



***Environmental Opportunities for the  
Chartered Surveyor:  
Recent and Forthcoming Developments in  
Environmental Practice and Regulations***

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### *What will be covered?*

- *Recent and forthcoming regulation and policy guidance.*
- *How the changes will affect Chartered Surveyor practice.*
- *Opportunities that arise from the changes.*



## ***Planning Policy***

- *Flood risk.*
- *Contaminated land.*
- *Soil Strategy for England and Wales.*

## ***Regulations and Codes of Practice***

- *Environmental Permitting.*
- *Environmental liability.*
- *Asbestos guidance.*
- *Mine Waste Directive Implementation.*
- *Development CoP.*

## ***Guidance***

- *RICS Guidance Notes and Information Papers.*

## ***On the Horizon: Consultations***

- *Civil sanctions.*
- *Habitats Regulations.*
- *Mine waste permitting guidance*



## Over a year since PPS25: Development and Flood Risk was published

- Developer responsibility for **site-specific flood risk assessment** – applies to **all new sites >1ha**
- EA flood maps not infallible and **cover only fluvial and tidal flooding not**:
  - **surface water sewers;**
  - **run-off;**
  - **groundwater;**
  - **man-made water bodies e.g. canals, reservoirs etc.**
- **Potential effects of a development on flood risk elsewhere**
- **Climate change effects** – a factor in planning process (PPS1 Planning and Climate Change)
  - ⇒ **adequacy of existing flood risk management measures in future?**



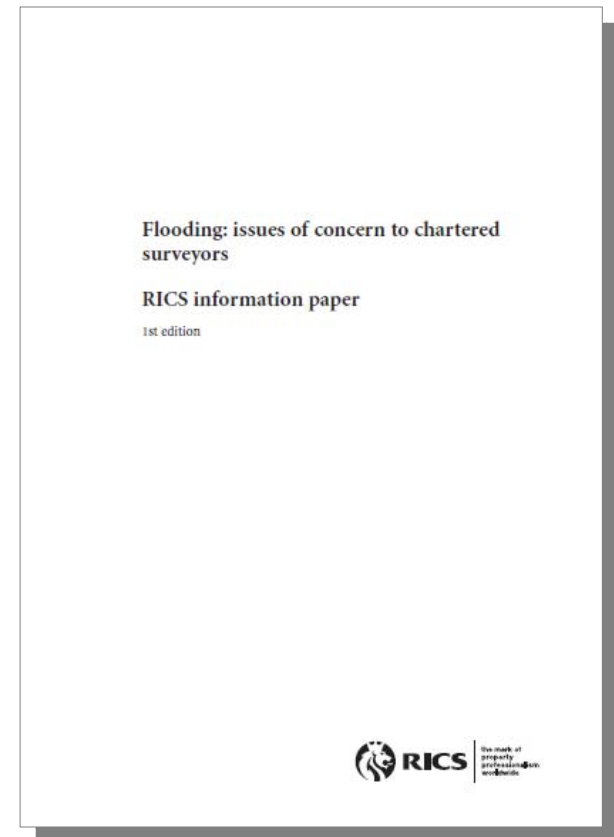


## *What has changed?*

- Flooding in England: A National Assessment of Flood Risk was released in June:
  - Site specific FRA increasingly required for planning applications – ***fewer than 4% of planning decisions go against EA recommendations***
  - EA Long Term Investment Strategy: ***budget is not there to maintain current levels of protection***

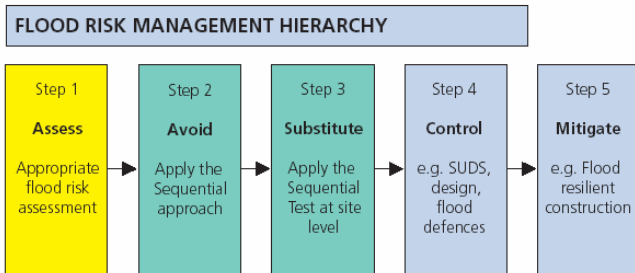
## *How will changes affect Chartered Surveyor practice?*

- Requirements, scope and value implications of FRA
- ***FRA now a must for any development >1ha***





## 4 The Sequential and Exception Tests



### Awareness

- Phased approach to risk assessment - **passing Sequential Test vital before money is potentially wasted on further assessment**

