



NICOLE/ CF Joint Meeting - Workshop Session 1:
Overview of the Regulatory Basis for Sustainable
Remediation in the European Union and United Kingdom



Friday 16th May 2014

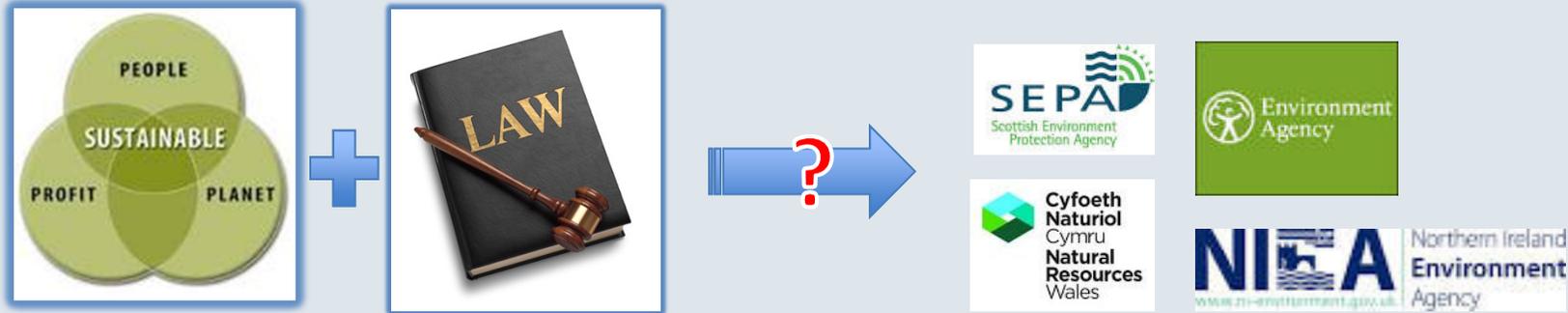
***Bundesministerium für Umwelt, Naturschutz, Bau und
Reaktorsicherheit, Berlin, Germany***

Session 1 Workshop Programme & Introduction

- **09.00-09.20 : Presentation by URS:**
 - Overview of Regulatory Basis for Sustainable Remediation (SR) in the European Union and United Kingdom.
 - An insight into a review on how the actual wordings issued by legislative bodies in the EU and UK can require, promote, or support the application of Sustainable Remediation principles. (Overview of Work in Progress).
- **09.20-09.30 :** General Q&A
- **09.30-10.30 :** Breakout Groups to discuss topics
- **10.30-11.00 :** Reconvene to discuss common themes and conclusions
- **Project Team Acknowledgements & Introduction**



Project Background & Overall Aims



1. Is there a disparity between what is presented in law and guidance applicable to sustainable remediation (SR), and its adoption or acceptance by practitioners and local regulators?
2. How can this be addressed?
3. To what extent are the existing references already being applied by Industry, environmental practitioners and Regulators?

Site operators, their consultants and Regulators could reference their decisions and work related to SR to relevant links in regulatory texts

