



Army Cost-to-Complete (CTC) and Compliance-Related Cleanup (CC) Guidance Updates



Briefing Objectives

- Overview of updated CTC and CC guidance
 - Interim Final CTC Guidance
 - Working Draft CC Guidance - comments
- How you should use them



Agenda

- **CTC and CC Workgroup**
 - CTC Guidance Overview
 - CC Guidance Overview
 - Challenges



CTC and CC Workgroup



The CTC and CC Workgroup members included participants in cleanup program:



**Office of the
Director,
Environmental
Programs
(ODEP)**



**Installation
Management
Agency
(IMA)**



**U.S. Army
Environmental
Center
(USAEC)**



**Army
Material
Command
(AMC)**



**National
Guard
Bureau
(NGB)**

Goals:

- Update based on current policy
- Update based on AEDB-CC and RACER changes
- Improve usability
- Minimize text



Agenda

- CTC and CC Workgroup
- **CTC Guidance Overview**
- CC Guidance Overview
- Challenges



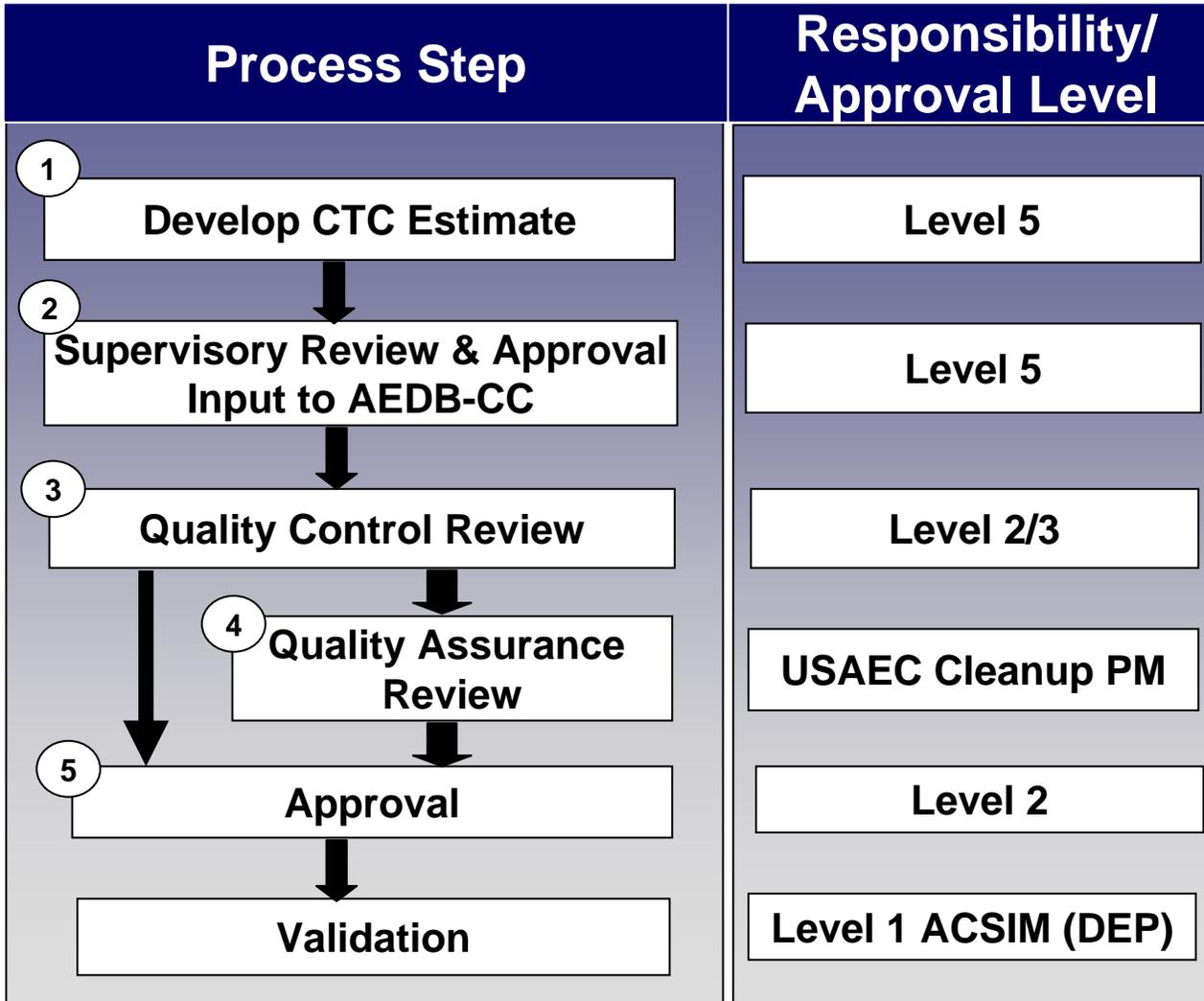
CTC Guidance Overview

CTC Guidance Purpose

- Help environmental managers understand how to develop cost estimates that assist in meeting financial requirements.
- Provide criteria for preparing, updating, reviewing, and reporting CTC estimates.

