

**Office of Inspector General** 

# **Report of Audit**

# **ACQUISITION MANAGEMENT**

# OMB REQUESTED REVIEW OF EPA CONTRACTING

Audit Report Number E1SKF7-04-0037-7100301

September 30, 1997

**Inspector General Division Conducting the Audit:**  Southern Audit Division Atlanta, Georgia

**Program Offices Involved:** 

Office of Administration and Resources Management

Office of Solid Waste and Emergency Response September 30, 1997

#### **MEMORANDUM**

| SUBJECT: | Audit Report E1SKF7-04-0037-7100301<br>OMB Requested Review of EPA Contracting                        |
|----------|-------------------------------------------------------------------------------------------------------|
| FROM:    | Elissa R. Karpf<br>Deputy Assistant Inspector General<br>for External Audits                          |
| TO:      | Alvin M. Pesachowitz<br>Acting Assistant Administrator<br>for Administration and Resources Management |

Attached is the final report concerning an audit of certain Environmental Protection Agency (EPA) contracting activities as requested by the Office of Management and Budget (OMB). The primary objective of this audit was to determine EPA's current use of available contract types and the Agency's capability to increase its use of completion form, fixed-price, and performance-based contracting mechanisms. We wish to express our appreciation for the assistance provided by the Office of Acquisition Management (OAM) during the audit; especially the two contract managers provided for the audit team. Their contributions were invaluable to the audit effort.

This report contains findings that describe problems the Office of Inspector General (OIG) has identified and corrective actions the OIG recommends. It represents the opinion of the OIG. Final determinations on matters in this report will be made by EPA managers in accordance with established EPA audit resolution procedures. Accordingly, the findings described in this report do not necessarily represent the final EPA position.

#### Action Required

In accordance with EPA Order 2750, you are required to provide a written response to the audit report within 90 days of the final audit report date. As the action official for this report, you should coordinate preparation of the response with other appropriate Agency senior officials. Your response to the final report should identify any completed or planned actions related to the report's recommendations. For corrective actions planned but not completed by the response date, reference to specific milestone dates will assist in deciding whether to close this report.

We have no objections to the further release of this report to the public. Should you or your staff have any questions, please call Mary Boyer, Divisional Inspector General for Audit, at (404) 562-9830.

Attachment

# **EXECUTIVE SUMMARY**

#### PURPOSE

In the fiscal year (FY) 1998 Pass Back Decisions for the President's Budget, the Office of Management and Budget (OMB) requested the following:

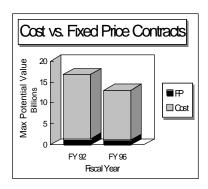
Agency Contract Issues - The Office of Inspector General, working with the Office of Acquisition Management and appropriate program offices, is requested to review contracting procedures and implementation for Superfund and other agency contracts relating to: 1) use of fixed price contracts; 2) accuracy of independent government cost estimates; 3) contract capacity; 4) use of award and incentive fees; 5) use of completion vs. term forms; 6) length of base and option periods; and 7) other items at the discretion of the review team. A preliminary draft of the report is requested to be forwarded to OMB with submission of the FY 1999 budget request in September of 1997.

At a February 5, 1997 meeting, OMB further requested that the Office of the Inspector General (OIG) review the adequacy of Response Action Contract (RAC) management procedures and practices, competition of task orders, and use of performance-based service contracting.

#### BACKGROUND

As reflected in the chart to the right, the vast majority of EPA's contract dollars continue to be awarded under cost-reimbursable, level of effort (LOE) type contracts. This type of contract places more of the risk for cost and performance on the Government and requires the highest level of Government oversight to ensure the receipt of quality services at a reasonable cost. Under LOE contracts, contractors are only required to give their best effort and all reasonable and allowable costs are reimbursed within the limits of the contract.

Past audits and reviews of EPA contracting have questioned the Agency's predominant use of cost-type LOE contracts. The many



years of experience and historical information from previous contracts should have allowed the Agency to define its contracting needs and related costs and, thereby, progress to more completion form, fixed-price, and performance-based contracting. In April 1991, OMB's Office of Federal Procurement Policy (OFPP) issued Policy Letter 91-2 requiring Government procurement offices to use, to the maximum extent practicable, performance-based service contracting (PBSC) when acquiring services. This form of contracting requires that the Government tell the contractor what services it requires, not how to provide them. The basic premise of PBSC is that when the Government limits the amount of mandated requirements in process and staffing, the contractor can provide more cost effective, efficient services. In a PBSC, the Government must clearly define its needs and the methodology it will use to

determine when the services requested have been received at the desired level of quality. Because positive and negative incentives to induce the desired level of performance must also be in a PBSC, the Government must communicate the work objectives and quality assurance plan to the contractor during the preaward phase. This permits the contractor to factor the cost for achieving the desired level of performance in the proposal. Past audits and reviews have shown that EPA had not effectively used incentive fees to achieve quality performance from its contractors.

#### **RESULTS IN BRIEF**

EPA has made some progress in correcting past problems related to independent government cost estimates (IGCE) and management of award fee contracts, such as issuing IGCE guidance, requiring IGCEs for all significant contract actions, and limiting award fees to above satisfactory performance. However, improvements are still needed. EPA has also initiated projects for the award of completion form and performance-based contracts. However, the Agency has many barriers to overcome, including a cultural dependence on LOE contracts, in order to significantly change its contracting practices.

Substantial opportunities exist for EPA to lessen its dependence on cost-reimbursable LOE contracts and move toward more efficient, results oriented contracting. To make such a transition in contract actions, EPA needs to better define its needs and goals, adequately estimate the cost of contracted services, and properly use positive and negative incentives to obtain high quality contractor performance.

#### **PRINCIPAL FINDINGS**

#### Independent Government Cost Estimates Not Always Properly Prepared or Effectively Used for Negotiating Contract Costs

IGCEs were not always adequately prepared, effectively used to analyze proposed cost, or to establish prenegotiation objectives. The quality of the IGCEs reviewed also varied, depending on the specificity of the work requirements and the experience of the responsible program officials. EPA program offices had no processes for reviewing past IGCEs for deficiencies or accumulating historical cost information for preparation of current and future IGCEs. In addition, program staff that oversee contracts had not always received adequate training on IGCE preparation. As a result, program staffs relied heavily on contractors' estimates, often choosing to award contracts and related work at amounts closer to that proposed by contractors rather than EPA estimates.

