

10 Years of SURF: Have We Reprogrammed?

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Background/Objectives. The Sustainable Remediation Forum (SURF) was established in 2006 and published its landmark white paper, *Integrating Sustainable Principles, Practices, and Metrics into Remediation Projects* (Ellis & Hadley 2009) three years later. In the decade since then, we have seen myriad policies, guidance documents, and programs developed to educate, encourage, and promote the implementation of sustainable remediation. The universal goal of these programs, across the broad range of approaches, has been to improve how we conduct business in the environmental remediation industry, considering environmental, economic, and social impacts. This presentation will look at these programs and assess the success of the industry in achieving this goal through the application of sustainable remediation programs.

Approach/Activities. We will discuss the drivers of corporate/organizational sustainable remediation programs, including corporate strategies (e.g., sustainability policies, environmental goals), Executive Orders (now overridden), industry/regulatory guidance, stakeholder/shareholder interest, and industry groups (e.g., SURF). Using a variety of corporate sustainable remediation programs as examples, we will review the ways in which programs are structured—from simple to complex, qualitative to quantitative, and flexible to prescriptive. We will highlight the use of tools across various programs, and how they incorporate stakeholder perspectives and specific regulatory considerations. Some of the programs to be reviewed include: Boeing, Ford, Shell, ExxonMobil, DuPont, Norfolk Southern, Tesoro, EPA, ITRC, ASTM, and DoD.

The 2018 AEHS East Coast Conference in Amherst, Massachusetts (October 2018) featured a panel discussion hosted by one of our co-authors titled “Organizational Drivers for Sustainable Remediation Panel.” It included contributions from representatives of Shell, DuPont, Boeing, Norfolk Southern, and Massachusetts Department of Environmental Protection and discussion of opportunities, challenges, and drivers that have driven success in organizations such as Shell, Boeing, DuPont, Norfolk Southern, and Massachusetts Department of Environmental Protection (MassDEP). The outcomes of this panel discussion, as well as input sought from other industry leaders, informed this platform presentation.

Results/Lessons Learned. Considering the programs identified, we will explore what lessons the developers and users of these programs learned since developing and rolling out these programs. Have they seen success? What type of results did they expect, and how have they measured them? Critically, we will identify what could be improved across various sustainable remediation programs to be more effective in their implementation or to see more acceptance among stakeholder and regulatory groups.