

## WORKSHOP AGENDA

# Focusing High-Resolution Site Characterization for Selecting Remedial Technologies

(Tom Kady, John Sohl, and Andrew Kirkman)

### Workshop Part I (2 hours)

#### Introduction to Principles of High-Resolution Site Characterization (HRSC) (30 mins)-T. Kady

- What is HRSC?
- How “Well” Do You Understand Your Site Conditions?
- Critical Issues Addressed by HRSC: Scale-Appropriate measurements and data density
- HRSC Tools
- Benefits of HRSC
- Cost of Remedies vs. Cost of Characterization
- Cost-Effectiveness of HRSC
- How is HRSC Implemented?
- HRSC Review
- **QUESTIONS??**

#### Choosing the Right Scale Appropriate Tools to Support Successful Outcomes (40 mins)- J. Sohl

- **Why High Resolution?**
- Risk Based vs. Remediation Measurements
- LNAPL Chemistry
- Direct Sensing Technologies (LIF/UVOST®, MIP, HPT, OIP, and hand-held tools)
- Weathered Gasoline vs Other Mid-Range Products
- Soil Permeability - REBOUND
- Dynamic Work Strategies, Real-Time Decision Making
- Role of Discrete Saturated Soil Sampling and Analysis
- Groundwater Dissolved Phase Contamination
- Vapor Phase Contamination and NSZD
- Spatial Alignment
- Technology Summary
- Key Takeaways
- **QUESTIONS??**

## **We've Done HRSC, What About Remedy Selection? (35 mins) – A. KIRKMAN**

- Why Does the Conceptual Site Model (CSM) Evolve?
- Remedy Selection CSM
- Remedial Mechanisms (Vapor, Biodegradation, Recovery and Injection)
- **QUESTIONS??**

## **BREAK (15 mins)**

### **Workshop Part II (2 hours)**

## **Data Use and Management (25 mins) – T. Kady**

- Maximizing the use of existing data
- Obtaining direct sensing data through HRSC
- Visualizing and interpreting the data
- Collaborating in real time with project stakeholders
- Decision-making in real time – data gaps and next actions
- **Questions??**

## **Key Considerations for Applying HRSC (30 mins) – A. Kirkman**

- The Role and Risk associated with monitoring wells
- Understanding groundwater analytical results
- Review historical site and remediation system performance data
- Effective identification and residual mapping
- Importance of understanding heterogeneity
- Screening for PVI
- **Questions??**

## **Case Examples – Now that you have the data what do you do with it? (40 mins)**

- Vacuum Truck Evaluation – A. Kirkman
- Comparison of Multiple Lines of Evidence – J. Sohl
- Down-Gradient Dissolved Phase Contamination – J. Sohl
- **Questions??**

## **Questions & Answers (25 mins)**