



University of South Australia

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SITE CONTAMINATION LAW AND POLICY IN EUROPE, NORTH AMERICA AND AUSTRALIA - TRENDS AND CHALLENGES

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CRC CARE

- Established November 2005
- A\$105m over 7 years (\$35m grant from Australian government, balance from participants)
- 23 participants (13 core, 10 supporting)
- Includes 5 Universities
- Based at Uni of SA in Adelaide, Australia
- Web-site: www.crccare.com



CRC CARE REVIEW OF LAW AND POLICY – EUROPE, NORTH AMERICA & AUSTRALIA

- Aims
 - To enable comparisons of legal approaches to site contamination
 - To assist development of new or improved laws – particularly in Asia-Pacific region
- Outcomes
 - Surveys to be presented on web-site
 - Use hypertext links to access primary source documents
 - Need for regular updating/ ongoing expansion
 - Access to be provided by subscription



CRC CARE REVIEW OF LAW AND POLICY – EUROPE, NORTH AMERICA & AUSTRALIA

■ USA

- California
- Massachusetts
- New Jersey

■ CANADA

- Federal
- Ontario
- British Columbia
- Alberta

■ EUROPE

- European Union
- United Kingdom
- Germany
- Netherlands
- Switzerland
- Belgium (Flanders)

■ AUSTRALIA

- Federal
- 6 States, 2 Territories



THE DEVELOPMENT OF SITE CONTAMINATION LAW AND POLICY

- USA
 - CERCLA (1980) (“Superfund”)
 - Also RCRA (re “current” sites) + State Superfund laws
- EUROPE
 - Denmark/Netherlands (1983)
 - Switzerland (1987)
 - United Kingdom (1995)
 - Germany (1999)
- CANADA & AUSTRALIA
 - Provinces/States – since 1990’s
- ASIA
 - Japan, South Korea, Taiwan, Singapore & Hong Kong
- INTERNATIONAL
 - Note: EU Draft Framework Directive on Soil Protection (2006)



THE NEED FOR SPECIFIC SITE CONTAMINATION LEGISLATION

- Driven by specific situations (e.g., Love Canal, Lekkerkerk, Fischer site)
- Also by growing awareness of magnitude of problem:
 - Europe: 250,000 sites, to increase by 50% by 2025 (EEA, 2007)
 - USA: 425,00 “brownfields” sites
 - Canada: 30,000 sites
 - Australia: 80,000 “potential” sites (at 1997)
- Reasons for specific legislation:
 - Retrospectivity
 - Provision of scientific/technical framework
 - Promotion of “brownfields” redevelopment



GENERAL CHARACTERISTICS OF SITE CONTAMINATION LEGISLATION

- **1ST generation legislation:**
 - Defined “potentially responsible parties”
 - Prescribed liability rules:
 - Retrospective
 - Strict
 - Joint and several
 - New regulatory mechanism: orders to assess and clean up
 - Public fund for “orphan sites”

- **2nd generation legislation:**
 - “Brownfields” measures



GENERAL APPROACH: REGULATED V MARKET-BASED CLEANUP

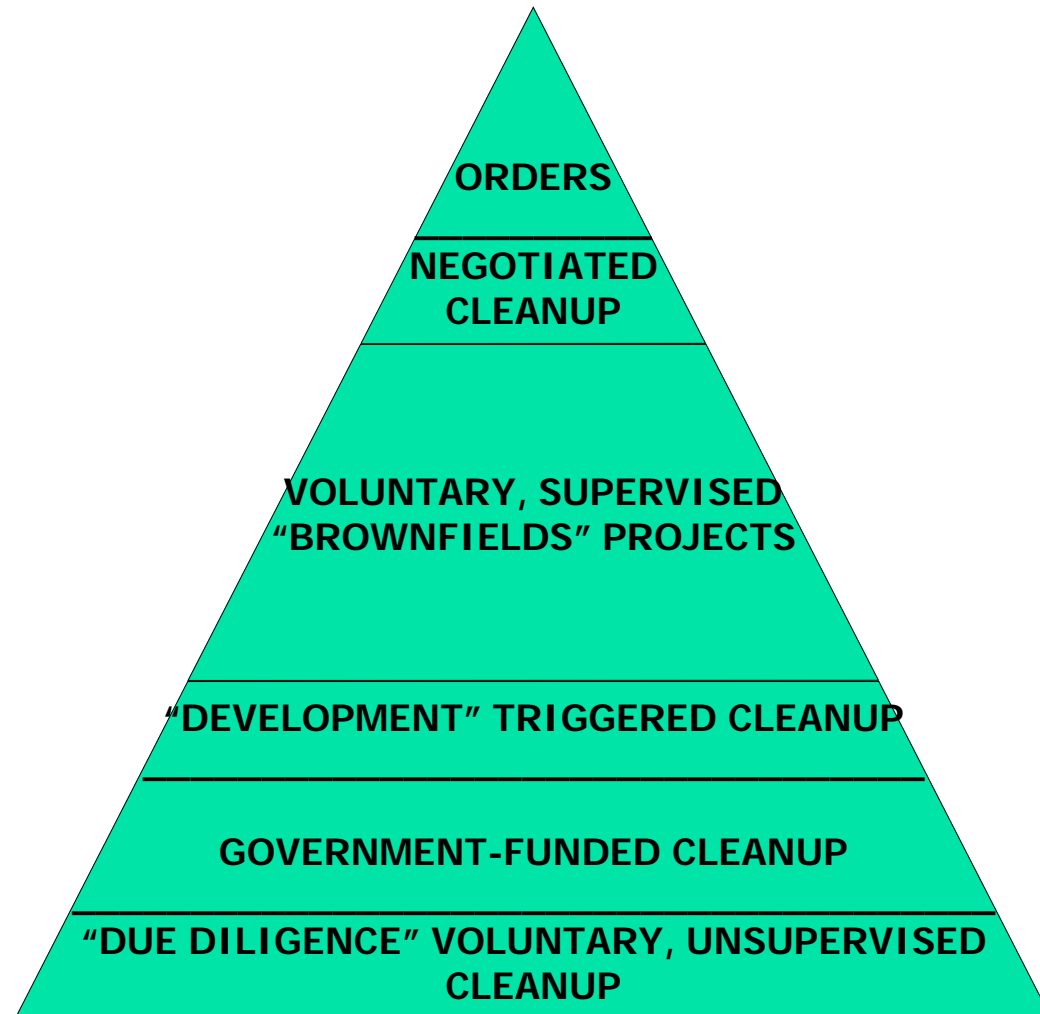
- **“command & control” approach (orders)**
 - In practice, limited to large, high-risk sites
 - Long lists of sites awaiting remediation