#### EPA Has Not Made Optimal Use of More Efficient Contract Types

The Agency continues to rely extensively on cost-reimbursable, LOE contracts that essentially buy labor hours, not results, and places the burden of cost control on the Government. EPA has

made some progress toward completion form, performance-based contracting; however, substantial opportunities exist for the Agency to award more completion, fixed-priced, and performance-based contracts and related work assignments (WA). The Agency's cultural preference for LOE contracts, lack of understanding of alternative contracting mechanisms, inability to define its needs, and broad statements of work (SOW) that include multitudes of varying tasks have prevented a more complete transition from LOE cost-type contracts to more efficient, cost-effective contract mechanisms.

#### Award Fee Contracts Generally Provided Limited Incentive for Superior Performance

A majority of the contracts reviewed permitted the award of fees for satisfactory performance. The percentage of fees awarded for satisfactory versus outstanding performance generally varied but the difference provided little incentive for superior performance. EPA revised its award fee policy in November 1995 to restrict award fees to above satisfactory ratings. However, the number of award fee contracts awarded in the last few years has declined dramatically, limiting the effect of the policy change on contractor performance.

Although current OMB initiatives stress reduced Agency dependence on cost reimbursable contracts, situations exist where requirements can not be defined and cost type contracts are the only option available. Therefore, this decline in cost-plus-award-fee (CPAF) contracts causes some concern. Award fee contracts incorporate one of the basic tenants of performance-based contracting, i.e., financial incentives for good performance, and represent one mechanism by which EPA could increase its use of PBSC where cost type contracts are the only reasonable option.

#### **Contract Performance Periods and Capacity Did Not Prevent Competition**

Contract capacity and length of base and option periods did not have a discernable impact on competition for the 26 contracts in our sample. The largest contracts with the longest performance periods received the most proposals. All competitively awarded contracts in our sample were determined to have received adequate competition.

#### **OMB Concerns Specific to RACs**

OMB had questions regarding (1) indirect rates for RACs prime and team subcontractors, (2) the use of regional crossover authority in RACs to increase WA competition, (3) limitations on the RACs subcontract pool, (4) the absence of a contract base for completion form WAs, and (5) the award of RACs as Architectural and Engineering (A&E) contracts. Within the time constraints for this audit, we tried to answer OMB's concerns in Chapter 6 of this report.

#### RECOMMENDATIONS

The Acting Assistant Administrator for Administration and Resources Management, in coordination with other appropriate senior Agency managers, should: (1) provide program personnel with proper training in cost estimation and alternative contract types; (2) require that IGCEs contain estimated costs for each WA task and be effectively used for contract cost negotiations; (3) develop processes to evaluate the quality of IGCEs and create historical cost databases for use in preparing IGCEs; (4) establish program goals for award of completion form, fixed-price, and performance-based contracts; (5) require Senior Resource Officials to implement OMB's requirement to justify contract awards that do not comply with PBSC requirements; (6) develop a strategy for meeting OMB's contract reform goals; and (7) where appropriate, modify award fee plans for current contracts to limit awards to above satisfactory ratings.

#### AGENCY COMMENTS AND OIG EVALUATION

In a memorandum dated September 12, 1997, the Acting Assistant Administrator for Administration and Resources Management (OARM) responded to our draft report. The Acting Assistant Administrator agreed with most of the findings and recommendations presented in the report. However, the response did present disagreements with certain audit conclusions and recommendations. Where appropriate, changes were made in the final report to address OARM's concerns.

OARM's comments were incorporated into appropriate sections of the final report along with our evaluation of these comments. OARM's response in its entirety is included as Appendix I and our evaluation of OARM's comments on specific findings and recommendations is included as Appendix II.

# **TABLE OF CONTENTS**

| EXE | CUTIVE SUMMARY                                                                                                              | i  |
|-----|-----------------------------------------------------------------------------------------------------------------------------|----|
| CHA | PTERS                                                                                                                       |    |
| 1   | INTRODUCTION                                                                                                                | 1  |
|     | PURPOSE                                                                                                                     | 1  |
|     | BACKGROUND                                                                                                                  | 1  |
|     | SCOPE AND METHODOLOGY                                                                                                       | 2  |
| 2   | INDEPENDENT GOVERNMENT COST ESTIMATES NOT ALWAYS<br>PROPERLY PREPARED OR EFFECTIVELY USED FOR NEGOTIATING<br>CONTRACT COSTS | 7  |
|     | BACKGROUND                                                                                                                  | 7  |
|     | IGCEs WERE NOT USED AS A NEGOTIATING TOOL                                                                                   | 8  |
|     | IGCEs LACKED DETAIL NECESSARY FOR EFFECTIVE COST<br>ANALYSIS                                                                | 10 |
|     | RACs IGCE PROCESS NEEDS IMPROVEMENT                                                                                         | 11 |
|     | NO PROCESS FOR ACCUMULATING HISTORICAL CONTRACT<br>COSTS OR EVALUATING IGCEs                                                | 13 |
|     | BETTER SOWs RESULT IN BETTER IGCEs                                                                                          | 14 |
|     | RECOMMENDATIONS                                                                                                             | 15 |
|     | AGENCY COMMENTS AND OIG EVALUATION                                                                                          | 16 |
| 3   | EPA HAS NOT MADE OPTIMAL USE OF MORE EFFICIENT<br>CONTRACT TYPES                                                            | 17 |
|     | BACKGROUND                                                                                                                  | 17 |
|     | TASKS CONDUCTED UNDER COST-REIMBURSABLE LOE<br>CONTRACTS COULD BE AWARDED UNDER CONTRACT TYPES                              |    |
|     | MORE FAVORABLE TO THE GOVERNMENT<br>BARRIERS/LIMITATIONS AFFECTING THE USE OF OTHER                                         | 19 |
|     | CONTRACT TYPES                                                                                                              | 27 |

|   | AGENCY PROGRESS IN AWARDING OTHER TYPES OF                                           |          |
|---|--------------------------------------------------------------------------------------|----------|
|   | CONTRACTS                                                                            | 30       |
|   | CONCLUSION                                                                           | 31       |
|   | RECOMMENDATIONS                                                                      | 31       |
|   | AGENCY COMMENTS AND OIG EVALUATION                                                   | 32       |
| 4 | AWARD FEE CONTRACTS GENERALLY PROVIDED LIMITED<br>INCENTIVE FOR SUPERIOR PERFORMANCE | 33       |
|   | BACKGROUND                                                                           | 34       |
|   | SAMPLED CONTRACTS AWARDED FEES FOR SATISFACTORY<br>PERFORMANCE                       | 34       |
|   | LIMITED IMPLEMENTATION OF REVISED AWARD FEE GUIDELINES                               | 35       |
|   | CONCLUSION                                                                           | 37       |
|   | RECOMMENDATIONS                                                                      | 38       |
|   | AGENCY COMMENTS AND OIG EVALUATION                                                   | 38       |
| 5 | CONTRACT PERFORMANCE PERIODS AND CAPACITY DID NOT<br>PREVENT COMPETITION             | 39       |
|   | BACKGROUND                                                                           | 39       |
|   | ADEQUATE COMPETITION OCCURRED FOR CONTRACTS REVIEWED                                 | 40       |
|   | BASE PERIODS WERE GENERALLY LIMITED TO ONE YEAR                                      | 41       |
|   | INTERNAL EPA REVIEWS QUESTIONED POSSIBLE IMPACT OF CAPACITY                          | 42       |
|   | CAPACITY OF EPA CONTRACTS MAY BE EXCESSIVE                                           | 42       |
|   | CONCLUSION                                                                           | 43       |
| 6 | AGENCY COMMENTS<br>OMB CONCERNS SPECIFIC TO RACs                                     | 43<br>45 |
|   | BACKGROUND                                                                           | 45       |

