

Remedy Optimization in the Era of Performance-Based Contracting

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Overview

- **Traditional Remedy Optimization Fundamentals**
- **Performance-Based Contracts (PBCs) for Remediation**
- **Remedy Optimization in Support of PBCs**
- **Do PBCs Save Money/Time Relative to Traditional Optimization?**
- **Current USACE EM CX Evaluation of Optimization for Army**



Traditional Remedy Optimization

- Long-Term Remedies
- Owner/Agency Requests Optimization of Remedy
 - ▶ Contractor Working under “Cost-Plus” Type Contract
- Optimization Team
 - ▶ Independent, Expert, Multi-disciplinary
- Holistic Evaluation
 - ▶ Effectiveness, Cost, Strategic



Traditional Remedy Optimization, Continued

- Recommendations Accepted by Project Team, to be Implemented by Contractor
- Challenges to Implementation of Recommendations
 - ▶ Reluctance by Project Team, Contractor, Stakeholders



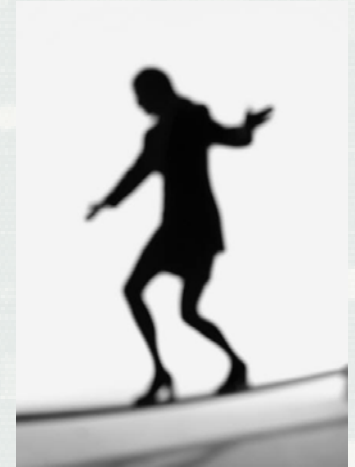
Performance-Based Contracts

- No Specific Instructions
 - ▶ Clear Objectives
 - ▶ Realistic Metrics to Assess Progress
 - ▶ Fixed Price
 - ▶ Payment Based on Accomplishments
- Contractor Expected to Continually Optimize Work
- Various Periods of Performance (3-10 Yr)



Performance-Based Contracts

- Success Depends on Ability to Craft Statement of Objectives, Metrics
- Poor Objectives/Metrics May Result in Unexpected Risks to Owner
- Long-Term Remedies Life Extend past Period of Performance
- Contract Shifts Risk to Contractor
 - ▶ Risk Increases Bids
 - ▶ Long Period of Performance Adds Risk



Remedy Optimization Support to PBCs

- Independent Optimization before Contract
 - ▶ “Seed” Ideas for Bidders to Consider in Bids
 - ▶ Suggest Alternative Formulation of Objectives, Metrics
- Independent Optimization after PBC Award
 - ▶ Assess Impact to Owner Risk from Contractor Approach
 - ▶ Cooperation from PBC Contractor
 - ▶ Suggest GSR, Address Stakeholder Concerns



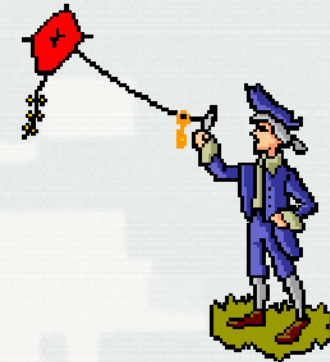
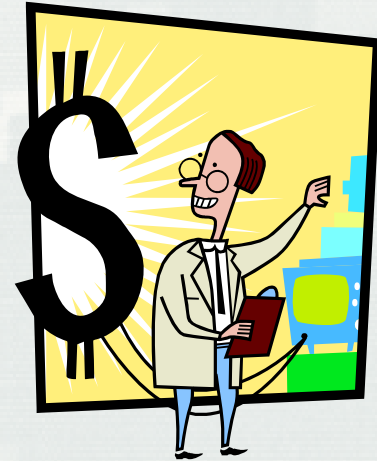
Which Approach Provides Most Benefit?

- Question only for Long-Term Remediation Projects
- Summary of “Pros and Cons”
 - ▶ PBC Contractor Highly Motivated to Optimize
 - ▶ Risk Transfer Comes at a Price
 - ▶ Independent, Expert Optimization with Cost-Plus Contracting Avoids Risk Premium
 - ▶ Traditional Optimization Depends on Ability to Implement Recommendations
- Not Clear that PBCs are Most Cost-Effective



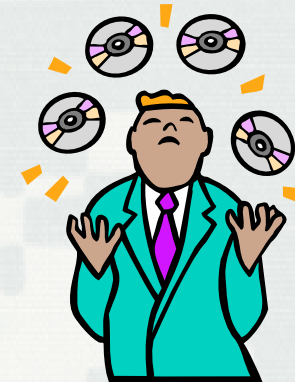
Which Approach? Continued...

- How to Test?
 - ▶ Two Comparable Sites
 - ▶ Get PBC Bids, then Use Traditional Contract, Compare Cost to Bids
- Difficulties in Comparison
 - ▶ Takes Time to Know True Costs
 - ▶ Need Statistically Valid Comparison
 - ▶ How Adjust for Optimization Ideas Not Incorporated?



Current Assessment of Army Optimization Opportunities

- Evaluation of Tools to Estimate Potential Programmatic Savings
- Identify and Rank Sites for Optimization Benefits
- Recommendations for Programmatic Approach to Optimization



Discussion and Questions?

- Examples?
- Questions?
- Thoughts?