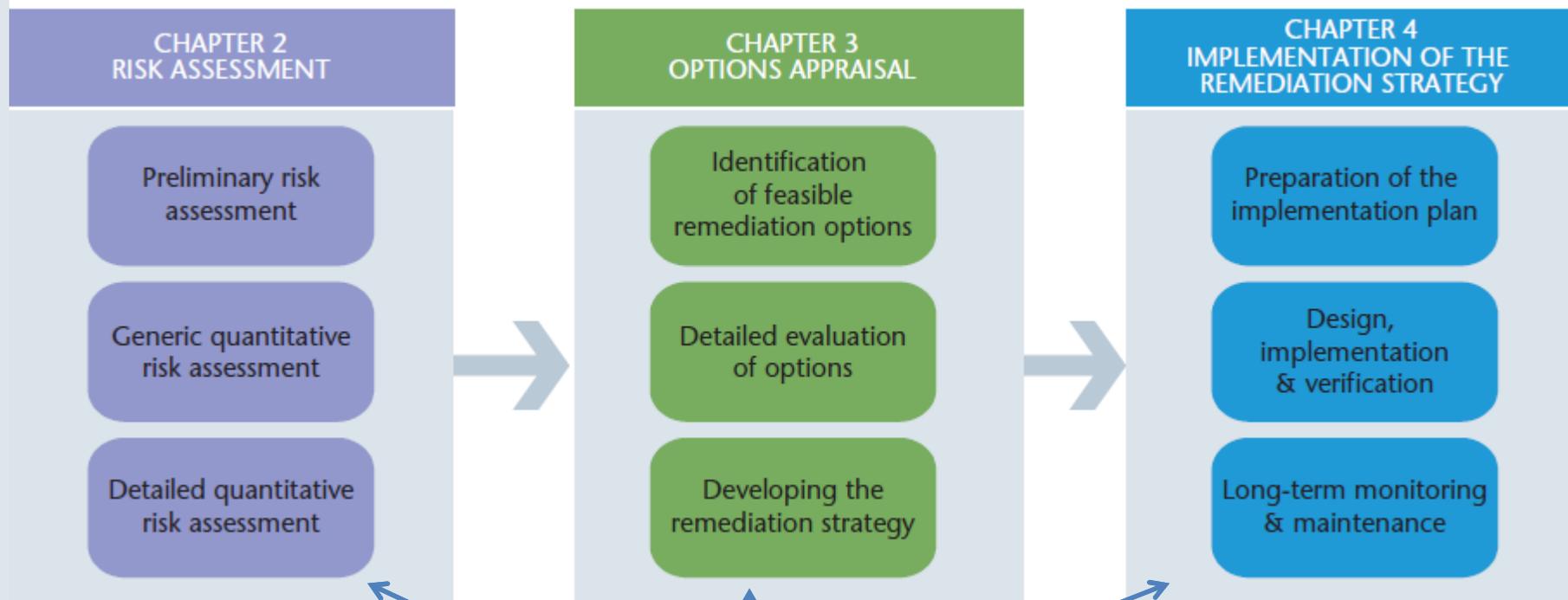
Project Objectives

- To identify pertinent sections of text issued by European Union and UK legislative bodies that specifically **require**, **promote** or **support** the application of SR principles.
- To review the literature in question and report it in a manner that enables the relevant areas of text to be readily brought to bear in developing the argument for a SR approach.



Project Life Cycle: (From: CLR11)

The UK regulatory definition of remediation is not just limited to implementation; as such, SR needs to consider more than just remediation technology selection



All aspects considered with respect to sustainability

Methodology – Literature Sources

EU Directives relevant to Contaminated Land/Sustainable Remediation

**Water
Framework
Directive 2000**

**Groundwater
Directive 2006**

**Industrial
Emissions
Directive 2010**

**Waste
Framework
Directive 2008**

**Environmental
Liabilities
Directive 2004**

**Priority
Substances
Directive 2013**

Also: Common Implementation Strategy (CIS) guidance for the WFD and Groundwater Directives