|                                                            | INDIRECT RATES FOR RACs WERE NOT EFFECTIVELY<br>NEGOTIATED                                                          | 47  |  |  |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----|--|--|
|                                                            | RACS DO NOT PROVIDE FOR ROUTINE USE OF REGIONAL<br>CROSSOVER AUTHORITY AND SUCH USE MAY NOT BE BENEFICIAL<br>TO EPA | 50  |  |  |
|                                                            | SUBCONTRACT POOL HAS NO PERCENTAGE LIMITATION AND CAN BE USED FOR COMPLETION FORM WAS                               | 51  |  |  |
|                                                            | A CONTRACT FLOOR FOR COMPLETION FORM NOT DEEMED<br>APPROPRIATE BY AGENCY OFFICIALS                                  | 52  |  |  |
| USE OF A&E CONTRACTS FOR RAC AWARDS REQUIRED<br>BY STATUTE |                                                                                                                     |     |  |  |
|                                                            | RECOMMENDATIONS                                                                                                     | 54  |  |  |
|                                                            | AGENCY COMMENTS AND OIG EVALUATION                                                                                  | 55  |  |  |
| APPE                                                       | NDICES                                                                                                              |     |  |  |
|                                                            | APPENDIX I: AGENCY RESPONSE                                                                                         | 57  |  |  |
|                                                            | APPENDIX II: OIG EVALUATION OF AGENCY COMMENTS                                                                      | 85  |  |  |
|                                                            | APPENDIX III: SAMPLING METHODOLOGY                                                                                  | 97  |  |  |
|                                                            | APPENDIX IV: CONTRACTS REVIEWED                                                                                     | 99  |  |  |
|                                                            | APPENDIX V: SCHEDULE OF WORK ASSIGNMENTS REVIEWED                                                                   | 103 |  |  |
|                                                            | APPENDIX VI: RACs INDIRECT RATES                                                                                    | 107 |  |  |
|                                                            | APPENDIX VII: ABBREVIATIONS                                                                                         | 111 |  |  |
|                                                            | APPENDIX VIII: DISTRIBUTION                                                                                         | 113 |  |  |

(This page intentionally left blank.)

#### **CHAPTER 1**

# **INTRODUCTION**

#### PURPOSE

In the fiscal year (FY) 1998 Pass Back Decisions for the President's Budget, the Office of Management and Budget (OMB) requested the following:

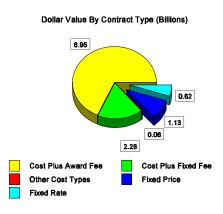
Agency Contract Issues - The Office of Inspector General, working with the Office of Acquisition Management and appropriate program offices, is requested to review contracting procedures and implementation for Superfund and other agency contracts relating to: 1) use of fixed price contracts; 2) accuracy of independent government cost estimates; 3) contract capacity; 4) use of award and incentive fees; 5) use of completion vs. term forms; 6) length of base and option periods; and 7) other items at the discretion of the review team. A preliminary draft of the report is requested to be forwarded to OMB with submission of the FY 1999 budget request in September of 1997.

At a February 5, 1997 meeting, OMB further requested that the Office of the Inspector General (OIG) review the adequacy of Response Action Contract (RAC) management procedures and practices, competition of task orders, and use of performance-based service contracting.

#### BACKGROUND

Contractors continue to play a significant role in helping EPA accomplish its mission. As of January 1997, the Agency had approximately 845 active contracts with a maximum potential value of about \$13 billion. Historically, EPA's largest contracts have been cost-reimbursable,

level of effort (LOE) type contracts. The chart to the right illustrates EPA's heavy dependence on cost-reimbursable contracts as of the end of FY 1996. Superfund contracts, valued in the hundreds of millions, historically have been cost-reimbursable award fee contracts. Superfund officials have indicated that it is impossible to predict site conditions and cleanup needs with sufficient accuracy to award fixed-price contracts. This form of contracting places more of the risk for cost and performance on the Government and requires the highest level of Governmental oversight to ensure the receipt of quality services at a reasonable cost. Contractors are only



required to give their best effort and all reasonable and allowable costs are reimbursed within the limits of the contract.

In prior years, OIG, General Accounting Office (GAO) and EPA internal reviews have identified longstanding contract deficiencies. From 1992 to 1994, the Agency reported contract management as a Presidential level weakness in its yearly Federal Managers' Financial Integrity Act (FMFIA) reports. In 1995, EPA downgraded contract management to an Agency level weakness. OIG, GAO, OMB and EPA internal reviews have questioned why the Agency has not gained sufficient experience and historical information from previous contracts to better define its future contracting needs and related costs and, thereby, progress to more completion form, fixed-price, and performance-based contracting. The EPA Standing Committee on Contract Management recommended in December 1992 that EPA use contract types other than cost-reimbursement contracts, where appropriate.

In 1991, OMB issued a policy letter requiring Government procurement offices to use, to the maximum practicable extent, performance based contracting (PBSC) when acquiring services. This policy was subsequently incorporated into the Federal Acquisition Regulation (FAR) on August 22, 1997. Performance based contracting requires that the Government tell the contractor what services it requires, not how to provide them. The basic premise of PBSC is that when the Government limits mandated requirements in process and staffing, the contractor can provide more cost effective, efficient services. In a PBSC, the Government must clearly define its needs and the methodologies it will use to determine when the services requested have been received at the desired level of quality. Because positive and negative incentives to induce the desired level of performance must also be in a PBSC, the Government must communicate the work objectives and quality assurance plan to the contractor during the preaward phase. This permits the contractor to factor the cost for achieving the desired level of performance in the proposal. Past audits and reviews have shown that EPA had not effectively used incentive fees to achieve quality performance from its contractors.

Performance-based method of contracting also assumes the Government can reasonably estimate the cost of the services to be procured and can define what end result or product it desires. Numerous OIG and GAO reports have documented serious problems in past years with EPA's ability to define its needs and estimate related costs.

