Communicating the Impact: Moving from Qualitative Inclusion of Sustainable Best Management Practices to an Integrated Sustainable Resilient Remediation Approach

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Background/Objectives. Globally, we're feeling the effects of climate change, rapid urbanization, and loss of biodiversity. Evaluation and implementation of remedial solutions for contaminant treatment at impacted sites has long been a balance of cost efficiency, technical effectiveness, and community acceptance. Many phases of evolution have taken place within the remediation industry due to technological developments, higher focus on emerging contaminants and new contaminant types, regulatory changes, economic factors, and, most recently, sustainability and resiliency considerations.

Generally, sustainability is defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Definition; 1987 Report of the World Commission on Environment and Development). Within sustainability is resilience, or the capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimal damage to social wellbeing, the economy, and the environment (ASTM). Inherently built into the practice of remediation is the process of improving environmental conditions for future generations and responding to hazards to human health and the environment. While this implies that all remediation practices are aligned with general sustainability objectives, there is significant opportunity for more deliberate and purposeful incorporation of sustainability and resiliency into our remedial practices to maximize the benefits. While this has been a topic of discussion within remediation for more than a decade, the practice of integrating sustainability is still a challenge to project teams. Much of that challenge stems from awareness and communication.

Approach/Activities. A focus on how sustainable best practices in the industry can often point in the same direction as those lower cost, technically advanced and improved outcomes are pointing. We identify the benefits of recognizing sustainability in these approaches and benchmarking progress with peers in the industry, as broadening the perspective to include sustainability and resilience aspects can lead to additional opportunities and recognition of additional gains and highlight the need for improved communication of the sustainability and resilience of remedial approaches within project teams, with project stakeholders and in project reporting so that gains are maintained and can be further built upon.

Results/Lessons Learned. The result is an end-to-end look at integration of sustainability into project implementation and project communication to give everyone green tinted glasses, create benchmarks and see improvement in achieving more sustainable and resilient remedial outcomes.