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COST MANAGEMENT MANUAL FOR THE SUPERFUND REMEDIAL AND ENFORCEMENT PROGRAMS

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Contents

	PAGE
Table of Contents	iii
List of Exhibits	iv
List of Acronyms	vi
Foreword	viii
Chapter 1 - Overview	
1.1 Chapter Introduction	1-1
1.2 Background Information	1-1
1.3 The Superfund Remedial and Enforcement Programs	1-4
1.4 Contracting in the Remedial and Enforcement Programs	1-5
Chapter 2 - Project Scoping	
2.1 Chapter Introduction	2-1
2.2 Establishing Project Files	2-1
2.3 Identifying Work Assignment Objectives	2-1
2.4 Developing the Work Assignment Package	2-3
Chapter 3 - Estimating Costs and Independent Government Cost Estimates	
3.1 Chapter Introduction	3-1
3.2 Preliminary Procedures for Estimating Costs	3-1
3.3 Independent Government Cost Estimates	3-3
3.4 Preparing Independent Government Cost Estimates	3-5
Chapter 4 - Initiating Work Assignments and Reviewing Work Plans/Cost Estimates	
4.1 Chapter Introduction	4-1
4.2 Initiating Work Assignments	4-1
4.3 Reviewing the Contractor Work Plan	4-1
4.4 Reviewing the Contractor Cost Estimate	4-2
4.5 Contractor Negotiations	4-4
4.6 Documentation	4-4
Chapter 5 - Controlling Contract Costs	
5.1 Chapter Introduction	5-1
5.2 Monitoring Contractor Performance	5-1
5.3 Monitoring Contractor Costs	5-7



Contents (Cont'd)

	Page
5.4 Documenting Contractor Costs for Cost Recovery	5-14
5.5 Reviewing Contractor Invoices	5-15
5.6 Contractor Claims and Change Orders	5-20
Chapter 6 - Closeout of Contract Work Assignments, Annual Closeouts and Final Contract Closeouts	
6.1 Chapter Introduction	6-1
6.2 The EPA Work Assignment Close-out Process	6-1
6.3 Annual Closeouts of ARCs Contracts	6-7
6.4 Final Closeout of ARCs Contracts	6-10

Appendices

- A References
- B OSWER Directive 9242.2-06, Superfund Contract Management Issues
- C OSWER Directive 9242.6-02, Guidance for Organizing ARCS Contract Files
- D OSWER Directive 9202.1-12, Guidance on Preparing Independent Government Cost Estimates (IGCEs)
- E OSWER Directive 9242.06a, Resources for Preparing Independent Government Estimates for Remedial Contracting Work Assignments
- F Guidance on Program Management Activities Under ARCs
- G Public Voucher Validation Procedures for Regional Contracting Officers
- H. Final Instructions and Procedures for Implementing ARCS Annual Closeouts

Exhibits

	PAGE
Exhibit 1-1: Cost Management Flowchart: Roles and Responsibilities	1-2
Exhibit 2-1: Document Organization	2-2
Exhibit 2-2: Comparative Costs of In-House and Contracting-Out Performance of Products and Services	2-3
Exhibit 2-3: Checklist for Identifying Work Assignment Objectives	2-4
Exhibit 2-4: Components of the Work Assignment Package	2-4
Exhibit 2-5: Checklist for Reviewing a Work Assignment	2-5
Exhibit 2-6: Work Assignment Form	2-7
Exhibit 2-7: Scheduling of Tasks	2-8

**Exhibits (Cont'd)**

	Page
Exhibit 3-1: Procedures for Preparing an Independent Government Cost Estimate	3-7
Exhibit 3-2: Computational Example for an Independent Government Cost Estimate	3-7
Exhibit 4-1: Components of a Work Plan Memorandum	4-1
Exhibit 4-2: Checklist for Reviewing Contractor Work Plans	4-3
Exhibit 4-3: Checklist for Reviewing Contractor Cost Estimates	4-3
Exhibit 5-1: Phone Log	5-3
Exhibit 5-2: Meeting Record	5-4
Exhibit 5-3: Sample Contractor Performance Evaluation Form	5-5, 5-6
Exhibit 5-4: Monthly Technical Progress Report	5-9, 5-10
Exhibit 5-5: Monthly Financial Progress Report	5-12, 5-13
Exhibit 5-6: Sample Contractor Invoice	5-16
Exhibit 5-7: Sample Contractor Invoice Supplemental Report for Program Management.....	5-17
Exhibit 5-8: Invoice Review Flowchart	5-19
Exhibit 5-9: Monthly Invoice Review Checklist	5-21
Exhibit 6-1: The EPA Work Assignment Completion Report.....	6-2, 6-3, 6-4
Exhibit 6-2: Evaluation Criteria for Work Assignments	6-6
Exhibit 6-3: Summary of Costs Claimed	6-8
Exhibit 6-4: Billing Summary	6-9



Acronyms

ARCS	Alternative Remedial Contracting Strategy
BuRec	Bureau of Reclamation
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CO	Contracting Officer
CPAF	Cost-Plus-Award-Fee Contract
CPFF	Cost-Plus-Fixed-Fee Contract
DOJ	Department of Justice
EPA	Environmental Protection Agency
EPAAR	EPA Acquisition Regulations
FAB	Financial Analysis Branch
FACO	Financial Administrative Contracting Officer
FAR	Federal Acquisition Regulations
FDO	Fee Determination Official
FMD	Financial Management Division, EPA
G&A	General & Administrative Costs
GAO	General Accounting Office
HQ	Headquarters, EPA
IGCE	Independent Government Cost Estimate
LOE	Level of Effort
LTCS	Long Term Contracting Strategy
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
OAM	Office of Acquisition Management (formerly the Procurement and Contracts Management Division)
ODC	Other Direct Cost
OIG	Office of Inspector General, EPA
OERR	Office of Emergency and Remedial Response, OSWER, EPA
OSWER	Office of Solid Waste and Emergency Response, EPA
PEB	Performance Evaluation Board
PO	Project Officer
PRP	Potentially Responsible Party

**Acronyms (Cont'd)**

RA	Remedial Action
RAC	Response Action Contractor
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
SACM	Superfund Accelerated Cleanup Model
SARA	Superfund Amendments and Reauthorization Act
SCEES	Scheduling and Cost Estimating Expert System
SOW	Statement of Work
SRO	Superfund Revitalization Office
USACE	U.S. Army Corps of Engineers
WA	Work Assignment
WACR	Work Assignment Completion Report
WAM	Work Assignment Manager



FOREWORD

To carry out its responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), the U.S. Environmental Protection Agency (EPA) relies on various contractors to perform much of the work. Recent attention has been focused on the Agency's progress in cleaning up sites and its ability to effectively oversee its contractors and ensure cost-effective work.

The purpose of this Manual is to enumerate a universal set of cost management practices and procedures for EPA personnel who have responsibility for managing Work Assignments under contracts where EPA Contracting Officers (COs), EPA Project Officers (POs), and Work Assignment Managers (WAMs) are co-located (e.g., ARCS contracts and RAC contracts, as well as other Long-Term Contracting Strategy (LTCS) contracts under which remedial work is done and that use Work Assignments as the ordering document). The Manual presents cost management techniques that can be employed by EPA officials at each step in the life of a Work Assignment.

In general, the Manual is designed to improve oversight of EPA contractors without creating an unnecessary administrative burden on WAMs, POs, and COs. Checklists and sample forms are included in the Manual to assist EPA personnel in monitoring contractor's costs.

The policies and procedures established in this document are intended solely for the guidance of government personnel. They are not intended, and cannot be relied upon, to create any rights, substantive or procedural, enforceable by any party in litigation with the United States of America. The Agency reserves the right to act at variance with these policies and procedures and to change them at any time without public notice.

The guidance and procedures presented herein reflect CERCLA policy and guidelines under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) of 1990, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986.

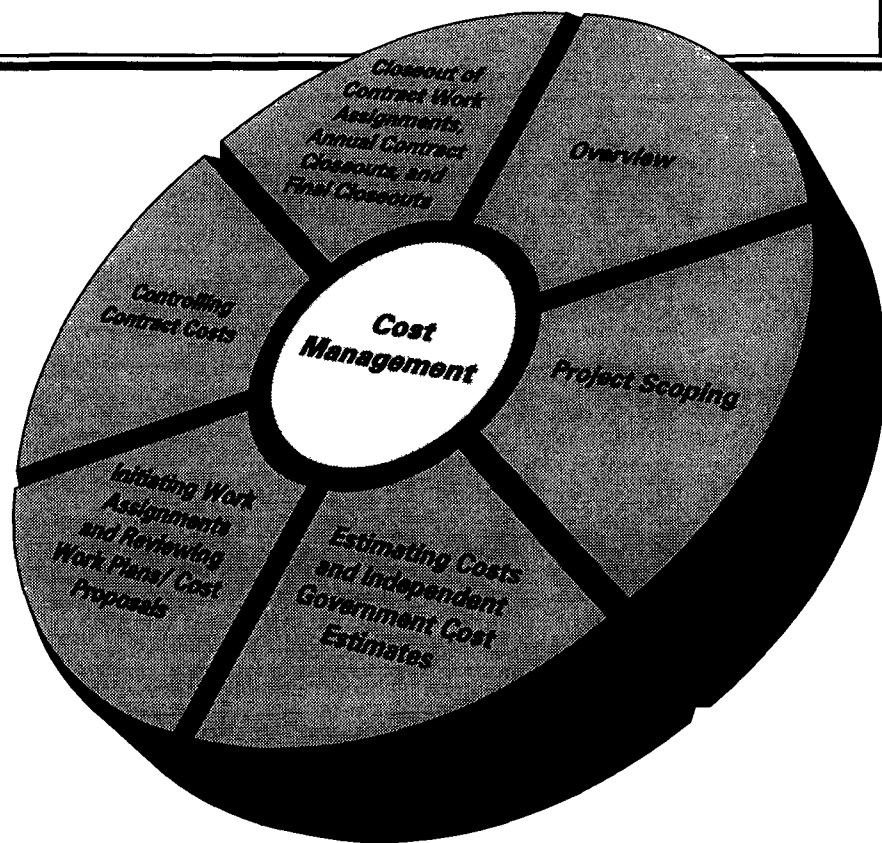
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CHAPTER 1 - OVERVIEW

- 1.1 Chapter Introduction
- 1.2 Background Information
- 1.3 The Superfund Remedial and Enforcement Programs
- 1.4 Contracting in the Remedial and Enforcement Programs





CHAPTER 1 - OVERVIEW

1.1 CHAPTER INTRODUCTION

This chapter explains the purpose of the Manual, describes its organization, and identifies its intended audience. To provide users with a sense of the context in which the Manual was developed, this chapter includes a brief overview of CERCLA and SARA legislation, focusing on the Remedial and Enforcement Program components and highlights recent changes to the contracting mechanisms that support the Superfund Program. These changes are a result of the Superfund Long-Term Contracting Strategy (LTCS) and the Superfund Accelerated Cleanup Model (SACM). Both current and planned remedial and enforcement contracts are discussed.

1.2 BACKGROUND INFORMATION

1.2.1 Setting

Over the years, a number of studies have criticized EPA for its contracts management practices and identified numerous deficiencies in the Agency's implementation and management of contracts. The Superfund program is particularly vulnerable to fraud, waste, and abuse because of its large size — one quarter of EPA's budget — and its extensive use of cost-reimbursement contracts. Although appropriate for some work, this type of contract can expose the government to excessive costs and give the contractors little incentive to control costs if adequate safeguards are not imposed.

A broad range of improvements have been recommended via internal EPA studies as well as by groups external to the Agency. Key recommendations from these studies concluded that EPA should:

- Prepare detailed Statements of Work for individual Work Assignments;
- Develop standard procedures for Independent Government Cost Estimates (IGCEs);
- Conduct a more thorough review of contractor invoices;

- Focus more attention on contract capacity and utilization;
- Reduce program management costs;
- Apply more stringent contract controls; and
- Streamline the award fee process.

The Agency subsequently increased its emphasis on improving contract management, particularly for those contracts awarded, implemented, and managed within the Superfund program. For example, on January 31, 1992 the Office of Solid Waste and Emergency Response (OSWER) released Directive 9242.2-06 (Appendix B). The Directive initiated new requirements regarding development of IGCEs, review of contractor invoices, and the appropriate participation of EPA employees in Performance Evaluation Boards.

As a means of adopting many of the recommendations offered by the internal and external groups, the OSWER Deputy Assistant Administrator directed the Superfund Revitalization Office (SRO) to coordinate the development of this Cost Management Manual for the Superfund Remedial and Enforcement Programs. Cost management refers to the process of planning the costs of site clean-up objectives, and tracking and controlling costs to ensure they are commensurate with accomplishments. Cost management also involves documenting the planning and monitoring of activities in a legally defensible manner for use, if appropriate, in the cost recovery process.

1.2.2 Organization

The six chapters of this Manual are presented in an order that corresponds to the chronological lifecycle of a typical EPA Work Assignment (i.e., project scoping, review/approval of the contractor work plan, monitoring contractor performance, and project closeout, as illustrated in Exhibit 1-1). See Appendix A for the references used in the Manual and the sources from which the user can obtain copies.

Chapter 1 presents background information on the Superfund Remedial and Enforcement Programs, as well as an overview of the current



contracting environment within the Superfund program. This chapter provides readers with a sense of the context in which the Manual was developed.

Chapter 2 outlines project scoping activities, which run the gamut from identifying the project objectives and developing the Work Assignment Statement of Work, to creating the Work Assignment timetable and establishing the Work Assignment files.

Chapter 3 on estimating costs contains guidance primarily on the roles and responsibilities of Agency personnel involved in the contracting process, preparation of IGCEs, as well as guidance and procedures on review of contractor work plans.

Chapter 4 contains information on initiating a Work Assignment, focusing principally on review of contractor work plans and cost proposals.

The largest chapter and “heart” of the Manual is **Chapter 5**, which presents techniques for controlling contractor costs.

In the context of cost management, the last chapter of this document **Chapter 6** addresses several “closeout” issues; specifically, closeout of individual Work Assignments, EPA’s Annual Closeout Process, and the Agency’s contract closeout process.

1.2.3 Intended Audience

This Manual presents some basic guidelines on cost management practices and procedures for EPA personnel who have responsibility for managing Work Assignments under contracts that support the Superfund Program. It is applicable to those contracts where Contracting Officers, Project Officers and Work Assignment Managers are co-located (i.e., ARCs contracts and RAC contracts, as well as other Long Term Contracting Strategy (LTCS), contracts under which remedial work is done, and contracts that use Work Assignments as the ordering document).

1.3 THE SUPERFUND REMEDIAL AND ENFORCEMENT PROGRAMS

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, authorized EPA to compel parties responsible for contaminating hazardous waste disposal sites, such as industrial generators of hazardous wastes and landfill operators, to cleanup the sites or reimburse the government for clean-up costs. The traditional system for Superfund cleanups was divided into two programs — removal and remedial. Sites under the removal program are reported through Federal, State, and local governments, potentially responsible parties, and the public because of reporting confidentiality (i.e., involving the National Response Center). Some are “screaming emergencies,” while others are prioritized for short-term action as money becomes available. On the other hand, remedial activities consist of a series of steps to define and address long-term clean-up sites on the National Priorities List (NPL). Although many of the risks and response actions associated with the two programs are similar, the depth of investigation and cost and time expended to clean up a site are generally greater under the remedial process than for a removal action, since there are statutory restrictions on removal costs.

CERCLA also created the “Superfund” to finance cleanups when financially viable parties could not be found. Since CERCLA’s enactment, Congress has reauthorized the program twice, with spending authorizations totalling \$15 billion dollars. There are approximately 1,200 sites on Superfund’s National Priorities List. The Agency expects to spend \$40 billion cleaning up these sites and to add about 900 sites to the NPL during the 1990s. EPA has not quantified the average cost for a remedial site, but estimates the cost to implement clean-up remedies at \$25 million per site.



When a site is selected for cleanup and placed on the NPL, EPA or the parties responsible for the contamination begin a remedial investigation and feasibility study (RI/FS) to determine the clean-up method. The remedial investigation assesses the type and extent of contamination at the site, and the health and environmental risks presented by the contamination. The feasibility study uses data developed in the remedial investigation to evaluate various clean-up alternatives and assess their cost effectiveness. These studies are typically conducted as one project and referred to as the “remedial investigation/feasibility study” or remedial study. Under the Superfund Accelerated Cleanup Model, however some portions are part of the integrated assessment.

Following a remedial study, EPA selects the final remedy and documents it in a Record of Decision (ROD). The selected remedy, which can include removing or covering contaminated soil and building water treatment facilities, is then designed and implemented. A remedial design documents the site conditions and outlines specifications for the remedy; the remedial action is the actual construction work necessary to implement the selected remedy.

One of Superfund’s major goals is to have responsible parties pay for and conduct cleanups at abandoned or uncontrolled hazardous waste sites. The foundation of the program’s enforcement program is CERCLA’s strict, joint and several liability standard. Under this standard, each potentially responsible party (PRP) — those owners and operators, waste generators, and transporters at a site — may be held fully liable for all site clean-up costs regardless of waste share or fault.

Any one PRP can be fully liable, but not every PRP. A PRP can seek contribution for costs not attributable to its activities.

When CERCLA was reauthorized and amended by SARA in 1986, Congress reinforced and significantly strengthened the law’s enforcement provisions. SARA provided enforcement tools to facilitate settlement negotiations, and enhanced the enforcement measures available to EPA in the event that responsible parties do not settle. In addition, the Superfund Management Review

Team established the “enforcement first” concept to encourage or compel responsible party clean-ups rather than using the Trust Fund, and to integrate all EPA response and enforcement activities.

EPA can negotiate settlements with responsible parties to have them conduct or pay for site cleanups. If negotiations fail, EPA issues orders to responsible parties to complete site cleanup. EPA also can use Trust Fund monies to cover clean-up costs and attempt to recover the costs later through litigation. To conserve Trust Fund dollars for “orphan” sites, those where no liable, financially-viable PRPs exist, EPA’s top priority is to use all its enforcement tools and reach settlement agreements with responsible parties.

1.4 CONTRACTING IN THE REMEDIAL AND ENFORCEMENT PROGRAMS

1.4.1 Overview of Superfund Contracts

Contract support to the Federal Superfund program falls into five basic categories: (1) removal activities; (2) remedial response; (3) support services; (4) technical enforcement support; and (5) policy, program management, and administrative services.

Removal action contracts provide EPA Regional offices with two categories of support: (1) technical and management assistance for the removal program financed by the Hazardous Substance Response Trust Fund, the corrective action program financed by the Underground Storage Tank (UST) Trust Fund, and the oil spill prevention program under the Clean Water Act; and (2) clean-up personnel, equipment, and materials for removal program and corrective actions financed by the UST Trust Fund.

Remedial response action contracts provide EPA Regional offices with technical assistance and resources for clean-up activities, support of enforcement actions, and community relations activities.

Support services contracts provide special technical support services to EPA Regional offices and Headquarters personnel. Contracts cover safety



and technical training, demonstration of new or novel technology, laboratory analysis and sample control, quality assurance, aerial survey and mapping, and remote sensing.

Enforcement support contracts provide technical support to EPA Headquarters and Regional office personnel to enforce CERCLA.

Advisory and assistance, program management, and administrative services contracts support formulation of Superfund policy and implementation, as well as development and maintenance of automated data processing (ADP) systems and data handling services at EPA Headquarters and the Regional offices.

EPA uses private contractors, the U.S. Army Corps of Engineers (USACE), and the U.S. Department of the Interior's Bureau of Reclamation (BuRec) to perform Superfund clean-up work paid for by the government (Trust Fund and general revenues). The private contractors perform remedial studies, design remedies, and manage the construction of the remedies generally of less than \$15 million. USACE designs and manages remedies generally in excess of \$15 million through an Interagency Agreement (IAG) with EPA. The Agency also has an IAG with the U.S. Bureau of Reclamation to review contractor cost estimates, and designs, and perform special analyses.

Contractors generally work under two primary types of contracts: fixed-price and cost-reimbursement. Fixed-price contracts require a contractor to assume responsibility to perform the agreed-upon work within an established price. Cost-reimbursement contracts are used because they offer Agency managers flexibility in responding to emergencies, and are appropriate when the scope and nature of the work to be performed are uncertain or subject to change. Because they reimburse contractors for all allowable costs, cost-reimbursement contracts:

- Place high risk on the government and minimum risk on the contractor;
- Provide the contractor with little incentive to control costs; and

- Place a large administrative burden on both the government and the contractor to oversee, control, and identify contract costs.

EPA's Office of Acquisition Management (EPA's Agency-wide contracting unit), the Office of Emergency and Remedial Response (the Superfund program office), and personnel in the EPA Regional offices are responsible for managing Superfund contracts. Contracting Officers (CO) and their technical assistants in the Regional offices are responsible for the day-to-day management of contracts to ensure contractor compliance with their provisions and the Agency's contract policies and procedures. The CO is the only official authorized to commit the government to a contract and to modify contract terms. Technical assistants include the Project Officer (PO) and the Work Assignment Manager (WAM). EPA Regional Project Officers (RPOs) assign work to contractors, approve work assignment budgets, approve contractor invoices, and evaluate their work. The PO provides technical direction and oversees the contractor's work at all sites assigned under a contract. The WAM is responsible for managing and overseeing clean-up work at individual sites, and provides feedback to the CO on contractor cost, performance, and scheduling.

1.4.2 Alternative Remedial Contracting Strategy Contracts

EPA began its present remedial contracting strategy in 1988. By July 1989, the Agency had awarded 45 contracts across the country to 23 architecture/engineering firms to implement this system, called the Alternative Remedial Contracting Strategy (ARCS). The Strategy decentralized remedial contract management to the EPA Regional offices, and was intended to improve competition for clean-up work and improve contractor performance. The ARCS contracts replaced three large remedial contracts, called REM contracts, under which contractors conducted clean-up studies and investigations under one nationwide contract and two large zone contracts — each zone covering one-half of the United States.

The cost-reimbursement ARCS contracts are contracts with a ten-year period of performance and an original aggregate value in excess of \$6.6 billion dollars.¹ Contractors are issued work under Work Assignments issued by EPA. The contractor Work Plan must be approved by the Agency before work can begin at a site. The contracts reimburse contractors for all allowable costs and offer an award fee, or incentive payment, for performance excellence. Allowable costs fall into two categories: (1) site-specific costs; and (2) program management costs, which are costs that cannot be immediately linked with a specific site (i.e., multiple site use equipment, QA/QC plans, administrative costs, etc.). Continuing concerns about the amount of contract dollars devoted to non-site specific clean-up costs have led to Congressional limits on program management costs. The Agency's Office of Administration and Resources Management (OARM) issued guidance (*Guidance on Program Management Activities Under ARCS*, February 11, 1993) that divided program management costs into administrative support costs and technical clean-up costs. In addition, OSWER's Office of Emergency and Remedial Response (OERR) sets annual target ceilings for ARCS contract program management costs in response to Congressional guidelines.

ARCS contracts support site assessment, remedial planning, and remedial action activities at National Priorities List (NPL) sites. ARCS contracts incorporate performance incentives designed to give incentives based on performance throughout the period of performance. In addition, ARCS contracts promote continuity in site project management and execution. These provisions are intended to optimize the quality, timeliness, and cost efficiency of remedial activities. EPA has established a pool of contractors in each Region or multi-Region "zone" (e.g., EPA Regional offices in Dallas, Kansas City, and Denver have been aggregated into one zone, as have the offices in San Francisco and Seattle) by awarding as many as eight ARCS contracts in each area. Awards were made through the standard "Brooks Act" architect/engineering competitive process, and the subsequent allocation of work assignments to contractors in each Region or zone is accom-

plished through a structured decision making process. Performance is the principle criteria used to determine the quantity of work assigned to each contractor.

1.4.3 Technical Enforcement Support Contracts

The Technical Enforcement Support (TES) contracts provide analytical, technical, and management services for EPA's Office of Waste Programs Enforcement (OWPE) to plan, develop, implement, and evaluate programs, strategies, guidance, and regulations under the Agency's CERCLA/SARA and RCRA/HSWA enforcement programs. There are nine TES contracts currently in effect ("TES V" through "TES XIII"). TES XIII was awarded in February 1991 and is used by EPA Headquarters staff to acquire assistance in developing and evaluating nationwide implementation strategies, monitoring Regional and State activities, and providing enforcement support.

In addition to TES XIII, the Agency awarded eight Regional contracts, for which Headquarters provides oversight. Tasks for these contracts include providing expert witnesses, searching for parties responsible for problems at hazardous waste sites, evaluating comprehensive groundwater monitor data, and inspecting RCRA facilities and reviewing closure plans.

1.4.4 Enforcement Support Services Contracts

The new generation of enforcement support contracts are being procured to replace the expiring TES contracts. These Enforcement Support Services (ESS) contracts provide assistance to EPA in the management of enforcement activities at Superfund sites. Each Region has awarded an ESS contract on a cost-plus-fixed-fee (CPFF) contract. This type of contract provides for payment of (1) incurred costs and (2) a fee fixed at inception of the contract. Headquarter's role is to oversee and monitor all the ESS contracts on a national basis and to provide technical assistance on an as-needed basis.

The ESS contracts provide a wide range of services including potentially responsible party (PRP)

¹ Some options can no longer be exercised, therefore the value is decreasing every year.



searches and reports function. These contracts also allow the Regions to acquire support during negotiations; expert/litigation; cost recovery; as well as management and project support.

1.4.5 Long-Term Contracting Strategy for Superfund

In 1990, EPA developed the Long-Term Contracting Strategy (LTCS) (OSWER Directive 9242.6-07) for the Superfund program. The purpose of the strategy was to analyze the long-term contracting needs of the program and design a portfolio of Superfund contracts to meet the program's needs over the next ten years. This strategic planning effort was implemented in response to a recommendation in the 1989 Agency report, *A Management Review of the Superfund Program*.

In analyzing those requirements, the Agency highlighted several issues. Among them were the need for program integration, streamlining project management by minimizing contractor handoffs, flexibility in responding to changing program priorities and budgets, and enhanced competition.

The issues, analyses, and decisions contained in the strategy are the products of an Agency-wide task force comprising representatives from the EPA Regional offices, OSWER, OARM, and the Office of Small and Disadvantaged Business Utilization. The task force developed several contracting options, analyzed them, and selected elements of the options that best served each of the Superfund program functions.

The LTCS for Superfund is built on several key principles:

- The strategy supports an integrated "one program" approach to enforcement and site cleanup;
- The strategy enhances the competitive environment by reducing the size of contracts and creating more opportunities for small and disadvantaged businesses; and
- The strategy provides mechanisms for greater flexibility and improved oversight and cost

management by giving EPA Regional offices full responsibility for contracts management.

The second important phase of LTCS is implementation. The LTCS Task Force developed an *Implementation Framework* (OSWER Directive 9242.6-09) that outlines the approach and timeframes for implementation to ensure an orderly transition to a decentralized contracting system without program disruption. The implementation phase entails full planning for the phase-in of new contracts and monitoring of the award and administration of these contracts.

A structure consisting of three groups, each with distinct roles and responsibilities, was developed to serve as the framework to manage and coordinate implementation efforts. The LTCS Advisory Committee² coordinates and oversees overall implementation, Designated Leads plan and oversee Regional administration of each Strategy component, and Regional Liaisons serve as points of contact in each Region to facilitate implementation across Regional organizations. This framework provides the structure for implementation and problem resolution of the LTCS as the new contracts are initiated over the next five years.

Under the LTCS, a variety of new contracts will be awarded beginning in FY 1994. These contracts will provide maximum flexibility to the EPA program offices by structuring contracts on a functional basis rather than a program-specific basis (e.g., remedial and removal). LTCS is ongoing, and recent emphasis has focused on its interaction and integration with the concepts of SACM, designed to accelerate clean-up actions, and to mitigate threats to human health and the environment.

1.4.6 Response Action Contracts

In concert with its "one program" approach to enforcement and response, LTCS recommended integrating remedial and enforcement oversight responsibilities into a single response action contracting structure. Under this plan, all remedial activities, enforcement oversight, and non-time-critical removals will be combined under a single

² Recently incorporated into the Superfund Regional Management and Acquisition Council (SRMAC).



Regional contracting mechanism. These activities are presently contracted through three resources: remedial activities are performed under the Alternative Remedial Contracting Strategy (ARCS) contracts; enforcement oversight is done under the Technical Enforcement Support (TES) contracts; and non-time-critical removals are done through the Emergency Response Clean-up Services (ERCS) contracts.

The Response Action Contracts (RACs) are intended to play a major role in the effective implementation of SACM. The purpose of SACM is to streamline and accelerate Superfund site cleanups. SACM supports early action to remove immediate risk to human health and the environment. This will be accomplished through integration of remedial and removal activities, with focus on eliminating redundancies in the site assessment

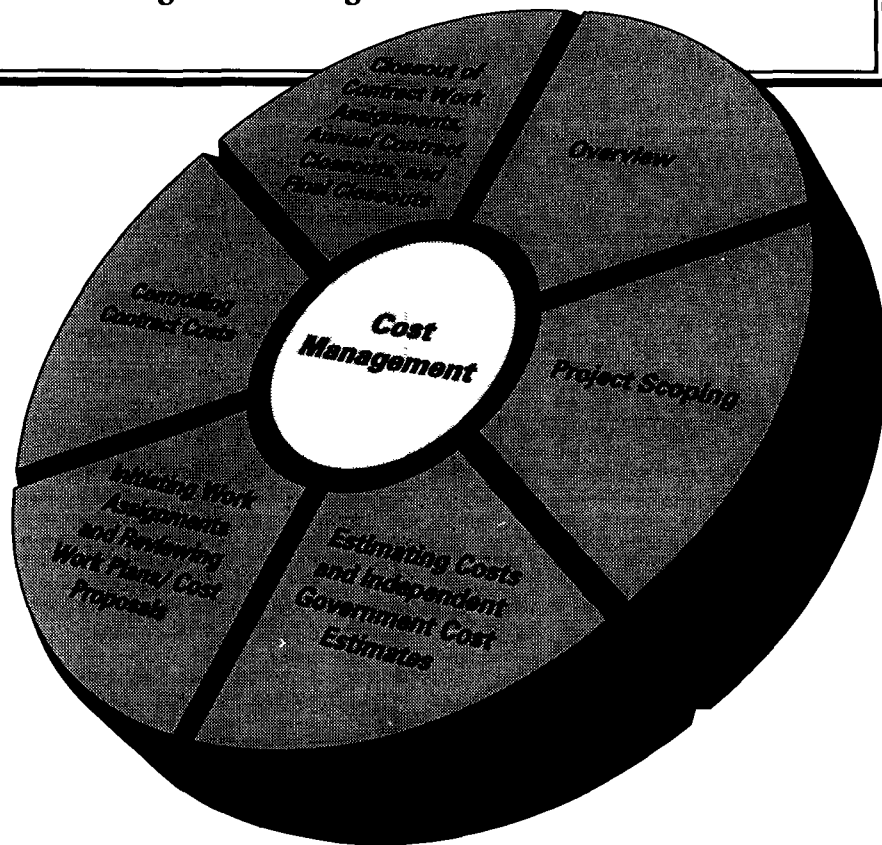
process and creating a one-step site screening and risk assessment process. In line with this effort, the Response Action Contracts have been designed to accomplish non-time-critical removals as well as traditional Superfund remedial actions.

The one-program approach is expected to reduce handoffs, promote program integration, and give the EPA Regional offices flexibility to pursue various enforcement options. Two or three response action contracts, available to each Region, will provide flexibility to respond to potential conflict of interest problems, and enhance post-award competition based on contractor performance. Based on Regional projections, the first ARCS contracts will expire in late 1994. Contract planning is underway to ensure that the new Response Action Contracts will be in place by that time.



CHAPTER 2 - PROJECT SCOPING

- 2.1 Chapter Introduction
- 2.2 Establishing Project Files
- 2.3 Identifying Work Assignment Objectives
- 2.4 Developing the Work Assignment Package





CHAPTER 2 - PROJECT SCOPING

2.1 CHAPTER INTRODUCTION

This chapter presents an approach to scoping work. Topics include establishing project files, identifying project objectives, and developing the Work Assignment Statement of Work (WASOW). There are many tools available to assist the WAM with project scoping. In addition to systems developed in the Regional offices, EPA Headquarters created the *Superfund Cost Estimating Expert System (SCEES)*, a computer model that uses site-specific data for scoping. Also available is the *Scoper's Notes*, a guide to RI/FS costing that develops ballpark cost estimates.

2.2 ESTABLISHING PROJECT FILES

The foundation of an effective cost management system includes utilization of good records management practices. Creating a project filing system is a logical first step in the project scoping process because it initiates the storage of documents (such as technical directives, monthly progress reports, and invoices) in a manner that enables easy retrieval for cost management purposes.

Creating and maintaining a good filing system also supports the Superfund cost recovery and enforcement programs. These programs depend upon the ability of Agency personnel to store and retrieve information in a legally-defensible manner. Contact the OSWER Records Management Officer or Regional Records Center for more information on the Agency-wide records management program, including applicable directives and guidance on records creation, retention, and disposition.

A model filing system is delineated in OSWER Directive 9242.6-02, "Guidance for Organizing ARCS Contract Files" (Appendix C). This directive recommends use of a standardized contract management filing system in every Region to avoid unnecessary duplication of records. The system serves three functions:

- **Simplifying access and retrieval.** The first document file will be an index listing the file contents. Other documents should be categorized and arranged in separate file sections or subsections.
- **Providing continuity.** Documents related to costs, site activity, contract management, and contractor performance should be retained. An organized filing system provides access and continuity if personnel turn over.
- **Facilitating review.** Good file organization will facilitate contract management oversight and site reviews.

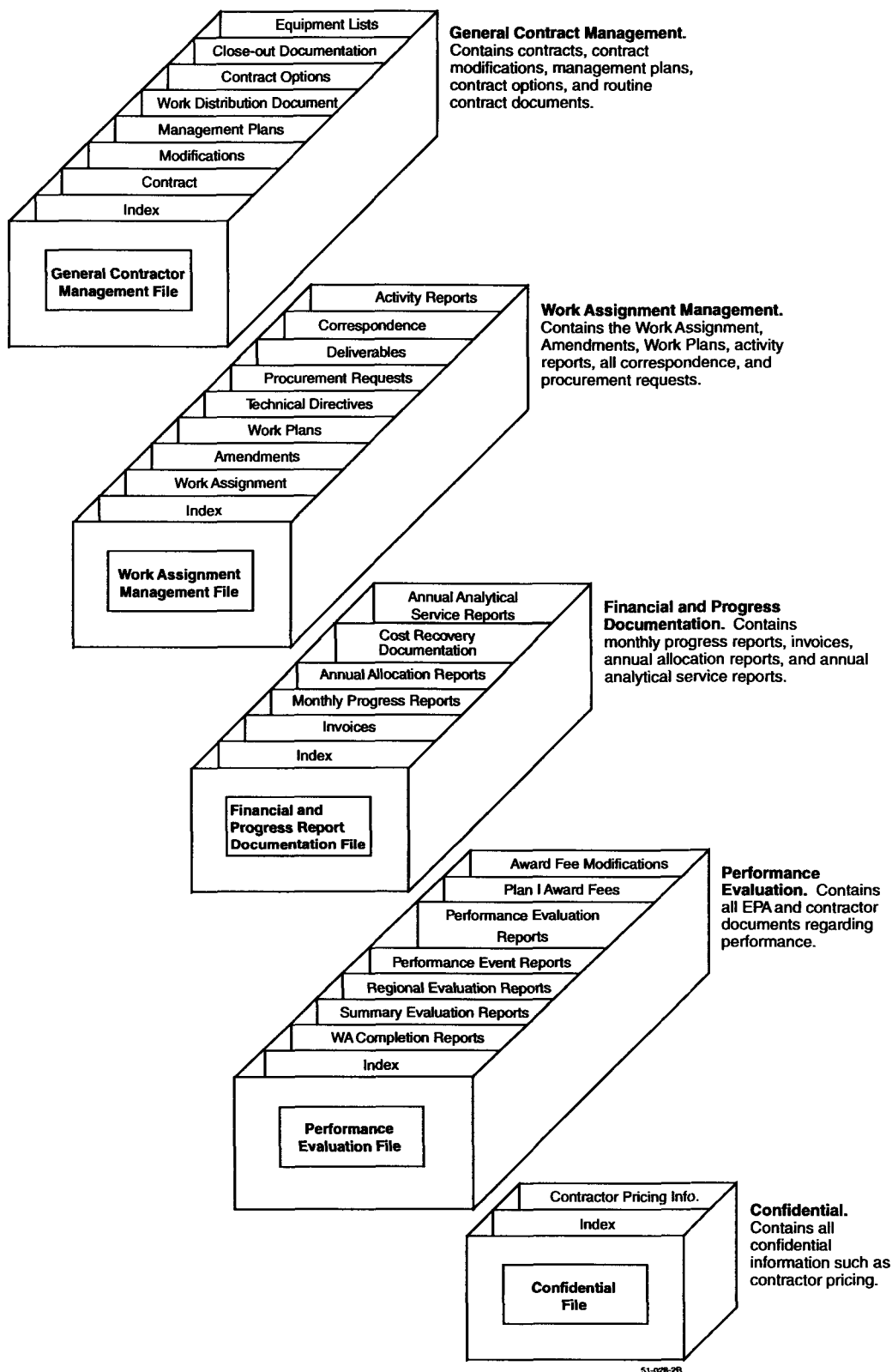
Documents should be organized in five files. Each file should contain an index listing each section (first document in each file); sections and subsections (clearly labeled); and single category documents filed together in separate sections or subsections in reverse chronological order (most recent documents first). See Exhibit 2-1 for guidance on file organization.

2.3 IDENTIFYING WORK ASSIGNMENT OBJECTIVES

The next step in the scoping process is evaluating the overall merits of and support for the Work Assignment concept, including verifying that the proposed activities could not be performed "in-house" by the Government. The WAM may wish to evaluate the possibility of using in-house resources, considering available personnel, staff expertise, necessary technologies, materials and equipment, and associated costs. These cost related elements which should be used in comparing in-house and contracting-out costs are illustrated in Exhibit 2-2. In addition, the contract vehicle selected must have resources (i.e., level of effort hours) remaining to perform the work, and the proposed Work Assignment concept must fall within the scope of the contract. Exhibit 2-3 will assist the WAM in identifying Work Assignment objectives.



Exhibit 2-1 Document Organization





2.4 DEVELOPING THE WORK ASSIGNMENT PACKAGE

Monitoring contractor costs begins with the initiation of a Work Assignment Package. Under cost-reimbursement contracts, the Work Assignment Package consists of the SOW (divided into tasks/subtasks), estimate of the level of effort (expressed in labor hours), products and deliverables warranted under the Work Assignment, Work Assignment timetable/period of performance, and an Independent Government Cost Estimate (IGCE). Exhibit 2-4 displays the Work Assignment components.

The Work Assignment should clearly and completely outline the task requirements because it will be used as the foundation upon which the contractor will develop the Work Plan and, will consequently drive all future activity under the Work Assignment. Exhibit 2-5 is designed to assist the WAM in assembling a Work Assignment Package. The following subsections describe in detail the components of a Work Assignment Package.

In preparing a Work Assignment, remember the underlying question: Has the Government provided enough information to enable the contractor to develop a detailed Work Plan/Cost Proposal?

2.4.1 Work Assignment Form

The Work Assignment Form (WAF) prepared by EPA is the document which accompanies the Work Assignment Package from Work Assignment issuance to Work Assignment close-out. The WAF is a summary cover sheet containing the contract and Work Assignment title; number; and purpose; authorized level of effort (LOE), period of performance, authorizing EPA signatures, and contractor acceptance. WAFs may vary between contracts, although they should include this basic information. See Exhibit 2-6 for an example of an Office of Emergency and Remedial Response (OERR) Work Assignment Form.