Methodology – Key Word Search

Sustainable/Sustainable development

Remedial/remediation Options Appraisal Criteria consultation

Sustainability Appraisal/Assessment

Social

Stakeholder

Economic

Brownfield

Necessary

Feasible

Cost (and) Benefit

Green Remediation

Socio-economic

Remedy

Reasonable/unreasonable

Balance

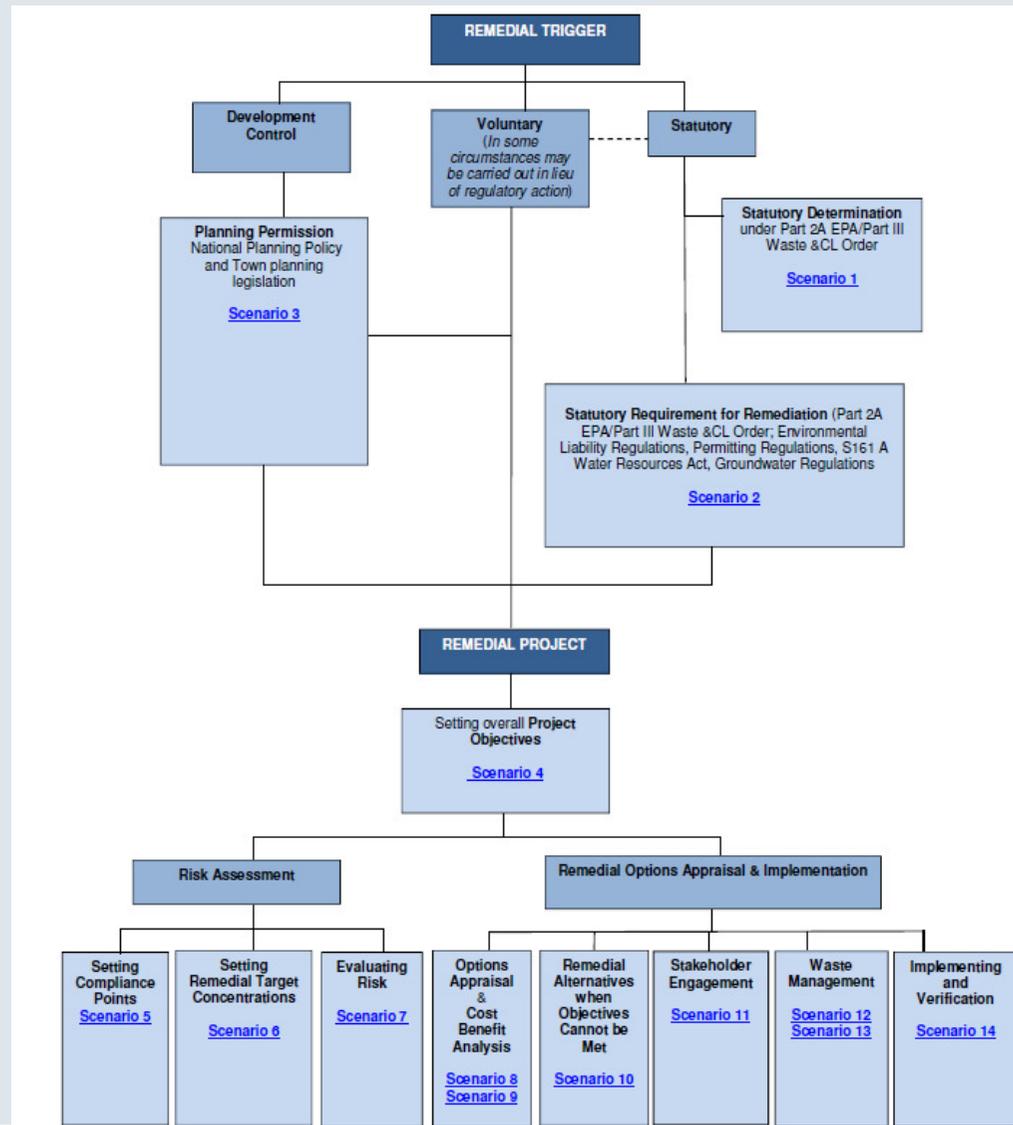
Proportionate / Proportionality



Regulatory Reference Framework

Intended to be “User-Friendly”

Scenario based: a wide range of different scenarios considered



Findings EU: Environmental Liabilities Directive 2004

Annex 2, Art 1.3.1

“The reasonable remedial options should be evaluated, using best available technologies, based on the following criteria:

- *The effect of each option on **public health and safety**,*
- *The **cost** of implementing the option,*
- *The likelihood of success of each option,*
- *The extent to which each option will prevent future damage, and avoid collateral damage as a result of implementing the option,*
- *The extent to which each option **benefits to each component of the natural resource and/or service**,*
- *The extent to which each option **takes account of relevant social, economic and cultural** concerns and other relevant factors specific to the locality....”*



