

Environmental Risks in Construction: Liability, exposure and Insurance Solutions



Dr Simon Johnson
Director, Practice Head EMEA
Aon Global Environmental Services Group

Presentation to ECRI 9th December 2010



Agenda

- Environmental Risks and Liability
- EU Environmental Liability Directive
- Exposure to uninsured loss and damage
- Environmental Insurance Solutions and examples
- Summary

Environmental Risks and (Legal) Liability

- Complex, expanding and evolving
 - Noise
 - Air emissions including fugitive dust from transport etc.
 - Waste management
 - Water management
 - Surface water and run-off
 - Groundwater – infiltration and pumping (control and use)
 - Management and protection of ecological resources on and off-site locations – **Environmental Damage**
 - Japanese knotweed
 - Contaminated land and remediation
 - Sustainability

Example Risks

A paving contractor sprays an oil-based binding layer on crushed aggregate, planning to complete the asphalt road the following day. A heavy overnight rain causes the binding layer to run off into the groundwater supply, contaminating the local water supply.



Remediation contractor unintentionally creates a pathway for pre-existing contamination to seep and migrate off-site and pollute an adjacent river, which damage occurs sometime after the initial event.

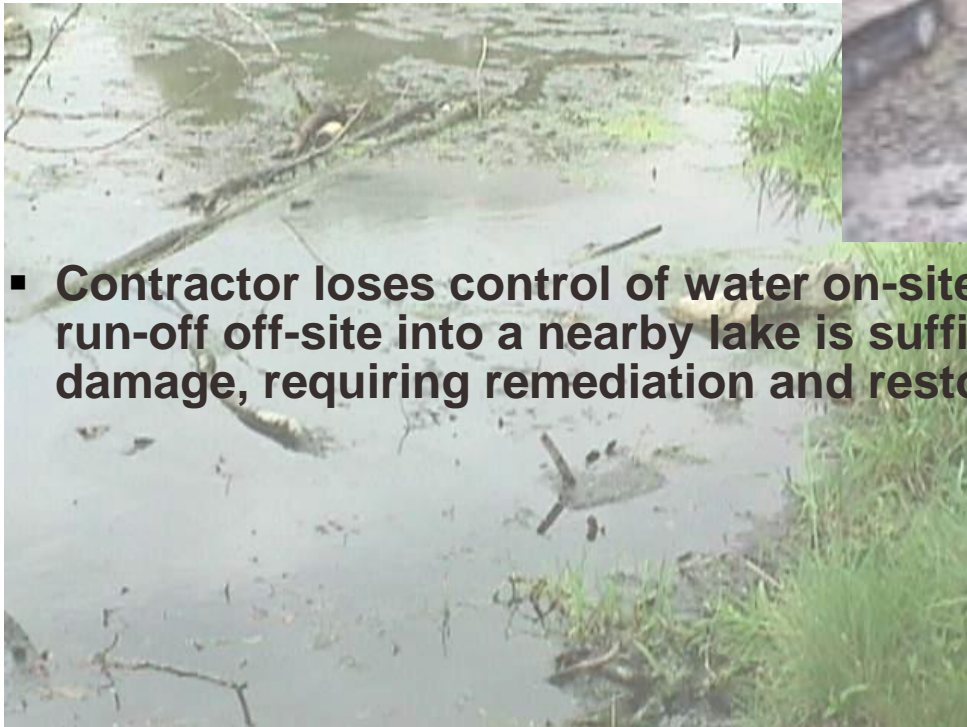


Example Risks

- **Contractor inadvertently mixes asbestos containing materials into a 'clean' stock pile, requiring all materials to be disposed off-site as special waste.**



- **Contractor loses control of water on-site so that over a period of time the run-off off-site into a nearby lake is sufficient to cause environmental damage, requiring remediation and restoration**