#### SCOPE AND METHODOLOGY

Our audit was designed to address OMB's concerns related to current EPA contracting practices. The primary audit objectives were to review EPA contracting operations in general and RACs program implementation in particular to determine:

- if EPA program staff prepare accurate IGCEs that assist in contract negotiations and promote cost effective contracts;
- EPA's current use of fixed-price, completion form, and performance-based contracting mechanisms and the feasibility of EPA increasing the use of these type contracts;

- whether EPA is effectively utilizing award and incentive fees to obtain the highest quality contractor services at the best price; and
- whether contract capacity and the length of base and option periods in EPA contracts negatively impacted competition.

OMB also requested that we evaluate (1) indirect rates for RACs prime and team subcontractors, (2) the use of regional crossover authority in RACs to increase WA competition, (3) limitations on the RACs subcontract pool, (4) the absence of a contract base for completion form WAs, and (5) the award of RACs as Architectural and Engineering (A&E) contracts.

Our audit fieldwork was conducted during the period February 5 through June 30, 1997. We were assisted by OAM who provided two contract managers for the audit team. Audit fieldwork was performed at EPA contracting offices in Research Triangle Park (RTP), North Carolina; Cincinnati, Ohio; and Washington, D.C. We also performed fieldwork at EPA Regions 1 through 9. We reviewed contracting files, applicable EPA contracting policies and procedures, and the FAR. We obtained legal advice from the Office of General Counsel (OGC), Inspector General Division (IGD), for certain issues. We interviewed EPA contracting officials, project officers (PO), and work assignment managers (WAM). In addition, we interviewed contracting officials and reviewed documents at several other Federal agencies that award contracts for services and materials similar to EPA.

Our specific audit approach and methodologies were designed to assess EPA contracting practices in relation to (1) all EPA contracts in general and (2) the award and administration of RACs.

### Methodology for Overall Review of EPA Contracting

To evaluate EPA's current use of fixed-price contracts, we obtained a listing of all contracts identified as fixed-price from EPA's Contract Information System (CIS) as of September 30, 1996. We performed limited tests to determine whether these contracts were actually firm-fixed-price or some other type of contract mechanism. We also obtained a listing of all EPA cost-reimbursable-type contracts to compare the number and dollar value to that of fixed-price contracts. We further compared the number and value of current fixed-price and cost contracts to the number and value of fixed-price and cost contracts that were active in 1992. This was done to assess EPA's progress in reducing the number of cost-type contracts and awarding more fixed-price contracts during this four and one-half year period.

To accomplish the audit objectives related to evaluating the effect of contract capacity and length of base and option periods on competition, adequacy of IGCEs, use of contract type, and administration of award fees, a total sample of 26 cost-type contracts and a sub-sample of 86

WAs<sup>1</sup> issued under these contracts were reviewed (Appendices IV and V list the contracts and WAs in our samples). We randomly selected a sample of 20 cost-reimbursable contracts (maximum potential value (MPV) \$1 billion) and a judgmental sample of six RACS (MPV \$1.8 billion). In addition to these 26 contracts, a separate random sample of five cost-plus-award-fee contracts (MPV \$224 million) was selected to supplement our initial sample to ensure adequate coverage of the award fee process (Appendix IV lists award fee contracts selected). The random samples were selected from separate universes of cost-reimbursable and award fee contracts that were active during FYs 1994 through 1996. The methodology used for each sample selection and the related contract universe is explained in Appendix III.

To evaluate the effect of contract capacity and length of base and option periods on competition, we determined how many competitive proposals were received for each of the 26 contracts in our samples. We defined a competitive proposal as one that was scored within the competitive range. For the purpose of this review, we established a benchmark for adequate competition as two competitive proposals. This criterion is more restrictive than the Competition in Contracting Act which defines open and full competition as all responsible sources having an opportunity to compete for the award. The Act does not establish a quantitative definition of competition. For those contracts that received only one competitive proposal, we reviewed contract files and interviewed prospective offerors to determine whether the contract capacity and length of base and option periods limited competition.

To evaluate the adequacy of IGCEs, we determined whether a detailed IGCE was prepared for the contracts and WAs in our sample as required by EPA policy. We also compared the initial IGCE to the following: the contractor's initial cost proposal for the contract or WA; the EPA negotiating position; the final award amount; and the final incurred cost, where possible. We also interviewed WAMs, POs, and contracting officials concerning the preparation and use of IGCEs.

We reviewed the statement of work (SOW) for our sample of cost-reimbursable contracts and related WAs to determine whether the tasks included in these SOWs could have been awarded under completion form, fixed-price, or performance-based (cost or fixed) contract mechanisms in lieu of cost-reimbursable. For each SOW, we completed a detailed data sheet answering a series of questions designed to determine whether any of these contract types could have been used to accomplish the tasks under the SOW. We also interviewed WAMs, POs, and contracting officials to obtain their opinions as to whether alternative contact types could have been used or why they believed other types could not have been used.

To assist us in determining whether EPA could award more performance-based contracts, we

<sup>&</sup>lt;sup>1</sup> Several types of instruments were used under the sample contracts to assign work to contractors. These included WAs, delivery orders (DO), and task orders (TO). We recognize there are technical differences between these instruments. However, for purposes of this audit, we refer to all of these instruments as WAs unless we are referring to a specific instrument.

contacted other Federal agencies to obtain information on their use of performance-based contracts. We interviewed contracting officials and reviewed performance-based contract information from the United States Air Force (USAF), Army Corps of Engineers (COE), National Aeronautics and Space Administration (NASA), and Department of Energy (DOE). We also interviewed officials from the OMB, GAO, and DOE OIG to obtain information related to use of performance-based contracting within the Federal government.

To determine whether EPA paid award fees to contractors only for outstanding performance, we reviewed award fee determinations and award fee plans for six RACs contracts and 13 other award fee contracts included in our two random samples of cost-type contracts. We also reviewed EPA's Contract Management Manual to identify EPA's current award fee policy. In addition, we interviewed EPA contracting officials to identify current trends in the use of award fee contacts and reasons for these trends.

#### Methodology for Review of RACs Activities

To determine the number of completion form WAs issued under RACs, we performed a review of all WAs issued under active RACs contracts at the time of our audit. To assess whether RAC WA tasks could be issued as completion form or performance based WAs, we reviewed tasks included in WAs issued under six RACs and interviewed regional POs and applicable contracting officers (CO). We also sought guidance from Agency management and representatives from the OGC-IGD on funding rules applicable to completion form WAs.

In order to address OMB's concerns related to RACs contractors' indirect rates, we interviewed the RACs Placement Contracting Officer (PCO), conferred with OIG contract audit staff on generic and contractor specific indirect rate issues, and reviewed contract preaward files for rate evaluations performed by the Defense Contract Audit Agency (DCAA), the EPA OIG, and/or the EPA Washington Cost Advisory office for both prime and subcontractors. We also reviewed Pre/Post Negotiation Memorandums in preaward files to evaluate EPA's negotiation of indirect rates.