Exhibit 2-2 Comparative Costs of In-House and Contracting-Out Performance of Products and Services

In-House Performance	Performance by Contracting-Out
Direct Material	Contract Price
Material Overhead	Transportation
Direct Labor	Contract Administration
Fringe Benefits	Government-Furnished Property
Other Direct Costs	Standby Maintenance
General and Administrative	Other Costs
Inflation	General and Administrative
Cost of Capital	Costs of Capital on GFP
One-Time New-Start Costs	Utilization of Government Capacity
Deductions	One-Time Conversion Costs
Other Costs	Deductions
	General Income Taxes
	Net Proceeds from Disposal of Assets
	Other Costs
Total	Total

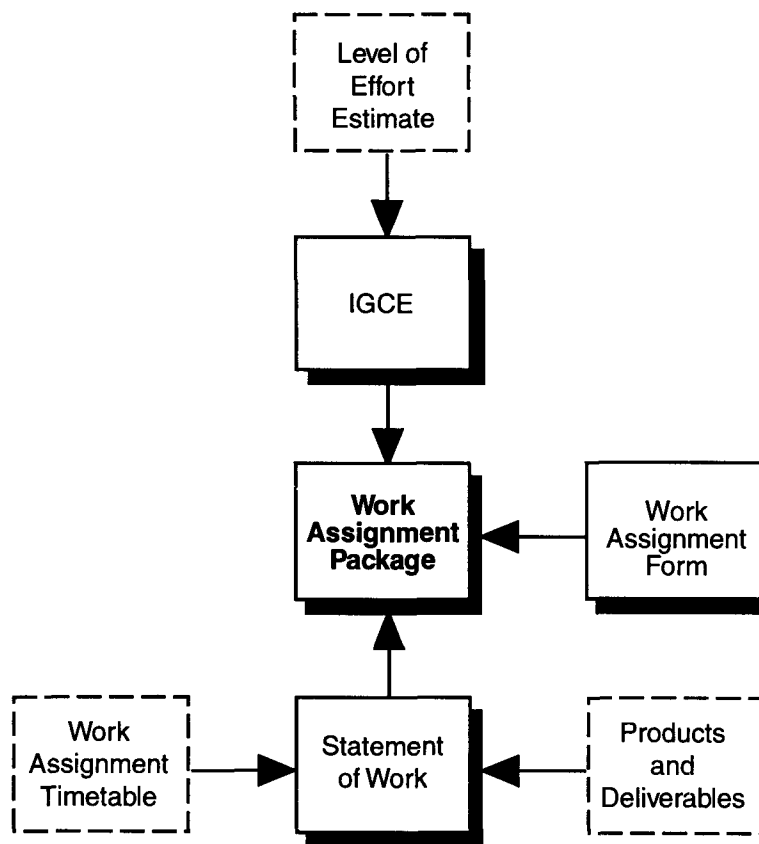
52-028-30



Exhibit 2-3 Checklist for Identifying Work Assignment Objectives

- ☐ Are the tasks, services and large segments of the work necessary to accomplish the project mission identified?
- ☐ Are all the major tasks and services identified and further defined into smaller tasks?
- ☐ Are these tasks written in terms of: (1) "input" (what is needed); (2) the steps required to do the job; and (3) "output" (what the work will produce)?
- ☐ Does the Work Assignment specify as to whether the Government or the contractor will furnish facilities, equipment and material?
- ☐ Does the Work Assignment identify special qualifications, skills, certifications, educational accomplishments, and experience, determined by task?
- ☐ Does the Work Assignment adhere to the various EPA procedures, regulations, and laws that may have a bearing on the work to be done?
- ☐ Is the Work Assignment detailed so that the cost of each task can be determined?

Exhibit 2-4 Components of the Work Assignment Package



51-028-4A



Exhibit 2-5

Checklist for Reviewing a Work Assignment

Statement of Work

- ☐ Is the SOW specific enough to permit the Government and the contractor to estimate the probable cost, required levels of expertise, personnel, and other resources needed to accomplish the tasks?
- ☐ Are specific duties/tasks/obligations stated? Will the Government be able to determine whether the contractor is complying with the SOW?
- ☐ Is the SOW written so that it is clear what the contractor's obligations/tasks are and when they must be accomplished?
- ☐ Is the appropriate reference document cited? Is the reference correct? Is all of it pertinent to the task, or should only portions be referenced?
- ☐ Has extraneous material been eliminated?
- ☐ Have all requirements for data been specified separately in the Contract Data Requirements List (CDRL)?
- ☐ Have appropriate technical experts reviewed draft copies of the SOW? Have recommendations from these reviews been included in the SOW?
- ☐ Has travel been considered in all tasks?

Products and Deliverables

- ☐ Has the contractor been given enough information to specify products and deliverables?
- ☐ Are all deliverables identified in the SOW?
- ☐ Are interim deliverables considered (where applicable)?

Timetable

- ☐ Are potential problems and/or constraints identified?
- ☐ Are deadlines and milestones identified?
- ☐ Is enough time allotted for predictable activities?

Independent Government Cost Estimates (IGCEs)

- ☐ Are costs based on historical and/or cost estimating tools?
- ☐ Are cost estimating relationships and results used effectively?
- ☐ Are SOW tasks broken down by labor category, summed, and multiplied by hourly rate?
- ☐ Are G&A, overhead, and fee rates established?
- ☐ Are other direct costs identified?

Level of Effort

- ☐ Is the Work Assignment cost effective?
- ☐ Does the Work Assignment define a reasonable division of senior- and junior-level staff?
- ☐ Does the Work Assignment give the contractor enough information to identify ODCs?



The LOE reported in the WAF is important for the purposes of cost management. Any modification in the Work Assignment LOE must be noted on this form. The WAF should always reflect up-to-date information and display the original LOE plus any addition or deletion to that LOE. See section 5.6 for more information on contractor claims and modifications.

2.4.2 Statement of Work

The Statement of Work prepared by EPA is the heart of the procurement action. While the Agency is free to tailor the individual WA SOW to a particular activity, the scope of the WA SOW must be within the overall scope of the contract. The purpose of the SOW is to provide a detailed description of specific requirements needed to fulfill the goals of the Agency. It also serves as the basis for determining both the contract and Government cost, and ensures comparability and equity in the cost analysis. Failure to adequately describe what the Government needs via the SOW may encourage a contractor to build in costly contingency allowances and disparity with the Government's cost estimate. When preparing the SOW, it is especially important to carefully define tasks that fall within the sensitive contracting areas defined by the Agency (i.e., activities deemed inherent governmental functions).

The SOW includes a work breakdown structure, duties and tasks, frequency of performance of repetitive functions, ground rules in estimating assumptions, preliminary equipment and Government Furnished Equipment requirements, and a Work Assignment schedule. The following items should also be incorporated in an SOW:

- A clear and complete description of the project objectives;
- Background information relevant to the requirement (sources);
- Any special technical considerations;
- A detailed description of technical and management requirements; and
- A description of the deliverable items (structure, form, etc.).

The Statement of Work should clearly state WHAT is to be done without prescribing HOW it is to be done.

Products and Deliverables

Because it has such a tangible payoff, preparing a deliverable can be one of the most enjoyable and satisfying parts of task management. To ensure production of final deliverables that are of high quality and are submitted to EPA in a timely fashion, the WAM must identify the series of tasks and subtasks that culminate with preliminary and final products/deliverables. Questions to consider in developing the list of deliverables include:

- What type of products are most appropriate? A report or a briefing? A workshop? A database? Guidance? Who is the target audience? The type of deliverable selected will affect the amount, pricing, and mix of resources required;
- When should interim and final deliverables be planned? Considering interim products as well as final ones will help the WAM conceptualize the phasing and pacing of the work. If an interim product is: (1) critical to proper formulation for the final deliverable; (2) essential to decision making; or (3) will receive widespread scrutiny, include it in the Work Assignment; and
- Who should review the interim and final products? Have the procedures for acceptance of contractor deliverables been clearly presented? For example, senior management in a Regional office may require review and approval of major deliverable prior to their formal approval.



Exhibit 2-6 Work Assignment Form

Contract Number: _____ Work Assignment Number: _____ Amendment Number: _____ Contract Period: _____	Contractor: _____												
Purpose: <div style="margin-left: 40px;"> <input type="checkbox"/> Initiate New Work Assignment <input type="checkbox"/> Amend Work Assignment <div style="margin-left: 20px;"> <input type="radio"/> SOW <input type="radio"/> LOE </div> <input type="checkbox"/> Other </div> Comments:													
Work Assignment Title: _____ Level of Effort (LOE) Authorized: _____													
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Previous</td> <td style="width: 40%;">_____</td> <td style="width: 10%;">\$</td> <td style="width: 30%;">_____</td> </tr> <tr> <td>This Action</td> <td>_____</td> <td>\$</td> <td>_____</td> </tr> <tr> <td>Total</td> <td>_____</td> <td>\$</td> <td>_____</td> </tr> </table>		Previous	_____	\$	_____	This Action	_____	\$	_____	Total	_____	\$	_____
Previous	_____	\$	_____										
This Action	_____	\$	_____										
Total	_____	\$	_____										
Period of Performance: From: _____ To: _____ <small>*Effective date of this action is Contracting Officer's signature date unless otherwise specified.</small>													
Approvals													
(Signature)	(Date)	(Mail Code)	(Phone #)										
Work Assignment Manager													
Branch Approval													
Division Approval													
(Funds are available from Division Allocation)													
Project Officer													
Contracting Officer													
Contractor's Acceptance													
<small>(Required within five (5) days after receipt from the Contracting Officer)</small>													
Signature: _____	Date: _____												
Title: _____													



Although the product/deliverable planned is rarely abandoned for a completely different one, reshaping is often necessary.

The Work Assignment Timetable/Period of Performance

Many variables affect the Work Assignment timetable. Some can be controlled by the WAM, others cannot. It is impossible to extract "rules of thumb" on how long various activities should take to complete — the variables involved are too diverse. The timetable for these activities is not easily predicted (i.e., modification of deliverables, internal reviews, QA/QC). On the other hand, certain activities are generally predictable and will cause a task to take more time. In developing the Work Assignment timetable the WAM should consider the scheduling constraints and identify any internal deadlines or milestones that deliverables or closeouts should meet (e.g., SCAP submission, Regional on-site review, legislative deadlines, budget cycle input). The Work Assignment timetable should also be designated to allow for predictable contractual activities. Exhibit 2-7 illustrates some of these activities and provides completion time *estimates*.

2.4.3 Independent Government Cost Estimates (IGCEs)

According to OSWER Directive 9242.2-06, effective January 31, 1992, an independent government cost estimate (IGCE) must be developed by the WAM, in concert with the cost estimators, for any Work Assignment estimated to exceed \$25,000 under contracts that utilize a Work Assignment administrative process. This requirement is applicable to both new Work Assignments and increases in existing Work Assignments. The IGCE will be used by the WAM as a tool in negotiating the Work Plan budget with the contractor, and for documenting the resulting agreements in the contract file. This cost estimate is a top down cost analysis used to analyze the reasonableness of the contractor's cost proposals and subsequent cost increases.

**Exhibit 2-7
Scheduling of Tasks**

Activity	Time Allotment
Holidays and vacations	2 weeks
State review	1 month
Regional review	3 weeks
EPA review	2 weeks
Other agency review	1 month
Red border/rulemaking review	varies
Public participation	6 weeks
Large events with complex logistics	3-5 months
Contract cycle	varies
GPO or EPA printing	4-6 weeks*

* Based on previous experience.

51-028-5A

NOTE: The IGCE must be developed independently, by government employees, without input from any contractor. The IGCE shall not be forwarded to any contractor. For more information on cost estimating and IGCEs see chapter 3.

Level of Effort

To determine the level of effort necessary to complete the Work Assignment, the WAM should prepare an estimate of the staffing mix, keeping in mind how many hours are needed for oversight, research, data development, etc. The staff mix should be divided into senior and junior level categories and when added together, reflect the total estimate. Areas identified in section 2.3 will assist the WAM in evaluating the cost effectiveness of a Work Assignment. Attempting to answer the



questions listed below may be a useful method in estimating the level of effort:

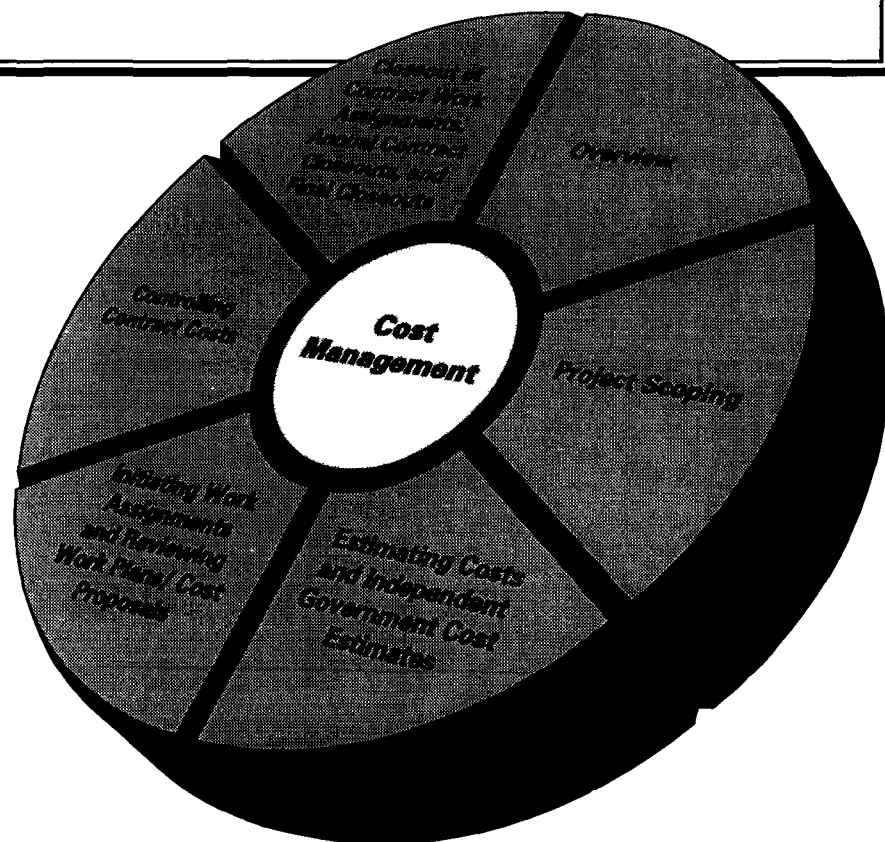
- Is the task cost effective? What are the full range of resources needed to complete the task?
- How many technical hours are necessary to complete the task?
- How much participation is necessary from the senior contractor staff? From junior levels?

When scoping level of effort, determine the length of time necessary for one or two seasoned professionals with ideal expertise to complete the task. Then put in some slack for realities: start-up costs, learning curves, ups and downs of staff allocation, time for EPA review, and time for QA/QC. All these factors increase the time and resources needed for task implementation.



CHAPTER 3 - ESTIMATING COSTS AND INDEPENDENT GOVERNMENT COST ESTIMATES

- 3.1 Chapter Introduction
- 3.2 Preliminary Procedures for Estimating Costs
- 3.3 Independent Government Cost Estimates
- 3.4 Preparing Independent Cost Government Estimates





CHAPTER 3 - ESTIMATING COSTS AND INDEPENDENT GOVERNMENT COST ESTIMATES

3.1 CHAPTER INTRODUCTION

This chapter presents an approach to cost estimating. Topics include procedures for project scoping/estimating costs and procedures for preparing an Independent Government Cost Estimate (IGCE) for remedial and enforcement Work Assignments in the Superfund Program. The chapter also outlines tools available to assist the cost estimator in collecting and assembling data.

For more information on IGCEs, see the Office of Solid Waste and Emergency Response (OSWER) Directive 9202.1-12 in Appendix D.

This guidance provides information and establishes minimum requirements regarding the roles and responsibilities of WAMs, POs, and COs for preparing IGCEs, performing reviews of the contractor's Work Plan and budget, and conducting and documenting negotiations.

3.2 PRELIMINARY PROCEDURES FOR ESTIMATING COSTS

Before estimating contract costs, a complete project plan is necessary. In order to estimate the cost of a project it is important to have a clearly defined Statement of Work (SOW) and detailed specifications. With the project being clearly defined it is then possible to estimate the costs by preparing an IGCE as described in section 3.3. (For more information on the components of a project plan, see section 2.4.) There is no formal procedure for preparing an IGCE. Although, a step-by-step process; planning, organizing and conducting a project in the same manner as a contractor will produce a reliable IGCE. A general approach to cost estimating is described in the following steps.

3.2.1 Define the Work Assignment

The cost estimator must define and thoroughly understand the contract work in detail; the scope of work, the Work Breakdown Structure (WBS), the schedule, the milestones and data requirements. This will ensure that the cost estimate is in compliance with the SOW.

3.2.2 Collect and Assemble Data

The cost estimate is only as good as the data upon which it is based. All data that are related to the contract work should be assembled. This includes comparative data from similar past or current Work Assignments. The data should cover as wide a spectrum as possible, financial and non-financial, quantitative and non-quantitative, historical and non-historical. OSWER Directive 9242.2-06a provides information regarding the availability of tools, databases, and assistance for developing IGCEs for remedial work assignments. This Directive is included as Appendix E.

Some of these tools that are useful in preparing an IGCE include the *Superfund Cost Estimating Expert System (SCEES)*, a computer model that uses site-specific data to develop an IGCE and the *Scoper's Notes*, a guide to RI/FS costing that develops ballpark cost estimates. Other cost estimating software models which may be helpful include:

- **Granular Activated Carbon:** This program shows granular activated carbon costs and performance for the remediation of hazardous waste sites or drinking water treatment.
- **Air Stripping:** This program shows air stripping costs and performance for the remediation of hazardous waste sites or drinking water treatment. This program is also used for cost comparisons of the treatment technologies.



- **M-CACES Gold:** This engineering or bottoms up program is used for estimating construction costs. The databases include unit price, crews, assemblies, labor rates, equipment rates, and models.
- **Invest Estimating Software:** This parametric or top down program is used to model and estimate the cost of remediation work. The package contains a RI/FS model, a RD model, RA technology models, and site work and utility models.
- **Engineering Method:** The engineering method involves the examination and definition of separate task elements at the lowest work breakdown structure (WBS) detail level and the application of factors for non-estimated elements, such as quality assurances, project management, etc. In other words, the estimator starts at the lowest level of identifiable work with the EPA CERCLA Guidance and specifications, identifies each labor task, tools, production operations, and materials required to accomplish the work. General factors are then added based on the direct labor estimated. The individual items are then added together forming the “bottoms-up” cost estimate.

3.2.3 Cost Estimating Methodologies

To arrive at a total scope of work cost estimate, you must determine the cost estimate of every task (element) and subtask (sub-element) defined in your WBS and SOW as well as present the rationale behind every estimate. There are four cost estimating methodologies available to assist the estimator: Analogy, Engineering, Parametric, and Extrapolation.

- **Analogy Method:** The Analogy method compares a new Work Assignment (scope of work) with an existing Work Assignment, for which we have accurate cost and technological data.

Uncertainty in an analogy cost estimate is due to the subjective evaluations made by the technical staff and cost estimators. In most cases, actual technical comparisons can be made. The problem is to develop a cost relationship based on technical differences. The estimator does not have to use only one analogous Work Assignment to compare with the Work Assignment being estimated. For example, you may estimate the cost of an RI/FS TASK 1 Project Planning by finding a previous Work Assignment for the Work Plan that describes the Community Relations Plan (CRP), Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP), and the Health and Safety Plan (HSP), etc. The key is to make a single comparison for each Work Assignment task or subtask evaluation. The total estimate will involve many single analogous cost estimates.

The technique(s) used in discrete work element estimates may be any one of the techniques available. For example, the estimator may use an analog for a like element of work, or a parametric cost estimate from a general industry database of like work elements. The estimator may also use a set of work standards based on work activities such as drilling a 2" hole, 5 feet deep in 2 minutes, hauling 8 tons of soil per mile, geological surveys of comparable acres with lead contaminants, etc.

The greatest uncertainty in this type of cost estimate is due to the effect of the added multiplicative factors on the estimated direct labor base. The compounding effect can result in large errors at the summation of the estimated elements. This is the reason why the government requires that a “Price Analysis” be conducted after a “Cost Analysis” has been performed.

- **Parametric Method:** The parametric method uses a database of like elements and generates an estimate based on some selected task performance or design characteristic. This assumes that there is a relationship between some performance parameter such as timeliness, comprehensiveness, thoroughness (independent variables) and the Work Assignment’s cost (dependent variable). The most significant factor in parametric cost estimating is the requirement for a database. Technology enhancements that are not



reflected in the database, but which are embodied in the Work Assignment will lead to erroneous cost estimates. Attempting to estimate the cost of a single contaminated site using a multi-contaminated (surface, subsurface, aquifer, and air) database would yield a much higher cost estimate on our current Work Assignment.

- **Extrapolation Method:** Extrapolation is the preferred estimating method. This technique develops estimates by extrapolating from actual costs, usually from a previous Work Assignment in the same series (types of RI/FS, RA, RD, etc.). It is probably the more accurate estimating methodology.

The accuracy of the extrapolation method depends on the assessment of the differences between the Work Assignment (Work Plan or site) being estimated and the prior Work Assignment (Work Plan or site). Obviously, the closer the two Work Assignments are alike, the less uncertainty.

Comparisons to a previous Work Assignment (Work Plan or project site) will require adjustments to compensate for changes in the current Work Assignment (Work Plan or site). These differences can be factored accurately into the estimate using historical information from previous Work Assignments; Contractors Monthly Cost/Performance Reports, trade magazines, journals, industry specific estimating handbooks (construction), etc.

3.2.4 Use Cost Estimating Relationships to Develop the Estimate

The information in the SOW and the data collection is used to develop relationships between the cost of something dependent on a certain set of variables. An estimate or a series of estimates is then developed involving judgement and discretion. These quantitative relationships are a combination of information based on the statement of work and the non-qualitative data collected in the data collection step described in section 3.2.2 and the cost estimating methodologies described in section 3.2.3.

3.2.5 Present Results

The best estimate of cost may be ineffective if it is presented in a manner that cannot be understood. The method of presentation depends on the nature of the work. For example, if uncertainty exists in the work and a best estimate cannot be made, present the cost estimate as a series of ranges rather than a single point estimate. All assumptions made in preparing the estimate should be documented in the project files for future reference.

3.2.6 Determine Government Objectives

The objective of this procedure is to obtain the commitment of the Program Office to manage the work within the Government's estimate. The estimate should not be used as absolute, instead it should be compared with other government estimates and contract cost experiences.

3.3 INDEPENDENT GOVERNMENT COST ESTIMATES

OSWER Directive 9242.2-06, dated January 31, 1992, requires the development of an IGCE for any new Work Assignment or Work Assignment modification expected to exceed \$25,000. An IGCE is the Government's internal estimate of the cost to accomplish the SOW or solicitation specifications. It will be used by the Work Assignment Manager (WAM), Project Officer (PO), and Contracting Officer (CO) as a tool in negotiating the Work Plan budget with the contractor and for documenting the resulting agreements in the contract file. This cost estimate is also used to analyze the reasonableness of the contractor's cost proposals and subsequent cost increases.

The IGCE shall be developed independently by EPA personnel without input from any contractor and shall not be forwarded or otherwise made available to any contractor. IGCEs shall be marked "CONFIDENTIAL-FOR OFFICIAL USE ONLY".



The WAM is responsible for the development of the IGCE. Where in-house cost estimators are available, the WAM may utilize these individuals when developing the IGCE. If the WAM intends to extensively involve cost estimators in the IGCE process, it is essential that estimators be kept informed and involved from the earliest time possible.

IGCEs generally fall into two categories: those consisting mostly of level of effort (LOE) hours, and those that not only contain LOE but need to estimate the anticipated cost of construction as well. OSWER has issued guidance on contractor program management costs under ARCS contracts (Appendix F).

3.3.1 Level of Effort Estimates

LOE estimates shall be based on supporting data such as historical information from previously completed work, cost estimating guidelines, engineering standards, or professional judgement. All assumptions, including rationale, used in developing the IGCE shall be clearly defined in writing and shall be part of the IGCE package. Estimates must, at a minimum, be broken out by task and subtask as outlined in the SOW, and by cost element such as labor, travel, other direct cost, subcontract expense, overhead, general and administrative (G&A), and fee. The estimate shall be realistic of the resources necessary to accomplish the tasks detailed in the SOW. The estimate shall not be structured to equal the funding document accompanying the Work Assignment Form (WAF).

One of the most important elements in the Government cost estimate is the estimate for labor hours. Labor hours must be estimated by skill category, professional (P) level and technical (T) level, as defined in the contract, and by task.

The IGCE must be prepared before the CO will accept the procurement request. This IGCE can be considered a preliminary estimate prior to having a technical scoping meeting with the contractor if desired, or a final estimate when no scoping meeting is required. A preliminary estimate is defined as the total LOE and dollar amount for all work anticipated in the SOW. The

major assumptions and rationale shall be included with the preliminary estimate. If a technical scoping meeting is required (limited solely to the technical aspects of the assignment, and not involving cost) the preliminary estimate must be revised to reflect any changes made to the SOW and then it will be considered the final estimate. In all cases, the final IGCE shall be completed prior to receipt of the Work Plan. In the event that a technical scoping meeting is not held, the IGCE shall accompany the SOW and shall be forwarded to the CO as part of initiation of the Work Assignment. Estimates shall be signed and dated by the WAM and the estimator/coordinator or PO (if involved in the IGCE preparation).

Where the contract SOW presents a WBS with specific, standardized tasks, the tasks presented in the SOW and the IGCE shall be organized, structured, and presented in a manner consistent and comparable with the contract SOW.

When the SOW and IGCE expand the activities or increase the level of effort to be performed in an approved Work Plan, the tasks in the SOW and IGCE shall be organized, structured, and presented in a manner consistent and comparable with the tasks presented in the approved Work Plan.

Current procedures for expanding LOE to an approved Work Plan include revising the IGCE to include old LOE plus the new LOE. It is important to keep the original LOE separate from any additional LOE. The procedures for expanding LOE include WAM determination that an increase is necessary. The WAM prepares a WAF (Amendment to Final Work Plan Approval) and a Procurement Request (PR). A PR will be necessary only if there is a change in dollars. The PO reviews and concurs with the WAF and submits it to the CO for approval. When the contractor makes an initial request for increased LOE, the WAM should ask for back-up information to support the request.

3.3.2 Construction Cost Estimates

Estimates for the Remedial Action are developed first at the RI/FS stage, amended during the Remedial Design (RD) process, and finalized based upon the solicitation/specification package.



The estimate at the RI/FS stage is a preliminary estimate which may range as much as plus or minus 50 percent. Construction cost estimates (CCEs) are developed later in the process. The CCE is a detailed estimate itemizing the principle elements of the cost to the contractor (including indirect costs and profit) to perform the work required by the specifications. The CCE is developed by EPA or other Federal or A&E contractor sources as discussed in this section. Detailed CCEs are developed using a step-by-step process, planning the project in the same manner as a contractor would plan, organize, and conduct it. They are based on the type and quantities of labor, equipment, and material required to perform the work. Consideration should be given to production rates, projected weather delays, schedule impacts, site accessibility, safety, haul routes and distance, and availability of narrative addressing site visits and the facts and assumption used in the preparation of the estimate, as well as specific references to source material used. OSWER Directive 9355.5-01/FS, dated September 1989, provides guidance on processing ARCS construction contract modifications.

The A&E contractor to whom the remedial design is awarded may or may not be specifically tasked to develop a detailed CCE as part of the design process. Listed below are the alternative methods that the Regions should use in the development of CCEs.

Use of EPA Staff. For EPA Regions having in-house applicable construction experience and technical expertise, the CCEs should be developed using available staff resources. This will serve as EPA's official CCE for the Remedial Action. If this approach is taken, the A&E contractor should not be tasked to develop a CCE (such duplication of the effort would not be cost effective). This CCE will become the subcontract portion of the Remedial Action IGCE if it is provided to the prime for subcontracting.

Use of Other Federal Agencies to Review A&E Contractor CCE. If Regional staff require assistance because of work load or lack of technical expertise in project construction, the A&E contractor will prepare the CCE and the WAM should access the technical expertise and knowl-

edge of other federal agencies, such as the Bureau of Reclamation (BuRec) or U.S. Army Corps of Engineers (USACE), through inter-agency agreements, to assist in reviewing the A&E contractor's estimate. Once the contractor's CCE has been reviewed, modified if necessary, and approved by the EPA, it shall serve as the EPA's official CCE. This CCE will become the subcontract portion of the Remedial Action IGCE if it is provided to the prime for subcontracting.

Use of other Federal Agencies to Develop CCE. If Regional staff require assistance because of work load or lack of technical expertise in project construction, the WAM should access the technical expertise and knowledge of other federal agencies, such as the BuRec or USACE, through inter-agency agreements, to develop a CCE based upon the A&E contractor's solicitation/specification package. Once the other agency's CCE has been reviewed, modified if necessary, and approved by the EPA, it shall serve as the EPA's official CCE. If this approach is taken, the A&E contractor should not be tasked to develop a CCE (such duplication of effort would not be cost effective).

When the WAM chooses to use another federal agency to develop the Remedial Design, the responsibility for the development of the detailed CCE is incorporated as part of the SOW and Interagency Agreement (IAG). This CCE will become the subcontract portion of the Remedial Action IGCE if it is provided to the prime for subcontracting.

3.4 PREPARING INDEPENDENT GOVERNMENT COST ESTIMATES

To arrive at a total Work Assignment cost estimate, the cost estimator must determine the cost of every task/subtask defined in the Work Assignment WBS/SOW and the rationale for that estimate. Contractors incur costs in two broad categories, direct costs and indirect costs. Direct costs are costs that can be directly associated with a particular project or contract. Examples of direct costs include direct labor, materials, travel, equipment, and other direct costs (ODCs).



Indirect costs are not directly associated with a particular contract but are necessary for the work to be done. Examples of possible indirect costs include General and Administrative expenses (G&A) (e.g. management salaries, utilities, office supplies, telephone, etc.) and overhead. Each element (labor hours, travel, material, equipment, ODCs, etc.) is broken down into costs for the services needed for that task. Because such a large percentage of EPA's contracts are labor intensive, a good estimate for labor is fundamental to a clear, concise and complete IGCE.

Exhibit 3-1 presents the fundamental components and basic procedure for preparing an IGCE, while Exhibit 3-2 illustrates a computational example for an IGCE.

3.4.1 Labor Hours

Identify the number of labor hours needed by professional labor category for each task and subtask in the Work Assignment. This estimate includes all labor hours regardless of labor category.

3.4.2 Travel

Identify all travel requirements for each task. Travel may be estimated based on historical averages by travel area and adjusted for any additional travel projected for the specific Work Assignment and for any increased costs due to inflation.

3.4.3 Material

Identify material requirements for each task. Material may be estimated based on historical material needed and averages (such as non-CLP testing costs, subcontractor costs for hauling soils, etc.). It should be adjusted for any unique needs specified in the SOW. Estimates for material requirements also may be adjusted for inflation. When applicable, lease *versus* purchase analysis is performed for determining the best price for the Government.

3.4.4 Government Furnished Property

Identify government furnished property (GFP) for each task. GFP should be estimated based on historical records maintained by Government Property Administrators.

3.4.5 Construction Costs

Identify costs to perform the solicitation specifications considering weather delays, schedules, production rates, safety, haul routes and distances, and site visits. These costs should reflect all direct and indirect charges to the project plus profit.

3.4.6 Other Direct Costs (ODCs)

Identify other direct costs (ODCs) for each task. ODCs may be estimated using historical averages from similar activities and adjusted for any known specific needs and for inflation.

3.4.7 Indirect Costs and Fee or Profit

Identify any indirect costs and fee or profit.



Exhibit 3-1

Procedures for Preparing an Independent Government Cost Estimate

1.	Estimate hours required to perform each WA task by labor category. Sum total hours, across all WA tasks, for each labor category in each work assignment type = <i>Total hours per labor category</i>
2.	Multiply hours per labor category x hourly rate per category = <i>Total costs per labor category</i>
3.	Sum the costs for all labor categories = <i>Total WA labor costs</i> (unloaded, i.e., no overhead)
4.	Multiply labor costs x contract overhead rate (e.g., 50%) = <i>Estimated overhead</i>
5.	Estimate other direct costs for the Work Assignment (e.g., consultants, subcontractors, travel, photocopying, computers) = <i>Estimated Total ODCs</i>
6.	Multiply sum of labor costs plus other direct costs x contract G&A (e.g., 10% for general and administrative costs) = <i>Estimated G&A</i>
7.	Multiply estimated cost x fee (e.g., 7%) = <i>Estimated WA fee</i>

51-028-15C

Exhibit 3-2

Computation Example for an Independent Government Cost Estimate

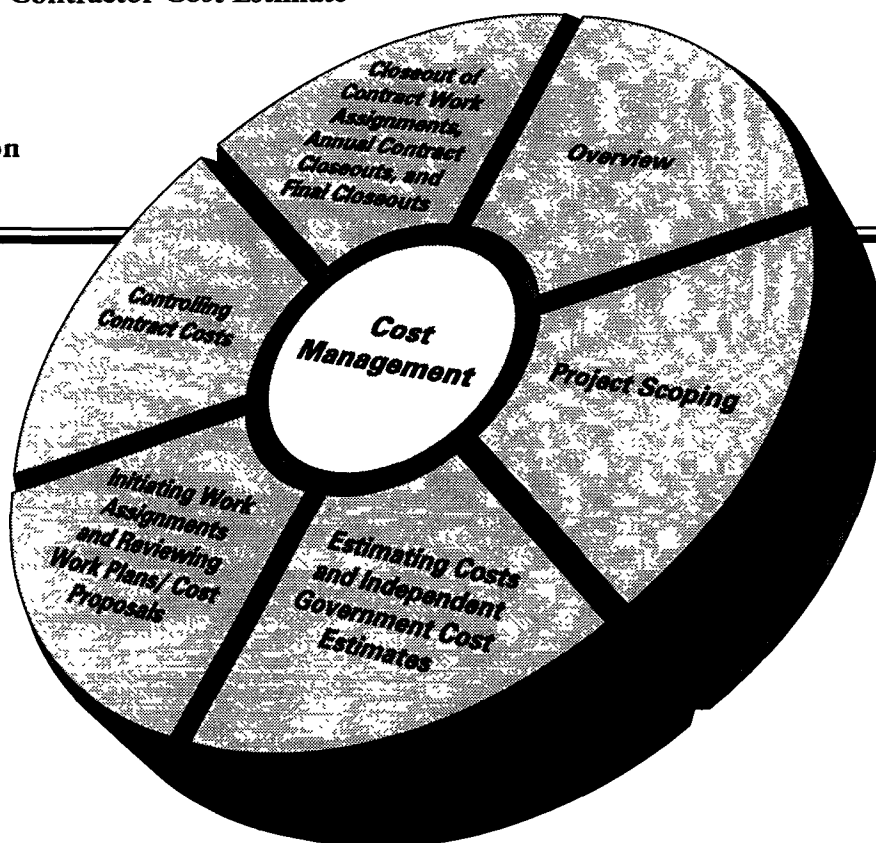
Direct Labor	\$5,000
Overhead (@ 50% of Direct Labor)	\$2,500
Other Direct Costs	\$750
Subtotal	\$8,250
General & Administrative (@ 10%)	\$825
Estimated Cost	\$9,075
Fee (@ 7%)	\$635
Total Work Assignment Fee	\$9,710

51-028-32



CHAPTER 4 - INITIATING WORK ASSIGNMENTS AND REVIEWING WORK PLANS/COST ESTIMATES

- 4.1 Chapter Introduction
- 4.2 Initiating Work Assignments
- 4.3 Reviewing the Contractor Work Plan
- 4.4 Reviewing the Contractor Cost Estimate
- 4.5 Negotiations
- 4.6 Documentation





CHAPTER 4 - INITIATING WORK ASSIGNMENTS AND REVIEWING WORK PLANS/COST ESTIMATES

4.1 CHAPTER INTRODUCTION

This chapter identifies the activities necessary to initiate a Work Assignment, including review of contractor Work Plans and Cost Estimates. Checklists are included to assist the Work Assignment Manager (WAM) in reviewing these documents, as well as to promote a standardized review process across the Agency.

4.2 INITIATING WORK ASSIGNMENTS

The completed Work Assignment Package; which includes at a minimum the Work Assignment, the Statement of Work (SOW), Work Assignment Form (WAF) and the Independent Government Cost Estimate (IGCE), is transmitted by the WAM to the EPA PO for review of completeness and accuracy. The PO forwards the Package to the CO who reviews the Package, assigns a Work Assignment number, and signs the Work Assignment Form and Procurement Request. The CO then forwards complete copies of the approved Work Assignment Package to the EPA Project Officer and WAM, and transmits the Package *minus the IGCE* to the contractor. The contractor acknowledges acceptance of the Work Assignment Package by signing the cover page and returning the original to the CO.

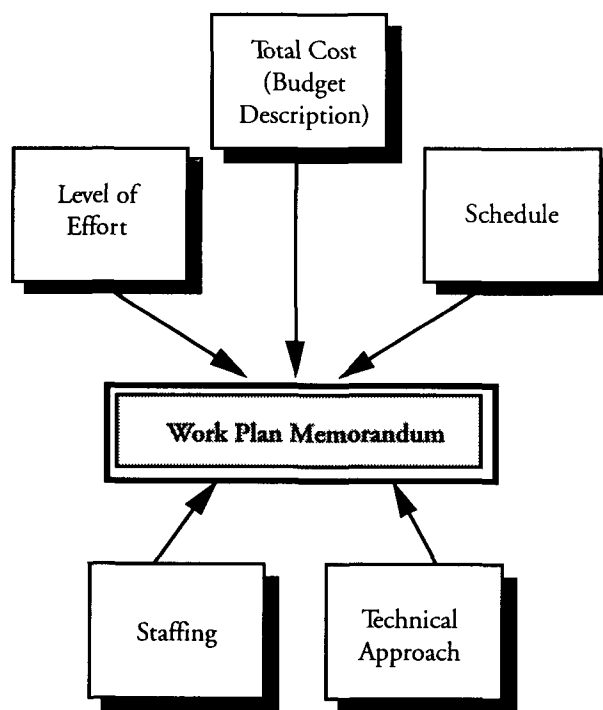
When there is an immediate need to begin work upon receipt of the Work Assignment Package, the contractor may be required to prepare a Work Plan Memorandum (WPM). The WPM is a 5-6 page document used in place of a Work Plan due within 15 days of receipt of Work Assignment. It includes a proposed level of effort (LOE), proposed total cost (budget description), proposed schedule, proposed staffing, and technical approach (methodology). Exhibit 4-1 demonstrates the components of a WPM. The WPM is **not** widely used in the Regions and is, therefore, an optional procedure.

If the WAM concurs with the course of action proposed by the contractor and detailed in the WPM, the WAM forwards the memorandum to the EPA CO for review and approval. Only the CO can authorize the contractor to begin work, (i.e., incur costs), prior to approval of the *overall* Work Plan.

4.3 REVIEWING THE CONTRACTOR WORK PLAN

The Work Plan is the contractor's response to the Government Work Assignment and details how contractor staff will conduct work during the life of the Work Assignment. The Work Plan describes the project goals, the technical approach to be used by the contractor, the tasks and

Exhibit 4-1
Components of a Work Plan Memorandum



51-028-8



deliverables, the proposed personnel, and any issues that warrant clarification. The WAM should review the contractor Work Plan to control costs with the following questions in mind:

- Are tasks and subtasks planned rationally and evenly?
- Do the identified tasks/subtasks in the Work Plan match those in the SOW?
- Are the responsibilities of all parties clearly delineated?
- Is the schedule timely and realistic?
- Is staffing well thought out?
- Are products clearly defined, well scheduled, and appropriate?
- Is the manner in which the contractor and the WAM will communicate specified?

Work Plans must be reviewed by the WAM and/or the Contract Management Team (CMT) to ensure that the contractor understands the project, follows the structure and organization of the SOW, and has proposed an acceptable approach to accomplish the effort within the scope of the original Work Assignment Statement of Work (WA SOW). In addition, the proposed level of staffing and resources should be appropriate, sufficient, and reasonable given the tasks to be performed. The CMT, at a minimum, consists of the WAM, PO, CO and others, such as contract specialist (CS), cost estimator, technical experts, the Bureau of Reclamation (BuRec) or U.S. Army Corps of Engineers (USACE).