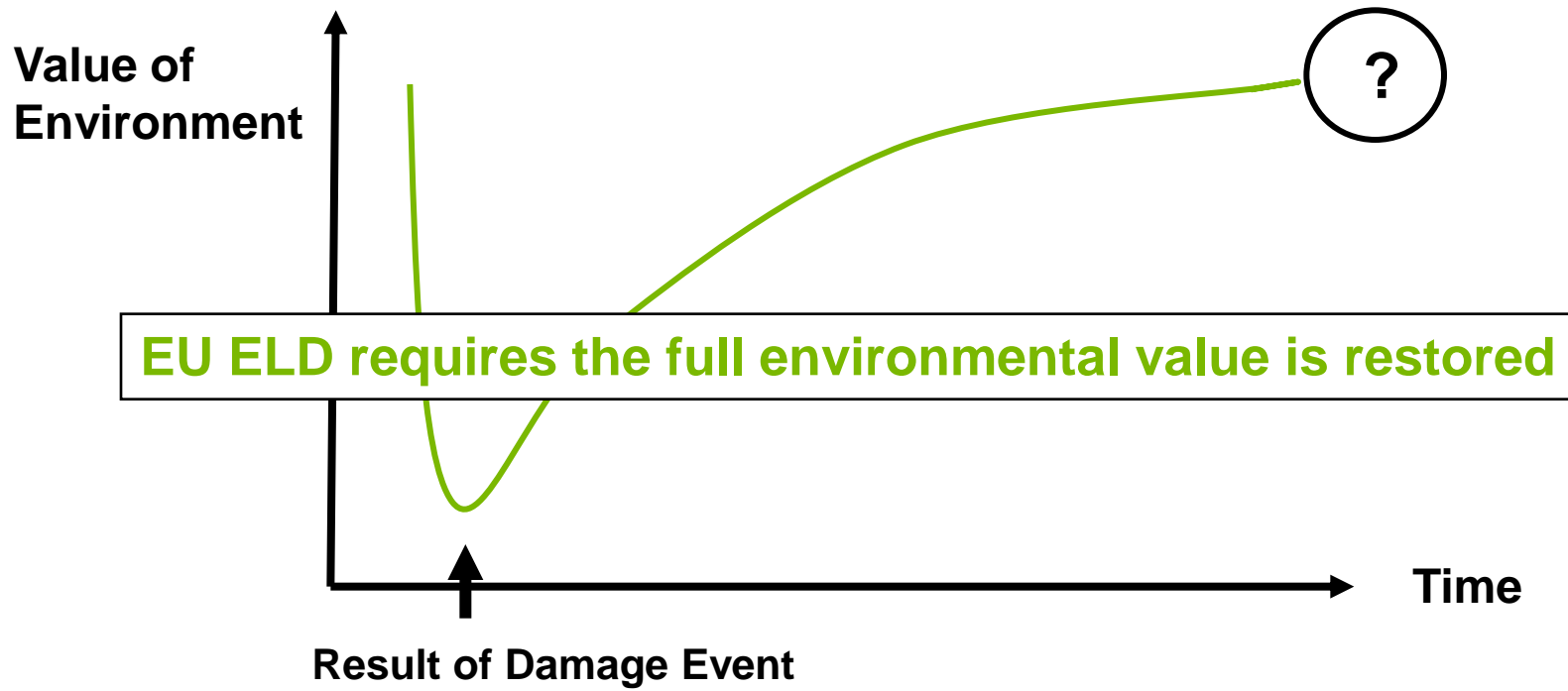
The EU Environmental Liability Directive

- Implemented across EU/EEA – all member states/countries
- New Liability for environmental **damage** not just pollution
- Includes biodiversity and damage to natural habitats
- Similar in scope to US Natural Resource Damage
- Creates **Strict Liability** for many types of operation
- **Financial security** may be required
- A global trend
- Insurance is available and competitive
- Applies to contractors
- **Financial impact of damage is likely to be higher**

