ENVIRONMENT

CL: AIRE

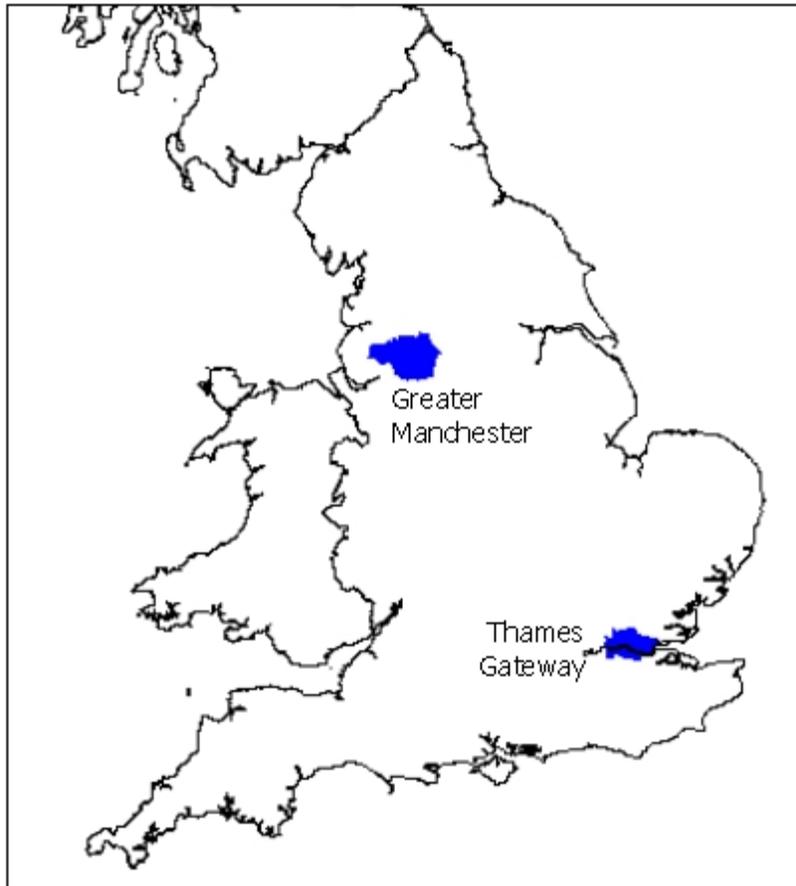


(c) Philip Catney



SUBR:IM

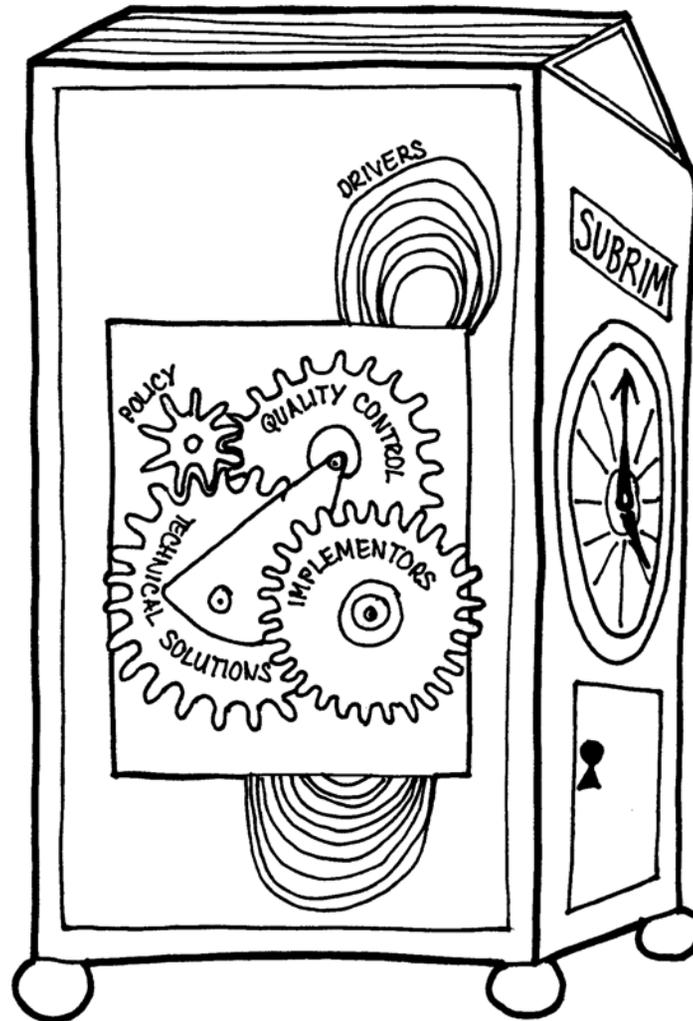
*SUSTAINABLE URBAN BROWNFIELD
REGENERATION: INTEGRATED
MANAGEMENT*



Projects within SUBR:IM

- Re-conceptualising brownfields
- Investors
- Development industry
- Governance
- Decision making
- Metrics
- Technical solutions
- Acid tar lagoons
- Risk reduction with charcoal
- Remediation and greening
- Novel composts
- Climate change
- Quality
- Design for deconstruction

Integrated Projects in Action!



What is Contaminated Land?

Contaminated land is 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 is a significant possibility of such harm being caused;
- (b) Pollution of controlled waters is being, or is likely to be, caused

(Source: Part IIa, sec. 78A(2))

An Acid Tar Lagoon



An Acid Tar Lagoon



A former landfill site



Why the focus on Contaminated land?