The WAM should assess the reasonableness of the proposed contractor staffing plan by comparing it to the original WA SOW — and noting any discrepancies between the two documents in a technical review memorandum. This memorandum outlines reasonable tasks and those which need to be negotiated, and is forwarded to the PO and CO. For example, the contractor may propose a higher proportion of senior personnel than needed, or contemplate a more expansive scope, thereby increasing the total cost of the project to the Government. The WAM should be aware of contractor understaffing — proposing too few or too junior staff — which may lead to under-budgeting and interruption of work in mid-task should additional funding need to be authorized

by the Agency. The staffing and skill mix needs to be examined to ascertain if the contractor has proposed both the proper blend of expertise, enough senior level hours for oversight and review, and enough junior level hours for research and data development. Exhibit 4-2 will assist the WAM in reviewing and evaluating a contractor Work Plan. For more information on Reviewing Contractor Work Plans see Appendix D.

4.4 REVIEWING THE CONTRACTOR COST ESTIMATE

The Cost Estimate is the contractor's proposed budget for the Work Assignment. The contractor should prepare this document in *detail* to clearly present labor and other costs entailed in Work Assignment performance. This cost estimate provides a benchmark for future cost comparison efforts and analyses by the Government. The major elements of the Cost Estimate are:

- Labor Costs, including notation of Professional Level, level of effort (number of hours), and hourly labor rates;
- Overhead Costs, usually expressed as a percentage of direct labor;
- Other Direct Costs (ODCs), such as supplies and equipment;
- Travel and Transportation Costs;
- General and Administrative Costs (G&A), usually expressed as a percentage of direct labor and ODCs; and
- Profit and fee.

The WAM should review the cost estimate against Exhibit 4-3 and the Independent Government Cost Estimate (IGCE). Comparing contractor proposed costs with the costs of previously completed contractor studies is not sufficient in evaluating the estimate, since controls over contractor costs in the past may have been inadequate. During this review, the Government should document all unreasonable or excessive costs on the evaluation checklist for contractor price estimates. This checklist is forwarded to the PO and CO and will be helpful when negotiating the final cost of the Work Assignment with the contractor.



Exhibit 4-2

Checklist for Reviewing Contractor Work Plans

- ☐ Are the major tasks of the entire Work Assignment and the steps to be undertaken to complete each task described?
- ☐ Did the contractor indicate how many weeks after Work Assignment kickoff it will take to complete each task (or use actual dates)?
- ☐ Is the schedule for interim and final deliverables shown?
- ☐ Did the contractor set a reasonable schedule for getting the work done and build in enough slack for contingencies?
- ☐ Are detailed responsibilities for the contractor and the Government defined?
- ☐ Are key contractor staff and their roles identified?
- ☐ Did the contractor include any assumptions that may affect execution of work?
- ☐ Are protocols as to how the contractor and Work Assignment Manager will communicate for the duration of the Work Assignment identified?
- ☐ Do tasks in the Work Plan match those in the SOW?

51-028-9B

Exhibit 4-3

Checklist for Reviewing Contractor Cost Estimates

- ☐ Are the hours and rates appropriate and reasonable?
- ☐ Are the costs broken down into specific areas?
- ☐ Is the labor mix appropriate?
- ☐ Are the indirect cost rates those which have already been negotiated and are stated in the contract?
- ☐ Are the subcontractor services necessary? Can they be justified?
- ☐ Is the proposed amount of travel acceptable?
- ☐ Did the contractor provide a breakdown of ODCs? Is each component reasonable?
- ☐ Are proposed subcontractors/consultants already approved?
- ☐ Will approval of the Work Plan require a ceiling increase of any proposed subcontractor/consultant?
- ☐ Is any government furnished property involved, and has it been authorized in the contract?

51-028-10B



In addition, Cost Estimates should be evaluated qualitatively and quantitatively (i.e., skills mix, number of hours, consultant effort, amount of travel, etc.). The importance of the evaluation activity cannot be overemphasized. If the Work Plan/Cost Estimate is signed without adequate analysis of the costs, the contractor is allowed to expend these funds during the period of performance. Therefore, at this stage there is a need for intense scrutiny. The checklist in Exhibit 4-3 will assist the WAM in reviewing a contractor cost estimate. For more information on Reviewing Contractor Cost Estimates see Appendix D.

The WAM should evaluate the subcontractor proposal with the same criteria as the prime contractor, (see Exhibits 4-2 and 4-3). If questions or discrepancies arise the WAM should discuss the subcontractor proposal with the prime contractor, who in turn will discuss the problems with the subcontractor. The Government **should not** conduct discussions directly with the subcontractor.

4.5 CONTRACTOR NEGOTIATIONS

The Contracting Officer (CO)/Contracting Specialist (CS) should discuss with the CMT the need for negotiations. The CO/CS is responsible for leading the team in developing its negotiation objective(s). *In no event are negotiations to be delegated to the WAM or PO.* Although each team member should assure that all issues are properly addressed and properly documented, the CO/CS is ultimately responsible for ensuring that documentation of the negotiation outcome is adequate. Once negotiations are completed, and an agreement has been reached, the work plan is approved by the CO/CS. In the event that no negotiations are required, the documentation for work plan approval shall be processed.

Upon receipt of the contractor's work plan, any significant changes in the terms and conditions, schedule or budget are accomplished through negotiations between the Agency and the contractor. *The Contracting Officer shall conduct negotiations.* When determined by the CO/CS, the appropriate personnel (WAM, PO, E/C, etc.) will also participate in the negotiations.

The following is a brief summary of the recommended roles and responsibilities of WAMs, POs, and COs/CSs in the negotiations process; however the specific roles and responsibilities may differ from Region to Region.

Work Assignment Manager provides technical expertise to the PO and CO/CS for negotiation session and prepares technical documentation solicited by CO/CS and/or PO.

Project Officer assists in strategy development, documentation and negotiations with other members of the CMT, when determined appropriate by the CO.

Contracting Officer/Contract Specialist ensures the pre-and-post negotiation documentation is adequate, meets with CMT members to establish negotiations strategy, and **conducts negotiations** or approves negotiations conducted by a contract specialist. For more information on negotiation and roles and responsibilities for negotiations, see EPA Directive 9202.1-12 in Appendix D.

4.6 DOCUMENTATION

Throughout the entire process, the CMT shall maintain adequate written documentation of the significant differences and acceptability between the Government's position and the contractor's work plan and budget. Particular attention should be paid to documenting the Government's negotiating position and the results of the actual negotiations between the government and contractor.

4.6.1 Pre-Negotiation Documentation

The pre-negotiation documentation summarizes the Agency's position and objective it hopes to accomplish during negotiations with the contractor. Objectives should be based upon the review of the contractor's work plan, the IGCE and other information available regarding the work to be performed. The document shall show the work assignment number, contractor's name, contract number, site name, a summary of the contractor's proposal and the IGCE, and present the Agency's position upon entering negotiations. A target position for the major cost elements shall be



included. The pre-negotiation memorandum shall be prepared by the CO/CS with input from other members of the CMT prior to negotiations and used as a guide during the negotiations. The pre-negotiation memorandum shall be signed and dated by the CO/CS.

4.6.2 Post-Negotiation Documentation

The post-negotiation documentation summarizes and documents negotiation with the contractor with emphasis on the resolution of differences between the IGCE and the contractor's Work Plan. It is prepared by the lead CO with input from other CMT members. The memorandum should include the following information:

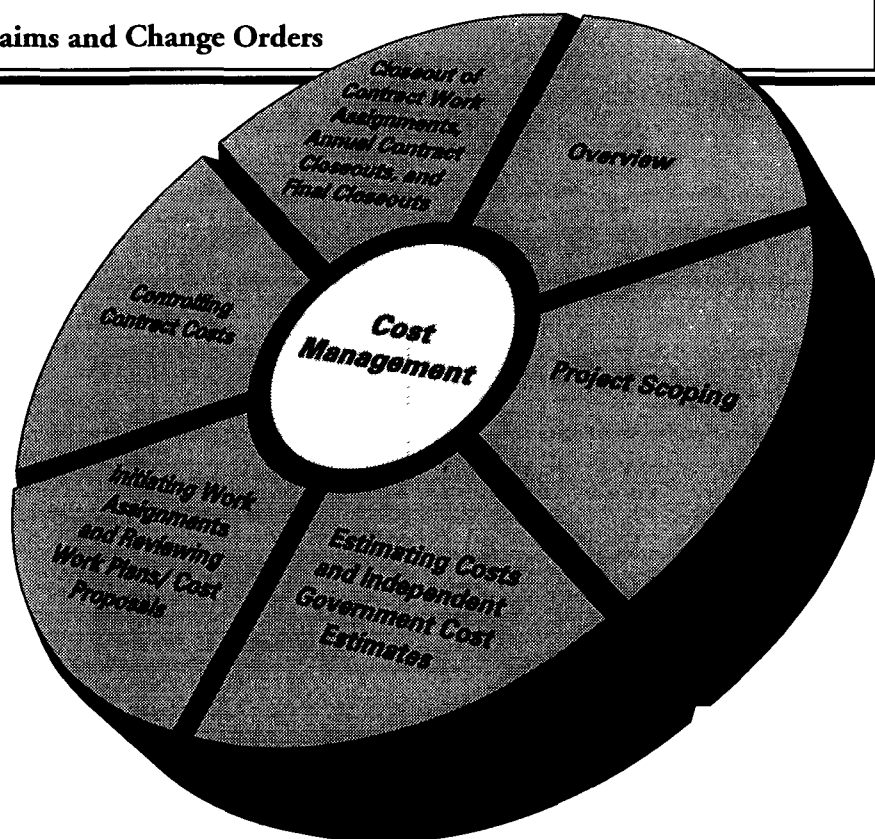
- The purpose of the negotiations;
- A description of the work, including the contract number, work assignment number and site name;
- The name, position, and organization of each person representing the contractor and the Government in the negotiations;
- The date, time, and place of the negotiations;
- The summary of the negotiated items (e.g., cost, technical scope and schedule), and a narrative justifying the agreements reached particularly if they differ significantly from the Agency's pre-negotiation position. The task breakdown, costs, hours and skill mix, the contractor's initial proposal, and the final negotiated items should be presented in matrix format for easy reference and comparison; and
- A statement to the effect that the negotiated agreement is determined to be fair and reasonable.

The post-negotiation memorandum must be signed and dated by the CO/CS.



CHAPTER 5 - CONTROLLING CONTRACT COSTS

- 5.1 Chapter Introduction
- 5.2 Monitoring Contractor Performance
- 5.3 Monitoring Contractor Costs
- 5.4 Documenting Contractor Costs for Cost Recovery
- 5.5 Reviewing Contractor Invoices
- 5.6 Contractor Claims and Change Orders





CHAPTER 5 - CONTROLLING CONTRACT COSTS

5.1 CHAPTER INTRODUCTION

The purpose of this chapter is to present the Agency's approach to controlling Work Assignment costs following review and approval of the contractor Work Plan and Cost Estimate. This chapter addresses the following topics: monitoring contractor performance, monitoring contractor costs, reviewing contractor invoices, and processing contractor claims/change orders.

5.2 MONITORING CONTRACTOR PERFORMANCE

Federal employees have a responsibility to monitor the efforts of contractors in order to prevent waste of public funds and obtain the required services *within the amount budgeted in the approved Work Plan*. The goal in contractor monitoring is to be aware of all situations under the contract. Proper and timely action on the part of EPA technical personnel gives the Government the time and opportunity to make decisions and adjustments as problems arise.

The unique problems associated with Superfund sites require the Work Assignment Manager (WAM) to play a key role in ensuring quality performance from the contractor. Since the WAM is the Government's primary technical representative with its contractors he/she should be knowledgeable in the work performed under the Work Assignment, and be available to assist the contractor when difficulties or questions arise. Areas in which the WAM needs expertise include:

- Sampling and analysis of contaminated media;
- Environmental fate and transport analysis;
- Risk and exposure assessment;
- Evaluation of remedial technologies;
- Environmental impact evaluation;
- Cost estimation;
- Remedial design and construction considerations; and
- Environmental regulations and policies.

Several effective methods exist (discussed in sections 5.2.1 through 5.2.8) for the WAM to monitor contractor performance including:

- Inspection of work;
- Review of progress reports;
- Meetings and telephone communications with contractor personnel;
- Comparison of progress with work plan schedule of tasks and deliverables;
- Review of financial management reports;
- Evaluation of contractor performance;
- Review of invoices; and
- Ensuring quality through facilitation.

5.2.1 Monitoring by Inspection of Work

Inspection clauses in the contract give the Government the right to inspect and test the work performed (at the work site, if possible) under the contract. This right can be exercised at any stage and place of work performance. The decision to use inspection as a tool for contractor monitoring depends upon many facts including: type of work, type of contract, location of performance, and feasibility of performing an inspection. As discussed earlier, cost-reimbursement type contracts frequently require a high level of monitoring.

5.2.2 Monitoring by Reviewing Contractor Technical Progress Reports

The contractor must comply with the reporting provisions incorporated in the contract. Contractor-prepared progress reports enable the Government to track project performance and determine whether the tasks are being completed in a timely and effective fashion. The information presented by the contractor in its monthly technical progress report is described in section 5.3.2. If necessary, the Government may request additional information to obtain a more thorough understanding of the report.



5.2.3 Monitoring by Meeting with Contractor Personnel

The WAM should conduct meetings on a regular basis — the agenda topics for those meetings can be specific to certain aspects of the performance or can cover the entire Work Assignment. The Contracting Officer (CO) should always be notified of the meetings and provided an opportunity to attend. If the contractor is not locally available, it might be more efficient to hold teleconferences. However, major issues and problems will best be resolved in face-to-face meetings. The proceedings from these meetings (teleconferences or face-to-face) should be well documented and distributed to the contractor and the CO. This will ensure that all parties understand the status of the Work Assignment, the activities discussed and the decisions made. The WAM may also obtain work status updates and troubleshoot via telephone calls with contractor management. The phone log in Exhibit 5-1 may be used to record the subject of all calls. Exhibit 5-2 may be used to record the activities at contractor meetings.

5.2.4 Monitoring by Comparing Actual Progress to Work Plan Schedule

Comparing the contractor's monthly progress report with its Work Plan can be a useful tool in monitoring progress. The Work Plan should contain a schedule identifying each step required in the Work Assignment, the period of time needed to accomplish the tasks, and key deliverables. The WAM should elicit the support of technical personnel, if needed, to identify delays and problems in actual progress. In addition, the Work Plan deliverable schedule should be updated to reflect changes in estimates for completion of individual task elements as well as the overall Work Assignment.

Tracking Superfund project schedules can be conducted using milestone, bar chart, and critical path method (CPM) scheduling techniques. These techniques can be used to ensure that critical milestones of the current project are met, as well as foresee delays that could potentially affect the schedule and budget decisions in follow-up work. These techniques, however, should not be substituted for frequent communication with the contractor.

- **Milestone scheduling** is appropriately used for monitoring key response activities that can be conducted independently of other activities. This method is most suitable for monitoring performance.
- **Bar charts and/or CPM scheduling networks** can be used when durations of sequential activities are related and delays in earlier tasks can impact follow-up tasks. These methods are most suitable for identifying critical dates on related tasks that must be met in order to adhere to the overall project schedule.

5.2.5 Monitoring by Reviewing Financial Management Reports

The degree of financial monitoring is directly related to the type of contract and the amount of risk assumed by the Government. Under cost-reimbursement contracts, the contractor has little incentive to control costs, as its compensation is based on expenditures associated with doing the work — barring a determination that costs are unreasonable or unallowable. In level of effort contracts, therefore, WAM review of financial management reports is an important element in ensuring efficient contract performance and cost control. For additional information on monitoring contractor costs, see section 5.3.

5.2.6 Monitoring by Evaluating Contractor Performance

It is recommended that contractor performance be evaluated periodically and feedback provided to the contractor. During the evaluation, the WAM should indicate specific contractor problems and give examples of correct performance in these situations. The contractor should be notified of perceived performance problems immediately so that future work is performed according to the scope of work. The Government should keep records of the time and date of the feedback and provide a summary memo for the contractor. It is also important to indicate positive performance. Exhibit 5-3 is a sample of a contractor performance evaluation form.

In cost plus award fee contracts, evaluation of contractor performance is done periodically (usually semi-annually) by a Performance Evalua-

Phone Log

[illegible]



Exhibit 5-2
Meeting Record

Meeting Record	
Attendees:	Date: Subject:
Discussion:	
Decisions:	
Action Items:	

51-028-17A



Exhibit 5-3
Sample Contractor Performance Evaluation Form

Contractor: Contract Number: Work Assignment Manager: Project Officer: Period Covered:	% of Work Completed:
I. Technical Performance <i>Criteria:</i>	<i>Rankings: (Circle one per criterion)</i> Excellent V. Good Avg. Poor Unsatis.
Level of creative contribution	5 4 3 2 1
Effective application of relevant statutes/ regulations/guidelines	5 4 3 2 1
Resourcefulness	5 4 3 2 1
Adherence to scope of work	5 4 3 2 1
Effectiveness of project planning	5 4 3 2 1
<i>Overall Rating for Technical Performance</i>	
<i>Narrative Evaluation:</i>	
II. Personnel <i>Criteria:</i>	<i>Rankings: (Circle one per criterion)</i> Excellent V. Good Avg. Poor Unsatis.
Technical competence appropriate to project	5 4 3 2 1
Commitment to the project	5 4 3 2 1
Effective interaction, responsiveness	5 4 3 2 1
Appropriate mix of professional levels	5 4 3 2 1
<i>Overall Rating for Personnel</i>	5 4 3 2 1
<i>Narrative Evaluation:</i>	

51-028-18B



Exhibit 5-3
Sample Contractor Performance Evaluation Form (cont'd)

Contractor: Contract Number: Work Assignment Manager: Project Officer: Period Covered:					
III. Deliverables <i>Criteria:</i>	Rankings: (Circle one per criterion) Excellent V. Good Avg. Poor Unsatis.				
Quality of product, thoroughness, adequate technical detail	5	4	3	2	1
Minimal corrections/revisions required	5	4	3	2	1
Quality assurance by contractor	5	4	3	2	1
Adherence to schedule	5	4	3	2	1
<i>Overall Rating for Technical Performance</i>					
<i>Narrative Evaluation:</i>					
IV. Budget <i>Criteria:</i>	Rankings: (Circle one per criterion) Excellent V. Good Avg. Poor Unsatis.				
Cost Effectiveness	5	4	3	2	1
Efforts to keep within budget	5	4	3	2	1
Early notification of potential overruns	5	4	3	2	1
<i>Overall Rating for Budget</i>	5	4	3	2	1
<i>Narrative Evaluation:</i>					
V. Overall Rating for Work Assignment	5	4	3	2	1
VI. Comments/Recommendations					



tion Board (PEB) according to a written Award Fee Plan. The Award Fee Plan includes detailed performance evaluation categories and criteria. The amount of fee awarded to the contractor is based on the recommendation of the PEB, but determined by the Fee Determination Official.

Under cost-reimbursement contracts, the Government may have to reimburse the contractor for work performed, even if it is unsatisfactory. In these situations, the Government can request that the work be corrected. In these situations the award fee should be zero. The Government can also refuse payment if the contractor exceeds the scope of work, charges hours not spent, proceeds in bad faith, or other similar circumstances.

5.2.7 Monitoring by Reviewing Contractor Invoices

Monitoring monthly contractor vouchers or invoices is a fundamental way the WAM can control contractor costs and monitor contractor performance. Invoices detail the contractor's monthly expenditures by cost element (i.e., direct labor, materials, subcontracts, indirect expenses, etc.) making it possible to spot high levels of expenditures. The invoice should be accompanied by an invoice backup report (Standard Form 1035-Invoice Continuation) that provides detailed costs for invoice line items. If additional information is needed to support the invoiced amounts, such as copies of vendor invoices, the WAM should ask for back-up documentation from the contractor. For more information on invoice review, see section 5.5.

The WAM should also be aware of the *Limitation of Cost* clause. This clause, which appears in all cost-reimbursement contracts unless they are incrementally funded, specifically limits the obligation of the Government to the amount stated in the contract as the total estimated cost of the contract. Due to unforeseen circumstances, the actual cost to complete a Work Assignment may exceed the estimated cost reflected in the contractor's Work Plan and Cost Estimate. The contractor should not exceed the budgeted amount for the Work Assignment without approval from the CO. This clause provides that the contractor has no obligation to continue work unless the Government's CO agrees to increase the total estimated cost. The Limitation of Cost clause

also requires the contractor to notify the CO — and provide revised estimates in writing — when:

- The expected costs incurred in the next 60 days plus costs already incurred will exceed 75 percent of the total estimated costs; and/or
- The total cost of performance will exceed or be substantially less than the total estimated cost of the Work Assignment.

5.2.8 Monitoring Activities at Multiple Levels

Generally, as the project budget increases in value, the more important it is for the WAM to perform his/her project communication and coordination functions. To promote efficient and effective contractor performance, the WAM needs to monitor project activities at several levels including:

- Internal programs that provide services to the project (e.g., analytical data reviews);
- Office of General Counsel (OGC);
- Office of Acquisition Management (OAM);
- Offices responsible for other environmental laws (RCRA and TSCA);
- Organizations external to EPA (USACE and ATSDR); and
- States.

Similar to ensuring quality, the WAM must monitor activities at these levels ensuring that all "bases are covered" and preventing problems before they adversely impact the project. This approach facilitates input from several levels at various project decision points.

WAMs should also communicate amongst themselves since innovative solutions to complex problems have been developed through experiences at various sites.

5.3 MONITORING CONTRACTOR COSTS

Using cost-reimbursement contracts for response studies gives EPA the flexibility to change contractor tasks and authorize additional funds to deal expeditiously with the uncertainties that occur in remedial and enforcement work. Cost-reimbursement contracts, however, give contractors limited incentive to control either costs or use of professional labor hours.



Federal regulations, EPA guidance, and specific contracts give EPA an array of management controls to use in planning, authorizing, monitoring, restricting, and evaluating contractor expenditures. Effective monitoring of contractor costs by the WAM ensures that Work Assignment activities are being accomplished according to the planned schedule and within the budget ceiling. Effective monitoring also enables the WAM to identify when budget variances occur that require contractor concessions, Work Plan revisions, stop work orders, or additional project funding.

Monitoring actions can lead to significant savings by ensuring that:

- All work performed is consistent with the Work Assignment; and
- The contractor used equipment and personnel in the most effective manner

The CO/CS has several sources of information at his/her disposal to monitor contractor costs including the ARCS Contract Tracking (ACT) System, and the contractor monthly technical and financial progress reports. The WAM, on the other hand, does not have access to the ACT system.

5.3.1 Monitoring through the ARCS Contract Tracking System

Effective cost monitoring depends on the availability of reliable indicators of contractor performance. These indicators and others, which may be available from the ARCS Contract Tracking (ACT) System, are the following:

- **Expenditures.** Provides basic information on total sums actually expended. Program data will be divided into administrative support and technical cleanup costs.
- **Obligations.** Shows amounts obligated by Work Assignment and total program management obligations. Useful for fiscal planning purposes and should be compared to expenditures to avoid excessive funding.
- **Administrative Support Costs vs Total Contract Cost, Technical Cleanup Costs vs Total Contract Costs, Program Management Costs vs Total Contract Costs.** Displays total costs associated with these elements as percentages of total contract costs based on actual

expenditures. Insurance liability costs and equipment costs may be segregated from other administrative and technical cleanup costs.

- **Administrative Support Costs per Level of Effort (LOE) Hour Delivered, Technical Cleanup Costs per LOE Hours Delivered, Program Management Costs per LOE Hours Delivered.** Measures the cost-effectiveness of program management operations. Individual contract rates can be analyzed, compared, and contrasted.

5.3.2 The Contractor Technical Progress Report

Under cost-reimbursement contracts, contractors are required to submit a monthly technical progress report. Level of effort contractors are required to include the following information each month in the report:

- Summary of activities and deliverables completed during the month;
- Work projected for the following month;
- Potential problems;
- Proposed corrective actions; and
- Follow-up actions taken to address previous problems

If one or more of these items is omitted from the report, the WAM should immediately notify the contractor of the omission and request that the item(s) be included in the next report. Exhibit 5-4 outlines the components of a monthly technical progress report.

5.3.3 The Contractor Financial Progress Report

Under cost-reimbursement contracts, contractors are required to submit a monthly financial progress report to the Agency. Level of effort contractors are required to include the following information, at a minimum each month:

- Cumulative costs and direct labor hours expended from the effective date of the contract through the last day of the current reporting month. A cumulative incurred cost per direct labor hour average computation (actual "loaded" contract cost per labor hour) will be included, with a comparison of the



Exhibit 5-4
Monthly Technical Progress Report

Monthly Technical Progress Report Period of _____	
Date of Report: Contractor: EPA WA Manager	EPA Contract No.: EPA Work Assignment No.:
Prepared by:	
Part I:	Activities undertaken during the month. (Provide DETAILED summary of activities, by task, and include any out of town travel.)
Part II:	Deliverables submitted during the month. (Include draft and final submissions listed by title and date submitted.)
Part III:	Difficulties encountered and actions taken during the month. (Detailed summary of contractor/subcontractor difficulties and actions taken by contractor or EPA.) (Identify activities being held up pending EPA approvals, comments, decisions, etc.; include dates as appropriate.)
Part IV:	Activities anticipated during the next month. (DETAILED summary, including dates and titles of any deliverables to be completed.) (Provide an estimate of next month's hours.)
Part V:	Estimate substantial lagging costs for the month. (Provide DETAILS on any discrepancies and substantial subcontractor lagging costs. Give estimate of subcontractors' total labor hours expended; can be based on telephone inquiry to the subcontractor/consultant.) (Identify prime and subcontractor SUBSTANTIAL lagging direct cost expenditures, particularly travel costs.)
Part VI:	Changes in personnel, if any, assigned to the Work Assignment during the month.
NOTE: The prime should require each subcontractor to submit the same level of information per Work Assignment and include it as backup to the prime's report.	

51-028-19



Exhibit 5-4
Monthly Technical Progress Report (cont'd)

[illegible]

51-028-19,1



result to the cumulative average cost per direct labor hour derived from the estimated cost of the contract;

- Actual costs and direct labor hours expended during the current reporting month;
- Estimated costs and direct labor hours to be expended during the following month; and
- Actual costs and direct labor hours incurred for each Work Assignment issued and estimates of costs and staff hours required to complete each Work Assignment.

If one or more of these items is omitted from the report, the WAM should immediately notify the contractor of the omission and request that the item(s) be included in the next report. Additional financial reporting requirements can be specified in the Work Assignment. Exhibit 5-5 outlines the components of a monthly financial progress report.

5.3.4 Monitoring by Comparing the Contractor Technical and Financial Progress Reports

The monthly technical and financial progress reports should be reviewed by the WAM immediately upon receipt. This approach will:

- Give immediate feedback to the contractor;
- Enable the contractor to promptly respond to the Government's concerns;
- Anticipate and solve any discrepancies or problems; and
- Assure actual expenditures have been properly reported and recorded (quality assurance).

Failing to consistently and fully challenge questionable contractor costs may, in effect, convey a message to the contractor that the Government is willing to accept all costs regardless of the level of performance provided by the contractor. Such an approach lessens the contractor's incentive to control costs. The WAM can employ three types of progress report review to control costs. Since all three reviews may not be necessary every month, they should be used in a hierarchical manner (each review incorporates more detail). For example, if the contractor's costs are well documented, reasonable, and within the Cost Estimate, the

higher levels of review would not be necessary.

Compare the Contractor's Monthly Technical Progress Report to the Monthly Financial Progress Report

The contractor's technical and financial progress reports should be comparatively examined to determine whether or not the technical progress matches the contractor's claimed costs. Using historical data, the WAM should analyze the completed tasks to assure that the level of effort and associated costs are reasonable. The WAM should identify any costs that seem excessive and ask the contractor for additional information to justify them.

Compare the Contractor's Monthly Technical and Financial Progress Report to the Previous Month's Progress Report

A fundamental responsibility of the WAM is to verify that the contractor has actually performed the work as projected in the previous technical progress reports. This can be accomplished by examining reports from prior months and determining if planned accomplishments match actual performance. Estimated costs and labor hours to be expended for the current period and the next period are presented in every contractor financial progress report. Each month the WAM can backtrack and verify if the contractor stayed within his/her estimated budget. The WAM should document major discrepancies in projected and actual costs and ask the contractor to rectify any problems.

Compare the Contractor's Monthly Financial Progress Report to the Work Assignment Cost Estimate

It may also be necessary to examine the contractor's monthly financial progress report on a more global scale. The WAM can cross-reference the projected costs in the Work Assignment Cost Estimate with the data in the monthly financial report. This will enable the WAM to gain a clear picture of funds expended and funds remaining in the Work Assignment.

After reviewing the monthly progress reports, the WAM and/or Project Officer (PO) or CO, as determined appropriate in the situation, should



Exhibit 5-5
Monthly Financial Progress Report

Monthly Financial Progress Report Period of _____ (To be completed for each Work Assignment)			
Contract No. WA No.	Expenditures		Explanation
	Current	Cumulative	
I. General			
Total Budget \$			WP approved budget
Total Budget Hrs.			WP approved hrs.
II. Direct Labor			
			prime only
* Total Professional Labor			P1-P4 and Total
* Total Professional Labor Hrs.			P1-P4 and Total
Total Technical Labor \$			all levels
Total Technical Labor Hrs.			all levels
Total Clerical Labor \$			secretarial
Total Clerical Labor Hours			secretarial
Fringe Benefits			based on all above
Labor Overhead			based on all above
Automation Rate			as negotiated and applicable
III. Other Direct Costs			
Total Travel			details on request
Postage/Freight			details on request
Computer			computer time
Property/Equipment			purchased/leased
Telephone/Long Distance			applicable charges
Photocopying			within limitations
Temporary Help			applicable charges
Delivery			applicable charges
Materials/Supplies			applicable charges
Other Direct Expense			details on request
Total ODCs			total all ODCs

* By P Level

51-028-20



Exhibit 5-5
Monthly Financial Progress Report (cont'd)

Monthly Financial Progress Report Period of _____ (To be completed for each Work Assignment)			
Contract No. WA No.	Expenditures		Explanation
	Current	Cumulative	
<i>Subcontractor/Consultant</i>			
Subcontractor(s) \$			P1-P4 and Total
Subcontractor(s) Travel			details on request
Subcontractor(s) Hrs.			
IV. Total Direct Costs			
G&A (Prime)			prime's only
Subcontractors' G&A			total all subcontractors
<i>Total Costs (No Fee)</i>			costs only without fees
Base (fixed) fee			total amt. fixed fee
<i>Total Cost Plus Base Fee</i>			cost plus fixed fee
<i>Total LOE</i>			total hours
Total \$ Remaining			balance of approved budget
Total Hrs. Remaining			balance of approved hours
\$ Percent Complete			percent of budget spent
Hrs. Percent Complete			percent of hours spent
WPAverage Hourly Rate			from approved W.P
Actual Average Hourly Rate			from actual costs
Est. \$ for Next Month			from actual costs
Est. \$ for Next Month			costs for next month



present the contractor with verbal and written feedback to emphasize the immediate concerns of the Government as well as to set a precedent for the future — that contractor reports will undergo a thorough examination each month.

5.4 DOCUMENTING CONTRACTOR COSTS FOR COST RECOVERY

Proper documentation during the process of contractor monitoring will ensure that the government is able to recover costs incurred during response activities. These costs include:

- EPA site-specific payroll costs;
- EPA site-specific travel expenditures;
- Interagency Agreement expenditures;
- Cooperative Agreement expenditures; and
- Costs incurred under EPA contracts with private contractors.

These are direct costs to the Agency. Indirect costs incurred by EPA (i.e., overhead and G&A) are also recoverable, and should be included as a separate item.

The activities during site assessment form the framework for the cost recovery claim. All costs and activities that relate to the performance of the response action and that describe the technical aspects of the response action must be fully documented. A key element of this documentation is the Administrative Record developed as part of the RI/FS process that identifies and justifies the selected remedy.

Since it is not known at the start of the process whether cost recovery will proceed to judicial action, it is of paramount importance to ensure that documentation prepared initially is complete and is prepared in compliance with Agency guidelines. EPA must document its clean-up expenses in order to successfully recover them in subsequent cost recovery actions. The National Contingency Plan (NCP) requires that EPA's documentation be "sufficient to provide the source and circumstances of the release, the identity of the responsible parties, the response action taken, accurate accounting of federal, state, or private party costs incurred for response actions, and impacts and potential impacts to the public health

and welfare and the environment." According to EPA, this requirement led to excessive documentation being provided to courts and to PRPs. To correct this situation, EPA has implemented a new cost recovery rule that requires the Agency to provide information that falls into two categories: documentation that covers the actual response action taken, and documentation that describes the technical aspects of the implementation of the response action. The WAM is responsible for ensuring that complete and accurate documentation is compiled.

EPA may recover its oversight costs when PRPs perform work. This will include extramural costs, such as contracts and interagency agreements, and intramural costs, such as EPA payroll and travel. The Regional personnel should track reimbursement, and contact the Regional Financial Management Officer to set up an accounts receivable file in the Integrated Financial Management System (IFMS) for the receipt of oversight costs. EPA should continue to account separately for all other site-specific costs not attributable to oversight in the event that a judicial action occurs.

The documentation of activities and accounting of costs must take place regardless of whether a site is EPA-, state-, or PRP-lead. Documents that are critical to cost recovery include:

- Timesheets/timecards and payroll expenses;
- Travel vouchers and receipts;
- Treasury schedules;
- Contracts/letters of agreement;
- Purchase orders and receipts;
- Paid processed invoices and vouchers;
- Data on PRP liability;
- Information relating to the selection of the response action; and
- Activity and cost documentation.

If the Region decides to proceed with a judicial cost recovery action, all documents relevant to the case must be assembled. This should simply require updating information previously gathered during the cost recovery process. The documents must show that:

- The site is a facility;
- There was either an actual or threatened



- release of a hazardous substance;
- EPA incurred costs as a result of this actual or threatened release; and
- The defendant is in one of the categories of liable parties listed in CERCLA Section 107(a):
 - Current owners or operators of facilities or vessels;
 - Owners or operators of a facility at the time hazardous substances were disposed of;
 - Persons who arranged for treatment or disposal of hazardous substances that went to the site; and
 - Persons who accepted hazardous substances for transport to disposal or treatment sites of their selection.

5.5 REVIEWING CONTRACTOR INVOICES

It is the responsibility of the EPA PO and WAM to review contractor invoices/vouchers each month and approve them for payment. Government personnel have an obligation to process these documents for payment in a timely fashion. EPA must transmit payment to its contractors within 30 days of invoice submission to avoid assessment of interest charges as prescribed in the Prompt Payment Act (Public Law 97-177). A sample contractor invoice is shown in Exhibit 5-6.

The invoice review process gives the WAM the opportunity to directly apply cost management practices to the Work Assignment. Calculation of several key cost ratios will enable the WAM to gain a good financial picture of an individual Work Assignment and/or the contract as a whole:

- Workhours Proposed vs. Actual vs. Estimated to Completion;
- Funds Budgeted vs. Actual (Period vs. Cumulative) vs. Estimated to Completion (By Task) and Variance; and
- Average Cost per Hour (Estimated vs. Actual).

Review of contractor monthly invoices, which are the basis for periodic contract payment, is an important factor in controlling contractor costs. The purpose of invoice review is to determine whether charges are commensurate with services performed, certify that work for which payments

are claimed actually has been performed, and provide a check on possible contractor oversights and/or abuses. Further, when contractors are aware that the Government is keeping close watch on their costs, there is more incentive for them to manage their work effectively. The level of financial risk to the Government, and thus the level of financial monitoring necessary, varies with the type of contract. Reporting and invoice requirements are standardized in order to simplify the process.

Each contract and Work Assignment contains specific limits on total costs and labor hours, and the WAM should ensure that these limits are not or will not be exceeded. In addition, individual Work Assignments provide estimates of hours that will be needed to conduct the work. If it appears that the contractor will exceed the estimated hours, the WAM should discuss the situation with the PO and determine the appropriate action to be taken.

5.5.1 Invoice Review Requirements

Superfund contractors are required to submit monthly invoices/vouchers (Standard Form 1034/1035) for reimbursement of costs incurred. These cost items include direct labor hours, travel, equipment, subcontracts, and any associated indirect costs.

In cost plus award fee contracts, evaluation of contractor performance is done periodically (usually semi-annually) by a PEB according to a written Award Fee Plan. The Award Fee Plan includes detailed performance evaluation categories and criteria. The amount of fee awarded to the contractor is based on the recommendation of the PEB and the determination by the Fee Determination Official.

Contractors are also required to submit an additional document with their invoices. The Contractor Invoice Supplemental Report for Program Management, which is designed to meet the objective of both Congress and EPA to reduce program management costs, provides a summary level report of these costs by cost element. A sample of this document is provided in Exhibit 5-7.



Exhibit 5-6
Sample Contractor Invoice

Invoice Number:	Period Start Date:
Invoice Date:	Period End Date:

Category	Notes	Values
Prime Labor Costs	Base Labor	
Indirect Costs	Other Than G&A	
G&A		
Other Direct Costs	Excludes Travel, Equipment, Lab Services, and Mobile Labs	
Pollution Liability Insurance	Base Value	
Travel	Does Not Include Relocation (Included in ODC Line)	
Equipment	Base Value	
Lab Services	Base Value	
Mobile Lab Costs	Base Value	
Team Subcontractors	Included all Fees Charges to Prime	
Pool Subcontractors	Included all Fees Charges to Prime	
Base Fee	Includes FCCM	
Award Fee	Prime Only	
Total \$ Invoiced	Automatically Calculated	
Suspended Amounts	See Notes Below	
Total Approved for Payment	Total \$ Invoiced Less Suspended	

Prime LOE	
Team Subcontractor LOE	
Total LOE	



Exhibit 5-7
Sample Contractor Invoice Supplemental Report
for Program Management

Invoice Number:	Period Start Date:
Invoice Date:	Period End Date:

Category	Notes	Values
Prime Labor Costs	Base Labor	
Indirect Costs	Other Than G&A	
G&A		
Other Direct Costs	Excludes Travel, Equipment, Lab Services, and Mobile Labs	
Pollution Liability Insurance	Base Value	
Travel	Does Not Include Relocation (Included in ODC Line)	
Equipment	Base Value	
Lab Services	Base Value	
Mobile Lab Costs	Base Value	
Team Subcontractors	Included all Fees Charges to Prime	
Pool Subcontractors	Included all Fees Charges to Prime	
Base Fee	Includes FCCM	
Award Fee	Prime Only	
Total \$ Invoiced	Automatically Calculated	
Suspended Amounts	See Notes Below	
Total Approved for Payment	Total \$ Invoiced Less Suspended	

51-028-22



An additional measure has been undertaken by the Office of Solid Waste and Emergency Response to reduce program management costs, in establishing targets for these costs under ARCS contracts (11 percent for FY94), and announcing a new process for tracking and reporting them. Under this new process, program management costs will now be segregated into administrative and technical support costs. Invoices will include two separate accounts with different activity codes for the two categories.

To assist in this process, the following definitions have been developed.

- **Administrative support costs** are non-site-specific costs necessary for managing the overall contract regardless of the amount of specific site work.
- **Technical support costs** are non-site-specific costs for technical activities that cover multiple sites, and are related to the site-specific work conducted under the contract.

There are several types of activities that may fall into both categories. Contractors should be made aware of this, and should adhere to the following guidelines. Subcontracting issues that are not site-specific will be classified as administrative support costs. Equipment, travel, and other direct costs should be allocated between administrative support and technical support areas for tracking purposes. Actual equipment costs will be categorized as technical support costs, as will labor costs associated with the justification and approval of equipment purchases. Travel and other direct costs can fall into either category, and should be monitored carefully. Clerical support should also be segregated by cost and be classified appropriately.