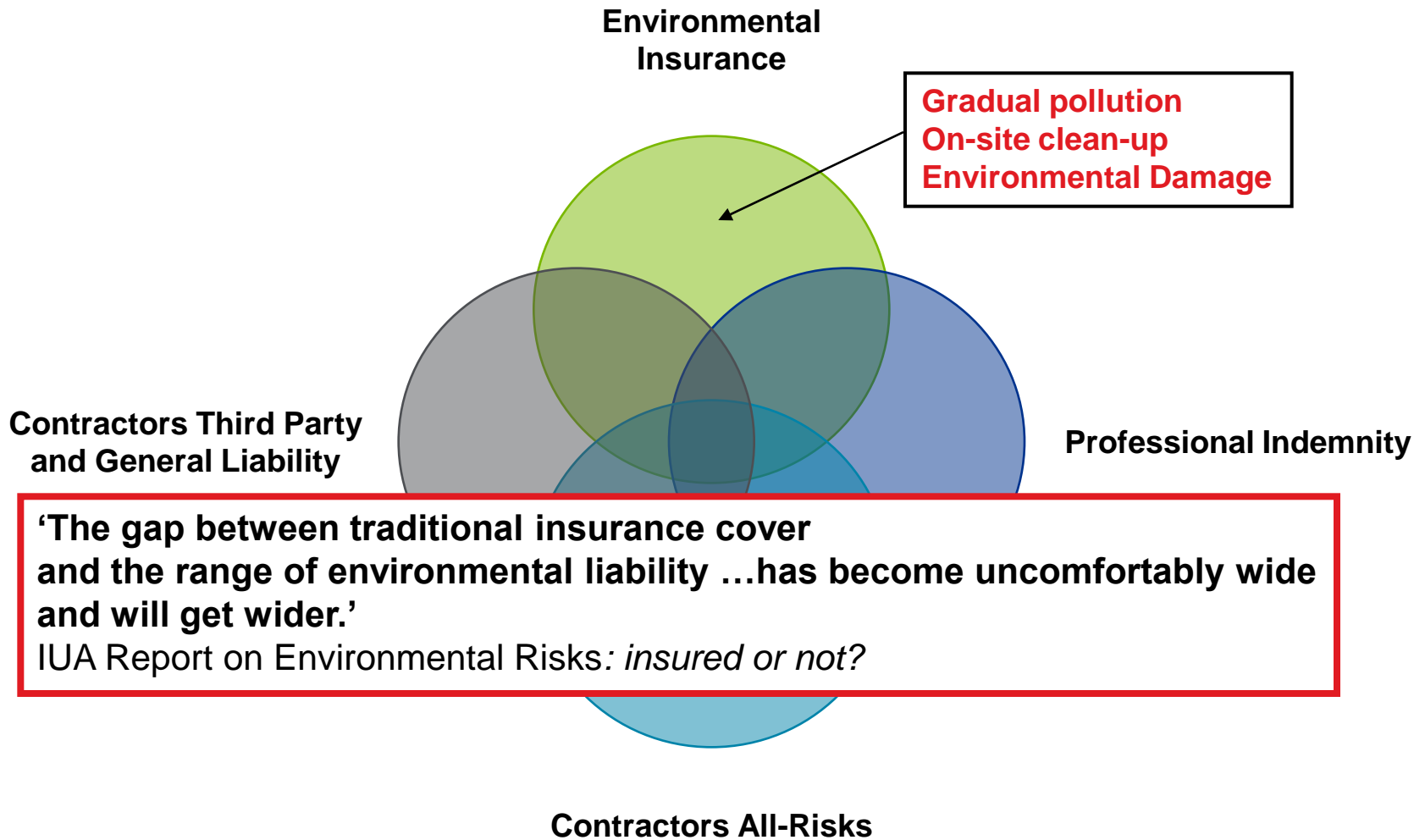


Financial impact of damage?

- French Government Report April 2010
 - Spill of hypochlorite 1996 – costs (imposed by Regulator) €42,000 today with ELD €140 - €400k – depending on approach (in-situ/ex-situ)
 - Pesticides in warehouse fire 1997 – costs (imposed by Regulator) €10,000 with ELD €4M



The Environmental Insurance Gap



Contractors Pollution Legal Liability

- Environmental liabilities arising from contractor operations and caused by the introduction of new pollution conditions or the exacerbation of existing pollution conditions
 - First party on-site clean-up
 - Third-party bodily injury and/or property **damage**
 - First party business interruption
 - Legal defence and associated costs
 - Indemnity for Directors and officers
 - Damage to the environment under the **EU ELD including non-pollution damage**



Policy term:

annual policy for all operations by the **insured**
up to 10-years for specific projects

Policy can be written on a claims made or occurrence basis

Professional Indemnity

- Errors and omissions – fault-based
- Unless specified may not include for environmental loss or damage or have significant limitations or sub-limits
- Environmental cover will be an aggregate limit within the programme