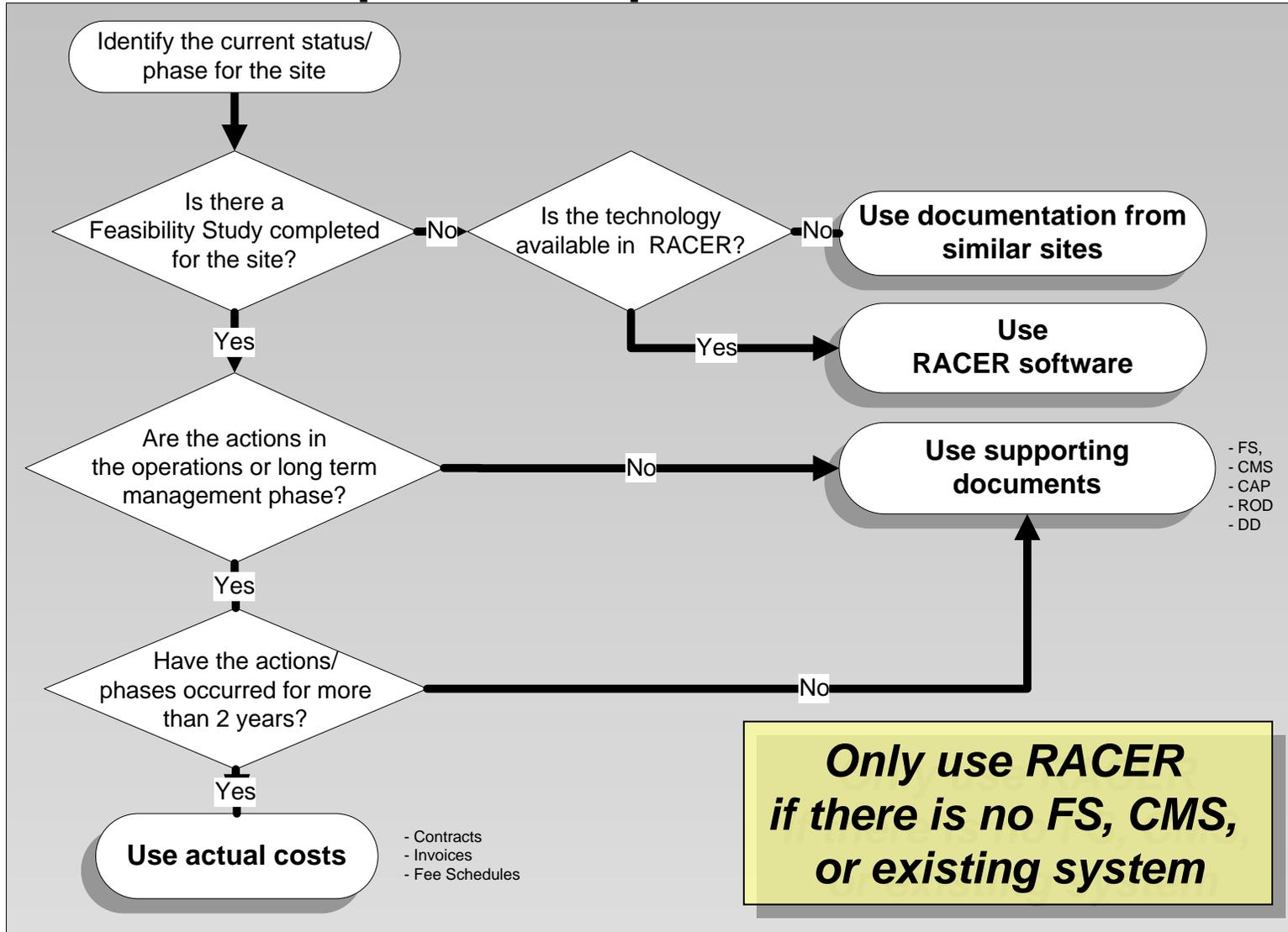


CTC Guidance





Step 1: Develop CTC Estimate





Step 1: Develop CTC Estimate



CTC Estimate Examples

- RACER-generated MFR, RACER estimate with no supporting documentation
- MFR and CMS
- MFR and proposal
- MFR and ongoing/recurring actions — historical/actual costs
- MFR and estimate from similar sites
- MFR and multi-year fixed price contract
- MFR and Fee Schedule (for SI/RI)
 - Task Order
 - CHPPM Services



Step 1: Develop CTC Estimate Memorandum for Record (MFR)

- What is an MFR?
 - Summary Document that identifies assumptions, supporting documentation, basis for CTC estimate
- What needs to be in an MFR?

Background Information	From historic narrative to identify project conditions
Cleanup Strategy	Assumed approach to reach RIP/RC
Assumptions	Unknown items needed to complete estimate
Calculation Summary	By phase, -includes escalation when appropriate
Quantities	Volumes (CY), numbers (no. of samples) etc.
Cost per Unit	When manually input (dump charges per CY)
Material Changes	Identify/explain changes $>\pm 10\%$
Cost Adjustments	Adjustments to project costs as project unfolds



Step 1: Develop CTC Estimate RACER-Generated MFR

Cost Summary Report

Assembly	Direct Cost	Marked Up Cost
Site Name: FE186-Temp. Landfill Site Number: CCFG003 Description: HQ legal counsel in correspondence dated 29 Nov 2001 has determined that this project is required according to final capping of the landfill is necessary after the settling process has ended. WHAT IS OUT OF COMPLIANCE: The sanitary landfill was closed in FY00 and temporarily being capped, FY01/02. Recapping is required by FY09 when the trash disposed until FY00 settled. The recapping of this old sanitary landfill is driven by the host nation approval/permit for a new landfill, which was constructed and completed in FY00. CURRENT STATUS: Landfill has temporary cap and is settling. Future costs include the design FY07, and recapping funded in FY08 according to landfill standards. Additional work may be added when final design for recapping which requires regulatory approval is available. IMPACT IF NOT FUNDED: Will not stay in compliance with the approval letter, which will lead to the loss of the permit to operate the landfill. Program: Estimator Information: Name: Katherine Best <i>Katherine Best 9/26/05</i> Title: Engineer Agency/Org./Office: Environmental Consulting Business Address: 123 Little Rd, Portland, ME 04103, USA Phone: +01168 555 1212 Email: katherine.best@ec.com Prepared Date: 04/29/2005 Reviewer Information: Name: Rob Reviewer <i>Rob Reviewer 9/26/05</i> Title: Engineer Agency/Org./Office: Environmental Consulting Business Address: 123 Little Rd, Portland, ME 04103 Date Reviewed: 04/29/2005		

