



**ENVIRONMENT AGENCY**

**UK Tour de Table  
NATO/CCMS Pilot Study  
Baia Mare, Romania 2003**

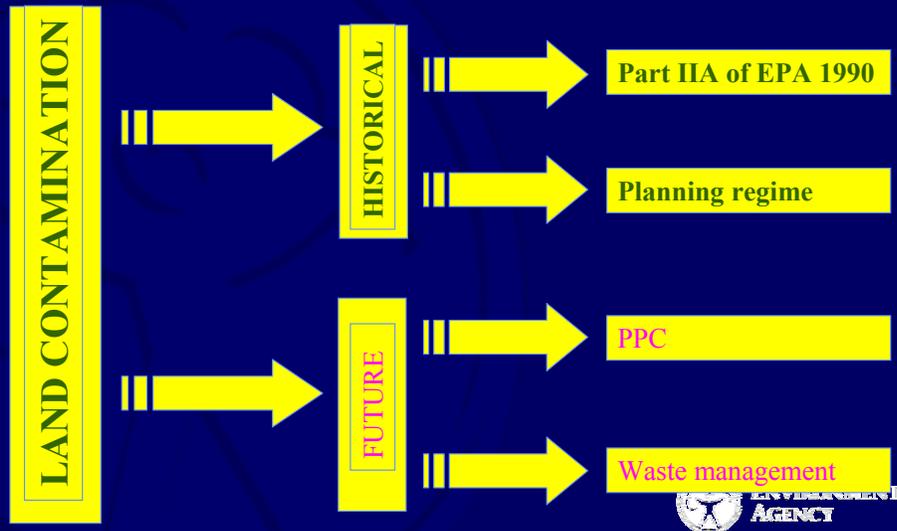
**Dr Theresa Kearney**

## History of land affected by contamination

- Estimates of the extent of land affected by contamination in England and Wales vary widely from:
  - 50,000 to 300,000 hectares,
  - relating to 100,000 sites.
- Of these, between 5,000 to 20,000 may be considered to be problem sites, (i.e. they require some form of action to make sure that they don't pose an unacceptable risk to human health or the environment.)
- Remediation market estimated to be worth £777M in 2003



## UK legislative drivers for managing land contamination



## The Model Procedures for the management of land contamination

- Model Procedures provide a generic risk based framework consisting of three parts:
  - Procedures for risk assessment; options appraisal and implementation of risk management actions;
  - Supporting information
  - Information map
- Consultation available on [www.environment-agency.gov.uk/yourenv/consultations](http://www.environment-agency.gov.uk/yourenv/consultations)



## New legislative initiatives & drivers

- National
  - Single remediation permit
- European Initiatives
  - Landfill Directive 2005
  - Water Framework Directive
  - Environmental Liability Directive
  - Soil Strategy

## Environmental Liability Directive: Land Damage

- Any damage that creates serious potential or actual harm to public health as a result of soil and subsoil contamination
- **Primary restoration:** return damaged natural resources and/or impaired services to *baseline condition*
- **Compensatory restoration:** compensate for *interim losses* of natural resources and/or services that occur from the date of damage until return to baseline condition
- Expect to Directive to be adopted in  ENVIRONMENT  
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2004

## EU Soil Strategy - Contaminated land management

- Working group has a number of objectives including:
  - the principles to set priorities to develop a national strategy for remediation based on:
    - actual and potential risks
    - land uses and changes in land use
    - social and economic aspects
- Final report to be available in February 2004



## Where are we now with Part IIA?

- LA Strategies
  - 98% and 82% have been published in England and Wales respectively;
  - 2% and 18% are at formal consultation;
- 63 sites determined as contaminated land sites
- 70 sites inspected as potential special sites;
- 16 sites designated as special sites;
- State of Contaminated Land report published in 2002 ([www.environment-agency.gov.uk](http://www.environment-agency.gov.uk))

## Remediation update

- Implementation of the EU Landfill Directive in 2005 is a key driver for the implementation of more sustainable technological remediation;
- Key interest is in the application of passive remediation approaches incurring low costs - research programmes on MNA & PRBs;
- RTDF-UK Phase 3 initiative - In situ accelerated biological degradation in DNAPL source areas;
- CLUSTER project - assesses the feasibility of remediation treatment hubs in strategic areas within the UK



### PARTNERSHIPS FOR A SUSTAINABLE UK



## Partnerships for a Sustainable UK

- EA has developed partnerships with a number of National, European and International Groups;
- Effective means to assist the Agency and others in achieving its objectives by:
  - leverage resources and experience in delivering priority areas of work;
  - building confidence and reducing technical / regulatory barriers in applying innovative approaches for dealing with land contamination.



## Partnerships for a Sustainable UK

- Technology demonstration & implementation
- Research & technology demonstration
- SAGTA, CL:AIRE, exSite, PRBnet; STARNET;
- SAGTA, CL:AIRE, FIRST FARADAY, PRBnet, STARNET, SIREN, Research Fellowships on MNA & PRBs, Bioremediation LINK programme, EPSRC, NERC funded projects



## EU EUGRIS Project

- EU Groundwater & Contaminated Land Remediation Information Systems ([www.eugris.info](http://www.eugris.info))
- Provides a web based portal for contaminated land & groundwater information
- National information from 5 pilot countries, in which one will be the UK national gateway
- Funded by the EU 5th Framework from March 2003 - August 2005



## Concluding comments

- Regulatory drivers for dealing with land contamination within a risk based framework;
- Scale of the problem is not fully known - more contaminated land sites will be identified and remediated over the next 5 years;
- Active participation in partnerships / networks will assist the Agency and others in achieving its long term objectives in dealing with contaminated land.