⇒ **Identify survey requirements**

- **Awareness of the limitations of existing flood risk assessment mapping**

- One in six properties in England are at risk of flooding
- Current flood protection infrastructure will not necessarily be maintained into the future
- Planning for climate change

### Potential opportunities

- **Co-ordinating early consultation with EA and other stakeholders**
- **Providing advice for owners on changing boundaries**

Table D.3<sup>22</sup>: Flood Risk Vulnerability and Flood Zone 'Compatibility'

Flood Risk Vulnerability classification (see Table D2)		Essential Infrastructure	Water compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Flood Zone (see Table D.1)	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test required	✓	✓
	Zone 3a	Exception Test required	✓	✗	Exception Test required	✓
	Zone 3b 'Functional Floodplain'	Exception Test required	✓	✗	✗	✗

Key:  
 ✓ Development is appropriate  
 ✗ Development should not be permitted



## *Pre-planning considerations for the surveyor: PPS23*

- **Developer responsibility** for ensuring a development is safe and suitable for use, plus ensuring the prevention of environmental harm
- The need to identify unacceptable environmental risks:

### *Internet commercial searches not sufficient*

⇒ **Minimum requirement = desktop + site walkover**

- Ensuring the benefits of risk management outweigh costs-  
**including guarding against potential legal action**
- **Viability of mitigation and knock-on effect for purchase or resale values, e.g. landfill costs**
- **Hurdles prior to planning application stage.**
- **Precautionary principle applies.**





## Contaminated land risk assessment

- Risk assessment for contaminated land is in a transition period
  - CLEA 1.06 and related documents provide framework for deriving **Soil Guideline Values (SGVs)**, superseding CLEA UK & CLEA 1.04
  - **CLEA is not compulsory**, but widely accepted by authorities as an approved method to meet requirements of Part 2A
  - Soil **Guideline Values - not intended to produce absolute values for determining SPOSH**
  - **SGVs now available** for a range of contaminants but still a number of **critical exceptions e.g. lead, TPH** and official SGVs are **applicable to a limited range of conditions**
- **Published guidance is subject to rapid change and sites assessed and remediated based on past understanding may represent SPOSH according to current criteria.**



5: RESULTS

	Rate of ADE to relevant Health Criteria Value			Soil Assessment Criteria			Soil Situation Limit
	total HCV	total HCV	Combined	total HCV	total HCV	Combined	
	(dimensionless)	(dimensionless)	(dimensionless)	mg kg <sup>-1</sup>	mg kg <sup>-1</sup>	mg kg <sup>-1</sup>	
Aluminium	0.05	0.17	1.00	3.20E+01	3.00E+01	1.50E+01	NR
Ammonium	0.07	0.13	1.00	1.40E+02	1.70E+01	1.00E+01	NR
Barium	1.00	0.00	1.00	1.40E+02	7.00E+04	1.40E+02	NR
Cadmium	0.21	0.79	1.00	3.00E+01	3.00E+01	7.00E+01	NR
Chromium	0.07	0.13	1.00	2.00E+02	7.00E+01	2.00E+01	NR
Copper	0.54	0.36	1.00	3.00E+03	7.00E+03	4.00E+03	NR
Iron	1.00	0.00	1.00	2.00E+03	3.00E+03	2.00E+01	NR
Lead	0.14	0.86	1.00	2.00E+02	7.00E+01	7.00E+01	NR
Nickel	1.00	NR	NR	2.00E+01	NR	NR	NR
Vanadium	0.87	0.13	1.00	2.00E+02	1.40E+01	2.00E+02	NR
Zinc	0.88	0.12	1.00	2.00E+04	1.50E+04	2.00E+04	NR
Chloride (free)	0.07	0.07	1.00	2.00E+00	1.20E+04	7.00E+02	NR
Fluoride	1.00	NR	NR	1.00E+00	NR	NR	2.00E+03
Acrylonitrile	0.04	0.96	1.00	4.00E+02	1.40E+01	1.40E+01	3.00E+00
PolycyclicAromaticHydrocarbons	0.04	0.96	1.00	3.00E+00	1.20E+00	1.00E+00	1.00E+00
PolychlorinatedBiphenyls	0.04	0.96	1.00	1.00E+01	1.20E+01	1.00E+01	1.00E+01
PolycyclicAromaticHydrocarbons	0.44	0.56	1.00	1.40E+01	1.20E+01	6.00E+00	3.00E+00





## What has changed?

- New RICS Guidance due soon on Contaminated Land
- Repercussions of the Corby Judgement – effects on investigation and remediation spec. from councils.