To determine why RACs were awarded as A&E contracts, we obtained information from OAM, reviewed Superfund statutory and FAR regulatory requirements. We also obtained legal advice from OGC-IGD related to applicable Superfund statutory requirements. We further determined whether other Federal agencies were contracting for similar work, as that obtained under RACs, using other contracting mechanisms.

To determine if RACs contained: (1) a subcontract ceiling and (2) a limitation on use of completion form WAs for subcontract work, we interviewed the PCO and reviewed relevant contract language pertaining to subcontract pool requirements and limitations. We also reviewed the RACs User's Guide, an EPA guidance document for RACs management.

To assess the feasibility of using contract regional crossover authority as a means of increasing

competition, we reviewed the RACs User's Guide, interviewed knowledgeable Agency personnel at the EPA Headquarters and regional levels, obtained advice from the OGC-IGD, and reviewed any pertinent contract file documentation relative to the advantages, disadvantages, and costs of regional crossovers.

Our audit was conducted in accordance with <u>Government Auditing Standards</u> (1994 Revision), issued by the Comptroller General of the United States. Our audit samples were selected from CIS contract information provided to us by OAM. In addition, we analyzed information from the CIS database to identify certain trends in EPA contracting. We did not evaluate the controls over CIS or the quality and integrity of data within this system. As a result, we cannot attest to the accuracy of the data in the system. However, the Agency uses this data to report contracting accomplishments and, as such, the data was relied upon for sample selection and analysis of contract types.

Although specific internal controls may have been addressed during this review of EPA contracting, an evaluation of internal controls over EPA contracting activities was not an objective of this audit. The audit scope was limited to OMB's concerns relative to EPA contracting and any control deficiencies identified were incidental to this purpose. One other issue related to potential excess contract capacity in EPA contracts came to our attention during the audit which we believe warrants further audit work but which could not be addressed during this review due to time constraints. This issue has been proposed for future audit work.

# **CHAPTER 2**

# INDEPENDENT GOVERNMENT COST ESTIMATES NOT ALWAYS PROPERLY PREPARED OR EFFECTIVELY USED FOR NEGOTIATING CONTRACT COSTS

EPA has made some progress in correcting past problems related to IGCEs by issuing IGCE guidance and requiring IGCEs for significant contract actions; but, improvements are still needed. For the 26 contracts and 86 WAs reviewed, IGCEs generally were prepared where required by EPA policy. However, IGCEs were not always adequately prepared, effectively used to analyze proposed contract costs, or to establish prenegotiation objectives. For some LOE contracts reviewed, the IGCEs seemed to be based on available funding rather than an actual estimated cost to perform the specified WA tasks. In two contract Divisions, EPA provided the contractor with the estimated total labor hours and the contractor prepared its proposal based on these hours. Officials believed that, when buying LOE, furnishing contractors with total labor hours did not compromise cost negotiations. EPA subsequently negotiated the labor mix with each contractor. In our opinion, these practices reduced the effectiveness of the IGCE as a cost analysis mechanism.

The quality of the IGCEs reviewed also varied, depending on the specificity of the work requirements and the experience of the WAMs and POs. In some instances, usually involving LOE contracts, IGCEs were not costed out by WA task. Also, WAs were often amended or tasks were carried over from one WA to another or from one contract to another. These conditions prevented meaningful comparisons of contractors' proposals to IGCEs, accumulation of historical cost data, and evaluation of IGCEs to final WA costs. EPA program offices have not evaluated past IGCEs to identify needed improvements or created a database of historical contract workloads and related costs for the preparation of current and future IGCEs. In addition, some POs and other program staff that oversee contracts had not received adequate training on IGCE preparation. As a result, program staffs continue to rely too heavily on contractors' estimates, often choosing to award contracts and issue WAs at amounts proposed by contractors rather than at EPA estimated amounts.

#### BACKGROUND

An IGCE is a detailed estimate of the cost to the Government for services and/or supplies to be acquired. In the past, both internal and external groups criticized the Agency for poor cost estimating practices and procedures. The Administrator's 1992 Standing Committee on Contract Management recommended that EPA pursue a more structured approach to IGCE development. OMB stated in a February 1997 meeting that EPA's high use of cost-reimbursable, LOE type contracts caused them to question EPA's ability to estimate its needs. In a March 3, 1993 memorandum, EPA's Acting Director, OAM, required that IGCEs be prepared and submitted with all contract actions greater than \$25,000. Contract actions were defined as new contract awards, modifications to increase the scope of work of contracts, work assignments and delivery

orders.

In June 1994, EPA issued specific guidance for preparation of IGCEs. The guidance provided for two major types of cost estimates, but stated that the Agency "wants the bottoms up type or detailed IGCE for all work assignments and delivery orders." This type of estimate presumes the total effort can be separated into a work breakdown structure (WBS), and pricing can be applied to each element such as direct labor, overhead, travel, equipment, other direct costs and general and administrative expenses. A WBS identifies each major task and divides them into small subtasks. This division into small subtasks makes it easier to identify the work required, to determine required staffing needs, to schedule the work and to estimate the initial cost for the desired output. It permits the cost estimator to assign quantities such as staff-hours, disciplines, labor category levels, number of trips, duration of trips, equipment, etc. The WBS is described as an important tool not only for identifying activities, deliverables, and milestones but also for providing a baseline to track actual versus estimated costs and identify potential cost overruns and underruns.

The guide emphasizes that WAMs/POs should be careful about letting external forces, such as time constraints or funding limits influence IGCEs. A good IGCE can be used to prepare the budget, prioritize areas of concern and monitor work in progress. IGCEs should be used as a negotiating tool toward achieving the best priced work for the Government.

#### IGCES WERE NOT ALWAYS USED AS A NEGOTIATING TOOL

The Standing Committee's 1992 report stated that cost negotiations were critical at the WA level. The committee stated that EPA should use IGCEs to analyze contractor costs and that the effectiveness of IGCEs would be dependent, in part, on their usefulness in negotiations and cost analysis.

At each of the four EPA contracting offices visited [Cincinnati, RTP, and Washington (two offices)], IGCEs for non-Superfund, LOE type contracts were not always used to negotiate WA costs. For LOE contracts, IGCEs seemed to be used to project available funding for the fiscal period rather than to actually estimate the costs to complete tasks in the SOWs. In such cases IGCEs serve little purpose. WAMs indicated that LOE WAs were principally a purchase of labor hours. As a result, little effort was made to develop detailed IGCEs from which contract costs could be negotiated. LOE hours were provided to contractors with the labor categories and labor mix determined during contract negotiations. In some instances, WAMs relied more heavily on contractor proposals than their own estimates. Of the 87 contract actions reviewed at four offices, the contractors' proposals equaled the contract action amounts in 62 instances (80 percent). In contrast, the Washington awarded RACs Superfund contracts and other regionally administered Superfund contract files, contained evidence that WA costs were generally negotiated.

