John Kingscott December 9, 2004

# Status Report - Technology Cost and Performance Activities





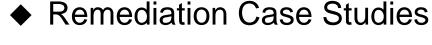


Remediation Technologies Roundtable









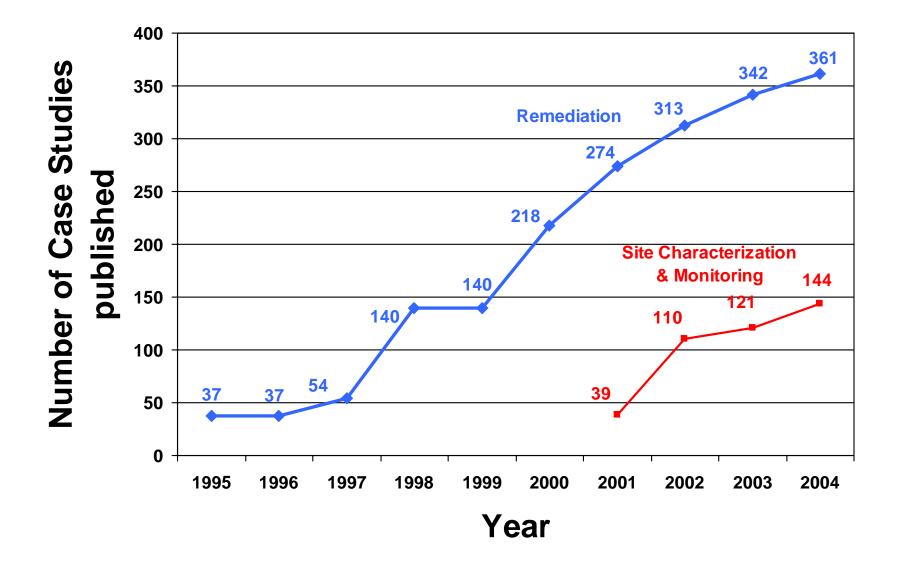
- Site Characterization and Monitoring Case Studies
- Long-Term Monitoring/ Optimization
- Remediation Technology Assessment Reports

# **Activities Since June 2004 Meeting**

- Completed the Spring addition of case studies/reports to the database
- Compiled a CD-ROM and Abstract Report
- Distributed Fact Sheet, CD-ROM, and Abstract Report

#### **REMEDIATION CASE STUDIES**

#### Number of Remediation and Site Characterization Case Studies Published Between 1995 and 2004



Note: No new remediation case studies were added in 1996 and 1999

# Possible Sources for New Case Studies

- Closeout reports
- Internal memos
- Closer networking arrangements, e.g.
  Corps ITAs
- Extracted case studies from broader reports
- Reports/work on emerging contaminants

#### Potential New Case Studies Identified for Spring 2005

Agency	New Case Studies	Technology
Army	1	Thermal treatment (in situ)
ESTCP	1	Soil flushing
EPA	9	Bioremediation (in situ); Chemical reduction (in situ); Pump and treat; Solidification/stabilization; Thermal desorption; Thermal treatment (in situ)
States (SCRD)	4	Bioremediation (in situ); Chemical oxidation (in situ); Pump and treat; SVE
Total	15	

Note: Initial projections based on web site checks as of November 2004 and ongoing case study preparation efforts

### SITE CHARACTERIZATION AND MONITORING CASE STUDIES

#### Potential New Case Studies Identified for Spring 2005

Agency	New Case Studies	Technology
ITRC	2	Organic chemical characterization; Miscellaneous/leak detection
ESTCP	1	Unexploded ordnance characterization
EPA (some with other Federal agencies)	13	Triad-related strategies/techniques; Sensor technologies
Total	16	

Note: Initial projections based on web site checks as of November 2004 and ongoing case study preparation efforts

### LONG-TERM MONITORING/OPTIMIZATION

# Long-Term Management/Optimization (Types of 73 Case Studies Currently Included)

- Optimization of pump and treat systems
- Evaluation/optimization of groundwater monitoring networks
- Capture zone analysis
- Procedures such as RAO, RPO, or RSE
- Application of models for performance optimization (groundwater flow, contaminant transport)

# REMEDIATION TECHNOLOGY ASSESSMENTS (Based on applications at multiple sites)

# **New Studies Identified for Spring 2005**

- Principles and Practices of Enhanced Anaerobic Bioremediation of Chlorinated Solvents, Interagency (Army, Navy, Air Force), August 2004
- Technical and Regulatory Guidance Document for Constructed Treatment Wetlands, ITRC, December 2003

## **Next Steps**

- Compile new case studies
  - EPA will continue to check web sites for all categories of reports
  - Agencies to identify available reports/documentation
- Final case studies required by April 1 for inclusion in Spring 2005 update
- Consider options for CD-ROM
- Use/distribute Fact Sheet & CD-ROM

#### Federal Agency Cost and Performance Points of Contact

Organization	Point of Contact
Army AEC	Layne Young
USACE	Greg Mellema
Navy	Charles Reeter/Joey Trotsky/Cliff Casey
Air Force	Erica Becvar
ESTCP	Andrea Leeson
DOE	Skip Chamberlain
EPA	John Kingscott/Marti Otto
NASA	Mark Schoppet

Note: Multiple points of contact for each agency are encouraged.