## How will changes affect Chartered Surveyor practice?

- PPS23 requires that as a minimum "the land should not be capable of being determined as contaminated land under Part IIA of the EPA 1990.
- 'Use by dates' for contaminated land reports?
- Consideration of pre-existing remediation measures in light of recent knowledge of human health effects

## Potential opportunities

- Review of clients existing holdings.
- A need for practical advice on previously risk assessed or remediated sites.



**5: RESULTS**

Final JAC    Full Report    Back to Table

	Rate of ADE to relevant Health Criteria Value			Soil Assessment Criteria			Soil Situation Limit
	anal HCIV	total HCIV	Combined	anal HCIV	total HCIV	Combined	
Chromium	0.05	0.15	1.00	0.20E+01	0.50E+01	1.50E+01	100
Lead	0.07	0.13	1.00	1.40E+02	1.70E+04	1.80E+01	100
Mercury	1.00	0.00	1.00	1.40E+02	7.00E+04	1.40E+02	100
Cadmium	0.21	0.79	1.00	0.20E+01	0.50E+01	2.00E+01	100
Chromium	0.07	0.13	1.00	2.00E+02	7.00E+01	2.00E+01	100
Copper	0.54	0.86	1.00	0.50E+03	7.00E+01	4.70E+03	100
Vanadium	1.00	0.00	1.00	2.00E+01	0.50E+01	2.00E+01	100
Iron	0.14	0.86	1.00	2.00E+02	7.00E+01	2.00E+01	100
Barium	1.00	0.00	1.00	2.00E+01	0.00	0.00	100
Strontium	0.05	0.13	1.00	0.10E+02	0.40E+01	2.00E+02	100
Co	0.06	0.22	1.00	2.00E+01	1.50E+01	2.00E+01	100
Chromium (Total)	0.07	0.22	1.00	2.00E+02	1.70E+04	7.00E+02	100
Plumbum	1.00	0.00	1.00	0.50E+02	0.00	0.00	100
Aluminium	0.04	0.86	1.00	4.00E+02	1.40E+01	1.40E+01	100
Polychlorinated Biphenyls	0.04	0.86	1.00	0.00E+00	0.00E+00	0.00E+00	100
Polycyclic Aromatic Hydrocarbons	0.24	0.28	1.00	1.00E+01	1.00E+01	1.00E+01	100
Benzeno(a)anthracene	0.44	0.86	1.00	1.40E+01	1.00E+01	6.00E+01	100



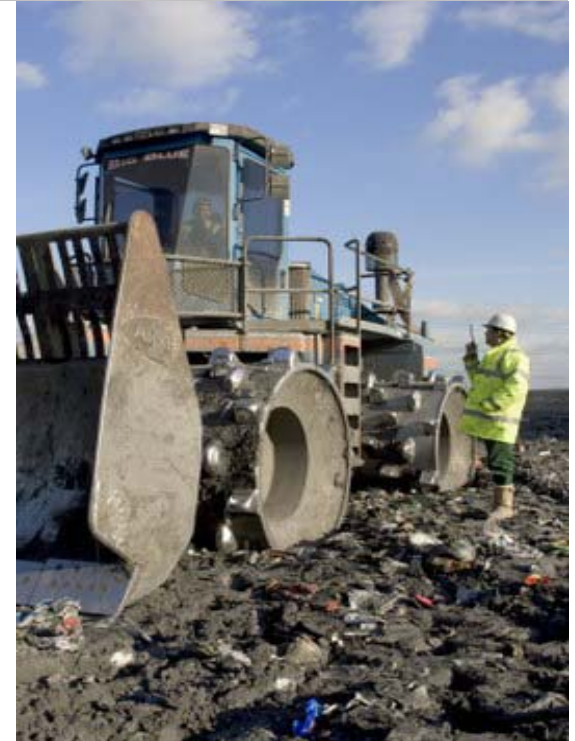


## ***Removal of the Landfill Tax Exemption for contaminated land***

- Landfill tax exemption for remediation of contaminated land no longer available and current exemption certificates expire 31 March 2012
- Landfill tax now £40/tonne and planned rise of £8/year during 2010 and 2011