- **Voluntary, supervised approach (market driven)**
 - “brownfields” redevelopment
 - “development” of land as a trigger for cleanup

- **Other avenues to clean-up:**
 - Government-funded cleanup (“Superfund” schemes)
 - Voluntary, unsupervised cleanup as part of “due diligence” audits re:
 - **Corporate reporting of environmental liabilities**
 - **Lender requirements for sale and transfer of businesses and properties**



THE CLEANUP PYRAMID



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BROWNFIELDS MEASURES

- Definition
 - Areas of unused land often contributing to urban blight;
 - Usually contaminated, but not to the extent that regulatory action is required
- Essential features (US EPA, 1994)
 - Financial incentives (grants, loans, tax relief)
 - Legal immunity from future liability
 - Voluntary, supervised cleanup



BROWNFIELDS MEASURES (cont.)

- Brownfields policy in other countries:
 - Canada – focus on immunity from liability, few incentives
 - Europe – strong uptake in UK, less elsewhere
 - Australia – no interest to date

- USA experience:
 - Significant reduction in lists of contaminated sites
 - Substantial increase in number of voluntary cleanups
 - Revitalization of numerous inner-city areas
 - But ?
 - **Some poorly-designed projects**
 - **Accusations of lowering of clean-up standards**
 - **Lack of take-up by large corporations**
 - **Issue of “finality”**



TECHNICAL APPROACHES TO ASSESSMENT & REMEDIATION

- Evolution from reliance on generic standards to use of site-based risk assessment
- Lack of connection between technical criteria and legislation
- Need for clearer remediation criteria:
 - Improper use of screening/investigation levels
 - Clearer provision for in situ retention
 - Wide acceptance in many countries
 - Need for more specific criteria re acceptability
 - Challenge of community acceptance: better risk communication
 - Problem of interface with waste management laws
 - Relationship with sustainability principles



INSTITUTIONAL CONTROLS – LONG TERM STEWARDSHIP

- Institutional controls relate to:
 - Monitoring and reporting obligations
 - Restrictions on immediate development of site
 - Constraints re future land-uses
- Limits of traditional property law mechanisms
- USA : *Uniform Environmental Covenants Act*
 - *Able to be registered on title to land*
 - *Enforceability*
 - *Adopted in over half of USA States by mid-2007*
- Need to consider similar mechanism in other countries?



“PRIVATIZED’ SUPERVISION OF SITE CONTAMINATION LAW

- Environmental auditor system in Australia
- Adopted in Canada (BC, Ontario and Alberta)
- Also in USA (Massachusetts)
- Canada/Mass. approach based on membership of professional organizations rather than examination & accreditation
- Oversight via random audits in Canada/Mass:
 - Disciplinary action
 - Independent body to oversee system
- Need for greater oversight of environmental auditors in Australia?



LIABILITY RULES: TRADITIONAL APPROACH

- Strict liability
- Retrospective application (to 'historic' pollution)
- Joint and several liability ("deep pocket" approach)
- Broad definitions of "potentially responsible parties"
- Provision for PRP's to "join" other parties



LIABILITY RULES: DEVELOPMENTS

- Natural resources damages (US Superfund)
- Liability for change of use (Alberta)
- Transfer of responsibility (CCME, Canada)
- Exemptions:
 - Local government
 - Lenders
 - Down-gradient owners
 - Innocent purchasers
- Special rules re insolvency (USA)
- Forfeit of property to the Crown by liquidator
 - Note: Australian Corporations Law, s. 568



FEDERAL JURISDICTIONS

- Often leave detailed regulation to States:
 - No legislation at Federal level in Canada or Australia
 - Framework law in Germany
 - But see USA :RCRA/CERCLA
- Funding for cleanup of Federal sites:
 - Canada: Federal funding of C\$3.5 bn over 10 years
- Australia?



CONCLUSIONS

TRENDS

- Negotiation widely preferred to regulation
- Shift towards market-driven “brownfields” schemes that:
 - Utilize economic and legal incentives
 - Encourage voluntary cleanups
- Shift in scientific/technical approach towards “fitness for purpose” rather than multifunctional use via:
 - Site-based risk assessment approach
 - Promotion of in situ retention
- Shift in some jurisdictions to “privatized” supervision of cleanups



CONCLUSIONS (cont.)

CHALLENGES

- To ensure specific legislation is adopted in more countries (particularly in developing world)
- To ensure recent trends deliver sound, long-term outcomes consistent with sustainability principles:
 - need for effective institutional controls
 - ensure accountability for “privatized” schemes
 - develop closer links between science and law
 - Review role of land-use planning (local) authorities
- THE BOTTOM LINE: LONG-TERM SOLUTIONS V SHORT-TERM EXPEDIENCY