Cost Summary Report

Assembly	Direct Cost	Marked Up Cost																																												
Total Phase Remedial Design for Capping Landfills	57,275	83,534																																												
Phase Name: RA - Construct permanent cap to landfill Phase: Remedial Action Description: Cost estimate based on 16,500m2 and landfill cap approval letter. Technology: Capping # 1 Comment: Total area = 16,500m2 = 4.07 acres. Size is approx 1.5 acres x 2.67 acres. Standard cover with passive gas venting 3:1 side slope assumed 0.5m (20 in) soil cover 80 mil liner (largest available in RACER -- a little equivalent to 0.002 m) 0.5 m (20 in) compacted clay liner 6 in leveling layer The Landfill Capping Approval letter stated the following: Once settlement of the landfill has stopped, the temporary landfill cover has to be upgraded to a final cover in accordance with federal regulations. The mineral layer has to have a hydraulic conductivity of less than 1 * 10^-9 m/s. The drainage layer has to be connected to the general stormwater sewer system. The drainage layer shall not consist of drainage pipes but of a leveled drainage layer (grain size 4-32 mm) to ensure complete removal of leachate. The drainage system has to be best protected. Where no settlement occurs a final landfill cap shall be constructed. There are 3 portions of the Landfill: "Old" requires more work. "CP1" = 16,500 m2, and "CP2" requires no further work. LTM ? <table border="1"> <tr><td>17030423</td><td>Unclassified Fill, 6" Lifts, Off-Site, Includ...</td><td>239,966</td><td>314,074</td></tr> <tr><td>17030426</td><td>Sand, 6" Lifts, Off-Site</td><td>112,167</td><td>146,493</td></tr> <tr><td>18050301</td><td>Loam or topsoil, imported topsoil, 6" deep, f...</td><td>148,823</td><td>194,393</td></tr> <tr><td>18050402</td><td>Seeding, Vegetative Cover</td><td>117,358</td><td>151,281</td></tr> <tr><td>33070201</td><td>6" Inside Diameter (Vertical Pipe Spaced @ 200...</td><td>19,915</td><td>26,554</td></tr> <tr><td>33080503</td><td>Polymeric Liner Anchor Trench, 3' x 1.5'</td><td>2,159</td><td>3,215</td></tr> <tr><td>33080507</td><td>Clay 10E-7, 6" Lifts, Off-Site</td><td>259,344</td><td>341,177</td></tr> <tr><td>33080513</td><td>Landfill gas and leachate control systems, polyeth</td><td>138,923</td><td>180,351</td></tr> <tr><td>33080532</td><td>8 oz/sy Erosion Control/Drainage Filter Fabric (80</td><td>31,604</td><td>42,511</td></tr> <tr><td>33080573</td><td>Secure burial cell construction, polymeric liner a</td><td>102,427</td><td>266,139</td></tr> <tr><td colspan="2">Total Capping Technology</td><td>1,206,685</td><td>1,666,788</td></tr> </table>			17030423	Unclassified Fill, 6" Lifts, Off-Site, Includ...	239,966	314,074	17030426	Sand, 6" Lifts, Off-Site	112,167	146,493	18050301	Loam or topsoil, imported topsoil, 6" deep, f...	148,823	194,393	18050402	Seeding, Vegetative Cover	117,358	151,281	33070201	6" Inside Diameter (Vertical Pipe Spaced @ 200...	19,915	26,554	33080503	Polymeric Liner Anchor Trench, 3' x 1.5'	2,159	3,215	33080507	Clay 10E-7, 6" Lifts, Off-Site	259,344	341,177	33080513	Landfill gas and leachate control systems, polyeth	138,923	180,351	33080532	8 oz/sy Erosion Control/Drainage Filter Fabric (80	31,604	42,511	33080573	Secure burial cell construction, polymeric liner a	102,427	266,139	Total Capping Technology		1,206,685	1,666,788
17030423	Unclassified Fill, 6" Lifts, Off-Site, Includ...	239,966	314,074																																											
17030426	Sand, 6" Lifts, Off-Site	112,167	146,493																																											
18050301	Loam or topsoil, imported topsoil, 6" deep, f...	148,823	194,393																																											
18050402	Seeding, Vegetative Cover	117,358	151,281																																											
33070201	6" Inside Diameter (Vertical Pipe Spaced @ 200...	19,915	26,554																																											
33080503	Polymeric Liner Anchor Trench, 3' x 1.5'	2,159	3,215																																											
33080507	Clay 10E-7, 6" Lifts, Off-Site	259,344	341,177																																											
33080513	Landfill gas and leachate control systems, polyeth	138,923	180,351																																											
33080532	8 oz/sy Erosion Control/Drainage Filter Fabric (80	31,604	42,511																																											
33080573	Secure burial cell construction, polymeric liner a	102,427	266,139																																											
Total Capping Technology		1,206,685	1,666,788																																											

2 signatures/ dates

Document all assumptions in comment fields



Step 1: Develop CTC Estimate

Non-RACER generated MFR

Example 2a - Soil
DEPARTMENT OF THE ARMY
Fort IRP
12345 ARMY HIGHWAY 27
BUMBANK, MN 12345-6789
30 September 2005

MEMORANDUM FOR RECORD

SUBJECT: Cost-to-Complete Estimate (CTC) for Site FTIRP-30

- This memorandum serves as formal documentation of the information used to develop the CTC estimate for FTIRP-30.
- Background information, strategy, and assumptions.** Site FTIRP-30 is located in the central portion of the plant and is approximately 350 acres. It includes the old and new TNT production facilities, Red Water Treatment Plant, and the Industrial Surface Water Pollution Control Facility. Initial remedial investigation results indicated contaminated groundwater. Additional contaminants include PCBs. The Remedial Measures Study (CMS) for the site was approved in January 2005 and indicated that 43,300 cubic yards of explosives-, PCB- and metals-contaminated soils required removal. The Statement of Basis was approved in March 2005. The CMS recommended alternative was Alternative 1, excavation of contaminated soil with onsite, ex situ stabilization and transport off site for final treatment and disposal.

