

Sustainable Remediation: the SuRF-UK Framework for Applying sustainable development principles to Contaminated Land Management

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Presented at: US EPA webinar, 12 July 2010

Summary

It has long been assumed that contaminated land and groundwater risk management was intrinsically sustainable because, for example, it controlled risks from pollutants and facilitated the re-use of brownfield land so reducing greenfield development pressures. However over the past decade it has increasingly been recognised that this simple assumption may not always be true. The “sustainable remediation” debate centres on how to identify the optimum management strategy that maximizes the benefits while limiting the impacts of undertaking remediation. The United Kingdom’s Sustainable Remediation Forum, SuRF-UK, is a multi-stakeholder initiative to develop a framework for sustainable soil and groundwater remediation, which involves incorporating sustainable development principles in remediation decision-making. Created in 2007 it has involvement and support from industry, service providers, government agencies and academia, and is independently led by CL:AIRE (www.claire.co.uk/surfuk).

The first phase of work by SuRF-UK produced a framework for assessing the sustainability of soil and groundwater remediation, and for incorporating sustainable development criteria in land contamination management strategies (CL:AIRE 2010). It helps assessors to identify the optimum land and/or groundwater remediation strategy and/or technique.

Assessment of sustainable remediation is defined by SuRF-UK as ‘the practice of demonstrating, in terms of **environmental**, **economic** and **social** indicators, that the benefit of undertaking remediation is greater than its impact and that the optimum remediation solution is selected through the use of a balanced decision-making process’. The SuRF-UK framework

recognises two main site management stages where sustainable remediation decision-making can be applied:

1. The project/plan design stage when some of the most influential decisions about the remediation solution can be embedded into a wider sustainable project design as part of a strategy across a portfolio of sites or a site-specific masterplan; and
2. The point of remediation options appraisal, selection and implementation when the decision is about selecting the optimum remedial strategy or technique.

Sustainable remediation considerations may also be an important consideration for local planning.

This is the first authoritative framework for assessing the sustainability of soil and groundwater remediation in the UK. While legislation and good practice guidance have encouraged remediation to contribute to sustainable development goals, no formal and authoritative framework has previously been published to guide such an assessment. It provides assessors with a means to undertake a sustainability assessment of soil and groundwater remediation, and to ensure that the remediation industry can directly and measurably contribute toward sustainable development goals. A supporting report reviews sustainability assessment indicators (CL:AIRE 2009).

The framework described in this document complements existing UK best practice guidance, such as the '*Model Procedures for the Management of Land Contamination*' (CLR11), but is sufficiently generic to be applied elsewhere and under different regulatory systems. SuRF-UK believes that its publication and use will lead to more sustainable remediation practice in the UK and elsewhere.

References

CL:AIRE (2010) A Framework for Assessing the Sustainability of Soil and Groundwater Remediation. Public Consultation March 2010 CL:AIRE, London, UK. ISBN 978-1-905046-19-5 www.claire.co.uk/surfuk

CL:AIRE (2009) A review of published sustainability indicator sets: How applicable are they to contaminated land remediation indicator-set development? CL:AIRE, London. ISBN 978-1-905046-18-8 www.claire.co.uk/surfuk

Acknowledgements

Funding for this project from the Homes and Communities Agency (HCA) is gratefully acknowledged, along with the support of SAGTA¹ technical contributions of the SuRF-UK Steering Group and contributions from the delegates at the SuRF-UK open forum meetings

¹ SAGTA: Soil and Groundwater Technology Association (<http://www.sagta.org.uk/>). This is a not-for-profit association of member organisations drawn from UK companies representing many major land holding sectors. Its members actively address challenges associated with the ownership and management of both contaminated operational land and brownfield development sites. Building on more than a decade of experience, SAGTA is the authoritative voice of contaminated land from a land holder's perspective.