Accelerating Site Closeout, Improving Performance, and Reducing Costs Through Optimization

## **Conference June 2004**

FRTR Meeting December 9, 2004

# Highlights

#### 6 Plenary talks

- EPA Superfund Program
- International Risk Group
- Air Force Real Property Agency
- Naval Facilities Engineering Command
- ChevronTexaco
- University of Illinois
- 70 Platform presentations
- 35 Poster presentations
- 4 Evening workshops

#### • 2.5 days



- U.S. EPA
- U.S. Navy
- U.S. Air Force
- SERDP/ESTCP
- ITRC
- U.S. Army Corps of Engineers
- Total cost ~ \$120K + state travel funded by ITRC

#### Attendees by Affiliation

- 157 consultants
- 86 federal agencies (DoD, DoE, Corps, other)
- 44 state agencies
- 38 other
- 37 EPA
- 33 private industry
- 14 academia
- Total attendees = 409

#### **Session Topics**

- Track A: Remediation Process Optimization

   Measuring Remedy Performance
   Treatment Technology Optimization
  - Mathematical Optimization Approaches
- Track B: Site Characterization, Long Term Monitoring, and Data Management Optimization
  - Long-Term Monitoring Optimization
  - Advances in Site Characterization and Investigation Technologies
  - Data Management and Data Visualization
    Techniques

#### Session Topics, cont.

- Track C: Strategic Considerations for Site Closeout
  - Optimization Programs problems, successes, and lessons learned
  - Financial Aspects of Optimization
  - Paths to Site Closeout

## Workshop Topics

- Applying Optimization Algorithms and Contaminant Transport Models to Reduce Costs and Speed Remediation at Pump and Treat Sites
- ITRC Presents: Essentials of Remediation Process Optimization
- The Triad Approach to Managing Decision Uncertainty for Better Cleanup Projects
- Long-Term Monitoring Optimization Methods and Software

# Did Conference Enhance Your Understanding of Optimization?

- Yes, Conference provided a full spectrum of issues related to optimization
- Yes, Conference fully explored developments since the 1999 Optimization Conference
- Yes, I now understand where the regulatory community stands on implementing optimization
- Yes, excellent discussion of the state of the practice by Federal Agencies and on upcoming guidance
- Yes, comparing and contrasting techniques by Federal agencies and private industry - valuable
- Yes, especially with respect to GW monitoring

# Did Conference Enhance Your Understanding of Optimization?

- Yes, good info on GW monitoring and P&T optimization. Surprisingly little on treatment system optimization
- Yes, but in a general sense, gave basic explanations and overviews
- Some, but not as much as I had hoped. Not enough case studies of actual remedy optimization
- Yes, but seemed general and argumentative
- All were good, but content became repetitive

# Suggestions for Improving the Conference?

- More emphasis on new treatment technologies
- More input from the private sector
- Eliminate night sessions and lengthen conference by ½ day
- Provide specific examples of RPO/RSE
- Don't wait 5 years to do it again
- More case studies
- Too much info crammed in too short of time
- More details on exit strategies

# Abstracts and Presentations Available at

www.frtr.gov/optimization/meetings.htm

#### Next Conference?

- When: Suggestions from FRTR? 2007?
- Who: Volunteer to lead conference?