At Cincinnati, there were no indications from the files, or discussions with WAMs and POs, that

EPA negotiated WAs with contractors. In all cases, the amounts proposed by the contractor were accepted by EPA. In 13 of 20 contract actions reviewed at Cincinnati, the dollar value of the issued WA/DOs was higher than the related IGCE. The difference between the IGCE and the amounts for these 13 actions ranged from one to 224 percent. In ten instances, the difference exceeded 10 percent or more<sup>2</sup>.

For three of five Cincinnati contracts reviewed, final progress reports for WAs contained statements that ". . . all tasks will be completed under subsequent WA." This statement indicated that the IGCE was prepared to fund a particular period or fiscal year, not the tasks themselves. In another WA, the labor hours ordered were almost identical to hours included in the previous WA (860 hours versus 870 in the current). This suggested that labor hours and available funding were the basis of the IGCE, not the tasks to be performed. IGCEs based on available funding rather than work to be performed defeats the purpose of the estimates as a cost analysis tool.

The usual practice at RTP was for program staff to provide the contractor with the number of estimated labor hours used in preparing the IGCE. The contractor then prepared his proposal based upon EPA's estimate of labor needed. In our opinion, this practice compromises the IGCE as an independent estimate since the contractor is essentially provided information on fund availability. As a result, contractor proposals tended to be based on available funding rather than the actual cost to perform the tasks in the SOW. Contracting officials stated that since the vehicle type was LOE, where essentially the Agency is just buying hours, they believed it was appropriate to provide the hours to the contractor. RTP contract officials would then negotiate the required labor mix that would result in the hours budgeted. In 14 of 24 contract actions reviewed, the contractor's proposal amounts were accepted without negotiation. In ten of the 14 cases, the contractor's proposal and the WA amounts exceeded the IGCE. The differences for these ten contract actions ranged from 1 percent to 197 percent. For four of the ten, the difference substantially exceeded 10 percent.

RACs and other Washington Superfund contract awards reflected more evidence of negotiation of WA amounts than found at Cincinnati and RTP. However, for the Washington contracts, the contractors' proposed amounts were relied upon more often than EPA cost estimates. The issued amounts for Washington WAs and WA amendments, were almost always the same as the amount estimated in the contractor's work plan. The contractor's proposed amounts were accepted in 28 of 39 contract actions reviewed. We were able to locate the IGCEs for 21 of the 28 contract actions. EPA personnel did not know whether the IGCEs had been prepared for the other seven WAs. For the 21 IGCEs that were available, the contractors' proposals were greater than EPA's estimates in nine instances, lower in 11 instances and equal in one instance. The differences for the nine WAs that exceeded EPA's estimates ranged from 12 to 89 percent. Eight

<sup>&</sup>lt;sup>2</sup> Some contract offices had an unwritten policy that a 10 percent difference between the IGCE and WA amount was significant and required a written justification. However, no justifications were found for many of the significant differences identified in this review.

of the WAs substantially exceeded the IGCE.

The true measure of the quality of an IGCE would be final actual costs. Matching the work completed for a WA and all cost associated with a project was not possible, in part, because projects may be started under one WA and continued under a subsequent WA. For one Washington contract reviewed, the contractor performed tasks such as updating reports, preparing speakers' kits and briefing packages, database maintenance and planning conferences. For three WAs reviewed under this contract, the SOWs did not specify any estimated quantities of deliverables and represented a continuation of work started under three predecessor WAs. For one WA, two predecessor WAs were found. Amendments were used to add additional dollars to the WAs. The dollar value of each of the amendments coincided with the amounts proposed by the contractor in the work plans.

Only three of the RACs WAs were issued at the same amount as the contractor's proposal. Contract files generally demonstrated PO/WAM negotiation of WA costs for work to be performed. Isolated instances were identified where contractors' estimates were evidently valued more heavily than the IGCE. One RACs IGCE stated, as an explanation for accepting the contractor's proposed costs: "The basic difference is that the IGCE did not consider [the contractor's] experience over the past eight years on the ARCS [Alternative Remedial Contract Services] contract in developing the estimate for this task." Based on their technical review, the PO and WAM recommended acceptance of the contractor's proposed cost without negotiation. RAC contract managers stated that the IGCE process was inherently flawed because of the lack of historical cost information.

#### **IGCES LACKED DETAIL NECESSARY FOR EFFECTIVE COST ANALYSIS**

In 1992, the Standing Committee concluded that EPA's contract negotiations often appeared to be mathematical calculations rather than detailed justifications of specific costs by activity. Section 3-2 of EPA's June 1994 Guide for Preparing Independent Government Cost Estimates states: "The Agency wants the bottoms-up type of detailed IGCE for all work assignments and delivery orders." OSWER Directive 9202.1-12 further states: "...[cost] estimates must, at a minimum, be broken out by task and subtask as outlined in the statement of work (SOW)."

Detailed IGCEs were prepared for only 27 of 45 WAs reviewed that were issued under the RACs and Washington Superfund contracts in our sample. Also, WA IGCEs for the four non-Superfund Washington contracts reviewed did not clearly define tasks or the estimated cost for each task. The WAs under these contracts were generally for the purchase of a wide variety of tasks at a set amount of labor hours without any correlation of the labor hours to specific tasks. Program officials believed that such detail was unnecessary for LOE contract actions. Without clearly defined tasks and related cost estimates, the IGCE is rendered useless for evaluating contractor proposals, identifying specific cost differences for negotiation purposes, and subsequently tracking contractor progress on individual tasks. It also prevents any accumulation of individual task costs for historical purposes. Program officials perceived that an LOE contract

for the purchase of labor hours, rather than complete tasks, did not require a detailed cost analysis in the IGCE.

The files for only one contract reviewed at RTP included detailed IGCEs for WAs. IGCEs prepared for WAs issued under the other five RTP contracts did not break out costs by WA task. In some cases, documentation in the files indicated that more detailed information may have been used to develop the estimates; however, we did not find file documentation showing the estimated hours necessary to complete each WA task. The IGCEs only included information such as the estimated hours by labor category and other direct costs. This lack of detailed cost information made it impossible for us, or a CO attempting negotiations, to evaluate reasons for differences between the contractor proposed costs and the IGCE. Differences between IGCEs reviewed and the dollar value of related WAs varied from as little as 1 percent to as much as 197 percent more than the Government's estimate.