- Can be combined with a non-fault based Contractors Pollution Liability programme in a single form with a single limit of indemnity
 - Ideal for smaller specialist contractors i.e. remediation contractors where they also design the remediation system

Insurance and markets (Europe)

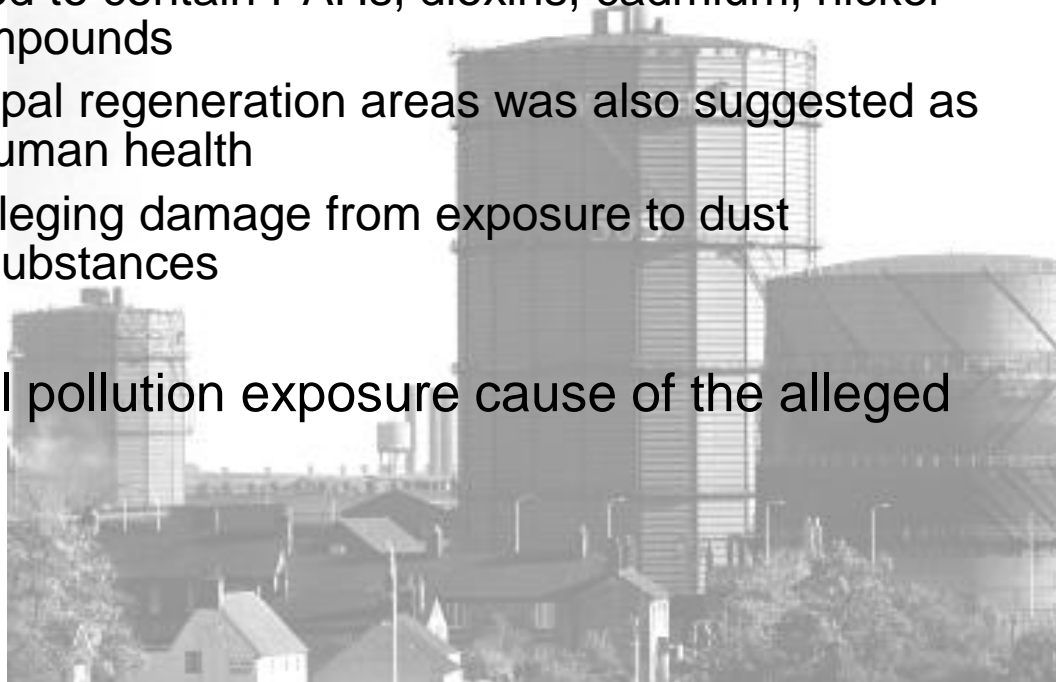
- CPL
 - ACE, AXA, Chartis, Chubb, XL, New entrants expected 2011
 - 14 markets US

- PI (Environmental)
 - Various including Lloyds depending on risk and limits
 - Specialists include: Chartis, XL, Pembroke Syndicate

- Underwriting information
 - Blanket programme
 - Description of activities
 - Breakdown of turnover by key activity
 - Project specific
 - Project details and risks
 - Project size/turnover by key risk elements e.g. groundworks, remediation etc.

Corby - UK

- As part of the regeneration project, agreed by and with a number of agencies:
 - Waste materials were transported on public highway in open trucks, where particulates allowed to escape to air and also ‘mud’ from the wheels allowed to dry on the roads and dust to escape
 - The particulates were alleged to contain PAHs, dioxins, cadmium, nickel and chromium and their compounds
 - General dust from the principal regeneration areas was also suggested as contributing to damage to human health
 - Action bought by children alleging damage from exposure to dust containing the above toxic substances
- Key insurance point: gradual pollution exposure cause of the alleged damage



Redland - UK

- Site acquired by Redland through acquisition of the company that previously owned and operated on the site, thereby assuming that company's liabilities
- Site then sold on to Crest Nicholson with 'some' information about bromide soil contamination
- Site subsequently served a remediation notice under Part 2A (after house build by Crest Nicholson) and on the basis of potable groundwater contamination by bromide and bromate – determined as a 'special site' under the jurisdiction of the Environment Agency
- Contractor deemed to have caused the pollution by creating a 'new' pathway