Four Factors:

- Deindustrialisation in 1980s
- More housing needed: 4.4 million houses needed between 1991-2016.
- Government target for brownfield regeneration: 67% target
- Exposure from environmental NGOs

Source: adapted from Walker 2002 (85-86)

Contaminated Land: Scale of the Problem

Britain:

- English Partnerships: 300,000 acres
- Cost: £20-40 billion (Watson 1993)

US:

600,000 contaminated sites

Cost: \$400 billion - \$1.7 trillion (Gray 2000)

Environmental Benefits

- Reduction of development pressures on greenfield sites
- Protection of public health and safety
- Protection and recycling of soil resources
- Protection of groundwaters

Source: Sousa (2001)

Social Benefits

- Renewal of urban areas
- Elimination of stigma attached to communities residing in affected areas
- Reduction of community fear (ill health, environmental damage and reduction in property values)
- Improved health & quality of life

Source: adapted from Sousa (2001)

Economic Benefits

- Attraction of domestic and foreign investment
- Development of remediation/ decontamination technologies
- Increasing land values in inner city areas
- More employment & tax revenues

Source: Sousa (2001)

Interlocking Processes

- Urban brownfield sites at nexus of many processes.
- Contamination and its treatment; physical redevelopment; property investment; governance, policy and regulation.
- Interactions and outcomes depend on characters of processes and contexts of relations.

The Development of the Policy Regime: Part 1

- 1977-8: Love Canal (US)
 - CERCLA passed 1980
 - Superfund created 1986
 - Clean up finished March 2004!
- 1978: Lekkerkerk (Netherlands)
- House of Lords Report 1981 and Royal Commission on Environmental Pollution report 1985
- Loscoe 1986 (Derbyshire)

The Development of the Policy Regime: Part 2

- 1990 EPA (Section 143): Opposition from Property industry
- 1993: government abandons registers
- 1994: *Paying for Our Past* published
- 1995: 1995 Environment Act (Section 57)
- April 2000: government issues guidance to local authorities.

The contaminated land policy process

- The way that a problem is construed conditions the way that a (policy) solution is developed.
- ‘Development-managerialism’ underpins UK contaminated land policy.
- Two Policy Processes: Part IIa and Planning

Development-managerialism

- recognises that contamination poses health and environmental problems, but
- frames the issue primarily in economic terms, as an obstacle to economic progress and urban (re)development;
- emphasises minimisation of urban blight, protection of economic interests and use of market-led development processes to bring contaminated land back into productive use; and
- is pragmatic and cost effective.

Policy process: 1

Part IIA

- Local authority surveys of potentially contaminated sites
- Identify/register 'contaminated land' (significant harm/potential)
- Either: take action itself to break the source/pathway/receptor linkages; or
- propose the site for listing as an EA 'special site'.

Policy process: 2

The planning system

- Remediation of all land that is not 'contaminated land'
- Framework established by Supplementary Planning Guidance
- Implemented through development control process
- Developer must ensure that the land is fit for the proposed use

Key features of UK policy

- the application of a specific definition of 'contaminated land'
- the 'suitable for use' doctrine
- risk assessment based decision making
- liability is the original polluter's and/or the current owner's
- decentralized, primarily locally implemented character
- most sites remediated as part of normal development process

Strengths of policy

- stronger national guidance and standards
- obligatory surveys by every local authority
- harnesses local knowledge and can be adapted to local circumstances
- allows (local) strategic priorities to be developed at two levels: register and special sites
- controls costs and needless 'over remediation'
- uses the development process continuously to monitor land and to mobilize resources for remediation

Weaknesses of policy

- 'contaminated land' is defined in very narrow terms
- does not allow for change (physical contamination should be recorded even if a 'pathway' is not now operative)
- modelled risks may not correspond to 'real world' risks
- liability regime – does the polluter actually pay?
- are responsible authorities adequately resourced?
- Relationship between ODPM and DEFRA
- Relationship between local authorities and Environment Agency
- Patchy implementation of regime across the country.
- Closed-off decision-making

Interaction of policy processes

Part IIA

- proactive
- (partly) publicly funded and operated
- focuses on dealing with 'contaminated sites' for which there is no immediate prospect of development

The planning system

- reactive (to development proposals)
- achieves privately funded treatment of contamination through public regulation
- deals with most contaminated land

Interaction of policy processes

Former toxic dump

- Capped and surrounded by 3m fence
- No pathway
- Not 'contaminated land'
- Not dealt with by Part IIA

Proposed housing site

- Receptor and pathway would exist
- It is now – or would be – 'contaminated land'
- Dealt with by the planning system

Is Contaminated Land Policy in the UK Sustainable?

- ‘it impedes social progress, depriving local people of a clean and healthy environment;
- it threatens wider damage to the environment and to wildlife;
- it inhibits the prudent use of land, in particular by obstructing the recycling of previously developed land and increasing development pressures on greenfield areas; and
- the cost of remediation represents a high burden on companies, home and land owners, and the economy as a whole.’ (Source DETR, 2000: para 6.)

Acknowledgements

- This paper is based on work undertaken for Work Packages C ‘Multi-level decision making processes, expertise and sustainable urban regeneration’ part of a collaborative research programme on ‘Sustainable Urban Brownfield Regeneration: Integrated Management’ (SUBR:IM) funded by the Engineering and Physical Sciences Research Council (grant number GR/S148809/01). The authors are grateful for EPSRC’s support. The views presented in the paper are those of the authors and cannot be taken as indicative in any way of the position of SUBR:IM colleagues or of EPSRC on the subject. All errors are similarly those of the authors alone.

More information

Project website:

www.subrim.org.uk

