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Systematic Project Planning

**Army Environmental Cleanup
Workshop**

San Antonio, TX

February 2, 2006



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Revisions **Technical**

Systematic Project Planning

Engineer Manual (EM) 200-1-2

- Facilitate contemporary uses of existing framework
- MMRP
- Performance Based Contracts
- Identification/management of project uncertainty
- Triad
- Adaptive Site Management
 - Process optimization



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Project Planning Process

- Multi-Disciplinary Approach
 - Army team, and other stakeholders
- Focused on Site Closeout
 - Planning with the end-state always in mind
- Utilizes Conceptual Site Models
 - Document evolution as the project progresses
 - Confidence in site model should increase through data collection



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Project Planning Process

- Facilitates consolidation of project information

- Defines and documents:

Project Objectives

Data Needs and Data Gaps

Constraints and Dependencies



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Flexible to Meet Army Needs

- Useful for all Project Phases
 - Investigations
 - Design
 - Operation/Maintenance and Monitoring
- Flexible
 - Plan New Projects
 - Review Existing Project Plans
 - Plan next executable stage
 - Uncertainty identification and management



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Planning Can Facilitate Shift in Project Paradigm

- PBC Candidate Selection
 - Identify sites
 - Identify/Consolidate Information
- Data gap identification
 - Contractor risk
 - Government risk
- Identify uncertainty for BRAC transfer
- Triad to streamline data collection



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Phase I - Identify Current Project

- Prepare Team Information Package
 - Team and Roles
 - Customer Goals
 - Existing Site Information
 - Boundaries
 - Points of compliance
 - Decision units



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Phase I - Identify Current Project

- Identify Site Approach
 - Site Closeout Statement
 - Project Objectives
 - Long term and Short term
 - Executable stages to achieve objectives
 - Regulator and Stakeholder Perspectives



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Phase II - Determine Data Needs

- All data will have identified use
- Data required to meet project objectives
- Project phase that requires data
 - Better to collect before the RFP?
- Sufficient sample number, detection limits and data quality for data use
- Concentration of interest
- Area/location/depth of interest



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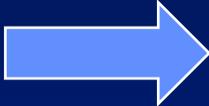
Phase II – Determine Data Needs

- Determine Data Needs
 - Data User's Roles
 - Use of Existing Data
 - Data Gaps
 - May differ by user of data
 - Additional Data Required to Satisfy Project Objectives
- Data User may include:
 - Risk, Remedy, Responsibility and Contracting or BRAC Team



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Contracting or BRAC Team as User of Site Data

- Uncertainty  Risk
- Acceptance of Risk is compensated
 - Property transfer
 - Bids on contract
- Higher risk  \$\$\$



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Contracting as a Data User

- Prior to Request for Proposal (RFP)
 - Filling data gaps will decrease uncertainty/
risk for contractor as a PBC
 - Develop quality objectives for this data
 - Less rigor than risk assessment, for example
 - Field methods and dynamic work strategy
using Triad methodology
 - Meet time constraint
 - Insure data gaps get filled



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Phase III – Develop Data Collection Options

- Plan Sampling and Analysis Approach
 - Review Phase I and II Worksheets
- Develop Data Collection Options
 - Basic, Optimum, Excessive
- Document Data Collection Options
 - Sampling Method
 - Analysis Method



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Phase IV – Finalize Data Collection Program

- Finalize Data Collection Program
 - Customer Communication and Participation
 - Regulators & Stakeholders
- Document Data Collection Program
 - DQOs
 - Technical Basis for SOW, Work Plans, QAPP
 - Cost Estimate



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More TPP With PBCs: Preparing PWS and SOO

- Performance Work Statement and Statement of Objectives
- Project planning critical to Performance Measure Development
- Phase IV too prescriptive
- Elements of Phase III may apply

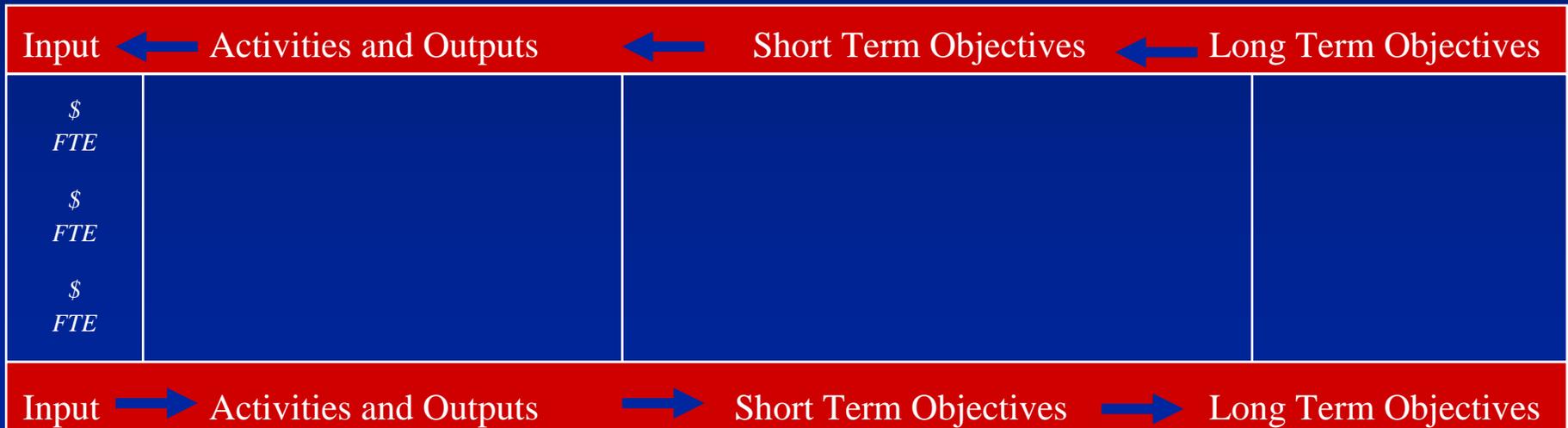


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Developing Performance Measures

Systematic Project Planning = the Logic Model

Using the Logic Model to Develop Performance Measurements



| Activities and Outputs | Short Term Objectives | Long Term Objectives |
|------------------------|-----------------------|----------------------|
|------------------------|-----------------------|----------------------|

Scope: **Design, execute and document the work**

Outputs:

- a. **Contractor work plan**
- b. **QC Plan**
- c. **SSFR**

Performance Measures:

- a. **work plan accepted (y/n) (# iterations before acceptance)**
- b. **QC plan accepted (y/n)**
- c. **QC documentation accepted**
- d. **Site specific final report accepted (y/n)**

1. **Detectable UXO and DMM removed**

Performance Measure:
Percent of work accomplished in accordance with contractor's QC plan
 Performance Target = 100%

2. **Contaminated soils removed (source material)**

Performance Measure:
Percent of work accomplished in accordance with contractor's Work Plan
 Performance Target = 100%

Response Complete.
 Land available for development and Base expansion under BRAC.

Measure:
 Command and regulatory acceptance



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Technical Systematic Project Planning Engineer Manual EM 200-1-2

- Provides TPP Guidance
 - Define Project Objectives
 - Develop Data Collection Options
 - Design Data Collection Plans
 - Define Data Quality Objectives (DQOs)
- Promotes Identification of *Type* and *Quality* of Data Required for Progress to Site Closeout
 - Investigations/Feasibility Studies
 - Design/Site Remediation
 - Operation/Maintenance and Monitoring