The Use of *In Vitro* Soil Metal Bioavailability Methodologies to Adjust Human and Ecological Risk Assessment

Challenge Questions and Ground Rules

Challenge Question Set #1: Decision Criteria

- What are the scientific, regulatory, and/or logistical barriers for using bioavailability adjustments in ecological/human health risk assessments? What data gaps prevent the use of bioavailability adjustments?

- For the four metals in question (As, Cr, Cu, and Pb), at what concentrations are decisions made? What is the range of concentrations where bioavailability adjustments may affect site decisions?

Challenge Question Set #2: *In Vitro* Assessments

- What are the barriers for regulatory acceptance of *in vitro* bioavailability data? What data gaps inhibit acceptance?

- How can we translate *in vitro* data into field scale risk assessment adjustments?

Challenge Question Set #3: Soil Characteristics

- What conclusions can be drawn about bioavailability based on soil characteristics?

- Is there value to a bioavailability screen based on soil characteristics for cleanup sites?

- What particle size fraction is appropriate for *in vivo* and *in vitro* tests? What soil collection method is appropriate?

Challenge Question Set #4: Project Contributions

- How can this ESTCP project contribute to bioavailability based risk assessments that are acceptable in a regulatory context and are decision focused?

- How can the bioavailability research community at large continue to contribute? Possible venues include ITRC or something similar to Bioavailability Research Group Europe.

- Demonstration site suggestions?

Ground Rules