## ***Land Remediation Relief***

- Investigation and remediation costs can be claimed against corporation tax – up to 150%
- Now includes derelict land and treatment of Japanese Knotweed

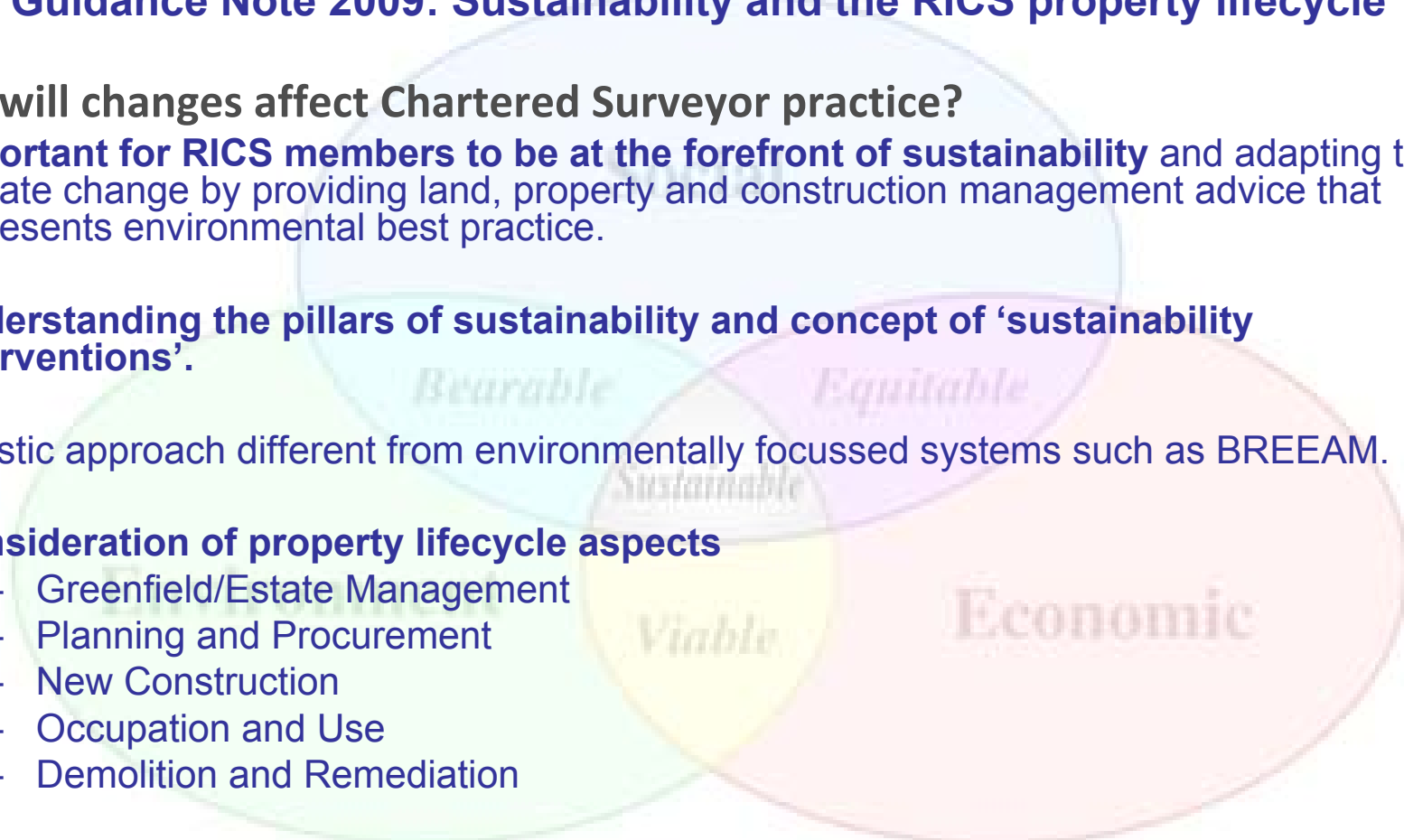




## RICS Guidance Note 2009: Sustainability and the RICS property lifecycle

### How will changes affect Chartered Surveyor practice?

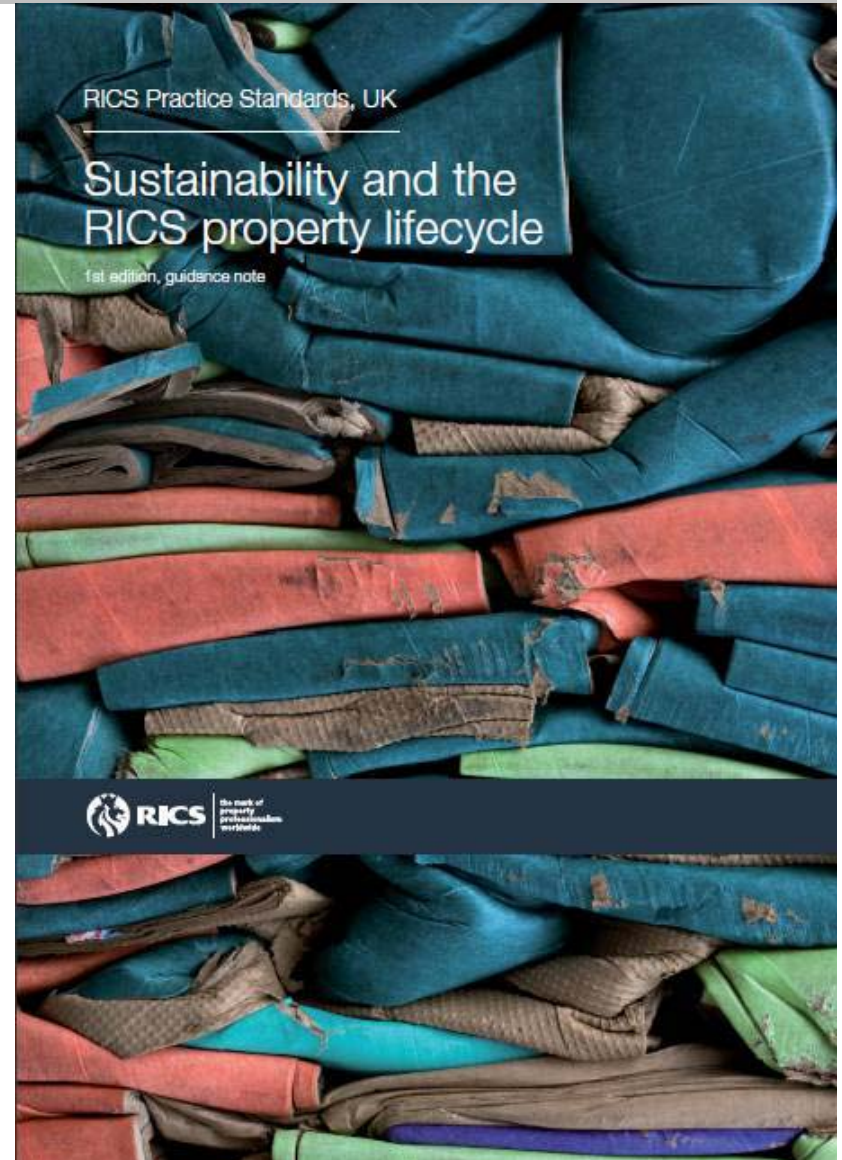
- **Important for RICS members to be at the forefront of sustainability** and adapting to climate change by providing land, property and construction management advice that represents environmental best practice.
- **Understanding the pillars of sustainability and concept of ‘sustainability interventions’.**
- Holistic approach different from environmentally focussed systems such as BREEAM.
- **Consideration of property lifecycle aspects**
  - Greenfield/Estate Management
  - Planning and Procurement
  - New Construction
  - Occupation and Use
  - Demolition and Remediation
- **Consideration of occupation phase and sustainability** e.g. Green Leases, corporate responsibility policies, goals and objectives of potential tenants and purchasers.