Potential for Insurance Solutions

- Corby
 - Occurrence based CPL put in-place for the life of the project would cover future manifestation of damage including gradual damage to health or the environment that was caused by events during the project

- Redland
 - Site Specific PLL taken out by Redland against claims arising directly in the future post-sale and transfer
 - CPL taken out by the contractor (Crest Nicholson) against exacerbation of pre-existing conditions

Environmental Insurance

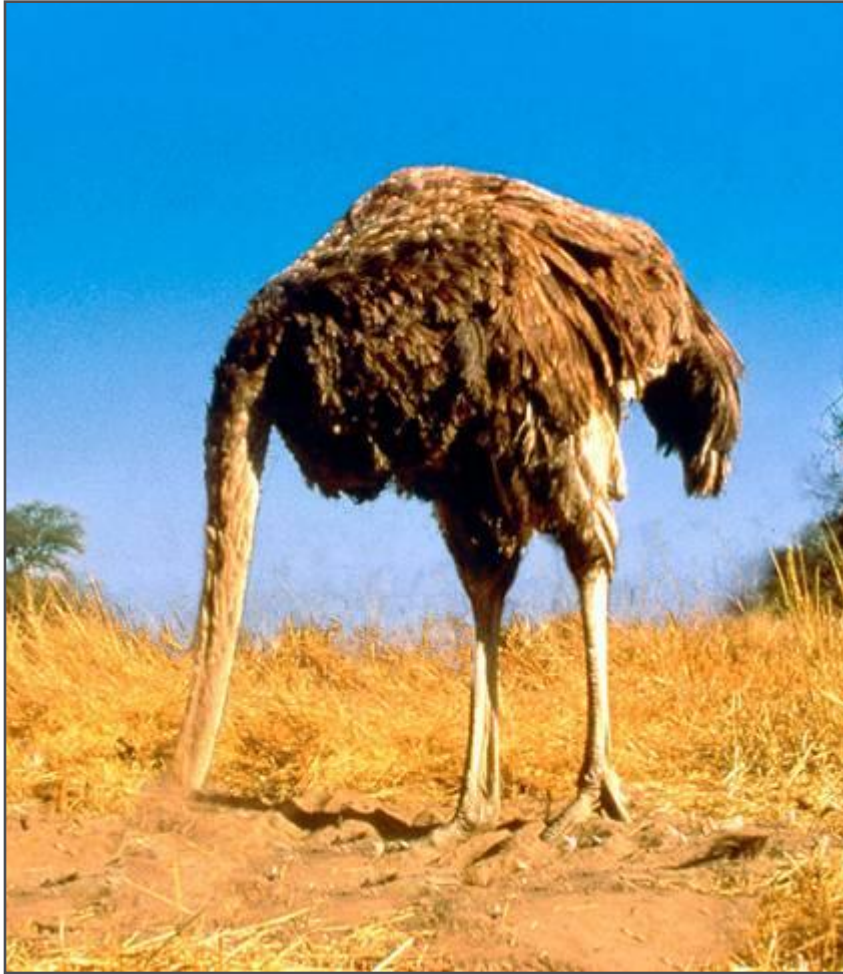
- Integrates with existing programmes
- Provides significant 'gap' cover
- Supports specialist projects and developments
- Catastrophe product
- An essential part of any construction risk management toolkit

Aon Environmental Services Group can assist in identifying and assessing these risks drawing on a depth of expertise within the Group of engineers, lawyers, and risk management professionals to provide risk mitigation and transfer programmes

Summary

- Contractors are exposed to a wide range of environmental risks and pressures
- The extent of liability either through law (regulations) or contract is increasing - Environmental damage and biodiversity is a new and potentially costly liability
- Identification of risk and assessment of exposure is critical
- Risk transfer supports risk management and control
- Gap between risk and insurance cover for traditional contractor programmes is increasing
- Environmental insurance can fill this gap, is proven, competitive and available

You Can No Longer Ignore Environmental Risks



Plausible deniability of environmental risks is no longer a viable option in today's world

Contact:

Simon Johnson Ph.D.

Practice Leader EMEA

Aon Global Environmental Services Group

+ 44 207 216 3719/+ 44 7507 882 266

Simon.johnson@aon.co.uk