



**US Army Corps
of Engineers**

A Contractors Perspective to Risk Management for Remediation Projects

Larry Woscyna, P.E.
Senior Consultant
SRC – January 25, 2007

Overview



**US Army Corps
of Engineers**

- Purpose
- Project phases – risk control
- Price swings
- Items to consider
- Risks to contractors today
- Questions

Purpose

Discuss:

**A Contractors perspectives,
methodology & challenges for
Risk Management on Superfund
Remediation and Removal projects.**



Pre Bid Phase - Opportunity Evaluation

- Is it work we know and can we make money?
- Is the “cost to bid” reasonable?
- What is our bid department workload now?
- Key staff – are they available for this project?
- Is project risk acceptable/reasonable?
- Have we worked for client project team?
- How many competitors? Who?

Bid Phase

- Site experience, knowledge of site conditions and regulatory constraints
 - Or, does a competitor have all these?
- Develop sound technical approach to work
- Are milestones reasonable, is there positive cash flow?
- Identify project risks, calculate value
 - Monte Carlo risk simulation
- Pricing:
 - Cost of Work: Direct costs for work performed
 - Corporate cost items: G&A, profit, bid cost recovery, risk contingency



Project Delivery Phase

- Establish cost and schedule project tracking
- Weekly/Monthly earned value reviews
- Weekly/Monthly risk reviews and updates
- Submittals and timely approvals
- Client reporting and management
- Monthly billing and payment tracking

Summary - What Causes Price Swings?

- **#1** - Uncertainties of any kind:
 - Site conditions
 - waste volumes/types
 - regulatory acceptance of proposed remedies
 - unclear/ambiguous scope of work
- **#2** - Difficulty determining when clean up levels are met/Guarantees
- **#3** - Unstable markets/shortages
 - Labor, materials and supplies
- **#4** - Contract terms shifting large risks to contractor
- **#5** - RFP issuance when contractors are busy



Summary – What Can be Done? Items to Consider

- During Program Budget Development
 - Forecast technology, inflation and local conditions
 - Carefully evaluate inflationary trends
- During Government Estimate Development
 - Include attributes of project site conditions
 - Evaluate local market conditions: for labor, material and supplies
 - Use real quotes for high quantity or expensive items
 - Exercise caution on multiple bid options
 - Include effects of current price volatility for key items:
 - Steel, concrete, fuel, long lead items



Summary – What Can be Done? Items to Consider Cont'd

- During Government RFP development/issue
 - Simplify RFP package
 - Use PBC if it really fits
 - Answer contractor questions
 - Provide full and pertinent site information
 - Recognize contractor need for positive cash flow
 - Balance gov't risk ownership vs risk transfer to contractor
 - Conduct meaningful site walk
 - Define numbers of meetings and project reviews
- During project execution
 - Timely response to submittals, pay requests, etc
 - Develop Partnered cooperative work atmosphere



Risks to Contractors Today

- Declining environmental budgets
 - Forcing contractor right sizing based on reduced work volume
- PBC mentality shift slowly evolving
 - Clients reluctant to accept project completion when milestones met
- Unbalanced SB/LB financial ratios
 - Eliminates work opportunities, creates hollow contracts (selected Districts)



**US Army Corps
of Engineers**

QUESTIONS?