## *Potential opportunities*

- *RICS Members well placed to consider climate change mitigation in buildings.*
- *Sustainability interventions – advice and management*
- *Building sustainability to assure asset value.*





## ***What has changed?***

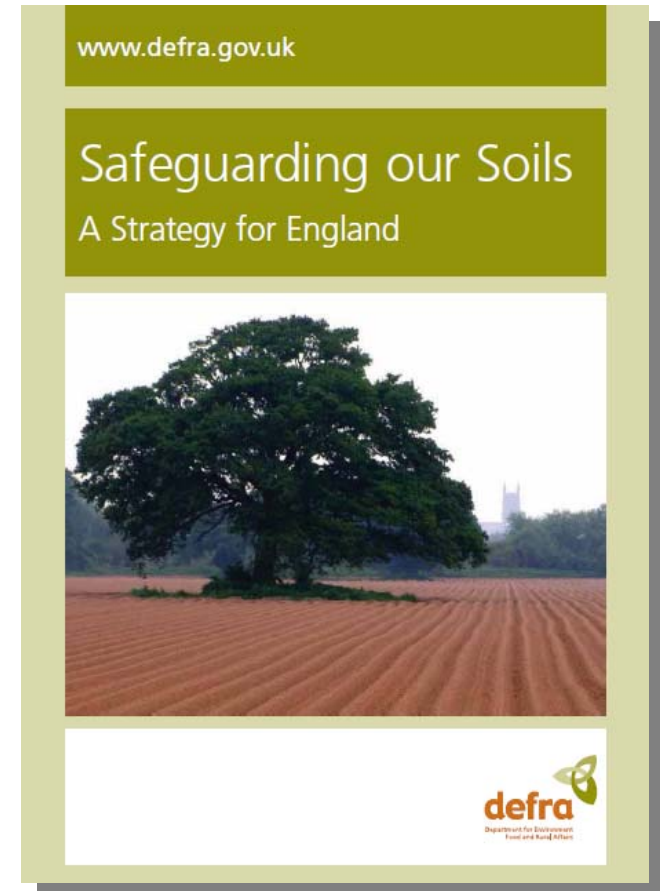
- *Sets out vision for improvement of the sustainable management of soil and to tackle degradation within 20 years.*
- *Security of food and fibre production and store for management of soil as a major carbon*

## ***How will changes affect Chartered Surveyor practice?***

- *Will affect future soil management in agriculture, land management, planning and construction, contaminated land.*

## ***Potential opportunities***

- *Soil management advice and planning.*





## ***Environmental Permitting and Revised Waste Exemptions***

- Introduction of Environmental Permitting Regulations 2007 in April 2008 covering waste management and PPC activities.
- Consultation on revised waste exemptions ended in October 2008 – summary of responses published in September 2009 – implementation of the new regs put back to April 2010.
- Theme is – “to minimise the burden on businesses handling waste and ensure that weight of regulation matches environmental risk”.

## ***How will changes affect Chartered Surveyor practice?***

- ***Many generalists still unaware of changes and there have been fines for operating in breach of exemptions.***

## ***Potential opportunities***

- ***Advice regarding compliance.***
- ***Guidance through the permitting process.***





# Mining Waste Directive Implementation



## ***What has changed?***

- *Management of extractive waste from mining and quarrying required by EU Mining Waste Directive.*
- *The MWD is being implemented through the Environmental Permitting system through amendments that came into force in July 2009.*
- *Consultation has just closed on guidance document being produced by the EA.*

## ***How will changes affect Chartered Surveyor practice?***

- *The Definition of Waste is the basis for what should be managed as extractive waste.*
- *Waste Management Plan requirements.*

## ***Potential opportunities***

- ***Advice regarding compliance.***
- ***Guidance through the permitting and waste management processes.***



[www.defra.gov.uk](http://www.defra.gov.uk)

### Environmental Permitting

#### Environmental Permitting Guidance The Mining Waste Directive

For the Environmental Permitting (England and Wales)  
Regulations 2007

Draft guidance for Consultation – May 2009



Llywodraeth Cymru  
Welsh Assembly Government



defra  
Department for Environment,  
Food and Rural Affairs



## ***What has changed?***

- *RICS Asbestos Guidance Note Revisions 2009.*
- *Asbestos – The Hidden Killer campaign re-launched 2 November 2009.*
- *Asbestos awareness training requirement.*

## ***How will changes affect Chartered Surveyor practice?***

- *Duty to Manage is a legal responsibility- but generally low take-up.*
- *Many surveys are out of date are not management plans and not reviewed.*
- *HSE prosecutions 2009 especially for refurbishment cases of inadequate or absent surveys.*
- *Potential liabilities for inaccurate asbestos surveys and resultant exposure Dutyholders and managing surveyors?*