Background, Strategy, Assumptions

Parameters/Quantities

Signatures

Calculation Summary

- Parameters:** Approximately 43,300 cubic yards of soil. Cost and cost elements are identified in Table 4-1. Cost elements are shown in the estimate. There are no project cost elements.
- Cost Estimation - Calculation Summary**
Total cost (present value) for Alternative 1= \$13,500,000
a. FY06 CMI (C) Cost: \$12,300,000 x 1.015 = \$12,484,500
Note: enter \$12,500K under CMI (C) phase
b. FY06 LTM Costs: \$1,200,000 x 1.015 = \$1,218,000
Note: enter \$41K under LTM phase per year for 30 years

Total for Alternative 1= \$13,500,000
FY06 CMI (C) Cost: \$12,300,000 x 1.015 = \$12,484,500 FY06\$
Enter \$12,500K under CMI (C) phase
FY06 LTM Costs: \$1,200,000 x 1.015 = \$1,218,000/30years
= \$40,600/yr
Enter \$41K under LTM phase per year for 30 years

Estimate prepared by: John Brown (757) 124-4500
John Brown 10/30/05
SIGNATURE DATE

Estimate reviewed by: Hank Jones (757) 124-4500
Hank Jones 10/30/05
SIGNATURE DATE



Step 1: Develop CTC Estimate Supporting Documentation: Corrective Measures Study/Feasibility Study

Title Page

Final
Corrective Measures Study
Site FTP-333
Gasoline Gulley, Fort Cleanup, New

U.S. Army Corps of Engineers

July 2003

Relevant Report Pages

This C... based... site... present... the... these... water... interface... extends... 550 ft... hydraulically... downgradient... in a northwest... direction... to the surface... water... impoundment... The estimated... volume... of subsurface... soil... targeted... for... corrective... action... is... 22,000... yd³... in... the... source... area... and... 10,300... yd³... adjacent... to... the... source... area... for... a... total... of... 22,300... yd³... A... dissolved-phase... groundwater... plume... extends... at... least... 1,000... ft... northwest... of... the... source... area...

The media targeted for remediation includes subsurface soil, groundwater, surface water, and sediment. As required by the State Department of Environmental Protection, the primary corrective action objectives (CAOs) will be to remediate the site to the extent practicable (i.e., technologically and fiscally feasible).

- **Surface and Subsurface Soil**—Determination of Soil Cleanup Objectives (SCOs) and Groundwater Cleanup Objectives (GCOs) in groundwater state.
- **Surface Water**—Achieve State surface water standards for COCs in surface water, and
- **Sediment**—Achieve the criteria set forth in the State Technical Guidance for Screening Contaminated Sediments.

The goal of this Corrective Measures Study was to develop, screen, and evaluate potential corrective measure alternatives for the site that are protective of human health and the environment and are capable of meeting the CAOs.

the site were... stration in each... e contaminated... rective actions... situ treatment

with conditions... for feasibility... ctiveness, (2)

Quantities

Selected Alternative

Costs

Alternative 5 Cost Summary

Phase	Type	Unit Cost	Number of Years	Total Cost
RA(C)	SVE/BV	\$585,961	1	\$585,961
	AAS	\$300,438	1	\$300,438
	Excavation	\$853,780	1	\$853,780
<i>Subtotal</i>				\$1,740,179
RA(O)	Operation	\$152,840	7	\$1,069,880
<i>Subtotal</i>				
RA(O)	(4-GW monitoring wells)	\$100,400	10	\$1,004,000
Annual progress meeting		\$3,000	10	\$30,000
<i>Subtotal</i>				\$1,034,000
LTM	Annual	\$22,540	20	\$450,800
LUC		\$22,500	1	\$22,500
5-year review meeting		\$25,500	6	\$153,000
Annual progress meeting		\$3,000	20	\$60,000
<i>Subtotal</i>				\$686,300

Phase	Total FY03 Costs	Escalation Factor	Total FY06 Costs	Annual Costs
RA(C)	\$1,740,179	1.0416	\$1,812,570.45	
RA(O)	\$1,069,880	1.0416	\$1,114,387.01	\$159,198.14
RA(O)	\$1,034,000	1.0416	\$1,077,014.40	\$107,701.44
LTM	\$686,300	1.0416	\$714,850.08	\$35,742.50
Total	\$4,530,359		\$4,718,821.93	



Step 1: Develop CTC Estimate

Supporting Documentation: Proposal

Scope of Work

Fort IRP, RAP Implementation
Scope of Work, FY 2006-2008
May 2005

Introduction

A Contaminated Remedial Action Plan (RAP) at Fort IRP site is being approved by the State Department of Environmental Protection (SDEP) as the lead remedial action agent. An area of approximately 422,400 cubic feet of facility groundwater at FL001 is known to be contaminated with benzene, toluene, ethyl benzene, total xylenes, naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, 1,2-dichloroethane, and Total Petroleum Hydrocarbons (TPH). The Contractor shall provide all labor, materials, and equipment necessary to complete the tasks presented below from the SDEP approved RAP for the time period of July 1, 2006 to September 30, 2008.

Site security issues and project working conditions shall be the responsibility of the Fort IRP point of contact (POC) for this project. The Contractor shall follow the following practices relative to worker health and safety. The Contractor will restore the site to original condition, including cleaning up and removing all project related trash, debris, etc.

Definition of Tasks

Task 1: Groundwater Monitoring

The Contractor will collect and analyze samples from MW-1 through MW-5, MW-11 through MW-14, and DMW-1 quarterly for ten sampling events during the period of this contract. Analyses of these quarterly samples will be performed for the parameters specified in Section 5.3.1 of the RAP and subsequent SDEP correspondence/directives.

Samples will be collected in accordance with SDEP SOP for Field Activities, dated January 2002 and latest updates, and with the Contractor's Quality Management Plan. Field forms established by SDEP for petroleum cleanups will be used for sampling activities.

Task 2: Reporting and Record Keeping

The Contractor will prepare the following reports under this SOW during the term of this remedial action. Two copies of each report will be submitted to the Fort IRP, one for Fort IRP records retention, and one for forwarding to the SDEP:

- 1. Ten (10) quarterly reports that summarize field and analytical data collected from the quarterly sampling events. Contaminant contour maps with injection and monitoring well locations and groundwater gradients will be included in these reports.