5.5.2 The Monthly Invoice Review Process

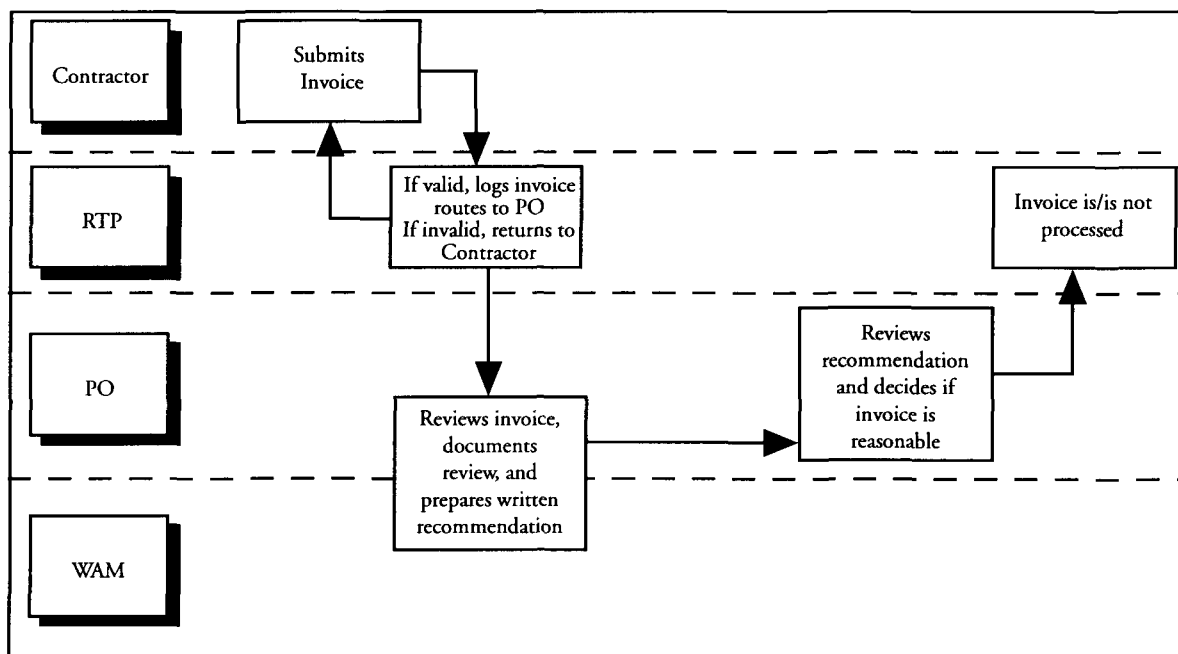
This section presents a brief chronological description of the invoice review process, beginning with the contractor submitting an invoice to the Agency, and concluding with a payment by EPA to the contractor. A flowchart outlining the process, a description of the steps involved, and a discussion of the roles and responsibilities of key individuals in this process is presented in Exhibit 5-8.

Steps Explained in Detail

- (1) The contractor submits an invoice to EPA's National Contracts Payment Division in Research Triangle Park, NC (NCPD-RTP) in detailed form as specified by the contract.
- (2) The PO receives a copy of the invoice from NCPD-RTP, and forwards it to the WAM for review.
- (3) The WAM and/or PO reviews the monthly invoice and compares it with the contractor's progress report to verify that the claimed contractor's services have been actually rendered and that the invoice dollar amount appears reasonable for the work performed. The WAM and/or PO documents the review of the invoice on the Monthly Invoice Review Checklist (Exhibit 5-9), and prepares a written statement offering his/her recommendation on the reasonableness or unreasonableness of contractor invoiced costs. If all or part of the claimed costs on the invoice are found to be unreasonable, the WAM works with the PO to resolve the situation. The PO should suspend payment of invoiced costs, or any portion thereof, until documentation is submitted by the contractor and the CO can make a reasonableness determination. (OSWER Directive 9242.2-06).
- (4) If the claimed costs are found to be reasonable, the PO approves the invoice by signing Form 2550-19 and returns it to the servicing finance office (NCPD-RTP) for further processing.
OR
If the claimed costs are found to be in some part unreasonable, the PO attempts to resolve the problem with the contractor and makes every effort possible to try to obtain a rationale and backup supporting the expenditures from the contractor. If charges are found to be unreasonable by both the WAM and PO, the PO may write a recommendation to the CO that the costs be disallowed.
- (5) All vouchers should be reviewed, certified and returned to the Financial Management Division-RTP by the PO within one week of receipt to provide timely payments to the contractor.



Exhibit 5-8
Invoice Review Flowchart



51-028-23A

5.5.3 Participants in the Invoice Review Process

In addition to the Agency's NCPD-RTP, the responsibility for conducting an effective and timely invoice review rests on the shoulders of three key individuals: the PO, the WAM, and the CO. The PO is responsible for invoice review, approval, and return to NCPD-RTP for payment. The WAM, however, is in a better position to determine if invoices are reasonable because of first hand knowledge of a project, and will therefore make recommendations to the PO. The CO is ultimately responsible for all contract and payment issues. Together these three officials complete a process which insures prompt payment of contractor invoices.

Project Officer's Role in Reviewing Invoices

Prior to payment of invoices submitted by the contractor, the PO must review the invoices and certify that to the best of his/her knowledge the payment is in accordance with the contract terms and limitations and that either: 1) sufficient progress has been made by the contractor, costs appear to be reasonable and appropriate, or 2) goods or services have been delivered in full from

the contractor. A thorough review of an invoice requires a level of familiarity with detailed project activities that a PO may not have. Consequently, the PO should work closely with the WAM, who may be more familiar with the technical and financial status of a project.

Work Assignment Manager's Role in Reviewing Invoices

As noted above, review of contractor monthly invoices by the WAM is particularly important because of this official's direct interaction with the contractor. It is therefore critical that WAMs have the necessary knowledge to conduct consistent and thorough reviews of contractor invoices. To ensure this, EPA requires all WAMs to complete a Superfund contract management course which includes an invoice review module.

The individual closest to the work being performed is ultimately responsible for determining whether costs contained in an invoice are "reasonable." OSWER Directive 9242.2-06 states, a "reasonable" cost is "one that would seem to be justified and legitimate and what a prudent person would pay under like circumstances in the conduct of competitive business." The person most familiar with the costs being charged is the most



logical choice to perform the invoice review, since past experience and common sense will assist in this process. In most cases, this person is the WAM. Exhibit 5-9 provides a summary checklist that can be used by the WAM in reviewing invoices.

Contracting Officer's Role in Reviewing Invoices

While the CO may not play an active role in the monthly review of contractor invoices/vouchers, this official does have the authority to:

- Suspend and disallow payment;
- Periodically review a representative sample of the billed costs and determine allowability and allocability as directed by OSWER Directive 9242.2-06; and
- Request professional auditors to perform annual comprehensive incurred cost audits and provide recommendations.

Public voucher validation procedures for Regional Contracting Officers are delineated in Appendix G.

5.5.4 Suspending and Disallowing Contractor Costs

If certain claimed contractor costs on the monthly invoice or voucher are deemed to be unreasonable, the PO can recommend either suspension of the cost(s), or payment of the vouchers less the suspended cost. Payment may also be suspended until clarification of subcontractor costs can be made. Prior to recommending suspension of costs, every effort should be made by the PO to obtain the rationale and back-up supporting the expenditure from the contractor. Lacking either the back-up or an acceptable rationale, the suspension should be recommended.

It is important to emphasize that only the CO can disallow costs. A cost is disallowed when the CO has made a final determination that the Government will not pay the cost. Costs may also be questioned on previously paid invoices, when the WAM did not have an adequate opportunity to conduct an in-depth review. If these costs are suspended, or disallowed, the amount can be deducted from the contractor's current invoice. If the contractor has completed the work and all invoices have been paid, the CO has the authority

to require reimbursement of the disallowed charges. The ability of the Government to suspend and disallow costs is an important cost management tool.

5.6 CONTRACTOR CLAIMS AND CHANGE ORDERS

Changes to the terms and conditions of a contract often become necessary after work has already commenced. These changes are made through a process called contract modification. Contractor cost management is an integral part of modifying a contract or a work assignment. EPA personnel must review the contractor's performance and determine if the costs claimed, to date, are commensurate with performance. Only at this time can the government determine if the contract or work assignment should be modified, thus allowing the contractor to continue work. This review process must ensure the government that it is spending its money wisely and receiving the services for which it has contracted.

Specific cost management principles should be applied during this procedure to ensure that costs are commensurate with performance. The PO and WAM have significant responsibilities in processing contract modifications and work assignment amendments, even though only the CO has the power to issue them. Since the PO and WAM monitor contractor performance they are in the best position to know when a change is required and what effect that change will have on the Government. The WAM should also determine a reasonable cost for the change, and the possible effects of the change on the contract. The responsibilities of the CO in this process are final determination when a change is needed, processing change orders, monitoring contractor performance, and verifying allowable and reasonable costs. After a change order has been issued, the PO is responsible for assuring that the contractor is implementing the correct procedures.

The PO and WAM should apply similar cost monitoring principles as used in the invoice review process to determine if the contractor performance warrants a modification or amendment. These include reviewing the following key cost ratios.



Exhibit 5-9 Monthly Invoice Review Checklist

This checklist contains a standard list of questions that will assist the WAM in determining the reasonableness of the contractor's monthly costs through verification of invoice summary data.

- ☐ Is the contract number valid?
- ☐ Is the account number of Work Assignment number valid?
- ☐ Is the LOE charged commensurate with progress?
- ☐ Do the labor hours appear to be appropriate?
- ☐ Does the labor mix appear to be appropriate?
- ☐ Are the hours charged by category within the ceilings or estimate?
- ☐ Was overtime charged?
- ☐ If overtime was charged, was it charged at premium rates and was it preapproved?
- ☐ Are local travel expenses warranted and reasonable?
- ☐ Is the purpose of out-of-town travel documented and consistent with project needs?
- ☐ Was the travel conducted by the appropriate number of people?
- ☐ Was a lease-versus-purchase analysis for equipment conducted and documented?
- ☐ Is the quality of the equipment commensurate with the needs of the project?
- ☐ Were the quantities of equipment purchased reasonable?
- ☐ Is EPA Form 1730 attached to the invoice?
- ☐ Are photocopying charges commensurate with the magnitude of deliverables?
- ☐ Are communications charges commensurate with the needs of the project?
- ☐ If present, do the "miscellaneous" charges seem reasonable and commensurate with the work performed?
- ☐ Have subcontractors received appropriate EPA approval to perform work on the contract?
- ☐ Is the level of effort charged by subcontractors commensurate with the level of progress made?
- ☐ Are the subcontractors' costs appropriate for the type of activities and progress made?
- ☐ If the subcontract is cost reimbursement, has the prime contractor provided a breakdown of charges by element of cost?

52-028-24A



- Work hours proposed vs. actual
- Funds budgeted vs. actual (period vs. cumulative)
- Average costs per hour (estimated vs. actual)

This section describes the types of contract modifications that may be made, defines the roles and responsibilities of EPA personnel, and discusses the kinds of changes that may be required.

5.6.1 Contract and Work Assignment Modifications

The need or request for a modification can result from:

- Changing EPA needs;
- Inadequate specifications that resulted in inadequate deliverables;
- The need to increase or decrease funds;
- Exercise of options to continue work;
- Extensions to provide additional time;
- Suspension of work; and
- Equitable adjustments.

There are two types of contract modifications: unilateral and bilateral. Unilateral modifications require only the signature of the CO. They are authorized for: (1) administrative changes, such as the designation of a new PO; (2) changes which the contract itself allows the Government to issue unilaterally; and (3) incremental funding. Bilateral modifications require the signature of both the CO and the contractor. They are authorized for: (1) new legal obligations, such as contractor mergers and name changes; (2) new procurement that increases the scope or quantity of work; (3) inspection and correction of defects; and (4) equitable adjustment of fees.

The criteria to determine whether a modification can be executed unilaterally or bilaterally is whether it is administrative or substantive. Administrative changes are those that do not affect the substance of the contract or the rights of either party. These changes can be made with a unilateral

modification. Substantive changes affect the price, quantity, quality, delivery, or terms and conditions of the contract. These changes require a bilateral modification.

5.6.2 Change Orders

The "Changes" Clause in Government contracts provides that the CO may unilaterally direct a change, within the scope of the contract, in one or more of the following cases:

Contracts for Supplies:

- Drawings, designs, or specifications;
- Method of shipment or packing; and
- Place of inspection, delivery, or acceptance.

Contracts for Services:

- Description of services to be performed;
- Time of performance; and
- Place of performance.

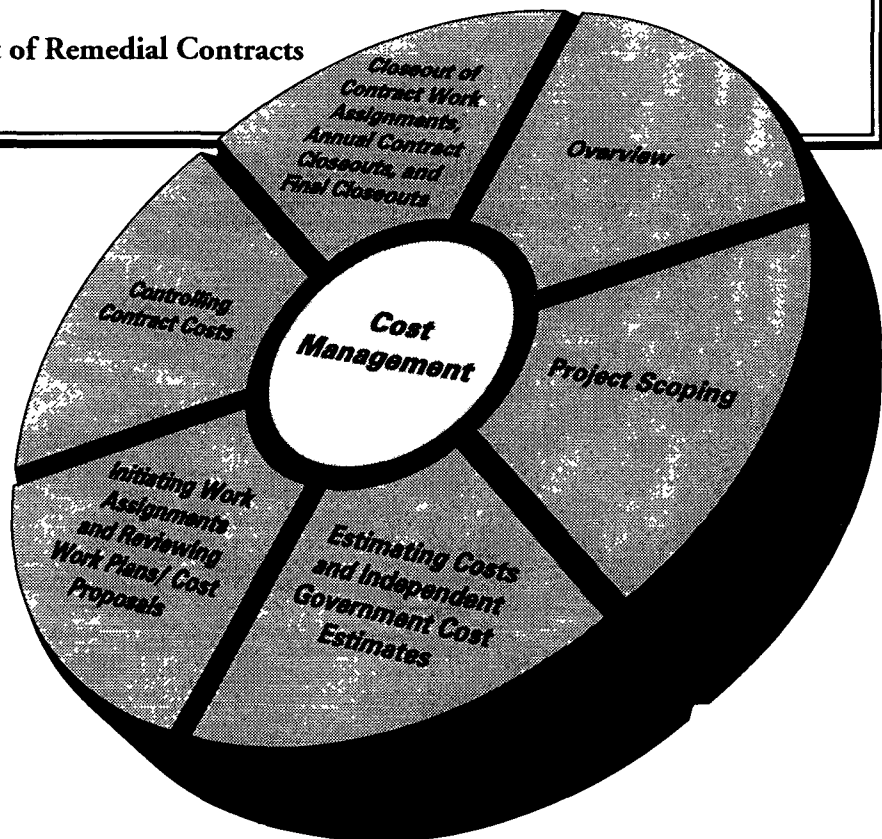
Change orders must be issued in writing by the EPA CO. They may be directed without the consent of the contractor, who is then obliged to follow them. If there is an impact on any contractual aspect, such as schedule or cost, the contractor may submit a claim for an equitable adjustment of fees within 30 days of receipt of the change order. The contractor's proposal for an equitable adjustment must be reviewed carefully by the WAM and the CO. Equitable adjustments should cover only the cost impact of a change order.

The PO and the WAM have significant responsibilities in processing change orders, even though only the CO has the power to issue them. Since these two officials monitor contractor performance, they will know when a change is required and how that change will benefit the Government. The WAM should also determine a reasonable cost for the change, and the possible effects of the change on the contract. After a change order has been issued, the PO is responsible for assuring that the contractor is implementing the correct procedures.



CHAPTER 6 - CLOSEOUT OF CONTRACT WORK ASSIGNMENTS, ANNUAL CONTRACT CLOSEOUTS, AND FINAL CONTRACT CLOSEOUTS

- 6.1 Chapter Introduction
- 6.2 The EPA Work Assignment Close-out Process
- 6.3 Annual Closeouts of Remedial Contracts
- 6.4 Final Closeout of Remedial Contracts





CHAPTER 6 - CLOSEOUT OF CONTRACT WORK ASSIGNMENTS, ANNUAL CONTRACT CLOSEOUTS, AND FINAL CONTRACT CLOSEOUTS

6.1 CHAPTER INTRODUCTION

This chapter provides information and guidelines on the closeout process for individual contract Work Assignments, procedures to conduct annual closeouts of contracts, and general procedures for final contract closeouts. The procedures for Work Assignment closeouts are similar among remedial contracts, but the ARCS, TES, ESS, and RAC contracts have contract-specific requirements for Work Assignment closeout in terms of conducting the award or performance fee process. Users will be referred to contract-specific work assignment closeout procedures that are provided in various guidance manuals for these contracts. The procedures for annual contract closeouts and final contract closeouts are generic to remedial and enforcement contracts.

6.2 THE EPA WORK ASSIGNMENT CLOSEOUT PROCESS

A work assignment completion report (WACR) is prepared for every remedial work assignment upon completion of the projects specified in the Statement of Work (SOW). The WACR provides a concise review of the contractor's project performance that can be used by EPA Regional and Headquarter's personnel to provide feedback to the contractor concerning performance areas requiring improvement and identify trends or recurring difficulties relating to the conduct of Work Assignment activities. In addition to the WACR, other Work Assignment closeout activities may include file storage, microfiche, microfilm, or other EPA-approved data storage technology.

A Work Assignment is considered "complete" upon approval of the final deliverable by the Work Assignment Manager (WAM) and upon receipt of the final invoice for the Work Assignment. The WAM usually receives the final invoice and work assignment completion report within 60 days of

Work Assignment completion. The WACR is prepared by the EPA WAM or other appropriate EPA personnel (e.g., enforcement or community relations staff) who were responsible for monitoring the activities performed by the contractor or subcontractor. The WAM forwards the completed WACR to the PO for review and approval. The contractor also completes a WACR (appropriately altering the title and signature blocks of the form) and submits the completed form to the PO.

6.2.1 Work Assignment Completion Report (Remedial Program)

The WACR is a three-page form for the Remedial Program (see Exhibit 6-1) and the format may be individualized for other programs. For example, the WACR shown in Exhibit 6-1 is from ARCS and has entries necessary for recording information on Phase I and Phase II fees.

Page one includes the body of the performance report. It is signed by the WAM and PO and presented to the Performance Evaluation Board (PEB). The WAM should refer to the cost and schedule information worksheet (page two of the WACR) to describe any performance deviations from the approved Work Plan. Page two provides a worksheet for summarizing the cost and schedule information associated with the completion of the Work Assignment. Page three of the WACR is a performance criteria rating worksheet that the WAM uses to rate overall Work Assignment performance. This worksheet is based on the category descriptions, evaluation criteria, and rating guidelines that appear in the contract award fee plan. Contractor performance evaluation criteria generally include:

- **Project Planning:** This includes developing Work Plans, project cost estimates and schedules, and screening for organizational conflicts of interest.
- **Technical Competence and Innovation:** This includes developing alternative courses of action, the thoroughness of analyses, ingenu-



Exhibit 6-1
EPA Work Assignment Completion Report (WACR)

Page 1 of 3

EPA Work Assignment Completion Report (WACR)			
Contract No.	Work Assignment No.		EPA Region
Contractor/Subcontractor(s)		Contractor Site Manager <i>(Name and Phone Number)</i> RPM <i>(Name and Phone No)</i> Work Location <i>(Site Name & State)</i>	
Briefly Describe Scope of Work:			
Describe Contractor's Performance:			
Unusual Problems/Occurrences Affecting Contractor's Performance			
Phase I Available	Phase I Paid	Phase II Available	Phase II Award Recommended? <input type="checkbox"/> Yes Recommended Size: _____% (0-100%) <input type="checkbox"/> No
State Specific Reasons for Recommendation for Phase II Award: <i>(Additional pages may be attached if necessary)</i>			
RPM _____ <i>Signature & Date</i>		PO _____ <i>Signature & Date</i>	

51-028-26A

Page 2 of 3

51-028-26,1A



Exhibit 6-1 (cont'd)

Page 3 of 3

EPA Work Assignment Completion Report (WACR) Part II: Project Schedule and Cost Information Worksheet		
Contract No.	Work Assignment No.	EPA Region
Performance Criteria	Rating	Supporting Comments
Project Planning <ul style="list-style-type: none"> • Organizing (e.g., Work Plan development, data review) • Scheduling • Budgeting 	____5 ____4 ____3 ____2 ____1	
Technical Competence & Innovation <ul style="list-style-type: none"> • Effectiveness of Analyses • Meet Plan Goals • Support USACE, State, Enforc. • Adhere to Regs. & Procedures • Approach Creativity/Ingenuity • Expert Testimony 	____5 ____4 ____3 ____2 ____1	
Schedule & Cost Control <ul style="list-style-type: none"> • Budget (Hours & Cost) Maint. • Priority/Schedule Adjustments • Cost Minimization 	____5 ____4 ____3 ____2 ____1	
Reporting <ul style="list-style-type: none"> • Timeliness of Deliverables • Clarity • Thoroughness 	____5 ____4 ____3 ____2 ____1	
Resource Utilization <ul style="list-style-type: none"> • Staffing • Subcontracting • Equipment, Travel, etc. 	____5 ____4 ____3 ____2 ____1	
Effort <ul style="list-style-type: none"> • Responsiveness • Mobilization • Day-to-Day • Special situations (e.g., adverse/dangerous conditions) 	____5 ____4 ____3 ____2 ____1	

51-028-26.2A



ity, and adherence to Agency, State, and other Federal and local standards.

- **Schedule and Cost Control:** This includes the ability to minimize costs, maintain planned budgets and schedules, and adjust priorities or schedules.
- **Resource Utilization:** This includes the effective use of resources, the suitability of staffing, recruiting, and training of personnel, and the ability to effectively manage subcontractor's costs and resources.
- **Reporting:** This includes the timeliness, thoroughness, and clarity of deliverables.
- **Effort:** This includes the ability to identify and resolve problems, and maintaining a regular communication link with Agency personnel.

The WAM should use the detailed listing of performance evaluation criteria (see Exhibit 6-2). All recommendations must be clearly supported and cite specific examples where the contractor's performance is rated above or below satisfactory. Additional supporting documents may be attached as appropriate. Every Region should implement procedures to track and record performance on work assignments to ensure an equitable evaluation on the WACR. In award fee contracts, the award fee plan specifies periodic contractor performance evaluation. The results of the evaluations should be considered when preparing the WACR.

6.2.2 Work Assignment Form (Enforcement Program)

Upon approval of the final report, the WAM notifies the PO who prepares a new Work Assignment Form (WAF) closing out the WA. This document (close-out WAF) need not come through the CO for signature, as it is for internal file documentation only. Only in instances where the actual LOE hours/dollars are 10 percent different from the current work assignment budget should the close-out WAF be formally processed through the CO for signature. For a more detailed discussion on the WAF see section 2.4.1 and Exhibit 2.6.

Should the final report be disapproved or approved subject to changes, it is necessary to apply

cost management principles. The final invoiced amount for the WA should not be approved. EPA personnel should compare the LOE hours or dollars that were expended on the assignment to the approved work plan budget. If the two do not match, a WA amendment must be initiated by the WAM.

To best assist in work assignment closeout and prevent cost overruns, it is suggested that the WAM and/or PO contact the contractor to confirm WA closeout and review the budget status, expected expenditures, and anticipated closeout costs.

6.2.3 Work Assignment Closeout and Fee Evaluation

The work assignment closeout process plays a critical role in the fee evaluation for the Alternative Remedial Contract Strategy (ARCS), Technical Enforcement Support (TES) contracts, Enforcement Support Services (ESS) contracts, and the Response Action Contracts (RACs). The fee evaluation is an important management function that helps ensure contract compliance and encourages high-quality contractor performance. The ARCS, and TES contracts use a Cost-Plus-Award-Fee (CPAF) structure that provides a "base" fee percentage of the cost of the contract. Each contractor is guaranteed the base fee, but must earn all or part of the award fee through demonstrated performance. RACs also uses the CPAF structure, but employs the term "performance fee" rather than "award fee." The base fee is paid monthly on a provisional basis and is retained by the contractor as long as a satisfactory rating is maintained. The contractor only qualifies for performance fee if the overall Work Assignment rating on the WACR is "exceeds expectations" or "outstanding."

6.2.4 Contract-specific Fee Evaluation Processes

ARCS Contracts and the Award Fee Process. A detailed discussion of the ARCS award fee process can be found in sections 3.14 - 3.22 of the "ARCS Work Assignment Management Field Guide, January 1989," and chapter 3 of the "ARCS Users Manual, August 1989."



Exhibit 6-2 Evaluation Criteria for Work Assignments

Project Planning

- Ability to set schedules and priorities for the accomplishment of all work under the work assignment.
- Regular and effective communication with Agency personnel.
- Compliance of contract and work assignment requirements.
- Development of work plan.

Technical Competence and Innovation

- Technical quality of deliverables.
- Effectiveness and thoroughness of analyses.
- Ability to meet work plan goals and objectives.
- Creativity and ingenuity in approach.
- Adherence to regulations, procedures, and guidelines.
- Ability to support other organizations involved at site.

Schedule and Cost Control

- Development and maintenance of planned schedules and budgets for deliverables provided by the work assignment.
- Ability to minimize and control the cost.
- Elimination of duplication of effort.
- Quality and timeliness of deliverables.

Resource Utilization

- Effective use of resources.
- Appropriateness of professional mix to ensure quality of work while minimizing cost and time expenditures.
- Ability to effectively manage subcontractors' costs and resources, eliminate cost duplication by subcontractors.
- Ability to assure contract compliance by subcontractor.
- Adherence to subcontracting plan.
- Ability to effectively monitor subcontractor performance.

Reporting

- Timeliness of deliverables.
- Clarity and thoroughness of reports and documents.
- Accuracy and completeness of data.

Effort

- Ability to identify and resolve problems.
- Maintains regular communication link with Agency personnel and provides appropriate information enabling Agency personnel to keep abreast of work assignment progress.
- Thoroughness in dealing with all aspects of the project.



TES Contracts and the Award Fee Process. A detailed discussion of the TES award fee process is found in chapter V of the "TES V+ Users Manual, April 1992."

ESS Contracts and the Award Fee Process. A detailed discussion of the ESS award fee process can be found in the "Regional ESS Users Manual."

RACs and the Award Fee Process. A RACs Users' Guide Manual is due to be completed in June of 1994. The Manual will describe the application of performance fee procedures in RACs.

6.3 ANNUAL CLOSEOUTS OF ARCS CONTRACTS

Alternative Remedial Contracts (ARCs) are incrementally closed out on an annual basis. In 1989, EPA amended the language in the Federal Acquisition Regulations (FAR) for Clause 52.216-7, "Allowable Cost and Payment." This FAR amendment requires annual closeouts of total costs and fee claimed for each completed fiscal year of a contract. This process is consistent with EPA's objective to provide stronger contract cost surveillance on a more current basis. Final instructions and procedures for implementing ARCs annual closeouts are delineated in Appendix H.

6.3.1 Contractor Responsibilities for ARCS Annual Closeouts

Each contractor is required to submit a schedule of direct and indirect costs claimed for each fiscal year to the applicable EPA Contracting Officer (CO) no later than 150 days from the end of each *contract fiscal year*. The submitted schedule is entitled *Summary of Contract Costs Claimed for FYE, 19XX* (see Exhibit 6-3). This schedule details the direct and indirect costs claimed by cost element and applicable base and award fee for the subject fiscal year. The schedule is further broken out by claimed program management and remedial costs. The schedule's format should be adjusted as needed to reflect each cost element recognized by the contractor's accounting system and the contract. The contract cost data should match the information included in the

contractor's Incurred Cost Submission due within 90 days from the end of each contract fiscal year.

Contractors are required to provide fiscal year contract costs claimed by Work Assignment because EPA accounts for each contract Work Assignment separately. Contractors must provide a supporting schedule to the *Summary of Contract Costs Claimed for FYE, 19XX* that details the contract cost claimed by cost element and Work Assignment. In addition, contractors must simultaneously submit a schedule entitled *Contract Billing Summary for FYE, 19XX* (see Exhibit 6-4) that summarizes contract costs and fee billed by voucher number for the fiscal year. If variances exist between the claimed/booked amounts and those amounts already billed, the contractor must include a fully documented reconciliation. The reconciliation should clearly outline a description and the amounts for all components of the variance broken out by cost element and Work Assignment.

Timing Issues. The contractor's fiscal year claim should be consistent with the contractor's Incurred Cost Submission and consist of all the costs incurred and recorded in the subject fiscal year. Subcontractor costs received by the end of the prime contractor's fiscal year should be included in the prime contractor's claim. Subcontractor invoices received after the end of the prime contractor's fiscal year should be recognized as incurred/claimed costs for the following fiscal year.

Any variance between billed indirect cost rates and the unaudited actual rates claimed for the subject fiscal year represents a claim for the fiscal year in which authority to bill the variance is prescribed under the terms of the contract. The billing of any difference between the claimed and negotiated costs of a prior year is a claim for the fiscal year in which the billing adjustment is made.

Billing for Prior Fiscal Year Adjustments. Any invoices for prior year adjustments should be submitted on a separate invoice from current monthly costs. The separate invoice should identify the appropriate time period for which the costs are applicable and contain an explanation and any documents that support the occurrence of the event causing the adjustment. The invoice should be numbered and show current and



Exhibit 6-3
Summary of Costs Claimed for FYE XX

Contractor Name: Contract Number: Fiscal Year Ended XX			
Cost Elements	Total Costs Claimed for FYXX	Program Mgt. Claimed for FYXX	Remedial Claimed for FYXX
Direct Labor			
Fringe			
Overhead			
ODCs			
Travel			
Materials			
Equipment			
Subtotal			
G&A			
Subcontract Pool Costs (Attachment)*			
Subcontract Costs			
Team Sub A			
Team Sub B			
G&A on Subcontracts			
Total Costs			
Base Fee			
Award Fee			
Total Claimed			
Less Total Billed (See Attachment 1E)			
Variance	=====	=====	=====

51-028-28

cumulative costs by cost element similar to current period invoices. Accordingly, a separate public voucher should be submitted for billings related to prior year indirect rate variances. A copy of the executed EPA Indirect Rate Agreement should be attached to the invoice.

6.3.2 Contract Officer Responsibilities in ARCS Annual Closeouts

The CO is responsible for ensuring that contractors are aware of annual closeout requirements and

that they submit annual claims as required by the contract clause. The CO reviews the contractor's claim for completeness to assure that information required at the contract and Work Assignment levels and any necessary reconciliations are consistent with each other. The CO also verifies that any necessary contractor, CO, or PO explanations or concerns are identified and attached to the claim. Upon satisfactory review, the CO will forward the contractor's claim with a request for audit to the Chief, Financial Analysis Branch (FAB).

	Invoice Date	Costs Billed for FYE XX	Fee Billed for FYE XX	Total Billed for FYE XX
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Total	=====	=====	=====	=====

Last Column on this Schedule must equal total Billed on Attachment 1C - Summary of Costs Claimed

Dates Submitted to EPA

Contract Person - Name

Phone Number

The FAB reviews the claim to verify the acceptability of the contractor's Summary of Contract Costs Claimed for FYE, 19XX. If the data in the contractor's schedule is not in the appropriate format, the FAB will advise the CO and contractor to resolve these problems. The FAB will also compare the submitted schedules for consistency with the Contractor's Incurred Cost Submission.

Resolution of Audit Results. After receipt of the audit report by the CPRNB, they will determine which cost issues are to be resolved or negotiated by the Financial Administrative Contracting Officer (FACO). The audit report will be transmitted to the CO by the FAB identifying which questioned costs must be settled by the CO and which questioned costs will be settled by the FACO.

The FACO will negotiate the indirect costs and direct costs that are not contract specific in nature. An example of such a direct cost would be a computer billing rate applied to all cost objectives. The CO will be responsible for negotiating all other direct costs. The CO and/or FACO should resolve any questioned direct or indirect costs immediately because any questioned costs will be in the EPA Inspector General's Audit Tracking System. The resolution of the questioned contract



costs must be resolved by the CO and FACO within 150 days along with a transmittal to the FAB, detailing the disposition of the audit report and including a summary of negotiations and appropriate correspondence reflecting the negotiated cost for the year. The CO is also responsible for providing the Management Audit Tracking System form summarizing the disposition of questioned costs within the 150 days.

Billing for Negotiated Cost Adjustments. After the costs are negotiated by the responsible official, the contractor may bill (debit or credit) on a separate invoice for any variances between claimed and negotiated costs related to the applicable fiscal year costs as authorized by the CO. The contractor will submit a release statement to the CO after the negotiation of direct and indirect costs are completed. The release statement should be reviewed for accuracy and reasonableness by the CO, and to assure that it reconciles to the contractor's Summary of Contract Costs Claimed For FYE, 19XX, and to the negotiated cost amounts for the year. Any list of estimated/unsettled cost items outlined in the contractor's release statement must be reviewed for reasonableness by the CO. After the release statement is fully executed, the subject fiscal year will be considered closed. A copy of the release statement and any correspondence applicable to the release should also be sent to the FAB by the CO for follow-up audit considerations.

6.4 FINAL CLOSEOUT OF CONTRACTS

In order to adhere to cost management principles, it is necessary for EPA personnel to terminate a contract in a cost effective and expeditious manner. Procedures similar to those of work assignment closeout should be followed. To best assist in terminating a contract and prevent cost overruns, it is suggested that the WAM and/or PO contact the CO to confirm the termination of the contract and review the budget status, expected expenditures, and anticipated termination costs. This section describes the contract termination process and outlines the roles and responsibilities of EPA personnel in this process as well as discusses

management techniques to administer cost management standards.

The contract closeout process entails all actions required to ensure that the Government has received goods or services under the contract, the contractor has been paid the correct amount, all Government property is accounted for, all required reports have been received, and the file is properly documented and transmitted to the records center. Excess funding must be returned to the Treasury Department. Contracts that are physically complete must be administratively closed out. This process involves the settlement of all outstanding contractual issues and complete documentation of the file. The CO is responsible for closing out the contract with the assistance of the PO. The contract is considered complete when:

- All deliverables are delivered and accepted/or;
- All services are performed and accepted; and
- The period of performance including that of all exercised option provisions has expired.

The Federal Acquisition Regulations Guidelines (FAR) set forth the following deadlines for closing out contract files:

- **Firm Fixed Price Contracts:** Six months from the date that the Contracting Officer receives documentation of physical completion.
- **Cost Reimbursement and Indefinite Quantity Contracts Requiring Settlement of Indirect Cost Rates:** 36 months from the date that the Contracting Officer receives documentation of physical completion.
- **All Other Contracts:** 20 months from the date that the Contracting Officer receives documentation of physical completion.

Timely closeout of contracts is important because completed contracts that remain open can foster late claims and disputes.

6.4.1 Contracting Officer Responsibilities in Contract Closeout

The CO requests that the contractor submit a completion voucher summarizing all costs claimed

¹ A completion voucher is not required for firm fixed price contracts because the voucher submitted after the items are accepted specifies the fixed price of the contract.



throughout the contract period once all services are rendered and/or items delivered¹. The completion voucher is the basis for requesting a final audit that provides a report on the contractor's actual costs and serves as the basis for negotiating a final cost settlement. The CO then determines the allowability, allocability, and reasonableness of costs claimed and enters into negotiations with the contractor. A final cost estimate is negotiated and a final payment is made to the contractor. The final voucher submitted by the contractor is certified by the CO and is subject to all provisions of the Prompt Payment Act.

6.4.2 Project Officer Responsibilities in Contract Closeout

POs assist in the following tasks of the work assignment closeout process:

- Certifying that all technical requirements of the contract are satisfied, that the products or services are satisfactorily completed within the contract amount, and that the final report and all deliverables are received and accepted;
- Reviewing and determining the accuracy of the contractor's report on inventions;
- Examining the completion voucher for cost-reimbursement contracts; and
- Evaluating the contractor's performance under the contract.

The CO will request that most of these activities take place in writing so that the PO only needs to respond to this written request. POs need to conduct a thorough contractor evaluation that is backed up by documentation because the evaluations serve as the basis for evaluating past performance of a potential contractor in consideration for award of future competitive requirements.

6.4.3 Termination of Contracts

In addition to final expiration of a contract, the laws that give the government power to enter into contracts also give it the right to terminate such contracts. Most contracts allow the government to terminate contracts for one of two reasons: default of the contractor or convenience of the Government. The ability to terminate a contract is a unilateral right of the government; the contractor

does not have any such rights. Terminations may be complete or partial. A complete termination requires the contractor to stop all work under the contract, while a partial termination discontinues only a portion of the uncompleted work. The decision to terminate a contract partially or completely is dependent on the exact circumstances surrounding the decision to terminate. It is preferable to work out possible solutions to contracting problems before resorting to contract termination. Terminations are often costly, time-consuming, and end up in litigation.

Termination for Convenience

Under the termination for convenience clause, the government has a right to cancel work under a contract whenever it determines that it is in its best interest. This decision is a unilateral right of the government, but should not be decided without considerable evaluation. Cancellation of the work under a contract is an expensive and undesirable course of action because there is an extensive administrative effort involved on the part of the government to complete the termination. Generally, termination for convenience occurs because of changes in government requirements or because contract funding is not available. Other circumstances such as an unavoidable organizational conflict of interest or a decision that working in-house could be more cost-effective may also make termination advisable.

The first step in a termination for convenience is written notification to the contractor by the CO. The notice clearly indicates that the contract is being terminated for the convenience of the government. The notice also provides:

- An effective date for the termination (usually the date of the notice);
- The extent of the termination identifying what portion, if any, should be continued; and
- Any special instructions.

Upon receipt of the notice, the contractor is obligated to comply with the termination clause and the terms of the notice that generally includes:

- Stopping work on the terminated portion of the contract;



- Terminating related subcontracts;
- Continuing with the unterminated portion and promptly requesting any equitable adjustment in price on the continued portion;
- Taking action to protect and preserve any government property or to return it as directed by the CO; and
- Promptly submitting its own claim for settlement (the contractor has up to one year to submit such a claim).

The CO should direct the actions of the contractor, review the settlement proposal, and promptly negotiate a settlement. One of the CO activities in which the PO may participate is the settlement conference. The CO or PO will be responsible for the following activities at the settlement conference:

- Explaining the general principles governing settlements under the relevant clause, including the contractor's obligations with respect to subcontracts;
- Determining the status of the work, and if necessary, clarifying the extent of the termination;
- Determining the subcontracts that will be terminated and identifying who is responsible for handling them for the contractor;
- Making all arrangements for proper handling and disposition of government property;
- Discussing the form of the settlement proposal and the required accounting data; and
- Establishing a tentative schedule for negotiation of the settlement.

In addition to possibly making a recommendation to terminate for convenience, the PO will be involved in settlement conferences, advising the CO on the disposition of property and evaluating the reasonableness (quantitatively and qualitatively) of the contractor's settlement proposal.

Termination for Default

The government has a contractual right to terminate, in whole or in part, the contractor's right to proceed with the work, when the contractor fails to perform their contractual obligations. The decision to terminate is discretionary and the CO should exhaust all reasonable efforts to prevail

upon the contractor to correct whatever problems exist.

If a contract is terminated for default, but it is determined afterwards that the contractor was not in default and that the default was "excusable", the termination will be considered to be for the convenience of the government. If the CO determines that it is in the best interests of the government, the contract may be reinstated by mutual agreement. The government's right to terminate for default is based on the contractor's failure to :

- (1) Perform on time, as provided in the contract.
- (2) Perform any other provision of the contract.
- (3) Make progress, to the extent that the delay endangers contract performance. Although not expressly provided for in the default clause, the government may immediately terminate for default if the contractor definitely exhibits an intention not to perform within the time fixed in the contract.

