



## TRABUCO BOMBING RANGE PLANNING FOR PROJECT EXECUTION

Based On EM 200-1-2: Technical Project  
Planning (TPP) Process



## Introduction

- **Purpose**
  - To achieve site closeout within project constraints
  - To involve stakeholders in project decision making
  - To systematically address complex issues
- **Structure**
  - Four-phase process
- **Spirit**
  - “Structured brainstorming”



## Overall Objective

To identify the desired site closeout condition (the project goal),  
and create a plan with the actions necessary to reach this goal;  
all with stakeholder acceptance



Or, said another way...  
To make good decisions in the face of  
complex circumstances



## Four Phases



- Phase 1 - Identify the project  
*(90% of the TPP effort)* Describe the situation
- Phase 2 - Determine data needs  
What *do* we know?  
What *don't* we know?
- Phase 3 - Develop data collection options
- Phase 4 - Finalize data collection program  
*(Phases 3 & 4 are mostly pre-defined for ordnance projects)* How best to get the information we need?





## Team Members

- **Stakeholders**
  - Government agencies (e.g., DoD, DTSC, O'Neill Park, etc.)
  - Regulators
  - Native American Tribal Nations
  - Public interest groups
  - Property owners (e.g., State, county, city, private)
  - User groups & community interests
- **External technical resources (technical experts)**
- **Elected officials and public interest groups**



Los Angeles District



## Roles and Responsibilities

- **Customers** – CESPL, Landowners (State, county, city, private)
- **Stakeholders** - Parties with direct interest (may be customers)
- **Regulators** - Federal and State agencies with jurisdiction
- **Project Manager** - team leader (USACE)
  - Primary decision maker
  - Sets constraints
  - Acquires and manages resources
  - Primary point of contact with customer(s)
- **Technical Experts**
  - Provide technical guidance



Los Angeles District



## Key Products

- Understanding of stakeholder concerns
- Project goal (site closeout statement)
- Conceptual site model (CSM)
- Project objective
- Probable remedies
- Actions needed for site closeout



Los Angeles District



## Understanding Stakeholder Concerns

- **Communicate, communicate, communicate!**
- **Identify stakeholders and their special interests**
  - Identify competing interests (if any)
  - Determine key issues ("hot buttons")
- **Understand special interests of Tribal Nations**
- **Elicit regulator expectations and perspectives**



Los Angeles District



## Project Goal

- **Statement of site closeout**

- What is the “walk away” goal?
- Goal may be influenced by:
  - Future land use
  - Regulatory status
  - Schedule and budget



Los Angeles District



## SITE CLOSEOUT STATEMENT

To manage the munitions and explosives of concern (MEC) risk through a combination of removal, administrative controls, and public education, thereby rendering the site as safe as possible to humans and the environment.



Los Angeles District



## Conceptual Site Model (CSM)

- **Definition of CSM**

- A simple model of the relationships between contaminants at a site and the potential exposure pathways to human health or the environment.

- **Examples of Exposure Pathways**

- Unexploded ordnance (UXO) becomes exposed by stream bank erosion; fisherman may contact
- Buried UXO may be in new gas pipeline corridor; construction crews may contact
- Recreational users may encounter surface UXO



Los Angeles District



## Conceptual Site Model MEC Illustration



Los Angeles District



## Project Objectives

- **Definition of Project Objectives**
  - Short- and long-term issues which need to be addressed and resolved prior to site closeout
- **Sources of Project Objectives**
  - Regulatory issues
    - Endangered Species Act, Clean Water Act, CERCLA, RCRA, etc.
  - Future land use



Los Angeles District



## Project Objectives (Cont'd)

- **Examples of Project Objectives**
  - Determine whether munitions debris requires special treatment and/or disposal procedures
  - Determine the most cost-effective way to characterize UXO contamination in heavily vegetated areas
  - Evaluate the risk of deeply buried (> 2' below ground surface) UXO items
- **Classifications of Project Objectives**
  - Basic - Pertaining to the current phase of the project
  - Optimum - Pertaining to future project phases
  - Excessive - Does not lead to site closeout



Los Angeles District



## Probable Remedies

- What remedial alternatives seem most suitable?
- What additional information is needed to support/discard such alternatives?
- Innovative technologies may be appropriate and should be considered
- Use of presumptive remedies



Los Angeles District



## Actions Needed for Site Closeout

- **Identify milestones for each project stage**
- **Define alternative actions for site closeout**
  - Phasing and sequencing
  - Use of presumptive remedies
- **Recognize constraints and dependencies**
  - Schedule, budget, weather, etc.



Los Angeles District



## Document Phase I

- **Prepare Phase I Memorandum for Record (MFR)**

- Standalone summary document
- Contents include:
  - Site background
  - Conceptual site model (CSM)
  - Project goal (closeout statement)
  - Project objectives
  - Additional data needs
  - Schedules and budgets



Los Angeles District



## Phase 2 - Determine Data Needs

- **Review Phase 1 Worksheets**

- **Inventory Existing Data**

- Purpose
- Use
- Cost and schedule vs. Project objectives



Los Angeles District



## Phase 3 - Data Collection Options

- **Focus is on design of sampling program**

- Fills data gaps identified in Phase 2
- Fulfills project objectives
- Considers site conditions
- Balances precision and accuracy vs. cost



Los Angeles District



## Phase 4 - Finalize Data Collection Program

- **Phase 4 ties back into Phase 1**

- Relates data needs to sampling program and to project objectives
- Provides assurance that decisions are well supported with the right data obtained in the correct manner

- **Focus is on detailed scoping of sampling and analysis program**

- Number and location of samples
- Sampling protocols/analytical methods



Los Angeles District



## DATA QUALITY OBJECTIVE WORKSHEET

SITE: Trabuco Bombing Range

PROJECT: Former Trabuco Bombing Range RI/FS, Rancho Santa Margarita, CA

DQO Statement Number: \_\_\_1\_\_\_

<b>Intended Data Use:</b> (Which project objective(s) will be satisfied?)	Prepare and obtain stakeholder concurrence on a Decision Document
<b>Data need requirements:</b> (What data do you need to collect?) see para 3-3	The type, distribution and density of OE on the site.
<b>Is data: basic, optimal, or excessive need?</b> (see para 3-4)	Basic
<b>How much data is enough?</b>	Any presence or evidence of MEC or munitions debris either on the surface or subsurface.
<b>How will this data be collected?</b>	Geophysical mapping of approximately 2% of the area using meandering path, transects and grids, and intrusive investigation of selected anomalies.
<b>Was DQO met?</b>	



Los Angeles District