Activities

Quantities

Costs

Fort IRP RAP Implementation (CMI (O)), 7/1/06 - 9/30/06

DESCRIPTION	SOURCE	SOURCE NAME	COST BASIS	LABOR COST	UNITS	QTY.	CATEGORY	TOTAL SUB TOTAL	TOTAL TASK
Labor									
Program Manager	SpecPro	Employee		\$ 105.67	hour			\$ -	
Sr. Project Manager	SpecPro	Employee		\$ 98.44	hour	16		\$ 1,575.04	
Regulatory Analyst/Specialist	SpecPro	Employee		\$ 70.60	hour	16		\$ 1,129.60	
Env Information Specialist	SpecPro	Employee		\$ 52.55	hour	8		\$ 420.40	
Env Technician	SpecPro	Employee		\$ 45.94	hour	48		\$ 2,205.12	
Subtotal: Direct Labor									\$ 5,330.16
ODCs									
Well Sampling Supplies			per event	\$ 100.00	# of events	2		\$ 200.00	
Per Diem			per day	\$ 91.00	days	6		\$ 546.00	
Mileage			GSA rate	\$ 0.405	miles	1500		\$ 607.50	
Printing/Binding			per copy	\$ 25.00	each	4		\$ 100.00	
Subtotal ODCs									\$ 1,453.50
G&A									
Subtotal: General and Administrative								15.38%	\$ 223.55
Subcontractors									
Laboratory Analysis w/ ODC	Subcontractor	Accutest	per event	\$ 60.00	each	20		\$ 1,200.00	
				\$ 56.00	each	14		\$ 784.00	
				\$ 96.00	each	8		\$ 768.00	
				\$ 84.00	each	4		\$ 336.00	
Duplicates				\$ 296.00	each	2		\$ 592.00	
Subtotal: Subcontractors									\$ 3,680.00
Subtotal: Material Handling on Subcontractors/Consultants								60%	\$ 132.48
G&A on M/H									
Subtotal: General and Administrative Overhead on Material Handling								15.38%	\$ 20.38
Subtotal: Subcontractor/Consultants with Overheads									\$ 3,832.86
									\$ 10,840.06



Step 1: Develop CTC Estimate

Ongoing/recurring actions: Historical/Actual costs

Supporting documentation:

- Invoices, purchase orders, existing contracts, vouchers,
- Scope of Work

14. SHIP TO	15. PAYMENT WILL BE MADE BY	16. MAIL INVOICES TO THE ADDRESS IN BLOCK 15	UNIT PRICE	AMOUNT
	17. PAYMENT WILL BE MADE BY (CASH/PAYEE/CHQ)		im Hohenfels	EU1.00 EU108,204.60

Signed Blanket Purchase Agreement (DD Form 1155) with amount

NAME OF CONTRACTOR		SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (MM/DD/YYYY)
contractor shall be paid the split payment for all service 5-2606. 1301 NET AMT EU108,204.60 5104,910.41				
18. ITEM NO.		19. SCHEDULE OF SUPPLY SERVICES	20. QUANTITY ORDERED/ACCEPTED	21. UNIT
				22. UNIT PRICE
				23. AMOUNT
24. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE 4. DATE 4. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE 28. SHIP NO. 29. DO VOUCHER NO. 30. DETAILS 31. PAID BY 32. AMOUNT VERIFIED CONTRACT FOR 33. CHECK NUMBER 34. BILL OF LADING NO. 35. TOTAL CONTAINERS 36. SHIP ACCOUNT NO. 37. SHIP VOUCHER NO.				

Department of the Army
U.S. Army Corps of Engineers, Europe District
Konrad-Adenauer Ring 39
65187 Wiesbaden

CENAU-PP-EW 19 August 2003

SCHEDULE OF SERVICES

Scope of Work

I. INTRODUCTION:

Project Description:

Building 12135 Landfill: Based on results of previous investigations at the site, it was recommended to perform bi-annual groundwater monitoring over a two-year period at all existing wells at the site, to confirm that no contaminants leach out of the landfill. For this effort, eight existing monitoring wells shall be sampled on a bi-annual basis over a period of two years. The groundwater samples will be analyzed for PCL, BTEX, PAH, CHC and heavy metals. The contractor shall submit letter reports after each sampling round summarizing the analytical results. A formal report shall be submitted at the end of the two-year period based on the results of the field activities, sampling and analysis.

Building 2371 Site: Based on results of previous investigations at the site, it was recommended to perform six one-week soil vapor extraction (SVE) tests over the period of one year (one test every two months) to assess the efficiency of pulse-vent SVE at the site. In order to accomplish this, 5 soil borings will be drilled to install SVE monitoring wells within the boreholes. Soil gas samples will be collected and analyzed for CHC, and six five-day SVE pilot tests will be performed over the period of one year. During the SVE tests, air flow rates, radius of influence and vapor contaminant concentrations will be determined. The contractor will submit a letter report upon completion of each five-day SVE pilot test as well as a formal report upon completion of the one-year test period based on the results of field activities, sampling and analysis.

FY 03 work at 12135 and 2371
Page 1 of 14



Step 1: Develop CTC Estimate Similar sites

Supporting documentation:

- contracts, studies or actual costs on similar completed sites

ORDER FOR SUPPLIES OR SERVICES		PRICE		AMOUNT		SCOPE OF WORK	
1.00		1.00		EU158,123.82		Section C - Descriptions and Specifications <u>SCOPE OF WORK</u> US Army Corps of Engineers	
Contract with amount, Scope of Work							
<p>Project: Groundwater Contamination Pilot Test Study, Building 2288 site, Contract: WWWW06-5102-2726</p> <p>BACKGROUND: Chlorinated hydrocarbons (CHC) have been detected in drinking water wells downgradient of the CC003A in the past with contaminant concentrations ranging from non-detectable to 14.9 ug/L. Therefore, extensive groundwater studies have been performed at this installation since 1985. During these studies, a massive and complex CHC contamination has been detected, which is comprised of at least 8 distinct but partially overlapping contamination plumes in groundwater.</p> <p>Based on all available data, a comprehensive groundwater model was performed to assess groundwater flow and contaminant transport for the whole area: during the initial modeling phase, a preliminary flow model was developed, which was refined during the second modeling phase. During the third modeling phase, contaminant transport was also modeled. As a result of these groundwater modeling efforts, 10 different remediation scenarios were developed. It was recommended that a remediation pilot test be performed in the vicinity of the purge area to assess the feasibility of enhanced in-situ biodegradation for groundwater remediation by introducing molasses into the groundwater. Moreover, it was recommended that the results of this pilot test be used to assess the benefits, risks, and costs of performing enhanced in-situ biodegradation for 5 different remediation scenarios as outlined in the phase III groundwater model report.</p> <p>GENERAL REQUIREMENTS: With regard to site specific requirements the Contractor shall: - Obtain digging permits and other site utility clearances as required by the installation to ensure that the borings and other soil probing do not encounter underground utilities or other structures.</p>							
1.00		1.00		EU153,309.89			
1.00		1.00		EU15,624.87			
1.00		1.00		EU158,123.82			
1.00		1.00		EU15,624.87			