Prior to taking any default action, the CO will normally take action on one of the following remedies short of termination. At this time, the CO should also determine:

- Whether it would be effective to withhold payment until satisfactory performance is demonstrated;
- Whether there is an alternative source of supply if default action is taken;
- Whether the contractor is in a financial position to reimburse the government for the excess costs of repurchase;
- Whether default would impact the contractor's ability to liquidate progress payments or continue to perform under other government contracts;
- Whether continued performance under a revised delivery schedule would be more in the government's interest;
- Whether the government's interest would be better served by offering advance payments or some other financing agreements;
- Whether an arrangement to have the contract performed by a capable subcontractor may be an appropriate solution;



- Whether, where a capable organization declines to perform as a subcontractor, a novation agreement can be arranged whereby the desired performance can be obtained from that organization while the original contractor remains legally liable for the contract;
- Whether there is a surety or trustee in bankruptcy who would be willing to take over the responsibility for performing the contract; and
- Whether a no-cost termination agreement should be executed (this occurs when the

requirement for the supplies or services no longer exists and the contractor is not liable to the government for damages.

The CO, with the assistance of the PO, has a reasonable amount of time to determine if it is in the Agency's best interests to exercise its right to terminate a contract for default. The definition of a reasonable period depends upon the facts of each case and will vary from case to case. The contract file must be fully documented to explain the reason(s) for default and the Agency's rationale for evoking the default provision.

APPENDIX A

APPENDIX A

REFERENCES

REFERENCES FROM THE OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

1. ***Memorandum from Henry Longest (Director, OSWER/OERR) Regarding Program Management Costs Under ARCS. February 11, 1993.***

The purpose of this memorandum is to notify EPA Regional Division Directors in the Superfund program of the Fiscal Year 1993 Congressionally-mandated target for ARCS contracts program management costs. The document also previews a new process (to be delineated in forthcoming guidance) for tracking and reporting project management costs.

2. ***Letter to Gerald M. Clifford (USEPA/OSWER/HSCD) from Michael H. Fellows (U.S. Army Corps of Engineers). October 15, 1992.***

This letter discusses joint USACE and U.S. EPA efforts to develop improved methods and procedures for estimating remediation costs for hazardous waste cleanup projects, including the availability of USACE to review EPA contractor-prepared cost estimates. Attached to this letter is a model "Scope of Work" that could be used by U.S. EPA Regional offices to establish agreements with Corps field offices for this purpose.

REFERENCES FROM THE ENVIRONMENTAL PROTECTION AGENCY HEADQUARTERS' LIBRARY

3. ***Contracts Management at EPA - Recommendations of the Standing Committee on Contracts Management. December 8, 1992.***

This document summarizes 40 recommendations of the Standing Committee on Contracts Management and provides background, specific milestones, validation, and current status for each recommendation. Of particular interest are the following recommendations:

- #22 Develop Training Course on How to Manage Contracts, Control Costs, etc.
- #24 Index Existing Procurement-related Guidance Documents
- #25 Prepare Cost Estimate Guide/Data Bases to Assist in Developing IGCEs
- #26 Issue Uniform Contract Management Guidance
- #36 Develop Policy on Allowable/Unallowable Indirect Costs

4. *Alternative Remedial Contracting Strategy (ARCS Contracts) Instructions and Procedures for Implementing the Annual Close-Outs.* July 1992.

This guidance document provides instructions and procedures for implementing ARCS Annual Closeouts of total costs and fees claimed.

5. *Superfund Accelerated Cleanup Model (SACM).* March 1992.

This document describes the new "paradigm" or approach developed by the Office of Emergency and Remedial Response to increase the efficiency of the Superfund program by streamlining cleanup efforts at Superfund sites. The SACM strategy includes: a single, integrated assessment function; early actions; long-term remediation; Regional Decision Teams; and appropriate integration of enforcement, community relations, and public participation throughout the process. Distinctions between remedial and removal programs are eliminated, and instead are viewed as separate legal authorities with different, but complimentary application at Superfund sites.

6. *Guidance on Program Management Activities Under ARCS.* February 26, 1992.

This guidance document addresses two of the six specific recommendations identified by the Administrator's Task Force. The document provides insight on the issues of administrative and technical support cost tracking, and cost management activities that would clarify, and discuss various aspects of program management.

7. *EPA Contract Administration Training Course Manual, Chapter 11 (Financial Management of Contracts).* December 1989.

This chapter of the training text provides guidance to Agency Project Officers, Work Assignment Managers, etc. on financial management of various types of Agency contracts.

8. *Financial Management Procedures for Documenting Superfund Costs.* September 1986.

This handbook is written primarily for EPA's Financial Management Offices (FMOs), which are responsible for documenting Superfund costs and providing copies of the cost documentation to EPA counsel. The handbook includes an overview of the cost recovery process, the filing and reconciliation procedures, and guidelines and procedures for documenting Superfund costs for cost recovery purposes.

REFERENCES FROM THE GENERAL ACCOUNTING OFFICE

9. ***Superfund Contracts - EPA Needs to Control Contractor Costs.*** (GAO/RCED-88-182), July 1988.

This report primarily discusses the need for EPA to exercise sufficient cost control over remedial contractors. It also offers suggestions to improve the award fee process and strengthen prime contractor/subcontractor procedures. While this is not an EPA document, we have included it on this list because it specifically addresses cost management of Superfund contracts. Agency comments on the audit findings are included throughout the document.

REFERENCES FROM THE NATIONAL TECHNICAL INFORMATION SERVICE

10. ***Resources for Preparing Independent Government Estimates for Remedial Contracting Work Assignments.*** (OSWER Directive 9242.2-06a), August 5, 1992.

This document provides information regarding the availability of tools, data bases, and assistance for developing independent government estimates of the cost of work to be performed by contractors for remedial work assignments (RI/FS, RD, and RA).

11. ***Superfund Contract Management Issues.*** (OSWER Directive 9242.2-06), January 31, 1992.

The purpose of this directive is to initiate new requirements regarding the development of independent government cost estimates, review of contractor invoices, and the appropriate participation on Performance Evaluation Boards.

12. ***Administrative Guidance for the FIT to ARCS Transition.*** (OSWER Directive 9242.2-03), November 1991.

This directive provides administrative guidelines for assigning site assessments previously done by the FIT contractors to the ARCS contractors. Cost reporting, invoice review, cost documentation, and cost recovery are addressed.

- 13. *Implementation of the Superfund Alternative Remedial Contracting Strategy (ARCS), Report of the Administrator's Task Force 1991. (OSWER Directive 9242.2-05), November 27, 1991.***

The scope of this directive encompasses the entire spectrum of remedial contract management issues, and offers 32 recommendations that are segregated into six categories. They include: program management; ARCS capacity and utilization; ARCS contract controls; ARCS financial audits and reviews; the award fee process; and EPA management processes and organizations.

- 14. *Approval of Long Term Contracting Strategy for Superfund. (OSWER Directive 9242.6-07), September 9, 1990.***

This directive summarizes the issues, findings, analysis, and recommendations for the Superfund Long Term Contracting Strategy (LTCS) which was developed to analyze the long-term contracting needs of the Superfund Program and to design a portfolio of Superfund contracts to meet those needs over the next ten years. This strategy builds upon a "One Program" approach to enforcement, as it supports project management from site discovery through remedy construction, builds in flexibility, responds rapidly to immediate risks, and decentralizes contracts management.

- 15. *Scoper's Notes-An RI/FS Costing Guide. (EPA/540/G-90/002), February 1990.***

This handbook is intended for use by RPMs during RI/FS scoping activities to assist them in identifying those options and decisions within the scoping process that may have significant impact on project budgets.

- 16. *The Enforcement Project Managers' Handbook, Cost Recovery Chapter. (OSWER Directive 9837.2), July 1989.***

This chapter provides RPMs/OSCs with an overview of the central components of cost recovery actions including removal, remedial, and oversight costs. The information is organized to follow the chronology of tasks.

- 17. *Site-Specific Contracting for Removals. (OSWER Directive 9242.2-02), April 1989.***

This memorandum provides direction on the use of site-specific contracts for removal actions and is intended to encourage site-specific contracts in as many actions as possible. These contracts, where applicable, lead to getting the best cleanup price possible for removal actions.

18. *The Superfund Cost Recovery Strategy.* (OSWER Directive 9832.13), July 20, 1988.

This guidance document is intended to provide a framework for planning and initiating actions to recover Federal funds expended by EPA or a State in CERCLA response actions (removal and remedial). It discusses general cost recovery program priorities, identifies case selection guidelines, and identifies activities required to support the development of cost recovery actions.

19. *Removal Cost Management Manual.* (OSWER Directive 9360.0-02B), April 1988.

This policy and procedural manual is designed to provide comprehensive cost management procedures for use by the EPA at removal actions authorized by CERCLA. This document should be used by the On-Scene Coordinator (OSC) and other on-site personnel designated by the OSC when performing cost management at a Superfund removal site.

20. *Remedial Action Costing Procedures Manual.* (EPA/600/8-87/049), October 1987.

This manual provides specific procedures for the cost estimating and economic analysis steps required for preparing engineering cost estimates for selecting remedial action alternatives in response to the requirements of CERCLA. Detailed procedures are provided for generating estimated capital and annual operating costs, calculating annual costs and present worth, and performing sensitivity analyses of the cost estimates to determine the impact of changes to various cost input parameters.

21. *Emergency Response Cleanup Services Contracts (ERCS) Users' Manual.* (OSWER Directive 9242.2-01B), October 1987.

This users' manual establishes a standard set of operating and management procedures to assist EPA Headquarters and Regional personnel, and personnel from other Federal agencies authorized to use the ERCS contracts, in using the contracts efficiently and effectively. In addition, the manual discusses coordinating the use of the ERCS contracts with other entities involved with the Superfund program. The manual can also be used to train and/or inform parties who regularly interact with or who are interested in the ERCS program. Cost issues addressed include invoice certification and cost documentation.

22. ***Technical Assistance Team (TAT) Contracts Users' Manual.*** (OSWER Directive 9242.4-01A), September 1987.

This users' manual provides information and guidance on management and implementation of EPA's "Technical Assistance Teams (TAT) for Emergency Response, Removal, and Prevention" contracts. Its primary purpose is to assist Regional and Headquarters personnel in understanding their roles and responsibilities under the contracts and to describe the necessary procedures and requirements that should be followed in managing the contracts, including financial management. The manual is also intended to be helpful to TAT contractors.

23. ***The RPM Primer, An Introductory Guide to the Role and Responsibilities of the Superfund Remedial Project Manager.*** (OSWER Directive 9355.1-02), September 1987.

This directive is used to familiarize RPMs with their roles and responsibilities in the Superfund remedial program. The Primer leads the RPM through all aspects of the remedial response process from site discovery to cost recovery action.

24. ***Policy on Recovering Indirect Cost in CERCLA Section 107 Cost Recovery Actions.*** (OSWER Directive 9832.5), June 27, 1986.

This directive clarifies EPA's policy regarding the recovery of indirect costs in CERCLA cost recovery actions, stating that the decision whether to seek indirect costs in existing cases will be made by the Regions after consultation with the Department of Justice and with the concurrence of EPA's Office of Enforcement Compliance and Monitoring and Office of Waste Programs Enforcement.

25. ***Cost Recovery Actions Under CERCLA.*** (OSWER Directive 9832.1), August 26, 1983.

This directive describes the essential elements that the government will probably be called upon to prove in a cost recovery action: the assembly and maintenance of a file, some examples of appropriate documentation for each element of the cause of action, procedures for processing and negotiating cost recovery claims, and the mechanics of repayment of any recovery to the Fund.

26. ***Cost Recovery Referrals.*** (OSWER Directive 9832.0), August 3, 1983.

This directive discusses procedures for Regional staff in handling and documenting upcoming CERCLA Section 107 cost recovery referrals in order to meet Department of Justice requirements.

APPENDIX B



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

JAN 31 1992

OSWER Directive 9242.2-06

MEMORANDUM

SUBJECT: Superfund Contracts Management Issues

FROM: Don R. Clay, Assistant Administrator
Office of Solid Waste and Emergency Response

Christian Holmes, Acting Assistant Administrator
Office of Administration and Resource Management

TO: Regional Administrators

PURPOSE

To initiate new requirements regarding the development of independent government cost estimates (IGE), review of contractor invoices, and the appropriate participation on Performance Evaluation Boards.

BACKGROUND

Within the last 6 months, the EPA Inspector General, the General Accounting Office and the Administrator's Task Force on the Implementation of Superfund Alternative Remedial Contracting Strategy (ARCS) have issued findings and recommendations regarding several issues including deficiencies in the areas of IGEs, the adequacy of our review of contractor invoices, and the performance of the award fee process. While the comments were directed at specific contracting programs within Superfund, they affect and are a concern across all OSWER contracting programs. This directive establishes new policy regarding these issues.

OBJECTIVE

Independent Government Cost Estimates

The Federal Acquisition Regulations require that IGEs be prepared for each new contract or modification that is expected to exceed \$25,000. Currently, there is no Federal or Agency policy that requires IGEs prior to the issuance of independent work assignments under existing contracts. A recent GAO report compared the work plan negotiation results for work assignments where IGEs were prepared against results where IGEs were not prepared. The conclusion of this comparison demonstrated that

considerable negotiation leverage is achieved when realistic IGEs are developed prior to work plan negotiation. In all cases where an IGE was prepared, the negotiated amounts were considerably below the initial work plan amounts presented by the contractor. The exercise of developing independent government cost estimates also demonstrates to our contractors that the government negotiation team is fully prepared to discuss, and to negotiate realistic costs for the work to be performed.

Both the GAO report and the ARCS Report of the Administrator's Task Force recommend that Regional Administrators develop a capability for contract managers in generating independent government cost estimates. The objective of this Directive is to establish policy to implement this recommendation across OSWER.

Review of Contractor Invoices

The objective of this directive is to clarify the role of contract managers (POs, WAMs and RPMs) in the voucher review process and to establish policy regarding these activities.

Under cost reimbursable contracts, allowable, allocable and reasonable costs are paid up to the estimated cost of the contract or the expenditure limit for the work assignment, as appropriate. Contract managers are required to assure that the direct costs on vouchers that they approve are appropriate and reasonable for the work performed and that the amount of work performed is reasonable for the task. Contracting Officers will periodically look at a representative sample of the billed costs and determine allowability and allocability. In addition, professional auditors, at the request of the Contracting Officers, perform annual comprehensive incurred cost audits and provide recommendations to the CO. Any concerns raised by the auditors will be conveyed to the appropriate Project Officer. However, the contract manager, that person most familiar with, and closest to the work being performed (e.g., RPM, WAM, PO, etc.), has the ultimate responsibility for determining the "reasonableness" of the costs being invoiced. A "reasonable" cost is one that would seem to be justified and legitimate and what a prudent person would pay under like circumstances in the conduct of competitive business.

In reviewing the reasonableness of charges, contract monitors are not expected to know the exact market values of various direct costs; however, past experience and common sense can assist in making a determination for each cost element examined. If unreasonable charges are approved for payment, it is doubtful that anyone reviewing the costs later will possess the knowledge to disallow those costs. Therefore, the contract manager is the most logical person to question, identify and recommend disallowance of unreasonable charges.

Participation on Performance Evaluation Boards

One of the benefits of an award fee contract is that it provides a means of periodically involving senior contractor and government management in the oversight of contractor performance. To reinforce this position, the Environmental Protection Agency Acquisition Regulations (EPAAR) require that the Performance Evaluation Boards (PEB) be chaired at the division director level of the program initiating the procurement. Any changes to the chairperson appointment must be approved by the Fee Determination Official.

The composition of personnel participating in the performance evaluation process must represent those employees most experienced and knowledgeable of contractor performance issues. In many cases, first and second line supervisors represent the most experienced managers and, as such, are expected to take an active role in the performance evaluation process. In addition, PEB chairpersonship is occasionally delegated to positions below the Division Director level, or even to the branch chief level. Both of these situations erode some of the benefits of the award fee process. The objective of this directive is to reinforce the intent of the EPAAR in the area of roles and responsibilities associated with the performance evaluation process.

IMPLEMENTATION

Independent Government Estimates

Effective February 1, 1992, an independent government cost estimate must be developed by the technical program office (WAM or RPM) generating the requirement prior to the issuance of any work assignment estimated to exceed \$25,000 under contracts that utilize a work assignment/work plan administrative process. This requirement is applicable to both new work assignments and to increases in existing work assignments. The IGE will be prepared, at a minimum, at the element of cost level (e.g., direct labor, subcontracts, equipment, other direct costs, etc.) and by major task, when practicable. While the responsibility for IGE development rests with the technical program office, it is expected that the technical office will work in concert with the contract specialists in the management offices in this effort and that the IGEs must be developed independently without input from the contractor receiving the work assignment. The IGE will be used by the RPM/WAM, PO and CO as a tool in negotiating the workplan budget with the contractor and for documenting the resulting agreements in the contract file. We recognize that additional guidance may be required to develop the best possible IGEs. OSWER and PCMD will assess that need and assist in any way they can. However, in the meantime, it is expected that the

Regions and Headquarters offices will proceed to implement this policy.

In addition to estimating systems already developed in some Regions and at Headquarters, you are reminded of two tools that have been distributed to assist in preparing Superfund IGEs. The first, the Superfund Cost Estimating Expert System, is a computer model that uses site-specific data to develop independent government estimates. The second, Scoper's Notes, is a guide to RI/FS costing and is used to develop ballpark cost estimates. You are encouraged to utilize these tools in developing your estimating capability.

Review of Contractor Invoices

Effective immediately, those contract managers (WAM or RPM) that are most familiar with the contractor work will be responsible for reviewing monthly invoices as directed by the Project Officers. Contract managers are responsible for providing written recommendations on cost reasonableness or unreasonableness to the Project Officers. When further contractor documentation is required before a determination can be made, payment of invoiced costs, or any portions thereof, may be suspended by the Project Officer until the documentation is submitted and a reasonableness determination can be made. When charges are determined to be improper or unreasonable, the Contracting Officer has the authority to disallow payment of those charges. Contractor charges or portions of those charges that are inadvertently paid and later determined to be improper or unreasonable, should be disallowed on subsequent invoices.

Guidance on voucher review can be obtained from the Contracting Officer, Project Officer or any member of the Contract Operations Review and Assessment Staff (CORAS). Consult the CORAS Bulletin series on Financial Oversight for additional written guidance on the steps associated with the voucher review process. More specifically, Issue No. 4, dated May of 1989, contains an article on contractor voucher review. Contract managers are encouraged to read this guidance and to use the Invoice Review Checklist in Exhibit 1. Once the Checklist is completed, it should be attached to the contract manager's copy of the invoice to document the review. Copies of Issue No. 4 can be obtained from Superfund Project Officers or from CORAS in OERR at mail code OS-240.

Participation on Performance Evaluation Boards (PEBs)

Effective immediately, all official PEB chairpersons shall review the membership of their PEBs and make whatever adjustments are necessary to involve the most knowledgeable and experienced personnel in the award fee process.

Only in unusual circumstances, and when absolutely necessary, may official chairpersons delegate their responsibilities. In the event that delegation becomes necessary, the official chairperson shall contact the Fee Determination Official, prior to the convening of the PEB, and obtain verbal approval to delegate. In no event will the chairperson responsibilities be delegated below the Branch Chief level.

Many tools have been provided over the years to address these issues. They have taken the form of training, CORAS Bulletins, guidance documents, Award Fee Guides, computer models, exit conferences (conducted by GAO, IG and CORAS), program conferences, and even IG audits and GAO reports. We feel that the policy presented in this directive is critical to achieving improvements to our contracts management activities, and represents the first steps in implementing meaningful recommendations presented in review documents. It is requested that each region (a single coordinated response from each region) inform us as to the action taken in regards to implementing this Directive. It is requested that the implementation information be submitted within 30 days from the date of this Directive to the Superfund Acquisition Manager, OS-100, OSWER.

Any questions regarding this policy should be directed to Ika Joiner, Acting Superfund Acquisition Manager, at FTS 260-0840.

cc: Regional Deputy Administrators
 Assistant Regional Administrators
 Henry L. Longest II, Director, Office of Emergency and
 Remedial Response
 Bruce M. Diamond, Director, Office of Waste Programs
 Enforcement
 Sylvia K. Lowrence, Director, Office of Solid Waste
 David W. Ziegele, Director, Office of Underground
 Storage Tanks
 John C. Chamberlin, Director, Office of Administration
 David J. O'Connor, Director, Procurement and Contracts
 Management Division
 Directors, Waste Management Division
 Regions I, IV, V, and VII
 Director, Emergency and Remedial Response Division
 Region II
 Directors, Hazardous Waste Management Division
 Regions III, VI, VIII, IX, and X
 Directors, Environmental Services Division
 Regions I-VIII, and X
 Chief, Environmental Services Branch
 Region IX
 Director, Hazardous Site Control Division (HSCD)
 Director, Hazardous Site Evaluation Division (HSED)

Director, Emergency Response Division
Director, Office of Program Management
Director, CERCLA Enforcement Division (CED)
Office of Waste Programs Enforcement

APPENDIX C



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 3 1989

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

OSWER DIRECTIVE 9242.6-02

MEMORANDUM

SUBJECT: Guidance for Organizing ARCS Contract Files

FROM: Henry L. Longest II, Director *[Signature]*
Office of Emergency and Remedial Response

TO: Director, Waste Management Division
Regions I, IV, V, VII, VIII
Director, Emergency and Remedial Response Division
Region II
Director, Hazardous Waste Management Division
Regions III, VI
Director, Toxic and Waste Management Division
Region IX
Director, Hazardous Waste Division, Region X

Purpose:

To transmit to you the attached Guidance for Organizing ARCS Contract Files.

Background:

The attached guidance was previously transmitted to you for comment via a memo from Clem Rastatter and Russ Wyer dated November 3, 1988, and was more recently incorporated into the CORAS Bulletin which was released in December.

Objective:

To attain a degree of consistency in the filing of ARCS contract documents.

Implementation:

It is recognized that there tends to be some variation among Regions in their approach to a file management system. The recommended system seeks to retain the flexibility needed to meet the varying needs of Regional Project Officers (RPOs). There is also the need for some standardization given the number of reviews which will continue to be conducted (EPA IG, GAO, etc.) as well as periodic visits by Headquarters representatives.

I expect the principles of the attached system to be followed in order to assure a minimal level of consistency among Regions in this area.

Any questions concerning the above or the attached guidance may be addressed to Ken Adams or Debbie Dietrich, Acting Director, Contract Operations, Review and Assessment Staff (CORAS) at 475-9337.

Attachment

GUIDANCE FOR ORGANIZING ARCS CONTRACTS FILES

This guidance recommends a standardized ARCS contracts file management system for Regional Project Officers (RPOs). A standard and consistent file organization in every Region is necessary because of the quantity and complexity of the documents that will be generated by the ARCS contracts. A standard system should serve several important functions:

- Simplify access and retrieval. Access and retrieval will be simplified. The first document in each file will be an index listing the file contents. Other documents in the file will be categorized and arranged in separate file sections or subsections, by category. For example, in the work assignment management file, the first section may include all work assignments for a given site arranged in chronological order.
- Provide continuity. As a kind of "institutional memory," a standard organization will ensure that all necessary documents related to costs, site activity, contract management, and contractor performance are retained and retrievable. Thus, even if personnel turnover occurs, key information will continue to be available as long as required.
- Facilitate review. A standard organization will facilitate contract management oversight and site review activities of Congress, the General Accounting Office (GAO), the EPA Inspector General, and other Agency groups.

The recommended organization serves these functions while retaining the flexibility necessary to meet the varying needs of Projects Officers (POs).

Exhibit 1 lists the majority of the documents that will have to be maintained in ARCS contract files and briefly describes their functions. The list of documents in Exhibit 1 is not exhaustive. Some of the documents included in the file illustrations below are not discussed. These are routine contract documents that are not ARCS-specific, such as procurement requests and equipment lists. Also, substantive programmatic documents such as preliminary assessment or RI/FS reports, for example, are not included. These documents form part of the administrative record supporting site decision-making and will be retained in the administrative record file. There may be additional documents that are part of the decision-making process, but are also pertinent to work assignment management, e.g., certain technical directives. Such documents should be retained in both the administrative record and the ARCS work assignment management file.

ARCS documents should be organized in five files:

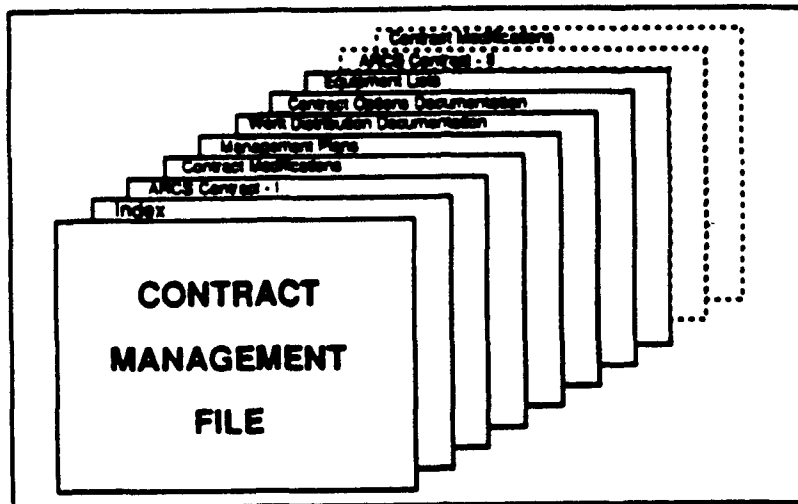
- A. A general contract management file, organized by

- contract;
- B. A work assignment management file, which may be site-specific;
 - C. A financial and progress report file;
 - D. A performance evaluation file; and
 - E. A confidential file.

Each file may occupy a file drawer, a portion of a drawer, or several drawers. The files, however, must be divided into the recommended sections. Each file section should be clearly identified and labeled. An index listing the sections should be the first document in each file. All documents in a single category should be filed together in a separate section or subsection, e.g., all work assignments or work assignment completion reports. Within each section, where practicable, documents should be arranged in chronological order with the most recent documents filed at the front of the section. The length of the retention period for each category of documents will be determined by the PO and Contracting Officer, pursuant to the Federal Acquisition Regulation (see 48 CFR 4.8, October 1, 1987 ed.).

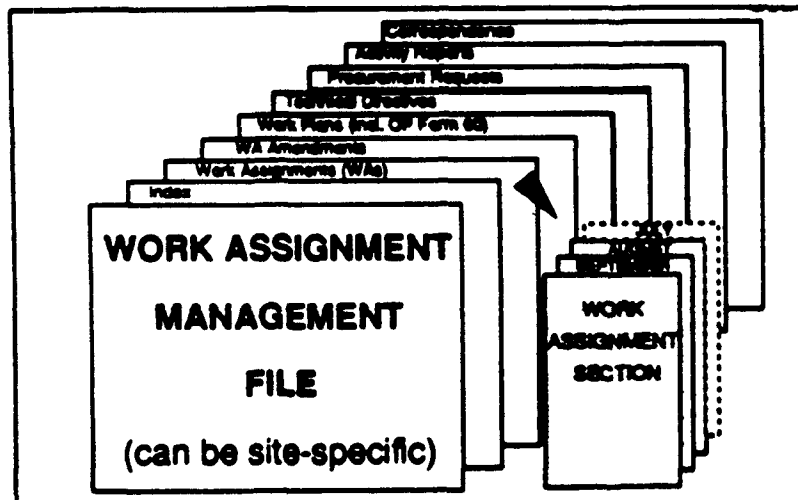
The following file illustrations show the documents that should be included in each file and the recommended sequence of document sections.

A. Contract Management File

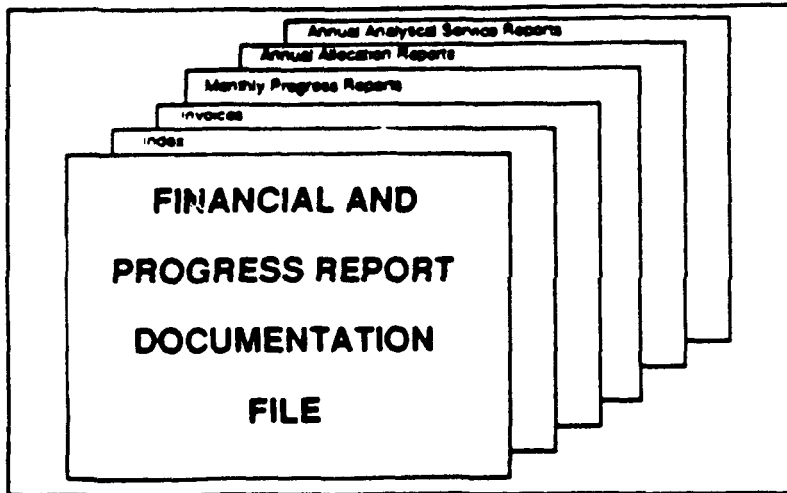


For each ARCS contract, the contract management file will contain documents directly related to the ARCS contract, such as the contract itself, contract modifications, management plans, documentation relating to work distribution and the exercise of contract options, and routine contract documents that are not ARCS-specific, such as equipment lists.

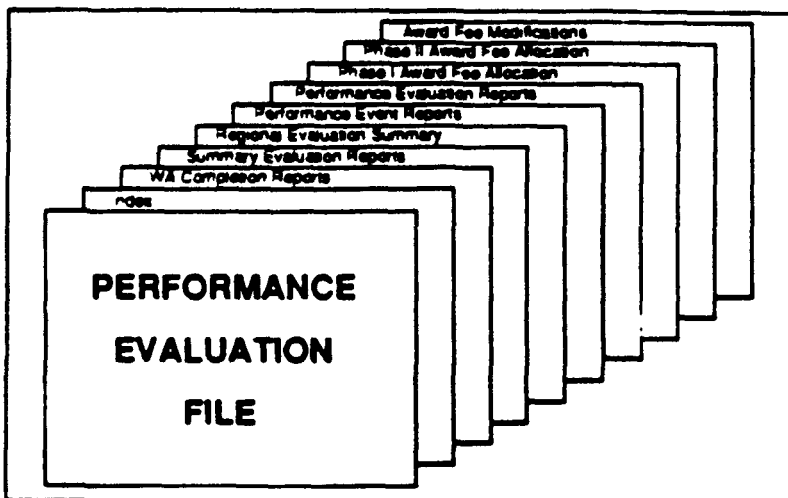
B. Work Assignment Management File



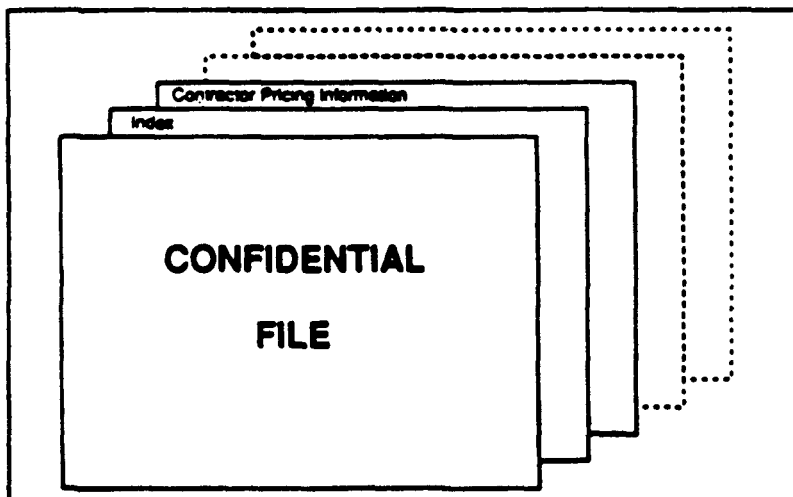
The work assignment management file may be site-specific. It will contain all work assignments and work assignment amendments, workplans, activity reports, and all correspondence (including cover letters from deliverables) related to a given site. Routine contract documents, such as procurement requests, will also be included in the work assignment management file.

C. Financial and Progress Report File

The financial and progress report documentation file will contain monthly progress reports and other cost-related documents such as invoices, annual allocation reports, and annual analytical service reports.

D. Performance Evaluation File

The performance evaluation file will contain all contractor and EPA prepared documents regarding contractor performance under each ARCS contract.

E. Confidential File

The confidential file is a limited access file that will contain any document that must be kept confidential, for example, contractor pricing information. Confidential documents should be organized by ARCS contract.

Regional contract management personnel who identify additional ARCS or routine contract documents that have not been included in this recommended plan, or have questions or suggestions regarding file management, should notify Ken Adams of the Contract Operations Review and Assessment Staff, FTS #8-475-9337, EPA mail code OS-240, EPA electronic mailbox EPA 5240.

EXHIBIT 1

DOCUMENTS THAT PRESENTLY NEED TO BE RETAINED IN ARCS CONTRACT FILES

Document	Function
<u>Contract Management Documents</u>	
Contract and Contract Modifications	Agreement between EPA and contractor stating terms according to which work will be performed.
Management Plan	Plan for managing the contract including the purpose and scope of the project, the management process, subcontracting, property management, the technical approach, quality assurance plans, and health and safety plan.
Work Distribution Documentation	[Specific documents required in this category have not been determined.]
Documentation of Exercise of Contract Options	[Specific documents required in this category have not been determined.]
<u>Work Assignment Management Documents</u>	
Work Assignment	Vehicle used by EPA to assign work to contractor; includes work description, allotted LOE, duration of assignment, and scheduled completion date.
Work Assignment Amendment	Modification to add to or change work assigned, hours, duration, etc.
Work Plan (incl. OP Form 60)	Required for each work assignment; serves as a baseline to monitor contractor's progress; must include a detailed cost estimate identifying all major cost items, stating objectives of proposed activity, and describing relationship to other activities, technical approach, and work to be performed under each task; must also include safety measures, schedule, number of person-hours required, cost flow and control procedures, subcontracting, and document production and distribution.
Activity Report	Documents the completion of work assignments, conduct of work; presents findings, conclusions, and recommendations; accounts for funds expended; provides guidance for future activity.
<u>Financial and Progress Report Documents</u>	
Invoice	Written request for payment under the contract for supplies delivered or for services rendered.
Monthly Progress Report	<p>Informs Project Officer (PO), Regional Managers, and the Remedial Project Managers (RPMs) of the status of individual activities and the overall program for the reporting period; provides baseline for planned expenditures for each site and work assignment; calls attention to departures from management and work plans. Consists of two parts:</p> <p>Summary Progress Report -- pertinent technical and financial information describing contractor efforts on all work assignments; summarizes expenditures, estimates LOE and costs required for completion, includes spread sheet comparing actual and budgeted expenditures.</p> <p>Site Specific Report -- supplies technical and financial summaries for each work assignment on a site specific basis.</p>

EXHIBIT 1 (CONTINUED)

DOCUMENTS THAT PRESENTLY NEED TO BE RETAINED IN ARCS CONTRACT FILES

Document	Function
Annual Allocation Report	Allocates program management costs, fixed and award fees, and some non-site activity costs to sites and activities for which costs were paid during the previous Federal fiscal year.
Analytical Services Report	Annual report on use of non-CLP laboratories and analysis of the effectiveness of the services provided.
<u>Performance Evaluation Documents</u>	
Work Assignment Completion Report (WACR)	Concise review of contractor's performance of specific work assignment used to identify difficulties or trends and provide contractor feedback about work areas that need improvement.
Contractor Self-Evaluation Report	Contractor's self-evaluation of performance for the relevant period for consideration by the Performance Evaluation Board (PEB).
Summary Evaluation Report (SER)	Project Officer's overall evaluation based on contractual criteria and rating guidelines; considers two categories: project management office activities and technical performance of remedial work assignments; identifies recurring difficulties and trends; indicates work assignments upon which evaluation is based. (Contracting Officers also prepare SERs; RPMs may prepare SERs in both categories for consolidation with the PO's evaluation.)
Regional Evaluation Summary (RES)	Summary of performance of contractor and subcontractors on each active work assignment for use of Performance Evaluation Board (PEB) in determining the award fee; rates performance and progress of specific projects, and documents average or above average performance; incorporates information on specific problems from the Performance Event Report; signed by the RPM and PO.
Performance Event Report (PER)	Documents less than satisfactory performance of an area of work or work assignment; vehicle for affecting the contractor's award fee and for PEB's use in determining the final amount of the Phase II award.
Phase I Award Fee Allocation Matrix	Table summarizing costs and Phase I award fees by work assignment prepared for trimester evaluation by the contractor and verified by the Contracting Officer (CO) for the PEB's use in determining the Phase I (contract-wide) award fee.
Phase II Award Fee Allocation Matrix	Prepared at the conclusion of work assignments; summarizes the evaluation made by the Region, the contractor, and the PEB.
Performance Evaluation Report	Report and recommendation of the PEB after determination of award fees.
Award Fee Modifications	Letter signed by fee determination official informing contractor of amount and basis of award fee.

APPENDIX D



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 29 1993

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

OSWER Directive 9202.1-12

MEMORANDUM

SUBJECT: Guidance on Preparing Independent Government Cost Estimates (IGCEs)

FROM: Timothy Fields Jr., Director *Tim Fields*
Superfund Revitalization Office

Betty L. Bailey, Director *Betty L. Bailey*
Office of Acquisition Management

TO: Director, Waste Management Division
Regions I, IV, V, VII
Director, Emergency and Remedial Response Division
Region II
Director, Hazardous Waste Management Division
Regions III, VI, VIII, IX
Director, Hazardous Waste Division
Region X
Director, Environmental Services Division
Regions I, VI, VII, X
Assistant Regional Administrators
Regions I - X

PURPOSE

The purpose of this memorandum is to transmit the guidance on roles and responsibilities for preparing Independent Government Cost Estimates (IGCEs) for remedial and enforcement work assignments, and for conducting and documenting work plan negotiations in the Superfund program.

BACKGROUND

As you are aware, OSWER Directive No. 9242.2-06, issued on January 31, 1992, required independent government cost estimates



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contains at least 50% recycled fiber

to be developed by the technical program office prior to the issuance of any work assignment estimated to exceed \$25,000. This provision is applicable to contracts that utilize a work plan/work assignment administrative process.

In recognition of the need for guidance in this area, the Superfund Revitalization Office (SRO) began work on this Directive in the summer of 1992. A cost estimating workgroup, consisting of POs, COs, RPMs, and Estimators/Coordinators in the Regions, was formed to assist in drafting the guidance and reach consensus on a wide array of issues relating to IGCEs. In addition, the SRO obtained, through an interagency agreement, the services of a cost estimator from the Bureau of Reclamation. This person (Ken Beebe) was the lead for this effort at Headquarters.

Significant issues raised by the Office of Inspector General (OIG) and the Office of Acquisition Management (OAM) resulted in appropriate changes to the guidance to reflect agreements reached. During the guidance development process, there were several opportunities for Regional and Headquarters Offices to comment on drafts of the guidance. All comments received were considered and discussed at higher management levels as appropriate. The resulting document reflects decisions reached. This guidance represents the culmination of efforts of many different people, and especially significant are the contributions of Regional personnel who worked tirelessly to help resolve issues and finalize the document.

IMPLEMENTATION

This guidance should not have a major impact on Regional operations since all Regions have been preparing IGCEs for some time now. All Regions should utilize this guidance effective immediately in preparing IGCEs and conducting work plan negotiations.

Questions concerning the guidance should be addressed to Ika Joiner, Superfund Acquisition Manager, at (202) 260-0840.

Attachment

cc: Rich Guimond
Ika Joiner
Henry Longest, OERR
Jerry Clifford, OWPE
Diane Balderson, OAM
Regional SF Branch Chiefs
Reg. Contracting Officers' Supervisors
Attendees of 1st Cost Estimators' Meeting
Marty Cook, OAM
Don Hambric, OAM
Pat Patterson, OAM
Rick Thurston, OAM
Marlene Suit, OS-110W
Superfund Documents Center

JULY 27, 1993

OSWER Directive 9202.1-12

**GUIDANCE ON ROLES AND RESPONSIBILITIES FOR PREPARING INDEPENDENT
GOVERNMENT COST ESTIMATES (IGCEs) FOR REMEDIAL AND ENFORCEMENT
WORK ASSIGNMENTS, AND CONDUCTING AND DOCUMENTING WORK PLAN
NEGOTIATIONS IN THE SUPERFUND PROGRAM**

I. PURPOSE

The Office of Solid Waste and Emergency Response (OSWER) Directive 9242.2-06, dated January 31, 1992, requires the development of IGCEs for any new work assignment or work assignment modification expected to exceed \$25,000. This requirement, along with other procedures discussed in this guidance, are being implemented to improve contract management within the agency.

