



# Risk-Informed and Sustainable Remediation

Joint Position Statement by

# NICOLE and COMMON FORUM

Across Europe, our industrial heritage has created brownfields and land where contamination presents a potential risk to humans, to water resources, soils and to ecosystems. Currently we spend in the region of € 17 billion (EC, 2006) each year remediating these historical sites and unlocking land so that it is suitable for its existing use or for re-use. However, we also know that managing the risks posed by such sites can cause further impacts to the environment or neighbours. As a society, we need to be sure that money is well spent remediating sites, and that the benefits achieved by remediation outweigh the impacts. Stakeholders should be involved, and their interests considered in the decision making process, when, how and to what extent remediation meets also overall societal interests.

This document presents a Joint Position Statement by the Common Forum and NICOLE on Sustainable Remediation of contaminated soil, sediment and groundwater. Sustainable Remediation is founded on the principles of Risk Based Land Management (CLARINET, 2002): the concept applied to contaminated land management has now been used as the basis of evolution of some national policy frameworks. Brownfield regeneration has built on the core of this CLARINET concept and developed a complementary approach to sustainable regeneration (CABERNET, 2006). Nothing in this statement should be regarded as conflicting with the expectation that appropriate efforts be made to prevent pollution occurring in the first instance, or with the polluter pays principle, which remain important underpinning principles.



## Risk-informed and sustainable remediation

### The Common Forum and NICOLE hereby:

- Agree on the necessity for protecting human populations and the environment against contaminated media and the mitigation of significant risks.
- 2 Understand that Sustainable Remediation of soil, sediment and groundwater involves the assessment and management of significant risks to human health and the environment, in a manner that identifies the environmental, social and economic benefits and impacts of remedial strategies and options, and which seeks to maximise the overall benefit through a balanced, evidence-based and transparent decision-making process.
- 3 Recognize that sustainable remediation principles embody:
  - the importance of contributing to sustainable development, for example, more sustainable use of natural resources or the EU global climate change and energy targets.
  - Conviction that decision-making based on sustainability principles can lead to: a more efficient use of environmental, social and economic resources; better remediation solutions balancing impacts and effects of different remediation measures, and; enhanced land management for the long term.
- Sustainability cannot be quantified in absolute terms. Consequently, stakeholder engagement is crucial to ensure that a sustainability assessment minimises uncertainties in its consideration of project-specific issues and concerns, and allows stakeholders to provide their perspectives on the balance of potential impacts and benefits. In addition control, or feedback, is integral to informing better land management decisions.
- 5 Sustainability appraisal aims to integrate the three elements of sustainability (environmental, social, and economic factors) and the broader integrated effects in a balanced and proportional way within specific legal and policy contexts. Ideally this occurs at the earliest stage of the remediation project, at the planning or project design stage where remediation objectives are

- set, and potential sustainability gain is greatest, but also throughout the life of a project including when the technical approach is selected, and where remediation is ongoing.
- 6 Drawing from the work of CLARINET, the concept of 
  'sustainable remediation' has been described in the 
  SuRF-UK Framework for Assessing the Sustainability 
  of Soil and Groundwater Remediation (CL:AIRE, 2010), 
  the NICOLE Roadmap for Sustainable Remediation 
  (NICOLE, 2010) and elsewhere. The approaches to 
  assessing sustainable remediation described in these 
  reference documents, are considered good practice, 
  consistent with existing risk-informed contaminated 
  land management practice, and are recommended as 
  a basis for future practice on the management of soil, 
  sediment and groundwater contamination in Europe.

#### References

CLARINET (Contaminated Land Rehabilitation Network for Environmental Technologies in Europe) - 2002 - Sustainable management of Contaminated Land: an overview.

Available at: http://www.commonforum.eu/Documents/DOC/Clarinet/rblm\_report.pdf

CABERNET 2006 - Sustainable Brownfield Regeneration: CABERNET Network Report.

Available at: http://www.cabernet.org.uk/resourcefs/427.pdf.

CL:AIRE 2010. A framework for assessing the sustainability of soil and groundwater remediation. SuRF-UK report, March 2010. CL:AIRE, London. Available at www.claire.co.uk/surfuk.

European Commission 2006 - Impact Assessment study of the thematic Strategy on soil protection. SEC(2006)620.

NICOLE, 2010. NICOLE Sustainable remediation roadmap. Available at:

http://www.nicole.org/documents/DocumentList.aspx?w=SR







**Pictures** 

Courtesy of WSP and National Grid

The **COMMON FORUM** on Contaminated Land, initiated in 1994, is a network of contaminated land policy makers and advisors from national ministries in European Union Member States and European Free Trade Association countries.

The objectives of COMMON FORUM are to develop strategies for the management and treatment of contaminated sites and for land recycling with respect to "sustainable resource protection" for contaminated land and groundwater.

www.commonforum.eu

NICOLE is a network for the stimulation, dissemination and exchange of knowledge about all aspects of industrially contaminated land. Its 125 members of 15 European countries come from industrial companies and trade organisations (problem holders), service providers / technology developers, universities and independent research organisations (problem solvers) and governmental organisations (policy makers).

The network started in February 1996 as a concerted action under the 4th Framework Programme of the European Community. Since February 1999, NICOLE has been self supporting and is financed by the fees of its members.

www.nicole.org