Step 1: Develop CTC Estimate Multi-Year Fixed Price Contracts

Supporting documentation:

- Base contracts and contract modifications

Contract with amount, Scope of Work, exercised/unexercised options		5-1235-7890
NET AMT \$30,000.00 (\$30,000.00)	5-1235-7890 NET AMT \$302,000.00 (\$302,000.00)	\$30,000.00 \$302,000.00

Enter only unexercised options in AEDB-CC

Do NOT escalate costs



Step 2: Supervisory Review and Approval

- Supervisory Review Checklist must be signed/dated:
 - For IMA, MACOMS, and Excess Installations: must be government employee at the installation environmental office
 - For ARNG facilities: Chief of staff or designee
- Checklist includes all CC sites at the installation
- Upload the checklist at the installation level
- Must be legible and downloadable



CTC Guidance Overview: Supervisory Review and Approval

1. Are Sound estimating methodology and reasonable assumptions used? Does the database of record (i.e. AEDB-CC or AEDB-R) capture and document the assumptions used to develop the IAP and CTC. Does the information in the database match the information in the IAP?
2. Did the estimator compare prior year estimates to the current year estimates and *address QC Comments*?
3. Does the estimate include all relevant phases and costs to complete the cleanup?
4. Is the estimate consistent with the operational plans of the Army?
5. Does the estimator have the proper qualifications and required training to compile/generate the estimate?

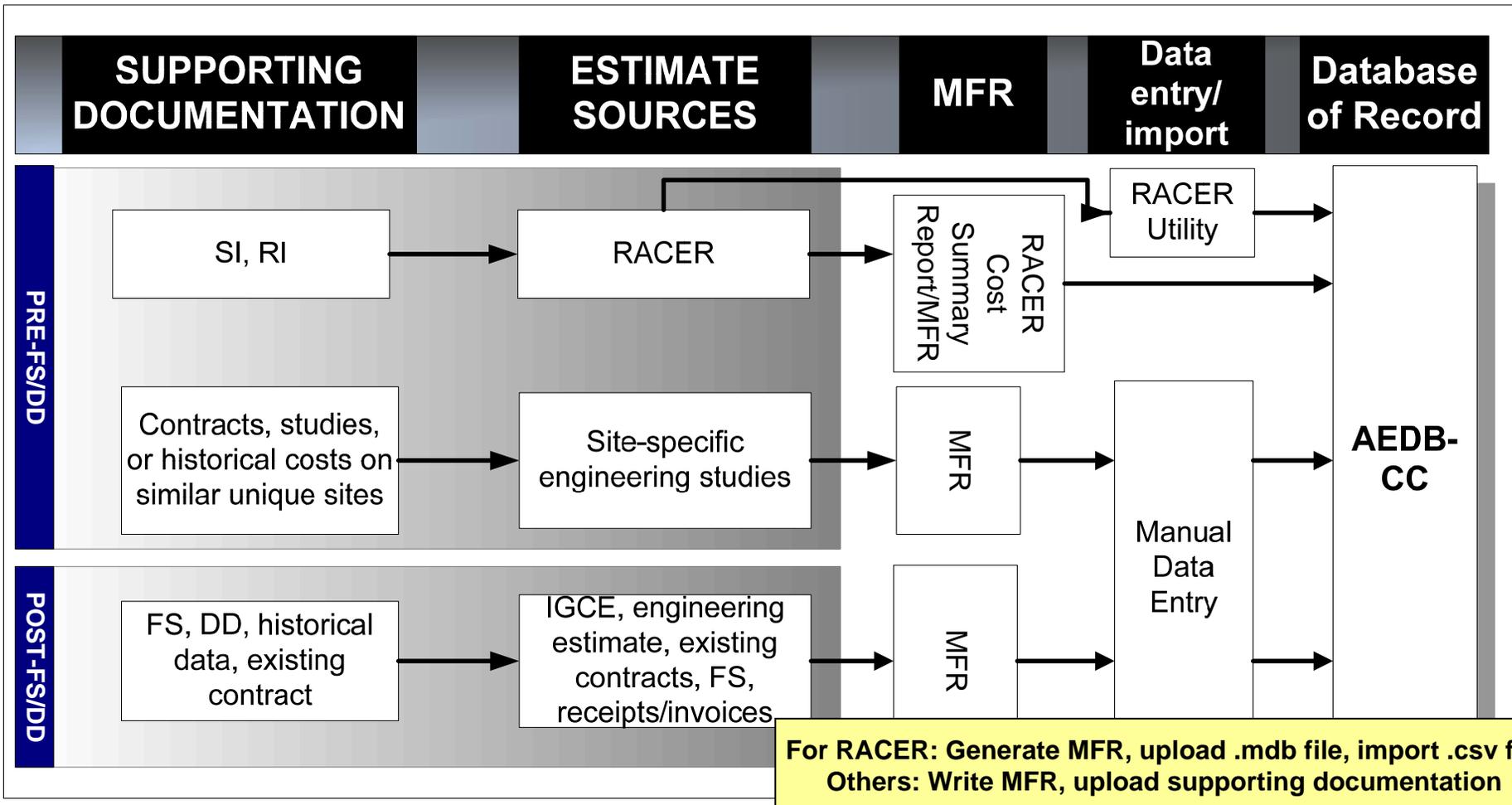


CTC Guidance Overview: Supervisory Review and Approval

6. Is there an adequate audit trail?
7. Is there adequate documentation to support the underlying assumptions used to develop the estimate?
8. Does the supervisor agree with the underlying assumptions made to develop the estimates?
9. Is the estimate maintained in the current cost basis?
10. Is or was the site listed in a different database of record (i.e. AEDB-CC, AEDB-R) for a previous data call?



