Using Geology to Follow the Groundwater, Follow the Flow to Successful Remediation

Moderators

Rick Cramer (Burns & McDonnell) John Wilson (Scissortail Environmental Solutions, LLC)

Panelists

Adria Bodour (U.S. Air Force/AFCEC) Herb Levine (U.S. EPA) Tamzen Macbeth (CDM Smith)

Recently in our industry there has been a developing best practice that focuses on the geology to define the subsurface "plumbing", which can improve groundwater remediation projects. These refined geology-based conceptual site models (CSMs) have proven to be valuable to remediation success. This panel includes experts from the fields of geology, remediation engineering, and the regulatory arena to communicate this best practice to non-geologists and provide remediation engineers with questions to address regarding CSMs that they inherit. The panel will present examples of best practices in applying geology to CSMs and provide "rules of thumb" to test the efficacy of your CSM, such as the following questions.

- 1. Is groundwater flow and the contaminant plume controlled by geologic features (e.g., buried sand channels)?
- 2. Does the CSM adequately define the geologic features?
- 3. What tools are available to define the geologic features that carry groundwater contamination?
- 4. How do buried sand channels and other geologic features affect source identification?
- 5. How do they affect remedial design?