The purpose of this guidance is to provide information and establish minimum requirements regarding the roles and responsibilities of the Work Assignment Manager (WAM), Project Officer (PO), and Contracting Officer (CO) for: 1) preparing Independent Government Cost Estimates (IGCEs) for remedial and enforcement work assignments in the Superfund program; 2) performing reviews of the contractor's work plan and budget, and 3) preparing for, conducting and documenting negotiations with the contractor for the work plan and budget. This guidance is applicable to those enforcement contracts where COs, POs, and WAMs are co-located and all regional and zone remedial contracts- (i.e., ARCS contracts as well as the Long-term Contracting Strategy (LTCS) contracts that use Work Assignments as the ordering document and are managed in the Regions). Regions may supplement this guidance with policies which address specific needs and which provide detailed instructions incorporating specific Regional requirements. These policies however, cannot contradict or supersede this guidance.

This document does not provide detailed guidance on how to arrive at specific costs but does give an overview of what should be considered in the preparation of IGCEs, review of the Work Plan, and resolution of pricing issues through negotiations. For more guidance on this subject, please refer to the document "EPA INDEPENDENT GOVERNMENT COST ESTIMATING GUIDE" prepared and issued by the Office of Acquisition Management (OAM). The OAM guide provides a thorough overview for preparing an IGCE, references for confirmation and information on indirect rates, and sample forms and examples.

II. BASIC CONSIDERATIONS

A. CONTRACT MANAGEMENT TEAM (CMT)

In order to ensure an effective and efficiently run Superfund program for each project, it is essential that the CMT be properly structured with the necessary interdisciplinary skills. Therefore, at a minimum, the CMT should consist of the Work Assignment Manager (WAM), the Project Officer (PO), and the Contracting Officer (CO). Others, such as contract specialist, cost estimator/coordinator, technical experts, the Bureau of Reclamation (BOR) or U.S. Army Corps of Engineers (USACE) may be included as team members.

The ability of the CMT to function as a team is essential and each team member plays an important supporting role. Good communications are necessary for effective operations of the CMT.

B. STATEMENT OF WORK (SOW)

The single most important component in the successful development of an IGCE is a clearly defined SOW and detailed specification. Model SOWs should serve as the basis for developing more detailed SOWs which are then customized for the particular site. Standard tasks from the contract specifications being utilized should be used as much as practicable in describing the work to be performed. All assumptions should be included in the SOW. The SOW should clearly define what the Government desires from a product, project or service. It should provide information on the product/service required along with the schedule (milestones) and location of the deliverables. An accurate and defensible IGCE cannot be prepared without a clear, complete and concise SOW and detailed specifications. The SOW is the basis for both the IGCE and the evaluation of the contractor's proposal. A good SOW should provide the necessary foundation for EPA to obtain the goods and services it contracts for at a fair and reasonable cost and to get the best product, project or service on time and within the budget.

III. IGCE DEVELOPMENT

A. DEFINITION

An IGCE is the Government's estimate of what the government thinks it should cost to accomplish the SOW or solicitation/specifications. The IGCE shall not be divulged to the potential contractor and shall be marked "CONFIDENTIAL - FOR OFFICIAL USE ONLY". All assignments or amendments that require an IGCE, generally fall into two categories: those consisting mostly of Level Of Effort (LOE) hours, and those that not only contain LOE but need to estimate the anticipated cost of construction (CCE) as well.

B. LOE ESTIMATES

The WAM is responsible for the development of the IGCE. Where in-house cost estimators/coordinators are available, the WAM may utilize these individuals when developing the IGCE. If the WAM intends to extensively involve the cost estimator/coordinator in the IGCE process, it is essential that estimators/coordinators be kept informed and involved from the earliest time possible.

The IGCE must be based on supporting data such as historical information from previously completed work, cost estimating guidelines, engineering standards, or professional judgement. All assumptions, including rationale, used in developing the IGCE shall be clearly defined in writing and shall be part of the IGCE package. Estimates must, at a minimum, be broken out by task and subtask as outlined in the SOW, and by cost element such as labor, travel, other direct cost, subcontract expense, overhead & G&A expense, and fee. The estimate shall not be structured to equal the funding document accompanying the Work Assignment Form (WAF). The estimate shall be realistic of the resources necessary to accomplish the tasks detailed in the SOW. One of the most important elements in the Government cost estimate is the estimate for labor hours. Labor hours must be estimated by skill category (P level) as defined in the contract, and by task.

The IGCE shall be prepared before the CO will accept the Procurement Request (PR). This IGCE can be considered a preliminary estimate prior to having a technical scoping meeting with the contractor if desired, or a final estimate when no scoping meeting is required. A preliminary estimate is defined as the total LOE and dollar amount for all work anticipated in the SOW. The estimates can be based on historical costs for similar work. The major assumptions and rationale shall be included with the preliminary estimate. If a technical scoping meeting is required, the

preliminary estimate must be revised to reflect any changes made to the SOW and then will be considered the final estimate, but in all cases, it shall be completed prior to receipt of the work plan. If a technical scoping meeting is required, it shall be limited solely to the technical aspects of the assignment, and not involve cost. In the event that no technical scoping meeting is held, the IGCE shall accompany the SOW and shall be forwarded to the CO as part of initiation of the work assignment. Estimates shall be signed and dated by the WAM and the estimator/coordinator or PO (if involved in the IGCE preparation).

When the contract SOW presents specific, standardized tasks, the tasks presented in the SOW and the IGCE shall be organized, structured and presented in a manner consistent with and comparable to the contract SOW.

When an approved workplan is modified and expands/decreases the activities, or increases/decreases the LOE, the tasks in the modification and the IGCE shall be organized, structured and presented in a manner consistent and comparable with the tasks presented in the approved work plan.

C. CONSTRUCTION ESTIMATES

A preliminary construction cost estimate (CCE) for the Remedial Action is developed first at the RI/FS stage. A more detailed CCE is developed during the Remedial Design process and then finalized based upon the solicitation/specification package. The CCE shall be a detailed estimate itemizing the principle elements of the cost to the contractor (including indirect costs, and the addition of profit) to perform the work required by the specifications. Detailed estimates are developed using a step-by-step process, planning the project in the same manner as a contractor would plan, organize, and conduct it. They are based on the type and quantities of labor, equipment, and material required to perform the work. Consideration should be given to production rates, projected weather delays, schedule impacts, type of technology to be used, site accessibility, safety, haul routes and distances, and availability of materials and equipment. Supporting documentation should include narratives addressing the site visit, pre-bid conference, the facts and assumptions used in the preparation of the estimate, as well as specific references to source material used.

1. REMEDIAL DESIGN BY A&E CONTRACTOR

The A&E contractor to whom the Remedial Design is awarded may or may not be specifically tasked to develop a detailed CCE as part of the design process. Listed below are the alternative methods that the Regions should use in the development of CCEs.

a. - Use of EPA Staff To Develop CCE:

For those EPA Regions having in-house construction experience and technical expertise, the CCEs should be developed using available staff resources. This will serve as EPA's official CCE for the Remedial Action. If this approach is taken, the A&E contractor should not be tasked to develop a CCE (such duplication of effort would not be cost effective).

b. - Use of Other Federal Agencies to Review A&Es CCE:

If Regional staff require assistance because of work load or lack of technical expertise in project construction, the A&E contractor will prepare the CCE and the WAM shall avail him/her self of the technical expertise and knowledge of other federal agencies, such as the Bureau of Reclamation or the U.S. Army Corps of Engineers, through inter-agency agreements, to assist in reviewing the A&E contractor's estimate. Once the contractor's CCE has been reviewed, modified if necessary, and approved by the EPA, it shall serve as EPA's official CCE. This CCE will become the subcontract portion of the Remedial Action IGCE if it is provided to the prime for subcontracting.

c. - Use of Other Federal Agencies to Develop the CCE:

If regional staff require assistance because of work load or lack of technical expertise in project construction, the WAM shall avail him/her self of the technical expertise and knowledge of other federal agencies, such as the Bureau of Reclamation or the U.S. Army Corps of Engineers, through inter-agency agreements, to develop a CCE based upon the A&E contractor's solicitation/specification package. Once the other agency's CCE has been reviewed, modified if necessary, and

approved by the EPA, it shall serve as EPA's official CCE. This CCE will become the subcontract portion of the Remedial Action IGCE. If this approach is taken, the A&E contractor should not be tasked to develop a CCE (such duplication of effort would not be cost effective).

2. REMEDIAL DESIGN BY OTHER FEDERAL AGENCIES

When the WAM chooses to use another federal agency to develop the Remedial Design, the responsibility for the development of the detailed CCE is incorporated as part of the SOW and Interagency Agreement (IAG). That CCE will become the IGCE for the Remedial Action.

3. ARCS CONSTRUCTION CONTRACT MODIFICATION

OSWER Directive 9355.5-01/FS, dated September 1989, provides guidance on how ARCS construction contract modifications shall be processed (copy attached).

IV. REMEDIAL ACTION

For Remedial Action work assignments, an IGCE for the A&E contractor's efforts associated with the award, management and oversight of the construction subcontractor must be completed. For this portion of the Remedial Action, the LOE estimate guidance noted earlier should be followed. The CCE developed during the Remedial Design phase, as outlined in III, c. 1. a., b., c., and 2, shall be incorporated as part of the overall Remedial Action IGCE.

V. WORK PLAN REVIEW

Upon receipt of the contractor's work plan and proposed budget, members of the CMT shall perform a technical and cost analysis.

A. Technical Analysis:

A technical analysis means the examination and evaluation by personnel having knowledge, skills, experience, or capability in engineering, science, or management of proposed quantities and kinds of materials, labor, and processes, and associated factors set forth in the proposed work plan. This analysis will determine and report on the need for reasonableness of the proposed resources.

During the technical review it may be necessary to have fact finding discussions with the contractor. These discussions do not include negotiation or resolution of differences with the

contractor in the total work plan or individual elements. Instead, the results of this discussion should be used to provide the CO with sound recommendations for establishing the Pre-Negotiation Objectives. These recommendations should include a narrative for: (1) reconciling the IGCE and the contractor's cost estimate based on fact finding; and (2) a summary of any remaining differences for negotiation.

A fact finding discussion is only for use in understanding the contractor's basis in developing the Work Plan/Cost Estimate. The individual conducting the fact finding shall inform the CO that such a discussion is warranted and the CO shall inform them if she/he will participate.

B. Cost Analysis:

A cost analysis means the review and evaluation of the separate cost elements of (a) the contractor's work plan and (b) the judgmental factors applied in developing the work plan budget/estimate. This analysis will enable the reviewer to form an opinion on the degree to which the proposed work plan cost estimate represents and what the cost of the SOW should be, assuming reasonable economy and efficiency.

The CMT should compare the technical aspects of the work plan with the SOW and evaluate the differences between the IGCE and the contractor's proposal. Special emphasis should be given to the total hours and dollars, hours and skill mix per task, subcontract costs, and schedule. It should again be emphasized that the WAM should call upon the expertise of other technical disciplines to aid in review of the work plan.

C. Roles and Responsibilities for Work Plan Review:

The following is a brief summary of the recommended roles and responsibilities of WAMs, POs, and COs in the work plan review process; however, the specific roles and responsibilities may differ from region to region.

1. Work Assignment Manager (WAM)

- reviews work plan to determine if work plan is appropriate, reasonable, and complete;
- provides quality control role within the work plan review process;
- determines if contractor's work plan is responsive to SOW;
- reviews number of hours and skill mix to determine appropriateness for tasks;

- reviews proposed schedule, equipment, health & safety requirements, travel/ODCs, deliverables, subcontract needs/use;
- reviews qualifications of contractor personnel for appropriateness;
- determines if tasks fit SOW, that no excess work is proposed, and costs proposed for tasks are reasonable;
- identifies issues that require CO/PO attention;
- initiates, conducts and documents fact finding discussions if needed; and
- summarizes comments in a work plan memorandum to the PO and CO on a task/subtask level, including a comparison of the contractor's cost proposal with the IGCE and makes recommendations regarding variances between the two.

2. Project Officer (PO)

- reviews work plan to determine if it is appropriate, reasonable, and complete;
- provides quality control role within the work plan review process;
- reviews project planning and project management activities;
- reviews qualifications of contractor personnel for appropriateness;
- reviews schedule(s) and deliverables;
- reviews equipment requirements - prepares 7 point justifications as appropriate;
- compares work plan with IGCE and SOW;
- initiates, conducts and documents fact finding discussions if needed; and
- reviews the WAM's technical review memorandum and/or provides additional comments as appropriate.

3. Contracting Officer (CO)

- reviews proposed labor, ODCs, indirect rates, and fees;
- compares work plan with IGCE and SOW;
- reviews need for overtime premium, if proposed;
- reviews for appropriate use of subcontracting;
- reviews for compliance with contract, FAR, etc.;
- reviews work plan for personal services and/or inherently governmental functions;
- requests clarification(s) from CMT members, when necessary;
- reviews role/responsibility of team subcontractors;
- reviews work plan for special contract provisions;
- initiates, conducts and documents fact finding discussions and participates in them if initiated by WAMs and POs when warranted;
- receives, reviews, and supplements the technical review memorandum as a basis for subsequent discussions with the contractor or possible future pre-negotiation and negotiation documentation; and
- approves the work plan.

If necessary, a designated member of the CMT shall consolidate the work plan comments and send only the technical comments without any cost related issues to the contractor through the CO for the contractor's review with a request to provide a response within a reasonable time frame. Cost estimators/coordinators, contract specialists or other technical experts that assisted in the preparation of the IGCE may also provide assistance during review of the contractor's work plan and/or negotiations. If the CMT determines that the work plan is to be approved as submitted, the proper documentation supporting the CMT's decision shall be prepared.

VI. NEGOTIATIONS

The CO discusses with the CMT the need for negotiations. The CO is responsible for leading the team in developing its negotiation objective(s). In no event are negotiations to be delegated to the WAM or PO. Although each team member should assure that all issues are properly addressed and properly documented, the CO is

ultimately responsible for ensuring that documentation of the negotiation outcome is adequate. Once negotiations are completed and an agreement has been reached, the work plan is approved by the Contracting Officer. In the event that no negotiations are required, the documentation for work plan approval shall be processed.

Upon receipt of the contractor's work plan, any significant changes in the tasks, schedule or budget are accomplished through negotiations between the Agency and the contractor. The Contracting Officer shall conduct those negotiations. When determined by the CO, the appropriate personnel (WAM, PO, E/C, etc.) will also participate in the negotiations.

Roles and Responsibilities for Negotiations:

The following is a brief summary of the recommended roles and responsibilities of WAMs, POs, and COs in the negotiation process; however, the specific roles and responsibilities may differ from region to region.

1. Work Assignment Manager (WAM)

- provides technical expertise to PO and CO for negotiation session.
- prepares technical documentation solicited by CO and/or PO.

2. Project Officer (PO)

- coordinates with other members of the CMT.

3. Contracting Officer (CO)

- ensures pre-negotiation documentation is adequate.
- meets with CMT members to establish negotiation strategy.
- conducts negotiations or approves negotiations conducted by contract specialist.
- ensures post-negotiation documentation is adequate.

If negotiations are held, the following provides a framework for documentation.

VII. DOCUMENTATION

Throughout the entire process, the CMT shall maintain adequate written documentation of the significant differences and acceptability between the Government's position and the Contractor's work plan and budget. Particular attention should be paid to documenting the Government's negotiating position and the results of the actual negotiations between the government and contractor.

A. PRE-NEGOTIATION DOCUMENTATION

The pre-negotiation documentation summarizes the Agency's position and objectives it hopes to accomplish during negotiations with the contractor. Objectives should be based upon the review of the contractor's work plan, the IGCE and other information available regarding the work to be performed. The document shall show the work assignment number, contractor's name, contract number, site name, a summary of the contractor's proposal and the IGCE, and present the Agency's position upon entering negotiations. A target position for the major cost elements shall be included. The document shall be prepared by the CO/CS with input from other members of the CMT prior to negotiations and is used as a guide during the negotiations. The pre-negotiation memorandum shall be signed and dated by the Contracting Officer.

B. POST-NEGOTIATION DOCUMENTATION

The post-negotiation documentation summarizes and documents negotiations with the contractor with emphasis on the reconciliation of differences between the IGCE and the contractor's work plan, pre-negotiation position and the negotiated agreement. It is prepared by the contracting officer with input from other CMT members. The memorandum should include the following information:

1. The purpose of the negotiations.
2. A description of the work, including the contract number, work assignment number and site name.
3. The name, position, and organization of each person representing the contractor and the Government in the negotiations.
4. The date, time, and place of the negotiations.

5. The summary of the negotiated items (cost, technical scope and schedule), and justification for agreement to estimated costs or statement of work significantly different from the Agency's pre-negotiation position. The task breakdown, costs, hours and skill mix of the government objective, the contractor's initial proposal and the final negotiated items should be presented in matrix format for easy reference and comparison.
6. A statement to the effect that the negotiated agreement is determined to be fair and reasonable.

The post-negotiation memorandum must be signed and dated by the Contracting Officer.



*THE HAZARDOUS SITE CONTROL DIVISION'S
DESIGN AND CONSTRUCTION MANAGEMENT GUIDE SERIES*

ARCS CONSTRUCTION CONTRACT MODIFICATION PROCEDURES

During the performance of a construction project it is often necessary to modify the contract to allow changes in the work which are required by actual conditions at the site. These contract modifications are accomplished either through bilateral modifications, which result in "supplemental agreements" to accomplish the work, or through unilateral modifications, which result in "change orders" to the constructor to accomplish the work.

This document describes the contracting relationships, as well as technical reviews and administrative procedures required to process supplemental agreements and change orders for changed work in Remedial Action construction projects which are subcontracts under EPA's ARCS contracts. These procedures are orientated towards fixed price contracts. Contract modifications in time and materials contracts will differ. These procedures do not cover the situation where the need for the change is in dispute. Disputes and claims will be presented in a subsequent guidance. Assistance with the implementation of these procedures may be requested from the Design and Construction Management Branch in HSCD.

RESPONSIBILITIES AND AUTHORITIES

The construction contracting relationship under ARCS involves two distinct spheres of authority. The first is the contractual relationship between the ARCS prime contractor and the subcontractor for construction. For the sake of simplicity, the subcontractor for construction will be called the "Constructor." The second sphere of authority is the contractual relationship between the ARCS prime contractor and the Federal Government. All changes to ARCS construction work will involve actions at both the subcontract and the prime contract level.

Within the first sphere of authority at the subcontracting level, the authority to approve changes to the work will reside with a designated senior member in the ARCS firm. The Federal government is not a direct party to any ARCS subcontract, and therefore cannot direct or order the Constructor to accomplish changed work.

The procedures used by the ARCS Construction Management Team for processing changes will also vary depending on the size and complexity of the construction project and will reflect the internal management structure of ARCS firm. On large construction projects the team may include a Construction Manager, a Resident Engineer, a Construction Representative or Construction Inspector, various technical review and design engineers, and other support staff. In a case such as this, the Resident Engineer and various technical review and design engineers may be involved in analyzing and negotiating a change, but the

authority to approve would reside only with a senior person within the ARCS firm who has the authority to commit the ARCS firm to additional work and costs in the subcontracts.

Within the second sphere of authority at the prime contract level, the ARCS firm must obtain review and approval from the Federal Government, within the context of the ARCS Work Assignment, for any changes in the work. The only person who has authority within the Federal Government to approve changes to the work is the EPA Contracting Officer. Various technical and program staff who act as the Contracting Officer's Technical Representatives (COTRs) provide support for the Contracting Officer's decisions to approve changes.

For each ARCS construction project the Environmental Protection Agency (EPA) will designate an experienced construction COTR who is a licensed professional engineer with substantial construction management experience. This construction COTR will function under the title of Design and Construction Advisor (DCA) and will support the Remedial Project Manager (RPM) by providing technical and cost analyses of all changes to the work. The role of the DCA will be discussed in further detail below. The EPA RPM will review changes to insure that the environmental criteria of the remedy are met, and will also administer any impacts on the Work Assignment budget and schedule.

CHANGES IN CONSTRUCTION

There are four primary reasons for changes in Construction Contracts within the general scope of the work:

- (1) To provide the ARCS Construction Manager the flexibility to accommodate actual field conditions or interpretations of the plans and specifications as they are encountered during the progress of the work. This flexibility may include acceleration of performance.
- (2) To allow the ARCS Construction Manager the means to order changes, or to allow the Constructor the means for proposing changes which will result in more efficient performance, or in a finished product which is of an improved quality.
- (3) To allow for the purchase of additional work within the general scope of the contract which will meet the government's needs in obtaining a remedy at the site.
- (4) To provide the means by which the Constructor may obtain equitable adjustments for costs resulting from constructive changes.

To be "within scope" the work: (1) should be essentially the same as the type of work originally contracted for, (2) should be for items that could be reasonably within the contemplation or expectations of the contracting parties, and (3) should not alter the nature of the thing to be constructed.

Immediate Action Changes Orders: Circumstances will sometimes require the ARCS firm to direct the Constructor to proceed with work to address an immediate need at the site. This need may result from emergency situations or be required to avoid incurring delay costs. In these circumstances the ARCS Construction Management Team will order the Constructor to proceed with actions that are needed on an immediate basis, while the standard Contract Modification process is carried forward in the normal manner. The approval procedure for using the Reserve Fund to address circumstances which require immediate action is described in Step 4 of the Construction Contract Modification Approval Procedures section.

ARCS DESIGN AND CONSTRUCTION ADVISOR (DCA)

The DCA will be the Contracting Officer's construction engineering technical expert and advisor. As such, the DCA will provide to EPA engineering judgments, reviews and advice on technical decisions regarding construction issues including, but not limited to, the review and analysis of changes to the work that may arise in the course of construction. In situations where high costs or complex conditions exist, the DCA will obtain other resources necessary to provide the analysis. The DCA will travel to the site on short notice when construction issues warrant it. In addition, the DCA will attend appropriate milestone events such as the pre-construction conference, and the pre-final and final inspection.

The education and experience of the DCA should be heavily weighted in construction. The individual should be a degreed and registered Professional Engineer since the Government position needs to be based on professional engineering judgments to meet the standards of evidence that is likely to be submitted to an appeals board. Sources of DCAs for ARCS construction projects include:

- **EPA REGIONAL SUPERFUND STAFF:** If the EPA Regional office has staff with the appropriate qualifications, then these individuals could be assigned as DCAs,

taking into consideration that due to the nature of active construction, the DCA duties would sometimes have to take precedence over all other duties.

- **U.S. BUREAU OF RECLAMATION:** The Bureau of Reclamation has made a commitment to make available construction engineers as DCAs in support of ARCS construction under an Interagency Agreement. Additionally the Bureau has agreed to provide access to their Claims Analysis Section in the Construction Division of the Denver Office. This Section is composed of a staff of 15 with a broad base of construction experience, change order analysis and claim resolution. The Claims Analysis Section will perform analyses of changes, make technical presentations and assist in the preparation of negotiating positions.
- **ALTERNATE A&E FIRMS:** An independent A&E firm, e.g. an ARCS firm with construction management experience which is not involved with the design or construction work assignment, REM 5 or REM 6 could provide DCA services for a specific site or across several sites. This approach will be further evaluated through pilots during FY 90.

TECHNICAL AND COST ANALYSIS OF PROPOSED CHANGES

Changes will be subject to technical and cost analyses at both the ARCS subcontract level and within the context of the Work Assignment at the prime contract level. A discussion of these functions at each level follows:

1. ARCS TECHNICAL AND COST ANALYSIS: Changes in construction work will be subject to an internal ARCS analysis. In simple, low-cost changes, the analysis may merely involve review of the engineering estimate and the definition of the work which was developed by the ARCS Construction Management Team.

For higher cost, more complex changes, the ARCS firm may use additional technical review and design engineers to analyze the proposed changed work during the development of the engineering estimate and definition of the work. These individuals may help develop and coordinate the negotiating position of the ARCS Construction Management Team. These activities will be accomplished in parallel with an analysis of the proposed change by EPA within the context of the Work Assignment at the prime contract level.

2. EPA TECHNICAL AND COST ANALYSIS: All changed work must be analyzed for approval by the EPA Contracting Officer. The Contracting Officer will rely on the RPM and the Design and Construction Advisor to provide these analyses. In the case of routine, low-cost changes, the analysis will be in the form of a quick turn-around review and approval of the change as negotiated by the ARCS firm with the Constructor. This will occur at Step 9, as described in the Construction Contract Modification Approval Procedures section.

For higher cost, more complex changes, the RPM will task the Design and Construction Advisor to initiate an analysis of the changed work and develop an Independent Government Estimate in parallel with the ARCS firm's actions to define and specify the work in preparation for negotiations. This process would be initiated at Step 5 of the Construction Contract Modification Approval Procedures section. The Design and Construction Advisor will utilize whatever resources are necessary to accomplish the analysis. If the changed work is of sufficient cost or complexity to warrant an in-depth analysis, then the Design and Construction Advisor may submit the change to the Claims Analysis Section of the Bureau of Reclamation Construction Division Office in Denver, Colorado.

WORK ASSIGNMENT MANAGEMENT AND ENVIRONMENTAL REVIEW

Within ARCS construction projects, all changes will be reviewed by the RPM to insure that the environmental criteria of the Remedial Action are maintained. These changes will also be reviewed for impacts on the Work Assignment budget and schedule.

When high cost changes occur that exceed the amount of funds in the Reserve Fund, then the Remedial Project Officer will revise the Work Assignment and arrange for the obligation of the additional funds necessary to pay for the change and replenish the Reserve Fund if necessary.

RESERVE FUNDS

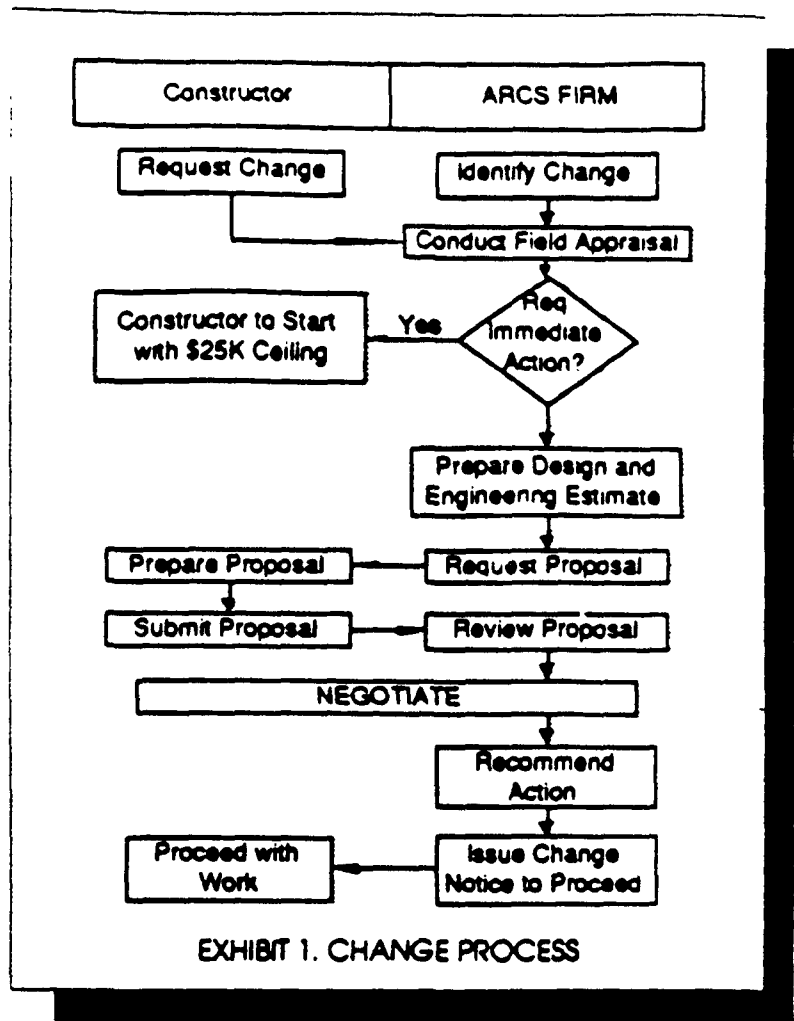
When an ARCS construction contract is executed, EPA will adjust the Work Assignment funds to provide a Reserve Fund that equals 15% of the contracted price for the work. These Reserve Funds are set aside exclusively to cover the costs of changes to work under conditions discussed in this document and in accordance with the Changes clauses of the subcontract.

The approval to use Reserve Funds will be given to the ARCS firm by way of a Work Assignment Form which increases the expenditure limit. For situations that require immediate action, verbal approval to draw \$25,000 or less will be given to the ARCS Construction Management Team by the EPA Contracting Officer or representative with the understanding that the appropriate paperwork will follow as soon as possible.

CHANGE ACTIVITIES

Exhibit 1 represents the activities that take place between a Construction Management Team and a Constructor when change is made in a construction contract. These activities begin with the identification and appraisal of the change, including a decision as to whether or not immediate action is required. The change is then defined by way of an engineering design. A proposal is the basis of negotiations to reach a final price and schedule for the work, and the Contract Modification is issued. For a small change, such as clearing and grubbing a small piece of land, all the activities could take place in a matter of hours. Very large, complex changes could require days or weeks to process because they require a greater effort to define and negotiate.

In all changes the same fundamental actions take place as shown in the chart. The ARCS Contract Modification Procedures described below is designed to tap into these actions at the appropriate times to provide Government oversight, approval and funding.



CONSTRUCTION CONTRACT MODIFICATION APPROVAL PROCEDURES

The procedure is an expansion of the process shown in Exhibit 1 and includes the approvals necessary to insure the appropriate management of changes and to provide an adequate amount of control to EPA in the funding and execution of changes in the work. Ten steps in the procedure are shown in the flow chart in Exhibit 2 and are described below.

1. REQUEST OR IDENTIFICATION OF REQUIRED CHANGE: A recognition of the need for a change can originate with either the Constructor or the Construction Management Team's representative, usually the Resident Engineer. The Constructor may encounter conditions at the site which will require a change or the Resident Engineer, through normal tracking of the construction tasks, may observe conditions that may warrant a change in the work. At this stage the Resident Engineer will inspect the field conditions or other circumstances that have been identified as a potential change to the work.

2. FIELD APPRAISAL: In the second step the Resident Engineer develops a Field Appraisal of the scope and cost of the potential change. For small changes this might be a simple engineering judgment. For larger changes it would, at most, entail an informal estimate of the adjustments that would be required with regard to cost and schedule.

3. SCOPE DETERMINATION: This step actually occurs concurrently with the initial observation and appraisal of the potential change. The Resident Engineer evaluates the change with regard to the scope of the project. If the change is out of scope, then it would be directed to the RPM as a basis of a possible new or revised Work Assignment, but it would not be accomplished under the current contract.

4. IMMEDIATE ACTION DETERMINATION: For changes that require immediate action, the ARCS Construction Management Team will be permitted by verbal approval, or through a prearranged notification procedure with the EPA Contracting Officer, to draw increments of up to \$25,000 from the Reserve Fund with which to initiate the work. The Constructor will then be ordered to proceed with actions that are needed on an immediate basis. While the work is progressing, the standard contract modification process will be carried forward in the normal manner. If the Constructor expends the initial \$25,000 on a large change order before the total change is defined and negotiated, then subsequent increments of funds can be requested for circumstances that require the actions to continue.

5. INDEPENDENT GOVERNMENT ESTIMATE: Changes that are expected to cost less than \$25,000 will not require an Independent Government Estimate. These changes will be reviewed and concurred with by the Contracting Officer with the support of the RPM and DCA after a price has been negotiated with the Constructor. This will occur at step 9 and will result in the issue of a Work Assignment Form permitting the ARCS Construction Management Team to draw down the Reserve Fund to pay for the work. The ARCS management of these small changes will be evaluated as part of the performance evaluation for award fee and for the assignment of future work.

Changes that will cost more than \$25,000 will require an Independent Government Estimate. The Contracting Officer will rely on Design and Construction Advisor to either develop the estimate independently, or, if the change is large enough, to submit it to the Bureau of Reclamation Claims Analysis Section for analysis. The results of the analysis will be submitted to the EPA Contracting Officer. This Independent Government Estimate will serve as the basis for negotiations between EPA and the ARCS firm for the revision of the work assignment cost and schedule to accommodate the changed work.

6. ARCS ENGINEERING ESTIMATE: For changes estimated to be under \$25,000, an ARCS engineering design and estimate of the work will be the sole basis for requesting and negotiating a proposal for the work from the constructor.

For changes estimated to cost over \$25,000, the ARCS engineering design and estimate will be developed in parallel with the Independent Government Estimate. Differences between the ARCS estimate and the Government estimate will be negotiated between the ARCS firm and EPA. These negotiations should be completed before a final price is negotiated by the ARCS firm with the constructor.

7. REQUEST AND REVIEW OF PROPOSAL: The next step is for the Construction Management Team to submit the design to the Constructor to request a proposal for the work. The Constructor then prepares and submits his own proposal and estimate for the work for a pre-negotiation review.

8. NEGOTIATIONS: It is during this Step that the Construction Management Team attempts to negotiate an acceptable price and an equitable adjustment to the project schedule to accommodate the changed work. When agreement is reached, the ARCS firm will prepare the modification to the subcontract. This would be in the form of a supplemental agreement which will be signed by both a representative of the ARCS firm and the Constructor for concurrence by the EPA Contracting Officer with the support of the RPM and DCA.

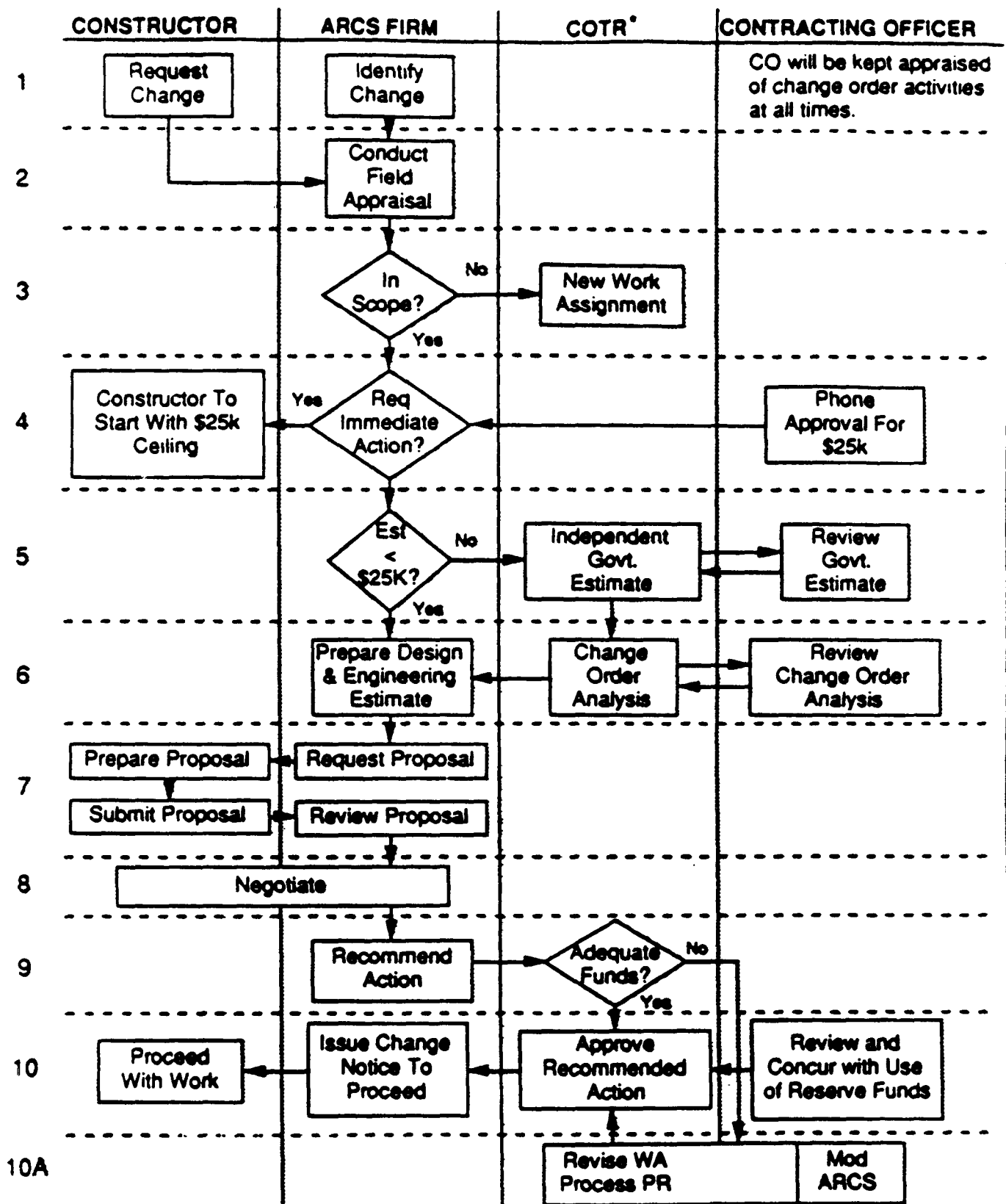
If agreement is not reached, the ARCS firm will prepare a Change Order (unilateral modification) which would be in the same format of a supplemental agreement but would not require the signature of the Constructor. The Constructor would be directed to accomplish the work at the schedule and cost determined by the ARCS firm. The unresolved price and schedule would become the subject of a Claim to the ARCS firm if the Constructor wished to pursue the matter further.

9. ACTION RECOMMENDATION: At the end of the negotiation period, the Supplemental Agreement or Change Order is submitted to the Contracting Officer through the RPM for concurrence and verification of funding to cover the agreed to price.

10. APPROVAL AND MODIFICATION OF CONSTRUCTION CONTRACTS: The Contracting Officer reviews and concurs. If there are adequate funds in the Reserve Fund, the RPM will issue a Work Assignment Form permitting the ARCS firm to draw down the Reserve Fund and issue the change to the subcontract.

10A. MODIFICATION OF ARCS CONTRACT: If there are not adequate funds in Reserve to cover the negotiated cost, then the RPM will process a Work Assignment Form with a Procurement Request to obligate sufficient funds for the change and to replenish the reserve for future changes.

EXHIBIT 2 - CONSTRUCTION CONTRACT MODIFICATION PROCEDURES



* COTR - Contracting Officer's Technical Representative - Can include Project Officer, RPM, and Design and Construction Advisor (DCA), as appropriate.

APPENDIX E



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

AUG 5 1992

OSWER Directive 9242.2-06a

MEMORANDUM

SUBJECT: Resources for Preparing Independent Government
Estimates for Remedial Contracting Work Assignments

FROM: Henry L. Longest II, Director *H.L.*
Office of Emergency and Remedial Response (OS-200)

TO: Director, Waste Management Division
Regions I, IV, V, VII
Director, Emergency and Remedial Response Division
Region II
Director, Hazardous Waste Management Division
Regions III, VI, VIII, IX
Director, Hazardous Waste Division
Region X
Director, Environmental Services Division
Regions I, VI, VII

PURPOSE

To provide information regarding the availability of tools, data bases, and assistance for developing independent government estimates (IGEs) of the cost of work to be performed by contractors for remedial work assignments (RI/FS, RD, and RA).

BACKGROUND

The Office of Solid Waste and Emergency Response (OSWER) Directive 9242.2-06, dated January 31, 1992, requires that the technical program office develop an independent government cost estimate prior to the issuance of any new work assignment (or increase to an existing work assignment) expected to exceed \$25,000. The IGE is then to be used by the Remedial Project Manager/ Work Assignment Manager (RPM/WAM), Project Officer, and Contracting Officer to negotiate the work plan budget with the contractor and as documentation to support the resulting negotiated agreements.

OBJECTIVE

The objective of this memorandum is to provide information about the resources that are available for use in preparing IGEs for remedial contracting work assignments.