Step 2: Input in AEDB-CC





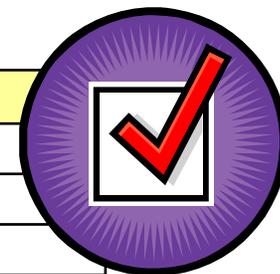
Steps 3 and 5: Quality Control Review and Approval

- Based on Supervisory Review Checklist.
- Document and sign review comments
 - IMA: IMA Region/HQ Environmental Office
 - MACOMs: Major Subordinate Command (MSCs)
 - Excess Installations: BRAC Field Office
 - NGB: NGB Cleanup Branch
- QC Checklist, comments in AEDB-CC provided to installations to address.
- Acceptable sites approved.





Steps 3 and 5: Quality Control Review and Approval QC Checklist



1. General Information - Does the Site/Historic narratives contain the following?
a. Site Conditions (e.g. soil, groundwater)
b. Type contamination
c. Current contaminant levels
d. Correct Law, reg, order, statute, or driver mandating cleanup
e. Proposed Cleanup strategy
f. Key documents supporting the strategy
g. Past uses, types of activities (processes), and occupants
h. Environmental history (e.g. investigations, known releases, sampling, cleanup actions, closures.)
2. Remedial Actions
a. Do the remedial actions make sense?
b. Do the remedial actions address what was discussed in the narrative?
c. Are they consistent with the phase schedules?
3. Phase Schedule
a. Is it reasonable and achievable (studies relative to the actions)?
b. Is it consistent with the funding spread and remedial actions (i.e., dates correct)?
c. Is it consistent with the cleanup strategy in the narrative?



Steps 3 and 5: Quality Control Review and Approval QC Checklist



4. Cost Estimate & Requirements

- a. Has correct Estimate Source been identified?
- b. Is an Estimate Source narrative provided?
- c. Have material changes (cost change +/- 10%) been adequately explained? (if applicable)
- d. Have zero cost estimates been explained? (if applicable)
- e. (Spring only) Is the information in the database consistent with the information in the IAP and CTC spreadsheet?
- h. Has an adequate CTC source document been uploaded ?
- f. Is it complete and legible and does it support the estimate?
- g. If RACER was used, was the .mdb file imported correctly?
- h. Were obligations entered?

5. Memorandum for Record (MFR)

- a. Does the MFR support the estimate and explain assumptions?
- b. Does the MFR have two signatures?
- c. Does the MFR contain and explain [required information]



Steps 3 and 5: Quality Control Review and Approval QC Checklist



6. Supervisory Review Checklist

- a. Is a supervisory review checklist attached, legible, signed, and dated?
- b. Are the correct sites and Site IDs listed?

7. Program Management Costs

- a. Have the Program Management Costs been entered?
- b. Do they look reasonable (i.e., 8-10% of annual costs)?



Step 4: Quality Assurance Review

- Based on Supervisory Review Checklist
 - Documentation
 - Audit trail
 - Qualification of Estimators
 - Supervisory Review
 - CC Program Manager's findings identified in the QC Review.
- QA comments provided to installations to address.





Agenda

- CTC and CC Workgroup
- CTC Guidance Overview
- **CC Guidance Overview**
- Challenges



CC Guidance Overview

CC Guidance Purpose

- Assists Army personnel in meeting the challenge of planning and executing the CC program.
- It provides instructional guidance on programming CC requirements.