Cincinnati IGCEs were also generally not costed out by task. Instead, as found at RTP, the IGCEs were based upon total labor hours needed and other direct costs (ODC). In some cases, a detailed breakdown was provided for ODCs. However, in other cases, the ODC amount in the IGCE was simply a percentage of total labor dollars.

For Washington contracts, 9 of 27 WAs reviewed had IGCEs that costed individual tasks. On four of nine Washington contracts, it appeared EPA was simply funding hours to complete tasks already started or to start future tasks. This practice increases the potential for contractors to continuously bill for hours without being held accountable for completion of individual tasks, or providing an end product. Also, the lack of detail in the IGCEs created the appearance that EPA program staff, while complying with EPA requirements to prepare IGCEs, gave little consideration to the purpose and useability of the IGCEs. When properly prepared and effectively used, IGCEs are a tool that contract and program officials can use to negotiate costs and monitor contractor work and related charges. Further, better definition of tasks and estimation of costs will permit greater use of more efficient contract mechanisms such as completion form, fixed-price, or PBSC.

#### **RACS IGCE PROCESS NEEDS IMPROVEMENT**

RAC files documented significant efforts by program and contract management personnel to estimate costs and use the results in contract and WA negotiations; however, improvements are still needed in the RACs IGCE process. Significant variances existed between some contract/WA IGCEs and contractor estimates and final contract dollar values. Some of the variances were due to underestimating the tasks required to cleanup sites. Other variances were attributed to a lack of firm negotiation of contract costs. In addition, a contractor substantially prepared a WA cost estimate for the Government in one region and an inexperienced summer employee prepared an IGCE in another region.

RACs had been awarded in six regions at the time of this review. Each region prepared a single

IGCE for multiple contract awards that included all the regions' needs for remediation services. Regions 1, 6, and 7 had awarded all of their RACs at the time of this review. Cumulative contract MPVs for these three regions exceeded their IGCEs by 26 to 32 percent. Regions 3, 5, and 8 had not awarded all of their planned contracts and, therefore, we could not effectively evaluate the regional IGCEs in relation to total contract award amounts. However, Region 5 had already awarded two RACs that exceeded the Region's IGCE by 12 percent with a third contract in the preaward phase. Because OAM officials indicated that they had worked to reduce the capacity of the RACs awarded thus far, we attributed the variance, in part, to EPA's emphasis on the technical proposals for the contracts and less emphasis on negotiating the contract costs. The Brooks Act requires EPA to consider technical qualifications over costs when awarding A&E contracts such as the RACs. However, once the highest qualified proposals have been identified, price reasonableness must be addressed in the negotiation process.

Of 18 WAs reviewed under six RACs, the final dollar value for ten WAs were substantially higher than the applicable IGCE. For instance, in Region 6, two WAs were issued for amounts 226 percent and 253 percent higher than the initial estimates. Regional officials stated that the differences between IGCEs and WA amounts were due to inadequate consideration of site complexities and all tasks that would need to be performed to clean up the sites.

IGCEs for five of 18 WAs could not be evaluated. The WAs had been issued for work plan development and the final WA costs had not been negotiated. The dollar amount for the four remaining WAs reviewed were negotiated close to amounts in the IGCEs.

In two instances, regions allowed persons to prepare IGCEs that were not qualified due to a potential conflict of interest and a lack of experience. In one region, an ARCS contractor prepared an IGCE for a river study which was subsequently used in an IGCE for a RACs WA. The ARCS contractor prepared the cost estimate for follow on work as part of an ARCS WA requirement. Subsequently, the PO used the ARCS's cost estimate as the IGCE for a health and ecological risk assessment under a RACs WA. The PO only modified the ARCS contractor's estimate for additional tasks not included in the contractor's original estimate. We were told by EPA contract managers that it was common for development of an IGCE to be included in WA tasks such as remedial design; however, these tasks were not design related. We do not believe it is in the best interest of the Government to have contractors preparing the Government's cost estimate for contracted services. Contractors would not have the same interest in cost control as a Government representative. In addition, this situation fosters a continuing dependence on contractor involvement in development of SOWs and related costs at EPA.

Another region permitted an inexperienced temporary summer employee to prepare an IGCE for a RACs WA related to EPA's Brownsfield initiative. The employee was not familiar with the Brownsfield program and had no related historical costs to rely upon. As a result, differences between the IGCE and the contractor's proposals for individual tasks within the WA ranged from 122 to 900 percent. The overall estimate was \$23,265 as compared to the WA maximum value of \$75,841; 226 percent higher than the IGCE. Both the PO and WAM reviewed and approved

the IGCE without detecting any problems in the cost analysis. However, when we discussed this with Regional personnel, they stated that the summer employee did not consider several items necessary for completion of the WA tasks. They further stated that the availability of historical cost data would have prevented some of the problems.

# NO PROCESS FOR ACCUMULATING HISTORICAL CONTRACT COSTS OR EVALUATING IGCES

In 1992, the Standing Committee stated that the absence of good supportive data and guidance, including pricing techniques and current market costs, and a lack of qualified personnel caused the Agency's difficulties in preparing IGCEs. EPA has still not developed historical data for contract services and related costs and has no procedure for evaluating prior IGCEs to identify deficiencies and needed improvements. Historical contract workloads and related cost data were not available or were not used to develop IGCEs at any of the EPA contracting offices or regions visited. IGCEs had been prepared for the expiring ARCS and Enforcement Support Services (ESS) Superfund contracts; however, we identified very little documentation that the estimates were being evaluated and actual cost data accumulated, as part of a centralized or regional database, for future use in preparing IGCEs for similar or follow-on contracts. Most WAMs and POs interviewed stated that current IGCEs were primarily based on the experience of the individual preparing the estimate. The Standing Committee documented the inherent danger in this practice in 1992. The Committee warned that an inexperienced WAM could easily accept whatever costs are offered by the contractor. As previously shown, EPA WAMs frequently accepted the contractors' proposed costs in spite of what their estimates may have reflected. The Standing Committee reported that the evaluation of IGCEs and accumulation of historical workload and cost data was a program responsibility and should be done on a program specific basis.

At the regional level, we received a variety of comments from RACs contract managers concerning creation, existence and use of database information for IGCEs. One PO said the disparity in IGCEs is due to EPA not taking everything into consideration or not taking history into account. A lot of emphasis was placed on the LOE aspect of the contracts. One RACs CO stated:

These are basically LOE contracts because of the changing nature of our work. As work progresses in a project, additional data and information are obtained which may not have been known prior to the start of work. It is not possible to know exactly what will be involved in step 20 before step one begins.

The CO further stated that WAMs have a difficult job to do, and do not have adequate training or the necessary tools to do cost estimates.