## ***Potential opportunities***

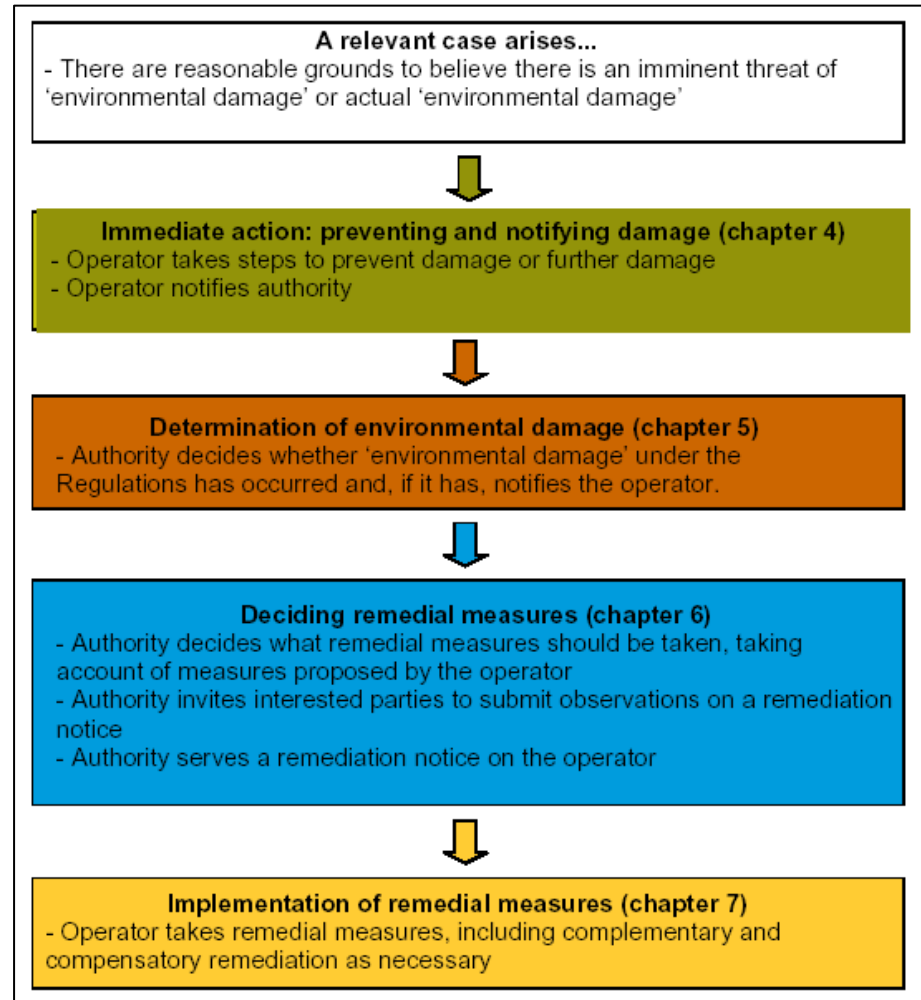
- *Awareness is spreading of the health dangers from asbestos – 8/10 tradesmen were aware of the first ‘hidden killer’ campaign.*
- *Many are not fulfilling Awareness training, Duty to Manage and require advice.*





## What has changed?

- Environmental Damage (Prevention and Remediation) Regulations 2009
- Just implemented across the UK- this year!
- Represents transposition into UK law of the Environmental Liability Directive (ELD), released in 2004 to reinforce EU 'polluter pays principle'
- Regulations cover:
  - damage to protected species, natural habitats or SSSIs;
  - damage surface or groundwaters;
  - damage to land.