Findings EU: Environmental Liabilities Directive 2004

Annex 2, Art 1.3.3

“the competent authority is entitled to decide that no further remedial measures should be taken if:

*.....the **cost of the remedial measures** that should be taken to reach baseline condition or similar level would be **disproportionate to the environmental benefits to be obtained.**”*



Findings EU: Water Framework Directive

- Preamble Para 11: *Community is to take account of, **environmental** conditions in the various regions of the Community, and the **economic and social development** of the Community as a whole and the **balanced** development of its regions as well as the **potential benefits and costs** of action or lack of action.*
- Preamble Para 31: *In cases where ... it may be **unfeasible** or **unreasonably expensive** to achieve good status, **less stringent environmental objectives** may be set on the basis of **appropriate, evident and transparent criteria**.*
- Article 4(7) *Member States may aim to achieve **less stringent environmental objectives** ...for specific bodies of water when ...the achievement of these objectives would be **infeasible or disproportionately expensive***
- Article 14(1): *Member States shall encourage the active involvement of **all interested parties** in the implementation of this Directive...*



Findings EU: Waste Framework Directive 2008

Article 4(1)

“The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:

- *prevention;*
- *preparing for re-use;*
- *recycling;*
- *other recovery, e.g. energy recovery; and disposal....*

*Member States shall take into account the general **environmental protection principles of precaution and sustainability**, technical feasibility and **economic viability**, protection of resources as well as the overall **environmental, human health, economic and social impacts**, in accordance with Articles 1 and 13”*



Findings EU: Priority Substances Directive 2013

Preamble Paragraph 6

*“in preparing its policy on the environment, the Union is to **take account of available scientific and technical data, environmental conditions** in the various regions of the Union, the potential **benefits and costs** of action or lack of action as well as the **economic and social development** of the Union as a whole and the **balanced development** of its regions. **Scientific, environmental and socio-economic factors, including human health considerations**, should be taken into account in developing a **cost-effective and proportionate policy** on the prevention and control of chemical pollution of surface waters...”*



Findings EU: Common Implementation Strategy (CIS)

Guidance Note no. 17, EC 2007 S 4.2.2

*“Site clean up should be directed towards preventing any hazardous substances from entering groundwater ... unless it can be demonstrated by risk assessment and **cost benefit analysis** that this is infeasible, or one of the exemptions ...applies”*



Findings UK

The same approach was adopted for UK legislation, for example:

- **The Environmental Damage (Prevention and Remediation) Regulations 2009** – Part 1 Section 8, para 3
- **Groundwater protection: Principles and Practice (GP3) (EA) 2013**, Section 2 (p187-188)
- **Remedial Targets Methodology (EA) 2006**, S 2.3, para 6
- **EA Guiding Principles of land contamination (GPLC2) 2010**, S 2.0, Para 21
- **Core guidance For the Environmental Permitting (England and Wales) Regulations 2010**, S7.3.1



Discussion Points

- Sustainable approaches to remediation are endorsed at EU directive level. To what extent are they supported at the **local** regulatory level across EU member states (nation/ region) ?
- What are the **key barriers** currently to the adoption of sustainability principles by both Industry, Practitioners and Regulators? For **Operators** and **Regulators**, would the identified references be useful to help approve a SR approach? Is anything else needed?
- At the domestic level, is sustainability being considered across **all** facets of remediation projects (Risk Assessment → Implementation)? Is this relevant?
- **How** could we use all these existing levers and hooks in regulations to promote SR at the project level?
- The SuRF-UK SR Framework has received UK regulator support. Has there been similar **uptake** of sustainability assessment frameworks across other member states?
- Are there any examples of how regulator/stakeholder engagement have resulted in a more sustainable remedial approach? Any **success stories** to share that we could build on?
- **Feedback** required - has the study identified anything new, or provided fresh light, on any particular aspects of SR not previously considered in projects. Have **similar exercises** to this been conducted elsewhere?



Closure

Thank you for listening. For more information please contact any of the following at URS:

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