IMPLEMENTATION

The accuracy of an independent government estimate will depend greatly upon the level of detail used to develop a statement of work and the estimating tools and data used to prepare the estimate. IGEs can be developed for contract work assignments using tools such as computer models and guidance, working with regional IGE Coordinators, or by obtaining estimating services from the U.S. Army Corps of Engineers (USACE) or U.S. Bureau of Reclamation (USBR). These resources are available and should be utilized. The resources are further described below.

Estimating Tools and Data Bases

A number of tools and data bases (of specific relevance to the Superfund remedial program) are available for use in preparing IGEs for contractor work assignments. Each tool or data base is listed in the following table according to the phase (RI/FS, RD, or RA) of the activity that would be assigned to the contractor. Other tools are being developed; the table will be updated as they become available for your use.

PHASE	TOOL/DATA BASE	INFORMATION	CONTACT
RI/FS	Scoper's Notes (guidance document)	EPA/540/G-90/002 February 1990 (available in Regions)	Randy Breeden HSCD/ROGB (703) 308-8368
RI/FS	Scheduling and Cost Estimating Expert System (SCEES) (computer model)	OSWER Directive 9355.0-29 August 13, 1990 (distributed to Regions)	Randy Breeden HSCD/ROGB (703) 308-8368
RD	Remedial Design Scoping (guidance document)	Being developed by HSCD (draft to Regions by October 1992)	Kenneth Skahn HSCD/DCMB (703) 308-8355
RA	M-CACES Gold (computer model)	Being distributed to Regions	Thomas Whalen HSCD/DCMB (703) 308-8345

RA	Bid Tabulation Data Base	Data base is being updated w/ prices from recent bids and is available upon request	Kenneth Skahn HSCD/DCMB (703) 308-8355
RI/FS RA	HAZRISK Cleanup Models (computer models used to validate cost estimates)	Privately developed (EPA may acquire license within the year)	Thomas Whalen HSCD/DCMB (703) 308-8345
RA	Drinking Water and Groundwater Remediation Cost Evaluation: Granular Activated Carbon and/or Air Stripping (computer models)	Available for purchase under a Federal Technology Transfer Act agreement from Lewis Publishers, Inc. Chelsea, MI 48118	Lewis Rossman ORD/RREL (513) 569-7603
RI/FS RD RA	Unit Price Book (prices for equipment, materials, etc.)	Included with M-CACES Gold	Thomas Whalen HSCD/DCMB (703) 308-8345

IGE Coordinators

We believe it should be the responsibility of the WAM to develop the IGE with assistance from the Region's IGE Coordinator. A number of Regions (III, IV, V and VI) have cost estimators (as IGE Coordinators) to assist RPMs/WAMs in preparing IGEs and to provide cost estimating training where appropriate. An advantage in having cost estimators available to assist RPMs/WAMs in developing cost estimates is in the ability to achieve uniformity and quality in the end product, particularly for large or complex projects. In other Regions, Project Officers are available to assist the RPMs/WAMs. We recommend cross-Regional coordination between IGE Coordinators to compare notes on the tools and data bases and to develop strategies for improvement. The following is a list of the Regional IGE Coordinators or Project Officers who can be contacted for assistance:

REGION	REGIONAL IGE COORDINATOR/ PROJECT OFFICER	PHONE NUMBER
1	Rick Leighton	(617) 573-9654
2	Keith Moncino	(212) 264-9300

3	Lisa Marino	(215) 597-8183
4	Bob Stewart	(404) 347-2930
5	Tom Short	(312) 353-8826
6	Rich Warrell Glenn Celerier	(214) 655-6720 (214) 655-8523
7	Debi Morey	(913) 551-7593
8	Jeff Mashburn	(303) 294-7156
9	Rob Stern Ken Erickson	(415) 744-2339 (415) 744-2324
10	Joanne LaBaw	(206) 553-2594

To make the process more effective, the RPM/WAM should first develop a detailed Statement of Work (SOW) and team with the IGE Coordinator who then will review the SOW and suggest improvements. When the draft SOW is close to being final, the RPM/WAM should contact the IGE Coordinator for assistance in development of the IGE. In addition to being more experienced and able to point out some of the items of work that an RPM/WAM might initially overlook, the IGE Coordinator will be able to provide and/or track regional and contract specific trends in costs associated with site surveys, sampling and analysis, treatability studies, and other direct costs such as travel, computer time, telephone, or equipment. Above all, the IGE Coordinator may be familiar with the cost estimating tools and data bases that can best fit the circumstances.

Interagency Agreements (IAG)

Both USACE and USBR have a number of experienced estimators available to EPA for use in either developing cost estimates or reviewing RA cost estimates that have been prepared by the design contractors. Simple IAGs can be drafted to obtain their assistance for all phases of remedial projects. The USACE and USBR have provided help in reviewing RD cost estimates prepared by ARCS designers, and in estimating the cost of construction change orders for ARCS supervised remedial action projects. Regions are encouraged to make use of these resources. Blanket agreements can be developed that would eliminate the need to process a separate IAG for each assignment. Regional Coordinators in the Design and Construction Management Branch can help to establish the initial contact with the USACE or USBR.

If you have any questions on the resources available for use in preparing IGEs for remedial contracting work assignments, or can suggest any additions to the resources listed above, please contact Kenneth Skahn at (703) 308-8355.

cc: Don R. Clay, Assistant Administrator, OSWER
Richard J. Guimond, Deputy Assistant Administrator, OSWER
Timothy Fields, Jr., Director, SRO
Bruce Diamond, Director, OWPE
Sylvia Lowrance, Director, OSW
Walter Kovalick, Jr., Director, TIO
James Makris, Director, CEPPO
David O'Connor, Director, PCMD, OA

06/15/93

FACT SHEET
TOOLS/DATA BASES FOR INDEPENDENT GOVERNMENT ESTIMATES

PHASE	TOOL/DATA BASE	INFORMATION	CONTACT
RI/FS	Scoper's Notes (guidance document)	EPA/540/G-90/002 February 1990	Randy Breeden HSCD/ROGB (703) 603-8753
RI/FS	Scheduling and Cost Estimating Expert System (SCEES) (computer model)	OSWER Directive 9355.0-29 August 13, 1990	Randy Breeden HSCD/ROGB (703) 603-8753
RI/FS	RACER (computer model)	Developed for USAF (Regions 6 and 8 have had the training)	Kenneth Skahn HSCD/DCMB (703) 603-8801
RD	Remedial Design Scoping (guidance document)	Being developed by HSCD (Draft sent to Regions on May 21, 1993)	Kenneth Skahn HSCD/DCMB (703) 603-8801
RA	M-CACES Gold (computer model)	Already distributed to Regions	Thomas Whalen HSCD/DCMB (703) 603-8807
RA	Bid Tabulation Data Base	Data base is being updated w/ prices from recent bids	Kenneth Skahn HSCD/DCMB (703) 603-8801
RA	HAZRISK Cleanup Models (computer models used to validate cost estimates)	Privately developed (EPA may acquire license within the year)	Thomas Whalen HSCD/DCMB (703) 603-8807
RA	Drinking Water and Groundwater Remediation Cost Evaluation: Granular Activated Carbon and/or Air Stripping (computer models)	Available for purchase under a Federal Technology Transfer Act agreement from Lewis Publishers, Inc. Chelsea, MI 48118	Lewis Rossman ORD/RREL (513) 569-7603
RI/FS RD RA	Unit Price Book (prices for equipment, materials, etc.)	Included with M-CACES Gold	Thomas Whalen HSCD/DCMB (703) 603-8807

APPENDIX F



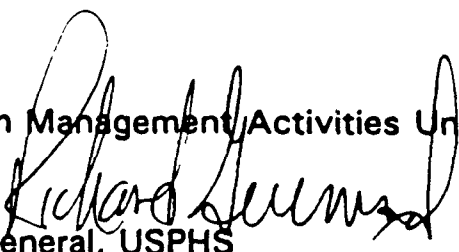
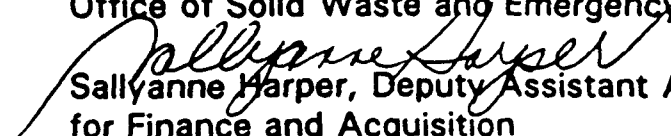
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 11 1993

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

MEMORANDUM

SUBJECT: Guidance on Program Management Activities Under ARCS

FROM: Richard Guimond 
Assistant Surgeon General, USPHS
Deputy Assistant Administrator
Office of Solid Waste and Emergency Response

Sallyanne Harper, Deputy Assistant Administrator
for Finance and Acquisition

TO: ARCS Contracting Officers and Project Officers

I. BACKGROUND/PURPOSE

In July 1991, Administrator Reilly established a task force of senior EPA managers and analysts to address concerns regarding the Agency's Alternative Remedial Contracting Strategy (ARCS) contracts. In the area of program management the task force made six specific recommendations. This guidance document addresses two of those recommendations: 1) division of program management costs into administrative support costs and technical cleanup costs and 2) development of guidance on cost management activities. The guidance is to be implemented beginning with ARCS contract invoices submitted for March, 1993.

In order to improve the ability of the Government to track program management costs, the task force directed that all costs currently characterized as program management costs be segregated into two functional areas. administrative support costs and technical cleanup costs. Section II of the guidance addresses this recommendation.



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The task force also directed that the Agency develop guidance on cost management activities that would assist the Regions in their efforts to control program management costs. Sections III through V address this recommendation.

Finally, Section VI provides specific instructions which will implement the recommendations.

Whereas this guidance provides direction on segregating program management costs, it should be noted that during contract negotiations contractors were encouraged to maximize site-specific program management wherever such costs could be legitimately associated with a single site. This should continue to be encouraged.

II. SEGREGATING PROGRAM MANAGEMENT COSTS

Each ARCS contract provides for the delivery of architect/engineering services for the remediation of hazardous waste sites. The contracts provide for two centers against which all costs will be reimbursed (excluding the Special Subcontracting Pool for Construction). The first cost center is designated as remedial planning activities and consists of all site-specific contract costs, that is, all cost directly associated with activities on specific hazardous waste sites assigned to the ARCS contractor for remediation. The second cost center is designated as program management activities which consist of all non-site specific contract costs. Typically, program management costs support and benefit the remedial sites on which a contractor is performing in the aggregate but cannot be attributed to a specific site.

Program Management, as defined in the ARCS contracts, *"is deemed to constitute those technical, management, administrative, clerical and secretarial activities to be performed by the Program Management Office (PMO) and those support functions to be performed by the corporate office which are allocable to the PMO."*

Currently, program management costs are tracked and reported on the basis of an aggregate amount. In order to improve the tracking, reporting and analysis of these costs, program management costs will henceforth be segregated into administrative and technical cleanup costs on all contract invoices. Invoices shall include two separate accounts with different activity

codes for administrative and technical cleanup costs. Attachment II, *Technical and Administrative Costs Tracked By Activity Code*, provides specific instructions on the use of these codes.

Program management activities are non-site-specific in nature, that is, they support more than one site or support general contract activities. Program management does not constitute any portion of the LOE hours stipulated for remedial planning activities.

To assist in improving the tracking and monitoring of these costs, the following definitions have been developed to segregate the program management costs into administrative and technical cleanup cost categories. The ARCS Contract Tracking (ACT) System will be modified concurrently with implementation of this guidance to reflect the segregation of program management into administrative and technical cleanup costs. Invoices and the ACT system reports should reflect the same dollar amounts for administrative and technical cleanup costs.

A. Administrative Support Costs are non-site-specific costs necessary for managing the overall contract regardless of the amount of specific site work.

Administrative support activities are necessary to enable the contractor to perform remedial site work as well as keeping the Government informed of overall contract activity.

The following examples will assist in determining which activities fall into the administrative support category. Because activities vary under each ARCS contract, this is not a definitive list of all administrative support activities which might be required.

- . Contract Mobilization (development of field equipment ~~needs~~ and inventory control guidelines)
- . Personnel Management
- . Preparation of Monthly Reports (Progress and Financial)
(The compilation of site specific progress and financial ~~data~~ should be charged site-specifically)
- . Meetings concerning contract operations

- . Financial Accounting Activities
- . Computer Support
- . Invoicing/Voucher Preparation
- . Updates to Management, Health and Safety and Quality Assurance/Control Plans
- . Routine Communication/Coordination between EPA/Contractor
- . Audit Support
- . Preparation of Contractor's Program Management Summary Evaluation Reports (SER)
- . Team Subcontractor Management Activities (Pool subcontract management activities should be charged to remedial planning.)
- . Labor Standards Compliance (Service Contract Act/ Davis-Bacon Act)
- . Maintenance of Corporate Conflict of Interest Plan and System Support
- . Annual Contract Close-Out Activities
- . Clerical Activity in Support of Administrative Functions
- . Other Administrative Activities (library and other reference activities, annual allocation reporting, non-site-specific records retention activities, etc.)

Staffing

Each contractor proposed staffing positions necessary to perform program management functions. Specific staffing plans were negotiated prior to contract award. The final approved staffing plans can be found in the Confirmation of Negotiations in the pre-award contract file. These staffing

positions are not part of the labor provided under the level of effort capacity of the contract; they are a unique labor pool available to provide specific program management functions. Since each of the contractors' staffing plans contain unique staff descriptions, the examples of staffing shown for administrative and technical cleanup are used only to indicate staff activities and not specific titles; they are not provided to indicate staffing patterns for any contract. They are sample categories of disciplinary expertise and management oversight necessary for the contract operation. However, any activities performed by the program management staff for site specific activities should be charged to remedial planning activities.

Examples of staffing that might be used to accomplish *administrative* activities are:

Program Manager	Reports Manager
Accountant	Subcontract Manager
Contract Administrator	Secretary/Data Entry Clerk

B. Technical Cleanup Costs *are non-site-specific costs for technical activities that cover multiple sites, and are related to the site-specific work conducted under the contract.*

Most technical cleanup activities under program management ~~are~~ performed as a result of requirements from multiple sites. These costs will ~~vary~~ with the number of sites assigned under the contract.

Examples of technical cleanup activities are provided to assist ~~in~~ determining which activities to include in the technical cleanup category. Again, this is not a definitive catalogue of these activities.

- . Equipment/Warehouse Management (Including cost of equipment maintenance, calibration and inventory)
- . Meetings concerning technical issues relevant to multiple work assignments
- . Health and Safety
- . Quality Assurance/Quality Control

- . Technical Guidance
- . Pollution Liability Insurance (Site-specific PLI should be invoiced as a site-specific cost)
- . Mobile Lab
- . Training (Requires PO and CO approval)
- . Limitation on Future Contracting
- . Preliminary Conflict of Interest investigations for potential work assignments

The following are examples of staffing that might be used to accomplish *technical cleanup* activities:

Program Manager	QA Officer
Contracts Manager	Equipment Manager
Sample Coordinator	Analytical Coordinator
Health and Safety Officer	
Clerical Support for these activities	

Health and safety, QA/QC and coordination of CLP/analytical services should be charged to site specific activities when possible.

C. Activities Containing Components of Both Administrative and Technical Cleanup Costs

The following activities may fall into both administrative and technical categories. As a result the contractor should be advised that depending on the nature of the activity, staff time and related costs should be classified under the definitions for administrative and technical cleanup costs.

- . Subcontracting (e.g. Basic Ordering Agreements)

Any subcontracting activities that are not site-specific will be classified as an administrative support cost.

- . Standard Operating Procedures

Standard Operating Procedures (SOP) which deal with overall contract administration will be classified as an administrative support cost. SOPs developed for multiple site work will be classified as a non-site-specific technical cleanup cost.

Equipment/Travel/Other Direct Costs (ODC)/Clerical Support

ODC, equipment, and travel pools for program management should be allocated between administrative support and technical cleanup areas for purposes of tracking the costs.

In implementing the segregation of program management costs, actual equipment costs will be classified as a technical cleanup cost. Labor costs associated with the justification and approval of equipment purchases will also be classified as a technical cleanup cost. Travel and ODC costs can be either administrative or technical cleanup costs and should be monitored, analyzed and reported under each discrete element.

Clerical support should be similarly segregated by cost into the specific element supported, either administrative or technical cleanup.

Site-Specific Program Management

Program management costs, both administrative support and technical cleanup, may be site-specific in nature. Site-specific program management is also called project management when the activity is part of a site-specific work plan. Where such costs can be associated with a single site, they must be included within the approved budget for the individual work assignment. Note that during contract negotiations contractors were encouraged to maximize site-specific program management wherever such costs could be legitimately associated with a single site.

III. CONTRACT COST INDICATORS

Effective contract management depends on the availability of reliable indicators of contractor performance. This guidance establishes a number of key indicators which will be used by regional and headquarters management in monitoring and analyzing ARCS contract costs.

The primary beneficiaries of this management data will be the managers directly responsible for the administration and oversight of ARCS contracts. Trends can be spotted and cost comparisons can be made to other contracts. Manual collection of data will be required far less frequently.

All of the information required can be gathered from the ARCS Contract Tracking (ACT) System. Because critical decisions will be based on the information provided by these management indicators, regional personnel must enter data in a timely, accurate, and comprehensive manner. Quarterly reports will be utilized by headquarters and the Regions in reaching these decisions.

The following indicators are included as examples which can be used to improve the analysis of contract costs. These indicators and others are currently available from the ACT System. New indicators will be developed to meet future needs for trend analyses of contractor performance. Individual regions may likewise develop additional cost indicators to solve specific management problems in their own regions.

- . **Expenditures.** This indicator provides basic information on total sums actually expended. The program management data will be displayed in total and subdivided into administrative support and technical cleanup costs.

- . **Obligations.** This indicator will show amounts obligated by work assignment and total program management obligations. It will provide useful information for fiscal planning purposes and should be compared to expenditures to avoid excessive funding (i.e. banking money).

- . **Administrative Support Costs vs Total Contract Cost,**
- . **Technical Cleanup Costs vs Total Contract Costs,**
- . **Program Management Costs vs Total Contract Cost.** These indicators will display total costs associated with these elements as percentages of total contract cost. They will be calculated on the basis of actual expenditures by region, and by contract. The objective will be to assess the relative efficiency of program management. To provide consistency in analyses, pollution liability insurance costs and equipment costs may be segregated from other administrative and technical cleanup costs.

- . **Administrative Support Costs per LOE Hour Delivered,**
- . **Technical Cleanup Costs per LOE Hour Delivered,**
- . **Program Management Cost per LOE Hour Delivered.** These indicators will measure the cost-effectiveness of program management

operations. They will provide individual contract rates which can be analyzed, compared and contrasted.

IV. COST EFFICIENCIES DURING WORK SLOWDOWN

During periods of low contract activity, support costs should be carefully monitored. Contracting officers and project officers should take the initiative to assure that contractors incur only absolutely essential costs. Evaluation of contractor performance under the award fee process during these periods should focus on the efficiency with which the contractor manages contract support costs. To insure consistency among ARCS contracts, changes made to required reports, deliverables or other contract activities should be coordinated with the Office of Acquisition Management (OAM) and HSCD.

Congress has mandated that the Agency achieve a national target for program management expenditures compared to total contract expenditures for ARCS contracts. In FY92, this target was 15%. Future targets may be adjusted by Congressional action.

V. PROGRAM MANAGEMENT OPTIONS

One of the principal goals of ARCS is to provide incentive to the contractors to perform in an outstanding manner. To achieve this goal, in addition to the award fee structure of the contracts, EPA designed the contracts to have a small base level-of-effort (LOE) with an extended option structure. Contractors performing in a manner superior to other contractors in a given region/zone would be rewarded with additional work and contractors performing less well would receive correspondingly less work.

To complement this option structure for increased quantity of LOE hours, a corresponding option structure for program management was created. The difference between the two is that remedial planning options are calculated in numbers of LOE hours and program management options were calculated as dollars estimated to support the delivery of the LOE hours.

Contract options for both remedial planning activities and program management are exercised by the contracting officer at the request of the

project officer. Note that ARCS contract option structures are variable depending on the capacity of individual ARCS contracts.

The relative dollar value negotiated for each type of option is based on an estimated labor mix and an estimated annual delivery rate of LOE. Because the actual labor mix and annual delivery rate for each ARCS contract are unique, the ratio between LOE options and program management options has changed since the contracts were negotiated. It is the responsibility of the contracting officer and project officer to analyze these changes to assure that adequate program management support is provided while closely monitoring the overall costs.

VI. IMPLEMENTATION GUIDANCE

Implementation of this guidance will require a change in the preparation of supporting documentation utilized in the award fee evaluation. These changes, addressed in detail below, should be implemented in the next evaluation period. Implementation will also require the standardization of selected invoice and reporting requirements among all ARCS contracts. Revised invoices should be submitted for costs incurred in March, 1993.

A. Roles and Responsibilities

Contractors are responsible for the accumulation and categorization of program management contract expenditures into administrative and technical cleanup costs and for the submission of this information in monthly invoices through the use of the *Contractor Invoice Supplemental Report for Program Management* provided as Attachment I to this guidance. In addition, contractor invoices should reflect the segregation of administrative and technical cleanup costs through the use of the two separate activity codes provided in Attachment II, *Technical and Administrative Costs Tracked By Activity Code*.

Project Officers are responsible for reviewing and approving the segregated costs as part of the invoice review process and for the evaluation of these separate activities as part of the award fee process. In addition, Project Officers are responsible ensuring that the contractor invoices contain the proper activity codes provided in Attachment II and that the Contractor Invoice

Supplemental Reports submitted reflect the same amounts for administrative and technical cleanup services as are reflected in the invoice account coding.

Contracting Officers are responsible for the contractual implementation of this guidance, evaluation of these separate activities as part of the award fee process as well as conducting informal reviews not less than semi-annually to insure that the guidance is being implemented correctly and consistently under all ARCS contracts. A separate review will be conducted as part of the routine Financial Management Reviews conducted by OAM.

B. Award Fee

Program management is one of the two areas under which ARCS contractors are evaluated. Contracting officers prepare a Summary Evaluation Report (SER) on contractor activity in the program management area. These evaluations are incorporated in the final SER prepared by the project officers to support overall recommendations to the Performance Evaluation Board (PEB). The Fee Determination Official (FDO) determines the final amount of fee to be awarded to contractors based upon the findings and recommendations of the PEB.

The segregation of program management costs into administrative and technical cleanup costs will result in a change to the supporting documentation provided. Contracting officers and projects officers, in preparing their evaluations of contractor performance, should address administrative and technical cleanup costs as discrete elements in determining overall contractor performance in providing program management activities.

Because the relative value of administrative and technical cleanup costs may vary during each evaluation period, no specific ratio between the two elements can be developed. The project officer, in consultation with the contracting officer, will need to determine the relationship between the two elements and incorporate that determination into the SER on program management.

Implementation of these changes to the award fee evaluation process will not require a formal change to the award fee plan incorporated in the ARCS contracts. However, contracting officers and project officers will discuss the changes in the program management evaluation process with their ARCS

contractors focusing on the need to improve the tracking and control of program management costs.

ARCS award fee plans contain general guidance on evaluating program management activities. The following are some additional areas to be considered when evaluating the contractor:

In the area of *administrative support*:

- . Scheduling, coordinating, and executing all individual work assignments within the region/zone.**
- . Predicting resource requirements, properly staffing and training personnel.**
- . Development and adherence to the management plan, including the health and safety plan and quality assurance/quality control plans.**
- . Establishing and effectively utilizing the management information and cost/schedule monitoring systems and ongoing analysis for costs and LOE utilization.**
- . Maintaining good communication channels with Regional EPA officials involved in the Superfund program as well as responding to regional priorities in a cooperative environment.**
- . Efficient, cost effective management of team subcontractors and timely placement and efficient, cost effective management of pool subcontractors with emphasis on realistic efforts in meeting the Small Business/Small Disadvantaged Business Enterprises (SB/SDBE) goals specified in the contract.**
- . Timeliness and quality of monthly progress and financial reports.**
- . Timeliness and quality of invoices with particular emphasis on the adequacy and reasonableness of invoice support documentation.**

- . Compliance with all contract terms and conditions.

In the area of *technical cleanup*:

- . Effective utilization of contract lab program (CLP) and non-CLP lab support where applicable in meeting the program commitment.
- . Cost effective acquisition and utilization of equipment and adherence to a property control system.
- . Timely implementation of corrective action plans affecting multiple sites where applicable.
- . Timely development and modification of health and safety plans.
- . Management of corporate COI issues related to the limitation on future contracting activity.
- . Diligent efforts to secure non-site-specific PLI

C. Invoicing and Reporting Requirements

In order to effectively monitor costs incurred for both administrative support and technical cleanup costs, an adjustment in the method by which a contractor invoices program management costs must be made. The ARCS contracts already require contractors to supply detailed cost element invoicing in accordance with the contract clause entitled "Submission of Invoices" (EPAAR 1552.232-70). The contractor is required to provide cost detail support on all major cost elements such as direct labor, travel, equipment and subcontracts as well as any associated indirect costs.

On January 13, 1992, the Office of Administration and Resources Management (OARM) issued a memorandum signed by David O'Connor, Director of PCMD, and Henry Longest, Director of OERR, addressing mandatory invoice tracking elements under ACT. The memorandum provided as an attachment a *Contractor Invoice Supplemental Report for Program Management* indicating the minimum invoice data elements to be reported by the contractor. This invoice supplement does not require any additional information than a

already required by the contract and by FAR 52.232-25. As a result of the segregation in program management however, this guidance provides revisions to the invoice supplement contained in the January 13th memorandum. In as much as this type of invoice reporting detail is already a contract requirement, modifications to existing ARCS contracts will not be necessary.

The revised *Contractor Invoice Supplemental Report for Program Management* is included as Attachment I to this guidance. This revised attachment requires the contractor to provide a summary level report of program management by cost element. Beginning with the invoices submitted for March, 1993, the ARCS contractors will be required to use this form when invoicing their program management administrative and technical cleanup costs. In determining whether to report a program management cost as administrative support or technical cleanup the contractor must follow this guidance.

Please note that the invoice for program management/administrative support costs does not include the cost elements for Pollution Liability Insurance (PLI), Equipment, Lab Services and Mobile Lab Services as part of the cost elements on the administrative program management invoice. The actual cost of purchasing any PLI (premiums), equipment, or lab/mobile lab services as well as labor costs associated with the procurement of these goods and services will be reported under technical cleanup costs.

Requiring the ARCS contractors to utilize the Invoice Supplemental Report will facilitate the subsequent input of this data into the ACT system and promote standardization and national consistency.

D. Other Implementation Guidance

Attachment II, *Technical and Administrative Costs Tracked by Activity Code*, provides specific implementation instructions regarding the use by ARCS contractors of separate activity codes within account numbers in invoicing for administrative and technical support under the ARCS contracts. The attachment also provides a point of contact within the Superfund Accounting Branch of the Financial Management Division to answer questions regarding the proper use of these new activity codes.

A *Guide to Program Management Cost Allocations* is provided as Attachment III to this memorandum. This will simplify the analysis of costs by the CO and PO.

ATTACHMENT I

CONTRACTOR INVOICE SUPPLEMENTAL REPORT SUMMARY PROGRAM MANAGEMENT INVOICE

1 of 3

INVOICE NUMBER:	PERIOD START DATE:
INVOICE DATE:	PERIOD END DATE:

CATEGORY	NOTES	VALUES
PRIME LABOR COSTS	BASE LABOR (STRAIGHT SALARY WITHOUT FRINGE)	
INDIRECT COSTS	OTHER THAN G&A (INCLUDING FRINGE)	
G&A		
OTHER DIRECT COSTS	EXCLUDES TRAVEL, EQUIPMENT, LAB SVCS, & MOBILE LABS	
POLLUTION LIABILITY INSURANCE	UNLOADED VALUE	
TRAVEL	DOES NOT INCLUDE RELOCATION (INCLUDED IN ODC LINE)	
EQUIPMENT	UNLOADED VALUE	
LAB SERVICES	UNLOADED VALUE	
MOBILE LAB COSTS	UNLOADED VALUE	
TEAM SUBCONTRACTORS	INCLUDES ALL FEES CHARGED TO PRIME	
OTHER SUBCONTRACTORS	INCLUDES ALL FEES CHARGED TO PRIME	
BASE FEE	INCLUDES FCCM	
AWARD FEE	PRIME ONLY	
TOTAL \$ INVOICED		

CONTRACTOR INVOICE SUPPLEMENTAL REPORT
PROGRAM MANAGEMENT INVOICE
ADMINISTRATIVE SUPPORT

2 of 3

INVOICE NUMBER:	PERIOD START DATE:
INVOICE DATE:	PERIOD END DATE:

CATEGORY	NOTES	VALUES
PRIME LABOR COSTS	BASE LABOR (STRAIGHT SALARY WITHOUT FRINGE)	
INDIRECT COSTS	OTHER THAN G&A (INCLUDING FRINGE)	
G&A		
OTHER DIRECT COSTS	EXCLUDES TRAVEL, EQUIPMENT, LAB SVCS, & MOBILE LABS	
TRAVEL	DOES NOT INCLUDE RELOCATION (INCLUDED IN ODC LINE)	
TEAM SUBCONTRACTORS	INCLUDES ALL FEES CHARGED TO PRIME	
OTHER SUBCONTRACTORS	INCLUDES ALL FEES CHARGED TO PRIME	
BASE FEE	INCLUDES FCCM	
AWARD FEE	PRIME ONLY	
TOTAL \$ INVOICED*		

* Total must agree with total amount invoiced under activity code 9.

CONTRACTOR INVOICE SUPPLEMENTAL REPORT
PROGRAM MANAGEMENT INVOICE
TECHNICAL CLEANUP COSTS

Page 3 of 3

INVOICE NUMBER:	PERIOD START DATE:
INVOICE DATE:	PERIOD END DATE:

CATEGORY	NOTES	VALUES
PRIME LABOR COSTS	BASE LABOR (STRAIGHT SALARY WITHOUT FRINGE)	
INDIRECT COSTS	OTHER THAN G&A (INCLUDING FRINGE)	
G&A		
OTHER DIRECT COSTS	EXCLUDES TRAVEL, EQUIPMENT, LAB SVCS, & MOBILE LABS	
POLLUTION LIABILITY INSURANCE	UNLOADED VALUE	
TRAVEL	DOES NOT INCLUDE RELOCATION (INCLUDED IN ODC LINE)	
EQUIPMENT	UNLOADED VALUE	
LAB SERVICES	UNLOADED VALUE	
MOBILE LAB COSTS	UNLOADED VALUE	
TEAM SUBCONTRACTORS	INCLUDES ALL FEES CHARGED TO PRIME	
OTHER SUBCONTRACTORS	INCLUDES ALL FEES CHARGED TO PRIME	
BASE FEE	INCLUDES FCCM	
AWARD FEE	PRIME ONLY	
TOTAL \$ INVOICED*		

* Total must agree with total amount invoiced under activity code a.

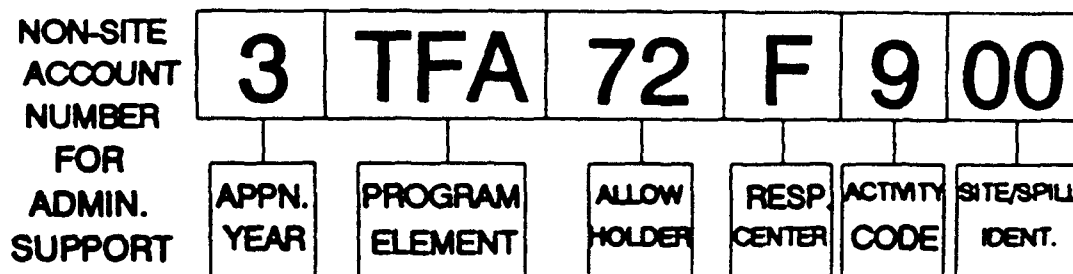
ATTACHMENT II

TECHNICAL & ADMINISTRATIVE COSTS TRACKED BY ACTIVITY CODE

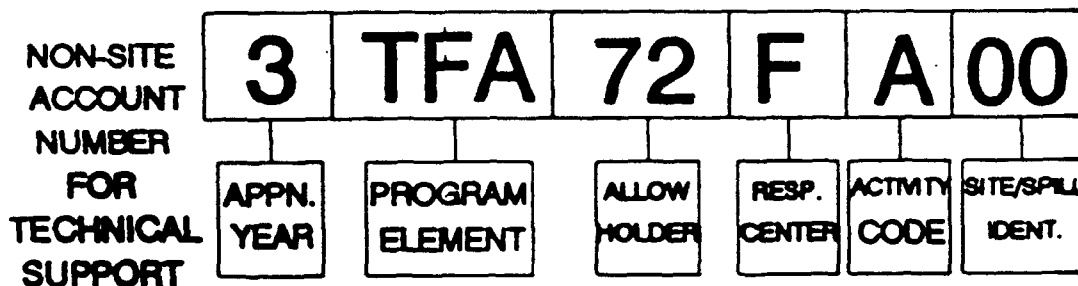
EPA will be able to track and report the technical and administrative contract expenses in its accounting system through the use of account numbers. FMD has designated activity code "9" for administrative costs as defined in the guidance and activity code "A" for technical cleanup as defined in the guidance. Contractors should use these activity codes in the account codes on the invoice site distribution sheets. Project Officers are responsible for ensuring that the correct codes are used. If there are any questions about the account codes or activity codes, please contact the Chief, Superfund Accounting Branch, FMD at (202) 260-9268.

REMEMBER!!

USE ACTIVITY CODE "9" FOR ADMINISTRATIVE COSTS PORTION OF PROGRAM MANAGEMENT



USE ACTIVITY CODE "A" FOR TECHNICAL COSTS PORTION OF PROGRAM MANAGEMENT



- o 8TH DIGIT REPRESENTS ACTIVITY CODE.
- o 9TH AND 10 DIGIT REPRESENTS SITE NUMBER. FOR ADMINISTRATIVE OR TECHNICAL CLEANUP, USE "00" SITE, UNLESS THE ACTIVITY CAN BE TRACED TO A SITE SPECIFIC SSID.
- o CONTACT THE SUPERFUND ACCOUNTING BRANCH IN FMD AT (202) 260-9268.

GUIDE TO PROGRAM MANAGEMENT COST ALLOCATIONS

The purpose of this guide is to assist the Regional COs and POs in evaluating the program management costs for segregation into administrative or technical categories.

Currently, program management costs are tracked and reported on the basis of an aggregate amount. In order to improve the tracking, reporting and analysis of these costs, program management costs will be segregated into administrative and technical cleanup costs.

To assist in improving the tracking and monitoring of these costs, the following definitions have been developed to segregate the program management costs into administrative and technical activities. Examples cannot be provided for every program management cost you may encounter, however, the following may assist in your determination.

A. **Administrative Support Costs** are non-site-specific costs necessary for managing the overall contract regardless of the amount of specific site work. The following are examples of administrative support costs:

- . Contract Mobilization (development of field equipment needs and inventory control guidelines)
- . Personnel Management
- . Preparation of Monthly Reports (Progress and Financial)
(The compilation of site-specific progress and financial data should be charged site-specifically)
- . Meetings (concerning contract operations)
- . Financial Accounting Activities
- . Invoicing/Voucher Preparation
- . Computer Support
- . Updates to Management, Health and Safety, and Quality Assurance/Control Plans
- . Routine Communication/Coordination between EPA/Contractor
- . Audit Support
- . Preparation of Contractor's Program Management Summary Evaluation Reports (SER)
- . Team Subcontractor Management Activities (Pool subcontract management activities should be charged to remedial planning.)
- . Maintenance of Corporate Conflict of Interest Plan and System Support
- . Labor Standards Compliance (Service Contract Act/Davis Bacon Act)
- . Annual Contract Close-Out Activities
- . Clerical Activity in Support of Administrative Functions

- . Other Administrative Activities (library and other reference activities, annual allocation reporting, non-site-specific records retention activities, etc.)
- . Staffing - Each contractor proposed staffing positions necessary to perform program management functions. Specific staffing plans were negotiated prior to contract award. The final approved staffing plans can be found in the Confirmation of Negotiations in the pre-award contract file. These staffing positions are not part of the labor provided under the level of effort capacity of the contract; they are a unique labor pool available to provide specific program management functions. Since each of the contractors' staffing plans contain unique staff descriptions, the examples of staffing shown for administrative and technical cleanup are used only to indicate staff activities and not specific titles; they are not provided to indicate staffing patterns for any contract. They are sample categories of disciplinary expertise and management oversight necessary for the contract operation. However, any activities performed by the program management staff for site specific activities should be charged to remedial planning activities.

Examples of staffing that might be used to accomplish administrative activities are:

Program Manager	Reports Manager
Accountant	Subcontract Manager
Contract Administrator	Secretary/Data Entry Clerk

B. Technical Cleanup Costs are non-site-specific costs for technical activities that cover multiple sites, and are related to the site-specific work conducted under the contract.

Most technical cleanup costs under program management are incurred as a result of requirements from multiple sites. Thus the amount of these costs will vary with the number of sites assigned under the contract.

Examples of technical cleanup activities are provided to assist in determining which activities to include in the technical support category. Again, this is not a definitive catalogue of these activities.

- . Equipment/Warehouse Management (Including cost of equipment maintenance, calibration and inventory)
- . Meetings concerning technical issues relevant to multiple work assignments
- . Health and Safety
- . Quality Assurance/Quality Control
- . Technical Guidance
- . Pollution Liability Insurance (Site-specific PLI should be invoiced as a site-specific cost)
- . Mobile Lab
- . Training (Requires PO and CO approval)

- . Limitation on Future Contracting
- . Preliminary Conflict of Interest investigations for potential work assignments
- . The following are examples of staffing that might be used to accomplish technical support activities:

Program Manager	Sample Coordinator
QA Officer	Analytical Coordinator
Contracts Manager	Health and Safety Officer
Equipment Manager	Clerical Support for these activities

- . Health and safety, QA/QC and coordination of CLP/analytical services should be charged to site-specific activities when possible.

C. Activities Containing Components of Both Administrative and Technical Cleanup Costs

The following activities may fall into both administrative and technical categories depending on the nature of the activity:

- . Subcontracting (e.g. Basic Ordering Agreements) - Any subcontracting activities that are not site specific will be classified as an administrative support cost.
- . Standard Operating Procedures (SOP) which deal with overall contract administration will be classified as an administrative support cost. SOPs developed for multiple site work will be classified as a non-site specific technical cleanup cost.

Equipment/Travel/Other Direct Costs (ODC)/Clerical Support

- . ODC, equipment, and travel pools for program management should be allocated between administrative support and technical cleanup areas for purposes of tracking the costs.

In implementing the segregation of program management costs, actual equipment costs will be classified as a technical cleanup cost. Labor costs associated with the justification and approval of equipment purchases will also be classified as a technical cleanup cost. Travel and ODC costs can be either administrative or technical cleanup costs and should be monitored, analyzed and reported under each discrete element.

- . Clerical support should similarly be segregated by cost into the specific element supported, either administrative or technical cleanup

Site-Specific Program Management - Program management costs, both administrative support and technical cleanup, may be site-specific in nature. Site-specific program management is also called project management when the activity is part of a site-specific work plan. Where such costs can be associated with a single site, they must be included within the approved budget for the individual work assignment. Note that during contract negotiations contractors were encouraged to maximize site-specific program management wherever such costs could legitimately be associated with a single site.

Guide to Program Management Cost Allocations

Cost Category	Administrative Support	Technical Cleanup	Other
Direct Labor	<ul style="list-style-type: none"> o Hours to support preparation of monthly progress reports (e.g., assembling input from field personnel) o invoicing (e.g., time spent in accounting, compiling billing activities) o personnel management o attending contract-wide meetings o managing team subcontractors o Maintenance of corporate conflict of interest plan and system o Updating and maintaining contract-wide management, QA/QC and Health and Safety Plans, other SOPs 	<ul style="list-style-type: none"> o Equipment maintenance/-warehouse management o Hours billed to train technical personnel o Maintenance of mobile labs o Hours billed by safety officer (e.g., guidance on OSHA regs to site managers) o Hours billed in technical consultation regarding interpretation of Agency requirements on QA/QC, analytical methods, etc. o Diligent effort in procuring pollution liability insurance for entire contract 	<ul style="list-style-type: none"> o Clerical hours may be directly allocable to either administrative or technical support (e.g., updating an equipment list is technical, typing monthly progress reports is administrative) o Hours related to site-specific lab requirements, sampling procedures, QA/QC plans, safety issues and subcontracting should not be billed to PM but rather to the site. o Diligent effort for site-specific PLI + indemnification request should be billed site-specifically and not PM. o Preparation of site-specific progress reports should be billed site-specifically and information should be used in summary reports.

