

Optimization Reviews

An Opportunity to Consider Exit Strategies

Stephen Dymont, USEPA/TIIB

The EPA Superfund Optimization Program provides independent third party evaluations of sites at strategic locations along the Superfund pipeline from Remedial Investigation (RI) through Long Term Remedial Action (LTRA). Traditionally these evaluations have focused on technical components and data associated with elements of the conceptual site model (CSM), remedial design, and subsequent remedial action. More recently a focus within the Superfund program has emerged based on the need to better define exit strategies particularly at complex, dynamic, and challenging groundwater sites. The emergence of a greater need for clearly defined and robust exit strategies coincides with many of the findings from our optimization reviews. The application of optimization may therefore provide opportunities for project regulatory stakeholders to collaborate on exit strategies that better define EPA headquarters, EPA region, and State expectations while meeting legal and programmatic requirements.

While the agency has not formally defined exit strategies nor are they programmatic or legal project requirements, optimization practitioners and Superfund program experts consider them valuable planning tools. As such, a working definition for exit strategies in the context of groundwater cleanups may be considered “a means of establishing metrics to evaluate progress and attainment of groundwater remedial action objectives and associated cleanup levels”. These strategies may also consider site specific elements that do not address a means of evaluating attainment of remedial objectives but may help position the team to communicate information or expeditiously meet other program and administrative requirements.

The challenge for project teams and regulators is to better define a framework to convey these exit strategies and consider interim milestones or trigger points that allow decision makers to determine when specific actions may be warranted. An agreed upon framework that not only defines technical, area specific (for example: source, dissolved plume), and remedial technology metrics but also considers organizational, programmatic, administrative, and stakeholder issues can help chart a path to meet a variety of project needs. This presentation will explore previous optimization projects to provide a historical perspective of exit strategies and consider future applications that may provide improved clarity and program benefits.