CC Guidance Overview

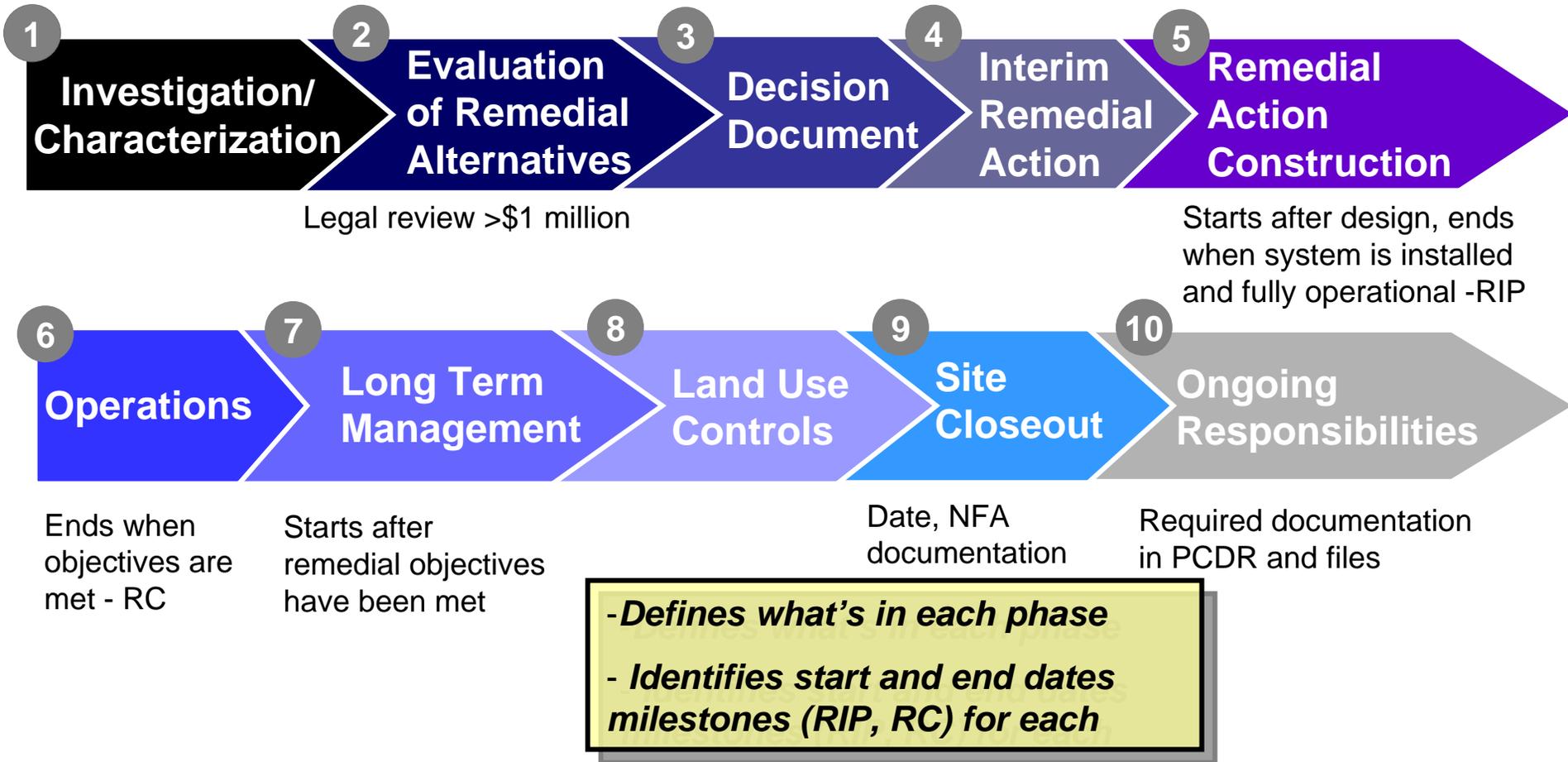


- Site eligibility
 - Typical eligible and ineligible projects
- Responsibilities
 - Focus on the Remedial Project Manager (RPM)
- Program Management
 - Installation Action Plans (IAP) - see new IAP Guidance
 - CTC Estimate – see CTC Guidance
 - Programming Requirements
 - Program Management
 - Site Projects



CC Guidance Overview

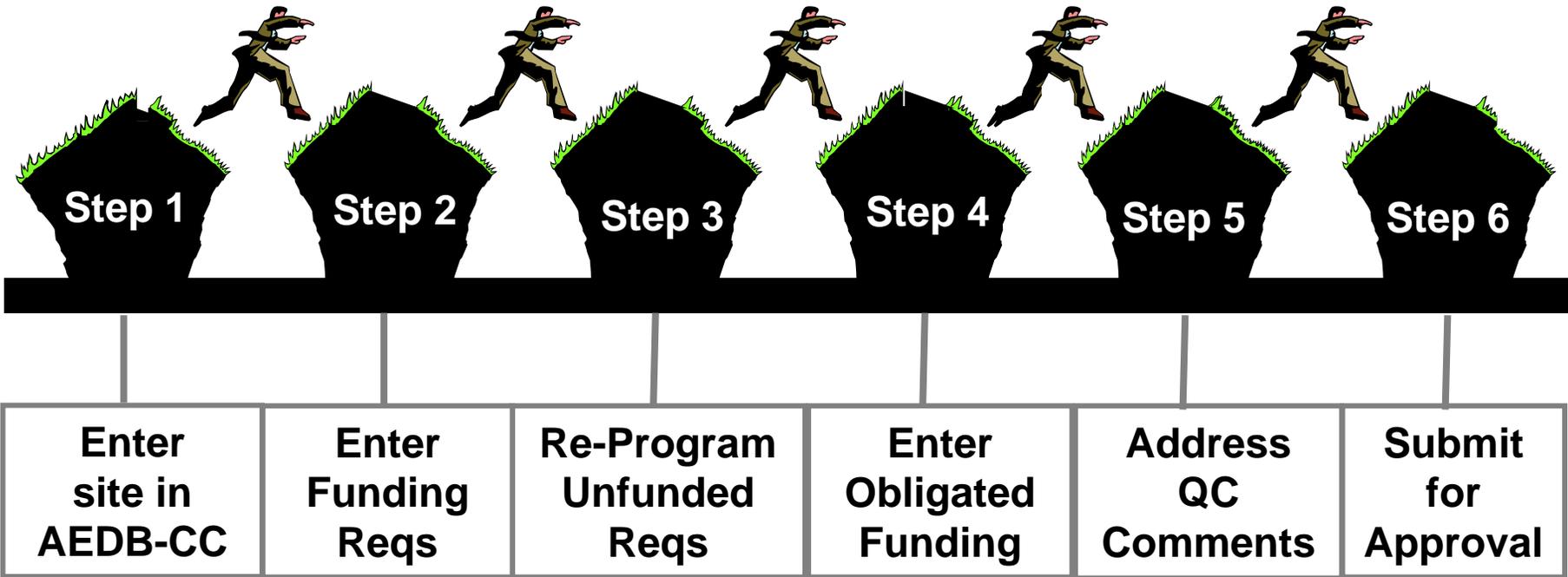
Cleanup Process Overview





CC Guidance Overview

CC Site Submission Process





CC Guidance Overview



- Specific Recommendations
 - Air sparging and soil vapor should be used together
 - For RACER estimates for Soil removal/disposal at UST sites, use Load and Haul
 - For RACER excavation, the cubic yards excavated and disposed of may vary (CY vs LCY)
 - MNA is entered in RA(O)
 - Program Management should be 8-10% of annual site costs



Agenda

- CTC Workgroup
- CTC Guidance Overview
- CC Guidance Overview
- **Challenges**



Challenges

- Capturing obligations (use the new DFAS codes)
- Proper documentation for each site
 - RACER estimate
 - MFR
 - Supporting Documentation
 - Supervisory Review Checklist
- Aligning database and RACER functionality



Questions?



BACKUP SLIDES



CC Guidance Overview: Site Eligibility

- Eligible sites
 - Documented release
 - Beyond initial response
 - Leaking UST after confirmatory sampling
 - CERCLA not eligible for DERP
 - RCRA corrective actions, known contamination, Non-DERP
 - RCRA corrective actions at closed permitted facilities, confirmed release
 - Post CC project monitoring and maintenance, RIP
 - Responses to MEC at non-operational ranges (not MMRP eligible) when necessary to protect human health and environment



CC Guidance Overview: Site Eligibility

- Ineligible sites
 - Preliminary Assessments
 - Initial spill response
 - Permit required closure activities
 - Landfill monitoring when there has not been a release
 - Tank Removal
 - Eligible for DERP
 - Responses to MEC at operational ranges
 - Environmental Baseline Surveys
 - Building demolition or debris removal
 - Routine hazardous waste management
 - Operating Permit fees and associated monitoring
 - Plans other than for corrective action