Cost Category	Administrative Support	Technical Cleanup	Other
Indirect Costs	<ul style="list-style-type: none"> o Contract specific established rate (other than G&A) 	<ul style="list-style-type: none"> o Contract specific established rate (other than G&A) 	
General and Administrative	<ul style="list-style-type: none"> o Contract specific established rate 	<ul style="list-style-type: none"> o Contract specific established rate 	
Other Direct Costs	<ul style="list-style-type: none"> o computer time o office supplies o courier service 	<ul style="list-style-type: none"> o mobile lab utility costs when lab is idle. 	<ul style="list-style-type: none"> o general office equipment for sites should be billed site-specifically o when mobile lab is in use utility costs should be charged site-specifically.
Pollution Liability Insurance	<ul style="list-style-type: none"> o 	<ul style="list-style-type: none"> o cost of contract-wide or multi-site policy 	<ul style="list-style-type: none"> o cost of site-specific policies should be billed site-specifically
Travel	<ul style="list-style-type: none"> o Travel related to general management of entire contract 	<ul style="list-style-type: none"> o Sending a technical specialist to a conference (with EPA permission) 	<ul style="list-style-type: none"> o travel by specialist to an individual site should be billed site-specifically o travel to present material on individual site at a conference (with EPA permission)

Cost Category	Administrative Support	Technical Cleanup	Other
Equipment	o General office equipment for personnel	o special equipment for site operations	o individual equipment pieces leased or purchased due to a unique site-specific requirement should be billed site-specifically
Lab Services		o Purchase of standards/methods, lab maintenance and calibration with contractor-owned/managed lab	o contracts with laboratories should be billed site-specifically
Mobile Lab Costs		o Utility costs, maintenance etc. associated with labs	
Team Subcontractors	o Fees, invoices and management of team subs	o Team sub experts consulted for multi-site support	o Other costs related directly to management of a specific site should be billed to the individual site
Other Subcontractor	o Fees, invoices and management of subs to primes	o Sub experts consulted for multi-site support	o Other subs procured to support site specific activities should be billed to individual site.
Base Fee	o Contract specific established \$	o Contract specific established \$	o calculated as \$ across all categories
Award Fee	o Fee earned on administrative support work	o Fee earned on technical work	

APPENDIX G



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 10 1992

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

MEMORANDUM

SUBJECT: Public Voucher Validation Procedures for Regional Contracting Officers

FROM: David J. O'Connor, Director *David J. O'Connor*
Procurement and Contracts Management Division (PM-214-F)

TO: See Below

The purpose of this memorandum is to provide guidance and outline procedures for performing public voucher validation reviews for EPA Regional Contracting Officers. The attached procedures (Attachment A) apply to EPA's Alternative Remedial Contracting Strategy (ARCS), Emergency Response Cleanup Services (ERCS), and other types of contracts with cost-reimbursable provisions. This guidance is prepared in response to the Administrator's Task Force on Implementation of the ARCS which recommended spot checks of contractor vouchers. It is important that the reviews are performed using a consistent approach which is coordinated with our invoice review, financial monitoring and audit processes. As with any new procedure, certain implementation problems may arise, and we will work with you to resolve them.

These reviews, in combination with other financial management tools such as financial monitoring reviews and voucher audits (Attachment B) that will be requested from the Defense Contract Audit Agency and the Office of Inspector General will result in better managed contracts. It is important for all of us to work together and to communicate the findings from these validation reviews to the Headquarters Financial Analysis Section. The results of these public voucher validation reviews will be very beneficial in planning and performing financial monitoring reviews, annual incurred cost audits and voucher reviews performed by the cognizant auditor.



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If you have any questions regarding this issue or the following procedures, please call Dale Roberson, Chief of the Financial Analysis Section at (FTS) 260-3194.

Attachments

Addressees:

Hillary Kelley, Chief, Superfund Contracts, Region I
Ted Rivero, Chief, Contracts Section, Region II
Frank Snock, Chief, Superfund Financial Management Section, Region III
Jane Singley, Chief, Contract Negot., and Mgt. Section, Region IV
Patricia Bamford, Chief, Contracts Section, Region V
Shirley Bruce, Chief, Procurement Section, Region VI
Alma Eaves, Director, Superfund Contracts Office, Region VII
Martha Nicodemus, Chief, Grants Management Branch, Region VIII
Tom Warner, Chief, Contracts Management Section, Region IX
Jonell Allamano, Chief, Support Services, Region X
William Topping, Chief, Regional Contract Placement Branch, (PM-214-F)
Pat Patterson, Staff Chief, Superfund/RCRA Program Management Staff (PM-214-F)
William Wilfong, Chief, Superfund/RCRA Headquarters Operation Branch (PM-214-F)
Sue Anderson, Acting Chief, Regional Contract Management Branch (PM-214-F)
Tom McEntegart, Chief, Procurement Operations Branch (PM-214-F)
Ika Joiner, Acting Superfund Acquisition Program Manager (PM-214-F)
Joan Barnes, Contract Operations Review and Assessment Staff
Ken Ayers, Design and Construction Management Branch

<p>cc: Assistant Regional Administrators Herbert Barrack, Region II Joseph R. Franzmathes, Region IV William Hathaway, Region VI Kerrigan G. Clough, Region VIII Barbara F. McAllister, Region X John Gherardini Edward Hanley</p>	<p>Patricia L. Meaney, Region I William J. Wisniewski, Region III Robert L. Springer, Region V Susan C. Gordon, Region VII Nora L. McGee, Region IX Mark Kellerman, CINN Mike Bower, RTP John Chamberlin</p>
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PUBLIC VOUCHER VALIDATION REVIEW PROCEDURES

The following is an outline of procedures and guidelines for Contracting Officers or their representatives to follow when performing a public voucher validation review under EPA's ARCS, ERCS and other contracts with cost-reimbursement provisions. The primary scope of the review involves limited testing of costs on invoices to ensure that billings are prepared in accordance with contractual terms and are adequately supported with accounting books and records. The extent of the review should depend upon the invoiced amount, timeliness, and degree of known issues or concerns as well as the reviewer's judgement and familiarity with the contractor's billing operations.

In those cases where the reviewer is satisfied that the contractor's cost documentation and records are reliable, it will generally be sufficient to limit the verification to the procedures listed. In other instances, where the reviewer or EPA has no prior experience with the contractor, or situations arise where there is reason to question the validity or accuracy of the contractor's public voucher, the reviewer should notify the Financial Analysis Section who will request an audit of the contractor's accounting system and billing procedures. In addition to these voucher reviews, other types of audits and reviews are being performed as shown on Attachment B. All requests for audits should be sent to EPA's Chief of the Financial Analysis Section located at Headquarters.

Review procedures for public voucher validation reviews are as follows:

OBJECTIVE

The objective of the review is to periodically ensure that billings are made in accordance with contractual terms and are adequately supported. The objective of the voucher validation review differs from the current monthly voucher review and approval process performed by Project Officers and Contracting Officers. A major difference is the depth of the reviews. For maximum coverage it is recommended that these reviews be performed on-site at the contractor's offices to verify costs to contemporaneously available source documents and accounting

records (i.e. invoices, labor distribution, payroll register, job cost ledgers, accounts payable, vendor files, subcontract files, etc.). However, in many cases the reviews will need to be performed as desk reviews using information mailed/faxed to the reviewer due to lack of travel funds or available staff resources.

TIMING

These reviews should be performed when questions arise from the Project Officer or from other sources which suggest the need for validating invoiced costs and other sources of invoice review are not available (financial monitoring reviews, voucher audits by DCAA or OIG, current annual incurred cost audits, etc.).

SELECTION OF VOUCHERS

- 1) One or more public vouchers per contract should be selected for review. A sample of costs from all cost elements where amounts billed are material should be reviewed.
- 2) The public vouchers selected for review should not be the same vouchers reviewed by the Financial Analysis Section (FAS) in the financial monitoring report or DCAA's voucher review requested by FAS. A copy of reports from these reviews will be sent to regional CO's and PO's within 1 to 2 months after the review. CO's should send copies to the PO's.

SCOPE OF REVIEW

After invoices for review have been selected, but prior to invoice review, special considerations should be given to reviewing transactions involving: 1) any unusual items being claimed or any costs that stick out as unusual based on the scope of work being performed, 2) high dollar items, and 3) testing transactions from each cost element from multiple WA's, or DO's. In reviewing the reasonableness of charges, the reviewer is not expected to know exact market values of various direct costs; however, past experience and common sense can assist in confirming the reasonableness of

charges for each cost element examined. Invoices are to be reviewed on a sample basis only; it is not the intent of these procedures to suggest that a 100% review is needed. We have identified specific areas and line items that should be examined when reviewing an invoice.

REPORTING

All findings or problems discovered as a result of the voucher validation review should be reported by or thru the Contracting Officer to the Chief, Financial Analysis Section (FAS). The CO should also notify the Project Officer of findings and any action required during the monthly voucher payment approval process.

Actions taken or proposed by the CO should be included in the report along with a time frame for resolution. Cross cutting issues affecting multiple contracts may be referred to the Financial Administration Contracting Officer (FACO) through the Chief, FAS. Questions regarding these procedures should be referred to the Chief of the Financial Analysis Section. Copies of the report and related documents must be maintained in the official contract file.

DOCUMENTATION

Attachment A is a review checklist which should be used to document performance of the review. The completed checklist along with the review report and any workpapers should be retained together as part of the contract file.

CHECK LIST FOR VOUCHER VALIDATION REVIEW

CONTRACTOR NAME: _____ CONTRACTING PROGRAM: _____
CONTRACT NO.: _____ REGION: _____
REVIEWERS NAME: _____ REVIEW COMPLETION DATE: _____
VOUCHER NUMBER(S) REVIEWED: _____
VOUCHER PERFORMANCE PERIOD(S): _____

STEP PERFORMED (Y/N)	REVIEWERS INITIALS	DATE
----------------------------	-----------------------	------

REVIEW PROCEDURES

_____	_____	_____	1) Review the public voucher for completeness (i.e. company name, total costs, signatures, dates, contract number, period of performance, etc.) and determine if costs are presented in the format required by the contract and billed in accordance with government regulations. Also determine the following:
_____	_____	_____	a. Are individual cost elements adequately shown?
_____	_____	_____	b. Are cumulative costs adequately shown?
_____	_____	_____	c. How often are vouchers submitted for payment?
_____	_____	_____	d. Is there evidence in the contract file that the voucher was reviewed and approved by the PO?
_____	_____	_____	2) Ascertain that claimed costs have been incurred, or actually paid, dependent upon the terms of the payment clause of the contract. Also determine if the contractor maintains adequate supporting records for all claimed costs.

CONTRACTOR NAME: _____ CONTRACT NO.: _____

STEP PERFORMED (Y/N)	REVIEWERS INITIALS	DATE	
_____	_____	_____	3) Make a quick check of the mathematical accuracy of the public voucher.
_____	_____	_____	4) Verify that billed costs were incurred within the period of performance authorized under the contract/delivery order/etc.
_____	_____	_____	5) Review cumulative costs claimed, to assure that the amount claimed does not exceed the total estimated cost (excluding fee) authorized under the contract, WA or DO if appropriate.
_____	_____	_____	6) Review and verify that indirect costs claimed are being billed at contractually established rates. Assure that you have the latest rate agreement issued by the Cost Policy and Rate Negotiation Section for the contractor.
_____	_____	_____	7) Verify that the fee billed is in accordance with contractual provisions and that fee withheld complies with requirements of the contract.
_____	_____	_____	8) Review any special contract provisions for payment restrictions such as ceilings, etc.
_____	_____	_____	9) Review and determine if site specific costs are correctly accumulated and billed.
_____	_____	_____	10) Review and determine whether there are or has been a history of suspended or disallowed billings, if so, what is the current status?

CONTRACTOR NAME: _____ CONTRACT NO.: _____

LABOR

Specific emphasis should be given to labor costs. The reviewer should assure answers to the following questions.

STEP PERFORMED (Y/N)	REVIEWERS INITIALS	DATE	
_____	_____	_____	1) Will the total LOE be exceeded before the contract performance period expires?
_____	_____	_____	2) Did the contractor charge premium for overtime worked? Was it authorized by the Contracting Officer in advance? Was it charged consistent with the contractor's established practice?
_____	_____	_____	3) Are the hours charged within the estimates specified in the work plan/delivery order?
_____	_____	_____	4) Do the employees billed meet the contract requirements for the category in which they are billed? (You can ask the contractor for specific employee's resumes and compare them to the labor category requirements)
_____	_____	_____	5) Does the labor mix appear to be appropriate.
_____	_____	_____	6) Are labor hours and rates supported by timesheets and the payroll register?
_____	_____	_____	7) Are there any dollars being charged to direct labor that are not being charged to LOE? (clerical & mgmt)

CONTRACTOR NAME: _____ CONTRACT NO.: _____

TRAVEL

STEP PERFORMED (Y/N)	REVIEWERS INITIALS	DATE	
_____	_____	_____	1) Determine that travel expenses are adequately justified by supporting documentation and were related specifically to a contract requirement.
_____	_____	_____	2) Determine if the sample travel expenses reviewed comply with contractual limitations, the contractor's policies and the Government Travel Regulations (GTR).

OTHER DIRECT COSTS

In the area of ODC's the reviewer must thoroughly review supporting documentation to ensure that all ODC's sampled are adequately supported and do not exceed any contract dollar ceilings. Also review any subcontract ODC's for ceiling limitations. In addition determine the following:

STEP PERFORMED (Y/N)	REVIEWERS INITIALS	DATE	
_____	_____	_____	1) Carefully sample any charges in the miscellaneous and transactions in other categories.
_____	_____	_____	2) Ascertain whether the contractor charges similar costs direct to all other clients.
_____	_____	_____	3) Determine if any expenses that should have been charged to overhead were charged as ODC expenses.
_____	_____	_____	4) Validate direct purchases of supplies, materials, equipment, etc. and determine whether property has been purchased and properly approved under the contract.

CONTRACTOR NAME: _____ CONTRACT NO.: _____

STEP PERFORMED (Y/N)	REVIEWERS INITIALS	DATE
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_____	_____	_____
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5) Review the purchase document (purchase order, etc.) to see who authorized the purchase.

_____	_____	_____
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6) Compare the purchase document with the vendor's invoice. This should then be compared with the contractor's voucher to EPA. Determine the reason for any differences.

SUBCONTRACTS

STEP PERFORMED (Y/N)	REVIEWERS INITIALS	DATE
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_____	_____	_____
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1) Verify a sample of subcontract costs claimed. Ascertain that items and services claimed were purchased directly for the contract. Verify that subcontractor's costs are properly shown on the prime contractor's vouchers. Assure that the contractor monitors subcontractor costs by cost element as well as by entity. Assure that indirect cost rates on subcontracts are periodically adjusted to reflect actual rates incurred. Validate support for subcontractor invoices.

_____	_____	_____
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2) Assess the adequacy of the Prime Contractor's monitoring of the performance of subcontractors.

_____	_____	_____
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3) Determine whether the subcontractors sampled have been properly approved by the Contracting Officer or appropriately notified to the CO in accordance with the terms of the contract. Review the contract agreement between the prime and subcontractor. Be aware of any potential conflicts of interest.

APPENDIX H



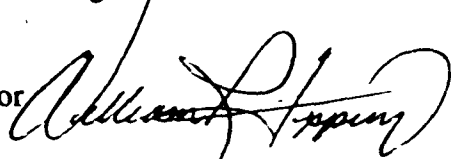
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 21 1992

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

MEMORANDUM

SUBJECT: FINAL Instructions and Procedures for Implementing ARCS
Annual Close-Outs

FROM: William R. Topping, Acting Associate Director
for Superfund (PM-214-F) 

TO: Addressees

The final instructions and procedures for implementing the ARCS Annual Close-Outs are attached. A draft of this final document was previously distributed for comment in a memorandum dated July 25, 1992. Comments received were incorporated into this final document as appropriate.

The ARCS contractors shall be requested to submit a separate claim in accordance with the instructions and procedures, and revised contract clause attached, for each completed contractor fiscal year from the inception of each contract. Since more than one fiscal year has already expired on all of the ARCS contracts, this will result in up to several claims to be submitted originally. These claims should be submitted by the ARCS contractors to the respective Contracting Officers no later than January 30, 1993. Therefore, it is necessary for each Contracting Officer to modify/remodify the ARCS contracts and distribute this policy document to every ARCS contractor as soon as possible. Please assure that all ARCS contracts are modified to include the revised clause no later than October 30, 1992. If you are unable to meet this date, please submit a justification and expected completion date to Sue Anderson, by October 20, 1992, on a contract by contract basis.

It is understood that the modification/remodification of the ARCS contracts to incorporate the revised ARCS annual close-out clause (See Attachment 1B for the clause to be incorporated by modification) and the efforts involved by the ARCS Contracting Officers, the Financial Analysis Branch, and the ARCS Contractors will require additional effort. However, it is consistent with EPA's objective to provide stronger contract cost surveillance on a more current basis.



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Any questions on this guidance should be directed to Thomas DeHoff (202) 260-6427 or Dale Roberson (202) 260-3194, of EPA's Financial Analysis Branch (FAB).

Attachments

Addressees:

Sue Anderson, Acting Chief, Regional Contract Management Branch (PM-214-F)
Ed Murphy, Chief, Procurement Policy Staff (PM-214-F)
Hillary Kelley, Chief, Superfund Contracts, Region I
Ted Riverso, Chief, Contracts Section, Region II
Frank Snock, Chief, Superfund Financial Management Section, Region III
Jane Singley, Chief, Contract Negot., and Mgt. Section, Region IV
Patricia Bamford, Chief, Contracts Section, Region V
Shirley Bruce, Chief, Procurement Section, Region VI
Alma Eaves, Director, Superfund Contracts Office, Region VII
Martha Nicodemus, Chief, Grants Management Branch, Region VIII
Tom Warner, Chief, Contracts Management Section, Region IX
Jonell Allamano, Chief, Support Services, Region X
Bill Topping, Acting Assoc. Director of Superfund (PM-214-F)
Scott Fredericks, Design and Construction Management Branch
Ika Joiner, Superfund Acquisition Manager
Debbie Dietrich, Director, Emergency Response Division
Gerald Clifford, Director, Hazardous Site Control Division
Larry Reed, Director, Hazardous Site Evaluation Division
Joan Barnes, Director, Contract Operations Review and Assessment Staff
John Walsh, Chief, Financial and Compliance Audit Unit, OIG

ATTACHMENT 1

Alternative Remedial Contracting Strategy (ARCS Contracts) Instructions and Procedures for Implementing the Annual Close-Outs

BACKGROUND AND PURPOSE

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, under Section 9619, Response Action Contractors (CERCLA), Section 119 addresses the subject of release or threatened release of hazardous substances, pollutants, or contaminants by any potentially responsible party who, as determined, will be held responsible ultimately for reimbursement to the Government for the costs of the complete clean-up of hazardous waste sites.

In order to achieve this objective, a number of EPA contracts have been awarded, which have been designated Alternative Remedial Contracting Strategy (ARCS) Contracts, to provide the remedial site clean-up response of selected uncontrolled hazardous waste sites. The ARCS contracts are cost reimbursable level of effort contracts with a potential performance period of 10 years. In order for EPA to improve its management of the ARCS contracts for this extended performance period, the contracts will be incrementally closed-out henceforth on an annual basis, or as currently as possible, in accordance with EPA OARM Memorandum dated December 22, 1989, Subject: Incremental Close-out of ARCS Contracts, and the FAR class deviation of Clause 52.216-7, "Allowable Cost and Payment," Paragraph (h), Incremental Settlement of Allowable Costs, incorporated in the ARCS contracts (See Attachment 1A). This clause has now been revised as shown in Attachment 1B.

CONTRACTOR REQUIREMENTS AND PROCEDURES SUBMISSION OF ANNUAL COSTS CLAIMED

Since dissemination of the FAR clause deviation to all ARCS Contracting Officers in the ten (10) Regions, all ARCS contracts awarded either have been modified or should be modified expeditiously in conformance with the approved class deviation clause specifying annual close-outs of total costs and fee claimed for each completed fiscal year of the specific ARCS contract.

Each ARCS contractor is required to submit, to the applicable EPA Contracting Officer, no later than 150 days from the end of each contractor fiscal year end for the duration of each ARCS contract, a schedule of direct and indirect costs claimed for each fiscal year. The schedule to be submitted will be entitled Summary of Contract Costs Claimed For FYE , 19XX (See Attachment 1C). This schedule details the direct and indirect costs claimed by cost element and applicable base and award fee for the subject fiscal year. The format of this schedule should be adjusted as needed to reflect each cost element recognized by the contractor's accounting system and the contract. It is further broken down by program management and remedial costs claimed. The contract cost data in this schedule should match that included in the contractor's Incurred Cost Submission due within 90 days from each contractor fiscal year end.

Because EPA accounts for each ARCS work assignment separately, it will be necessary for the contractor to also provide fiscal year contract costs claimed by cost element by work assignment. Therefore, it will be necessary for the contractor to provide a supporting schedule to the Summary of Contract Costs Claimed for FYE . 19XX (Attachment 1C) which details the contract costs claimed by cost element and further by work assignment (See Attachment 1D for the basic format).

In addition to the schedule of costs claimed under the contract, at the contract and work assignment level, the contractor must also submit, simultaneously, a schedule entitled Contract Billing Summary For FYE . 19XX (See Attachment 1E) which summarizes contract costs and fee billed by voucher number for the subject contractor's fiscal year.

Where variances exist between claimed/booked amounts and those amounts already billed, the contractor shall include a fully documented reconciliation, which outlines, clearly, the description and amounts of all components of the variance by cost element and by work assignment. (See the bottom of Attachment 1C and 1D).

TIMING ISSUES

The contractor's fiscal year claim shall be consistent with the contractor's Incurred Cost Submission and consist of all costs incurred and recorded in the subject fiscal year, (which is required by the FAR contract clause 52.216-7(d) Allowable Cost and Payment - Final Indirect Cost Rates). Where the prime contractor has received subcontractor invoices by prime contractor fiscal year end, the subcontractor costs shall be included in the prime contractor's claim. Subcontractor invoices that are not received by the prime contractor by fiscal year end, should be recognized as incurred/claimed costs of the following fiscal year.

The variance between billed indirect cost rates and the unaudited actual rates claimed for the subject fiscal year represents a claim for the fiscal year in which authority to bill the variance is given under the terms of the contract. The billing of any difference between the claimed and negotiated costs of a prior year is a claim for the fiscal year in which the billing adjustment is made.

BILLING FOR PRIOR FISCAL YEAR ADJUSTMENTS

Any invoices for prior year adjustments should be submitted on a separate invoice from current monthly costs. The separate invoice should identify the appropriate time period for which the costs are applicable and contain an explanation and any supporting documents that support the occurrence of the event causing the adjustment. The invoice should be numbered and show current and cumulative costs by cost element similar to current period invoices. Accordingly, a separate public voucher should be submitted for billings related to prior year indirect rate variances, i.e., where there are differences between a prior year claimed indirect rate and the negotiated indirect rate. A copy of the executed EPA Indirect Rate Agreement should be attached to the invoice.

RELEASE STATEMENT

After an audit of the direct and indirect costs claimed for the subject fiscal year has been performed by the cognizant audit office, and the costs have been negotiated by the appropriate EPA Contracting Officer, the ARCS contractor will be required to submit a Release Statement (EPA Form 1900-6) which will release the Government of liability of payment for additional costs claimed in the subject fiscal year. The total release amount will be the equivalent to the contractor's claimed amount for the subject fiscal year after adjusting for any questioned costs sustained as a result of the audit and negotiation process. The Release Statement will also list any estimated claims or items not settled/released for which the EPA is not released from liability. However, since the release statement submittal will take place after the audit and negotiation process, generally several fiscal years later, any unknown or unsettled cost items should be minimal.

EPA PROCEDURES & RESPONSIBILITIES FOR PROCESSING OF ANNUAL CLAIMS

It will be the responsibility of the Contracting Officer to assure that the ARCS contractor is aware of the requirements of this document and submits annual claims as required by the contract clause.

REVIEW OF CLAIM

The Contracting Officer, after receipt of the contractor's claim, shall review the claim for completeness and to assure that the Summary of Contract Costs Claimed for FYE , 19XX, at the contract and work assignment level, and the Contract Billing Summary are included along with any necessary reconciliations and that the documents submitted are complete, are consistent with each other, and that any necessary contractor, Contracting Officer or Project Officer explanations or concerns are identified and attached. Once the Contracting Officer is satisfied with the contractor's claim, the Contracting Officer should forward the claim along with a request for audit to the Chief, Financial Analysis Branch (FAB).

After receipt of the contractor's claim from the Contracting Officer, the Financial Analysis Branch will review the claim to assure that the contractor's schedule of Summary of Contract Costs Claimed For FYE , 19XX is acceptable. If the data in the contractor's schedule is not in the appropriate format (See Attachment 1C, 1D, and 1E), the FAB will advise the Contracting Officer and contractor to resolve such problems. The FAB will compare the schedules submitted for consistency with the Contractor's Incurred Cost Submission.

If the annual direct and indirect Incurred Cost Audit for the fiscal year has not been requested by the Cost Policy and Rate Negotiation Branch (CPRNB), when the contractor's claim is received by FAB, the FAB will coordinate an audit of the claim with the CPRNB. If the CPRNB has already issued the direct and indirect incurred cost audit request for the subject fiscal year, the FAB will issue a supplemental request to the cognizant audit office which will include the contractor's fiscal year claim and appropriate audit instructions.

RESOLUTION OF AUDIT RESULTS

After receipt of the audit report by the CPRNB, they will determine which cost issues are to be resolved/negotiated by the Financial Administrative Contracting Officer (FACO). The audit report will be transmitted to the Contracting Officer by the FAB identifying which questioned costs must be settled by the Contracting Officer and also identifying which questioned costs will be settled by the (FACO).

The (FACO) will negotiate the indirect costs and any direct costs that are not contract specific in nature. An example of such a direct cost would be a computer billing rate applied to all cost objectives. The Contracting Officer will be responsible for negotiating all other direct costs. The Contracting Officer and/or FACO should resolve any questioned direct or indirect costs immediately, as any questioned costs will be in the EPA IG's Audit Tracking System. The resolution of the questioned contract costs must be resolved by the Contracting Officer and FACO within 150 days along with a transmittal to the FAB, detailing the disposition of the audit report and including a Summary of Negotiations and appropriate correspondence reflecting the negotiated cost for the year. The Contracting Officer will also be responsible for providing the Management Audit Tracking System form summarizing the disposition of questioned costs within the 150 days.

BILLING FOR NEGOTIATED COST ADJUSTMENTS

After the costs have been negotiated by the responsible official, the contractor may bill (debit or credit) on a separate invoice for any variances between claimed and negotiated costs related to the applicable fiscal year costs as authorized by the Contracting Officer. See **BILLING FOR PRIOR FISCAL YEAR ADJUSTMENTS** above.

As discussed above under **RELEASE STATEMENT**, the contractor will submit a Release Statement to the Contracting Officer after the negotiation of direct and indirect costs has been completed. The Release Statement must be reviewed for accuracy and reasonableness by the Contracting Officer, and to assure that it reconciles to the contractor's Summary of Contract Costs Claimed for FYE , 19XX, and to the negotiated cost amounts for the year. Any list of estimated/unsettled cost items outlined in the contractor's Release Statement must be reviewed for reasonableness by the Contracting Officer. After the Release Statement has been fully executed, the subject fiscal year will be considered closed. A copy of the Release Statement and any correspondence applicable to the release should also be sent to the FAB by the Contracting Officer for follow-up audit considerations.

ATTACHMENT 1A
PAGE 1 OF 2

- (h) Incremental Settlement of Allowable Costs. (1) The Government and the Contractor intend that annual final determination be made on allowable costs of this contract on as current a basis as possible. In order to meet this objective, the Contractor shall, within 150 days after the expiration of each of its fiscal years or by a later date approved by the Contracting Officer, submit to the Contracting Officer a fiscal year completion voucher, prepared in the format required by the clause entitled "Submission of Invoices" (EPAAR 1552.232-70). The voucher shall set forth the actual allowable costs incurred during the fiscal year for which reimbursement is claimed under the contract. Following receipt of the fiscal year completion voucher, the Contracting Officer shall request from the cognizant audit activities audits of the costs claimed by the Contractor, and where appropriate, by its subcontractors.
- (2) Within a reasonable time after receipt of the audit report (including any audits of subcontractor), the Contracting Officer shall determine the allowable costs for each fiscal year. If the Contractor has not reached a final agreement with all of its subcontractors for the fiscal year, or other pending claims from third parties remain unresolved, the determination will specifically identify cost areas not covered. Within ninety days after these pending claims are resolved, the Contractor shall submit to the Contracting Officer a final claim. The Government shall make a written final determination on these costs.
- (3) After the Government determination of the total allowable costs for each fiscal year, but before final payment, the Contractor shall provide to the Contracting Officer, the following for the period covered by the determination:
- (i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and
 - (ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except -
 - (A) Specified claims stated in exact amounts or in estimated amounts when the exact amounts are not known;

ATTACHMENT 1A
PAGE 2 OF 2

- (B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and
 - (C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding however, any expenses arising from the Contractor's indemnification of the Government against patent liability.
- (4) The Contractor shall make annual final cost determinations on cost reimbursement subcontracts, whenever practicable.

INCREMENTAL SETTLEMENT OF ALLOWABLE COSTS (REVISED)

Annual Settlement of Allowable Costs. (1) The Government and the Contractor intend that annual final determination be made on allowable direct and indirect costs of this ARCS contract on as current a basis as possible. In order to meet this objective, the Contractor shall, within 150 days after the expiration of each of its fiscal years, submit to the Contracting Officer a summary of the direct and indirect costs claimed, by cost element, for the subject contractor's fiscal year. The Contractor, in addition to providing claimed contract costs by cost element, must provide a supporting schedule which details the claimed costs by cost element and by work assignment. It is also necessary for the contractor to provide with the above schedules, a billing summary for the fiscal year which outlines the cost and fee billed by individual voucher. These schedules shall be prepared in accordance with the ARCS Instructions and Procedures for Implementing the Annual Close-Outs. The ARCS annual claim and supporting schedules shall set forth the unaudited actual allowable costs incurred during the fiscal year for which reimbursement is claimed under the contract. Following receipt of the fiscal year claim, the Contracting Officer shall request, through EPA's Financial Analysis Branch (FAB) an audit of the direct and indirect costs claimed by the Contractor, and where applicable, by its subcontractors.

(2) After receipt of the direct and indirect cost audits of the contractor and any applicable subcontractors, the Financial Administrative Contracting Officer (FACO) within the Cost Policy and Rate Negotiation Branch (CPRNB) will negotiate the indirect costs and any direct costs that are not contract specific in nature. Negotiation of any contract specific direct costs will be the responsibility of the Contracting Officer. The Contracting Officer and/or FACO will resolve any questioned direct or indirect costs within 150 days if possible, or as soon thereafter as practicable.

(3) After the Government's determination of the total allowable costs for each fiscal year, the Contracting Officer will authorize the contractor to invoice for the amount of any difference between negotiated and billed costs. The Contractor shall then provide to the Contracting Officer the following for the period covered by the determination:

ATTACHMENT 1B
PAGE 2 OF 2

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) a release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except

a) Specified claims stated in exact amounts or in estimated amounts when the exact amounts are not known.

b) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following notice of final payment under the contract.

c) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractor's indemnification of the Government against patent liability.

(4) The Contractor shall make annual final cost determinations on cost reimbursement subcontracts, after obtaining approval for the proposed settlement by the Contracting Officer. Materiality of the claim and evidence of the reliability of the subcontractor's accounting system should be considered during the decision making process.

ATTACHMENT 1C

SUMMARY OF COSTS CLAIMED FOR FYE XX

Contractor Name
 Contract Number
 Fiscal Year Ended XX

<u>COSTS ELEMENTS</u>	<u>TOTAL COSTS CLAIMED FOR FY XX</u>	<u>PROGRAM MGT. CLAIMED FOR FY XX</u>	<u>REMEDIAL CLAIMED FOR FY XX</u>
Direct Labor			
Fringe			
Overhead			
ODC's			
Travel			
Materials			
Equipment			
Subtotal			
G&A			
Subcontract Pool Costs (Attachment)*			
Subcontract Costs			
Team Sub A			
Team Sub B			
G&A on Subcontracts			
Total Costs			
Base Fee			
Award Fee			
Total Claimed			
Less Total Billed			
(See Attachment 1E)			
Variance **			
	=====	=====	=====

ATTACHMENT ID

SUMMARY OF COSTS CLAIMED FOR FYE XX BY WORK ASSIGNMENT

Contractor Name
 Contract Number
 Fiscal Year Ended XX

<u>COSTS ELEMENTS</u>	<u>WORK ASSIGNMENT # 1</u>	<u>WORK ASSIGNMENT # 2</u>	<u>TOTAL ALL WORK ASSIGNMENTS</u>
Direct Labor			
Fringe			
Overhead			
ODC's			
Travel			
Materials			
Equipment			
Subtotal			
G&A			
Subcontract Pool Costs			
Subcontract Costs			
Team Sub A			
Team Sub B			
G&A on Subcontracts			
Total Costs			
Base Fee			
Award Fee			
Total Claimed			
Less Total Billed			
(See Attachment 1E)			
Variance			
	=====	=====	=====

ATTACHMENT IE

BILLING SUMMARY FOR FYE XX

	Invoice <u>Date</u>	Costs Billed <u>for FYE XX</u>	Fee Billed <u>for FYE XX</u>	Total Billed <u>for FYE XX</u>
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
Voucher #				
	<hr/>	<hr/>	<hr/>	<hr/>
Total	=====	=====	=====	=====

Last Column on this Schedule must equal total Billed on Attachment 1C - Summary of Costs Claimed

Dated Submitted to EPA
Contract Person - Name
Phone Number

CONTRACTOR NAME: _____ CONTRACT NO.: _____

REPORT PREPARATION

STEP PERFORMED (Y/N)	REVIEWERS INITIALS	DATE	
_____	_____	_____	1) Summarize the results of the review.
_____	_____	_____	2) Discuss results with the Contracting Officer, Chief of the Financial Analysis Section and FACO (when applicable) for assurance of a thorough understanding of the issues.
_____	_____	_____	3) Disclose financial and contracting issues that need interpretation or clarifications.
_____	_____	_____	4) Prepare file notes for identification of problem areas to be included in future and follow-up reviews.
_____	_____	_____	5) Prepare draft report and obtain necessary approval of the draft.
_____	_____	_____	6) Prepare and issue the final report.

DOCUMENTATION

STEP PERFORMED (Y/N)	REVIEWERS INITIALS	DATE	
_____	_____	_____	1) Complete the review checklist.
_____	_____	_____	2) Package the report, checklist, correspondence and workpapers into a file to be maintained as part of the contract file.

THE POST-AWARD AUDIT PROCESS

Financial Monitoring Review (FMR) -

The FMR is a review of contractor billings associated with an individual contract to ensure compliance with contract requirements and to ensure that billed costs are adequately supported by appropriate systems and records. Reports are issued to the CO and the Financial Administrative Contracting Officer (FACO) for resolution of findings. These reviews are performed by the PCMD Financial Analysis Section on contracts in excess of \$5 million. Current PCMD policy stipulates that the reviews should be scheduled for each appropriate contract after at least 6 months of performance has been completed.

Incremental closeout audit - (ARCS contracts only)

These audits, once the instructions and procedures have been agreed to and finalized, will be performed incrementally when the final incurred cost audits are completed for a given contractor fiscal year. The audit will provide the Contracting Officer with the recommended allowable direct and indirect contractor fiscal year costs claimed by the contractor for the particular ARCS contract. The objective of the close-out audits will be to close the ARCS contracts incrementally so that after the 10 year performance period, there will not be a need to close out contractor fiscal years all at once.

Annual Incurred Cost Audits -

The Annual Incurred Cost Audit is a comprehensive audit of a contractor. The review includes an audit of the allowability of direct and indirect costs for all government contracts and is performed for each of the contractor's fiscal years. Upon receipt of the contractor's submission, the Cost Policy and Rate Negotiation Section (CPRNS) will arrange for an audit by the cognizant audit agency. The audit report from the cognizant audit agency is used by CPRNS to negotiate the final indirect rates. The incurred cost audit is also used, as discussed above, as a basis for the ARCS annual/incremental close-out audit report received from the cognizant audit office.

Voucher Audits -

A voucher audit may be conducted by the cognizant audit activity for a specific contract during the performance period of the contract. This audit may be requested by PCMD's Financial Analysis Section, based upon concern about the reliability of the costs claimed, a suspicion that there may be problems with contractor performance, or upon completion and determination of need as a result of an FMR. We will be requesting voucher audits on each ARCS contract as appropriate.

Contract Audit Closing Statement -

The closing statement, sometimes called a final audit, is a summarization of the amounts claimed and accepted in the annual incurred cost audits for the contract. Normally, no added audit work is performed.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 26 1991

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Request for Financial Audit Assistance to the Superfund Program

FROM: Don R. Clay
Assistant Administrator (OS-100)

TO: John C. Martin
Inspector General (A-109)

Purpose: The purpose of this memorandum is to request your support in performing fiscal financial audits of all prime contractors supporting the Superfund program.

Background: The Superfund program is under continuous scrutiny by Congress, the General Accounting Office, the Office of the Inspector General and the public. Considerable resources are expended in performing audits and reviews of the program, preparing and issuing reports, preparing responses to these documents and, implementing recommendations. Many of these reports criticize our use and management of contractors, and our lack of financial monitoring and oversight. We depend upon the Procurement and Contracts Management Division and your office to provide the financial audit support necessary to assist us in identifying allowable, allocable and questioned costs charged by our contractors. Because Superfund manages a significant number of multi-million dollar contracts, we require timely, current financial audits in order to maintain a high level of management oversight and to avoid the public consequences of lax contract administration.

Objective: I understand that annual financial audits are routinely requested on the Agency's largest contracts. I also understand that you are experiencing serious audit backlogs and that some of our major, prime contractors have not undergone a complete financial audit since the inception of the Superfund program. This situation has exposed the program to needless criticism and concern and, I think you will agree, is unacceptable. While experiencing these backlogs, your office has directed considerable resources to numerous programmatic audits. Many of the programmatic audits have revealed a heightened need for more effective financial oversight. A flexible balance



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between these activities needs to be struck such that the audit back load is reduced while maintaining a sufficient level of program oversight.

Implementation: In an effort to overcome these problems and to achieve a timely, proactive program of contractor financial audits, we must, obviously, first take whatever action is necessary to alleviate the backlog of audit requests, assess the need for additional incurred cost audits and, as a minimum, perform financial audits on all major Superfund contracts. It is imperative that we promptly eliminate existing roadblocks to this activity and aggressively pursue these audits.

I realize that action plans are being, or have already been, developed. However, I feel compelled to communicate my thoughts regarding audit priority for the Superfund program. Our priorities regarding financial audits are articulated below:

- Priority Group 1:**
 - o Audits resulting from investigations (e.g. Fraud, etc)
 - o Pre-award audits of contractor proposals.
- Priority Group 2:**
 - o Audits requested as a result of problems discovered in an audit survey, I.G. report, GAO report or, other financial monitoring activity.
 - o Interim incurred cost audits of all major Superfund contracts.
 - o Oldest contracts since last audit first.
 - o Contractors with multiple contracts.
- Priority Group 3:**
 - o Fiscal indirect cost rate audits.
 - o Contract close-out audits

I am requesting that these audits proceed with utmost haste utilizing all resources at your command even if it requires redirecting certain resources from other, lower priority activities. I look forward to working with you to resolve these issues.

cc: Christian Holmes, PM-208