## Land

- *Land contamination thresholds are not the same as Part 2A and include contamination caused by organisms and micro-organisms*
- *Preventative and remedial measures required more immediately than pre-existing regimes*

## Water

- *Require return to baseline conditions and compensation for interim loss*

## Species and habitats

- *Covers EU protected species and habitats outside protected sites*
- *Remediation can be required without first securing a prosecution*
- *Require return to baseline conditions and compensation for interim loss*

## All

- *Duty to report damage or imminent threats and to take immediate action*
- *Duty of authority to require preventative and remedial measures rather than power*



# The Environmental Damage Regulations



## How will changes affect Chartered Surveyor practice?

- *A large range of activities with the potential to harm the environment have new duties under the regulations.*
- *Lack of awareness may result in serious financial loss or custodial sentence.*
- *Reporting by interest groups.*
- *RICS Information Paper published.*

## Potential opportunities

- *Advisory role at strategic and development levels, survey co-ordination*
- *Additional need for environmental due diligence surveying*
- *Increased skills requirements in the assessment of the status of waters, land, habitats or species*
- *Habitats and protected species pre-planning*

The Environmental Damage (Prevention and Remediation) Regulations 2009

RICS information paper

1st edition





### *What could change?*

- *Consultation (closed 14th Oct) on introducing new regulator imposed civil sanctions with stronger role for criminal courts in sentencing worst cases and tightening up of compliance deficit that results from time-consuming and costly process of criminal prosecution.*
- *Aim to introduce more proportionate civil and criminal sanctions and remove financial benefit/competitive advantage from non-compliance*

Will apply to offences in regulations such as:

- The Environmental Permitting Regulations 2007,
- The Environmental Protection Act 1990,
- The Wildlife and Countryside Act 1981,
- The Water Resources Act 1991,
- Nitrate Pollution Prevention Regulations 2008 and others



## *Proposed sanctions:*

- *Compliance notices*
- *Restoration notices*
- *Stop notices*
- *Fixed monetary penalties*
- *Variable monetary penalties*
- *Undertakings*

## *How will changes affect Chartered Surveyor practice?*

- *Potential to affect compliance, land management etc. of potentially non-compliant sites e.g. farms in NVZs, commercial composting operations etc.*

## *Potential opportunities*

- *Advice and management to prevent financial penalties and reputation damage.*



## *What could change?*

- *Consultation held in August 2009 on proposed minor amendments to the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (England & Wales only) to ensure proper implementation of the Habitats Directive.*
- *Intended to clarify that provisions to make Special Nature Conservation Orders can be used to restrict operations on water and activities taking place outside the site.*
- *Operations that could destroy or damage, flora, fauna or geological or physiographical features of Natura 2000 sites. Likely to apply to exceptional cases in consultation with appropriate nature conservation bodies*
- *Currently, regulation 23(1) provides that “no person shall carry out on any land within a European site...any operation specified in the order...” which excluded operations being carried out on waters or outside the protected site.*
- *SNCOs to be targeted at persons or organisations instead of activities undertaken or permitted by owners/occupiers – extends to those operating outside protected sites.*



## *How would changes affect Chartered Surveyor practice?*

- Operations with apparent risk of destroying or damaging the interest features of a European site could be affected.
- Powers would stretch beyond Environmental Damage Regulations to cover domestic or recreational activities.
- *SNCO powers have potential to be used in respect of a consented operation although most likely to apply to unregulated activities.*
- ***Protected Species Licensing - changes***





## Timing of surveys – developer responsibilities

POSSIBLE TIMES OF YEAR FOR FIELD SURVEYS												
	January	February	March	April	May	June	July	August	September	October	November	December
<b>BREEDING BIRDS</b>												
<b>BATS</b>	Should not be disturbed whether during winter hibernation or summer roosting. Surveys will generally consist of looking for signs of bats rather than seeing the animals. If bats are thought to be present English Nature should be contacted so that experienced personnel can assess the situation											
<b>BADGERS</b>												
<b>REPTILES</b>												
<b>AMPHIBIANS</b>												
<b>BEEES, ANTS &amp; WASPS</b>												
<b>WOODLAND FLORA</b>												
<b>GRASSLAND FLORA</b>												

KEY	
Optimal	
Sub-optimal	
poor	



*Chartered Surveyors play a key role in the protection of the environment and adaptation to environmental challenges*

- *Environmental regulation will have increasing implications for asset management and land & property value*
- *So...there is an increasing need for early consideration of environmental responsibilities*
- *Applies to asset management, development & regeneration*
- *Also...there is an increasing need for assessment of flood risk, site ecology and potential for contaminated sites, as well as management of waste*
- *All these represent opportunities for Surveyors, at strategic asset management level, in project management or as environmental specialists*



*Thank you for your attention*



## *Any Questions?*

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