EPA has not made the type of commitment, as other Federal agencies, to develop, hire, and train estimating people. Apparently, other Agencies have cost

estimators, and provide them resources, databases of historical data, libraries of information, etc. to do their job. EPA WAMs do not have that type of information, because EPA has not made that type of commitment.

This same sentiment was expressed by another CO in a different region. He said, WAMs have some historical data, such as "scoper notes and information from the Corps of Engineers; however, there is not enough information available to produce high quality IGCEs."

The COE is a Federal agency that contracts for hazardous waste remediation. In a visit to COE Headquarters, we learned that the COE's dominant concern in management of remediation contracts was cost control. All COs at the COE are required to be cost negotiators before they can be a CO. The COE also maintains a historical database on contract services and costs. This database, which is available to other Agencies, contains project costs that are continually created and updated by COE field contract managers. Even though EPA has contracted for similar Superfund work since 1981, little of this data has been maintained in a format that would make it useful for future contract actions. The Agency's ability to accumulate such costs is also adversely impacted by the manner in which work is ordered under EPA's Superfund contracts. EPA uses WAs, where multiple amendments make the WA a long-term contract vehicle, for a multitude of tasks and where multiple WAs may be used to order tasks for one project. By contrast, the COE uses completion form delivery orders where tasks are tied to specific projects with specific deliverables.

EPA officials reported that a database has been started for the RACs contracts. Contractors are required to submit actual cost data to EPA Headquarters that will be accumulated in the database along with workload statistics. We were also told that the Superfund program has a database for its emergency response contract users and one region reported using an Interagency Agreement with the Bureau of Reclamation for assistance in preparation of IGCEs for complex remedial designs. WAMs and POs did not report use of a database or historical workload information in preparing any of the IGCEs for the 86 WAs we reviewed.

#### **BETTER SOWS RESULT IN BETTER IGCES**

Generally, where even informal historical information was used, or SOWs were well defined, the IGCEs were more detailed and more apt to be used as negotiating tools. For example, the WAs for one RTP contract were written in completion form, with defined deliverables and an end product. Although the contractor's proposal was significantly greater than EPA's IGCE, the final WA amount was close to the Agency's cost estimate. At Cincinnati, the IGCEs were better for two of the contracts that had more defined tasks and related end products. The first, a Superfund contract, involved multi-year funding that permitted the WAM to estimate costs for the entire project. The second, a peer review contract, involved tasks such as reviews and meetings that were started and completed within a one year period. Washington awarded ARCS and Enforcement Support Services (ESS) contracts also tended to have a greater level of detail in their IGCEs and documented evidence of negotiations with the contractors. WA tasks under

Superfund contracts, in general, seemed to be more defined than other program WAs and the cost estimates were usually based on work to be done rather than the purchase of labor hours.

A member of the EPA task force that developed the 1994 IGCE guidance stated that well defined SOWs were necessary for the preparation of good IGCEs. This means defining tasks and estimating costs at the task level regardless of whether or not the contract is cost-reimbursable. While EPA has recognized the need for IGCEs, improvements in the process are necessary to ensure that IGCEs are properly prepared and serve as a meaningful cost analysis tool.

#### RECOMMENDATIONS

We recommend that the Acting Assistant Administrator for Administration and Resources Management in coordination with other appropriate senior Agency managers:

- 2-1 Obtain cost estimator training for POs and WAMs similar to that received by COE contract managers. Require CO training related to the evaluation and effective use of IGCEs in contract negotiations.
- 2-2 Emphasize to program staff that IGCEs should, include a detailed cost analysis of each task and/or subtask to be performed under a contract or WA; be used as a basis for effective cost negotiations; and, be used as a mechanism for tracking actual costs for specific work for all contract types, including LOE.
- 2-3 Instruct POs and COs not to accept IGCEs that do not include estimated costs for individual contract or WA tasks. Emphasize to COs that IGCEs are a cost analysis tool that should be effectively utilized during contract and WA negotiations.
- 2-4 Develop processes to evaluate IGCEs and accumulate historical contract workload and related cost information in a database format. Form focus groups, that include program staff, to identify existing impediments to developing historical cost databases on an individual program basis.
- 2-5 Instruct program staff to seek available cost information from other Federal agencies, such as the COE, or private entities that are contracting for similar work when preparing IGCEs.
- 2-6 Develop model SOWs to determine if ranges can be established for contingencies, or information gathered to clarify and define contract tasks to resolve uncertainties involved in work currently performed under LOE contracts.
- 2-7 Instruct POs and WAMs not to use contractors and inexperienced employees to prepare Government cost estimates. Require that program personnel preparing IGCEs have the necessary experience and training to ensure that accurate, detailed cost estimates are

developed.

## AGENCY COMMENTS AND OIG EVALUATION

OARM believes EPA has come a long way in improving the use of IGCEs over several years ago when IGCEs were rarely done. However, OARM agreed that improvements were still needed to ensure the development of good, realistic IGCEs.

OARM's response did not clearly address many of the overall conclusions and recommendations presented in Chapter 2. OARM did express disagreement with several specific statements or conclusions and partially disagreed with one recommendation. To resolve the recommendations presented in the final report, OARM needs to provide specific actions to be taken on each recommendation with projected milestone dates for completion.

A summary of OARM's comments on Chapter 2's findings and recommendations, along with our evaluation of these comments, are presented in Appendix II.

# **CHAPTER 3**

# EPA HAS NOT MADE OPTIMAL USE OF MORE EFFICIENT CONTRACT TYPES

EPA has not made optimal use of contract types that are results-oriented and provide better cost control. Instead, the Agency continues to rely extensively on cost-reimbursable LOE contracts that essentially buy labor hours, not results, and places the burden of cost control on the Government. While we recognize that LOE cost type contracts may be the most appropriate contracting mechanism in certain situations, this review identified substantial opportunities for the Agency to issue more completion, fixed-priced, and performance-based contracts and WAs<sup>3</sup>. EPA has made some progress toward completion form, performance-based contracting. However, the Agency's cultural preference for LOE contracts, lack of understanding of alternative contracting mechanisms, inability to define its needs, and broad SOWs that include multitudes of varying tasks, has prevented a more complete transition from LOE cost-type contracts were not always oriented toward obtaining an end-product or result and place the majority of risk for performance on the Agency. The Agency may also be paying excessive costs for services that could be procured at less cost under firmer contract pricing arrangements.

#### BACKGROUND

Contract types are grouped into two broad categories, fixed-price and cost-reimbursement. Under FAR requirements, fixed-price contracts are preferred over cost-reimbursable contracts because of the cost control and less performance risk assumed by the Government. Under a firmfixed-price contract, the contractor has full responsibility for performance, cost control, and profit. However, under a cost-reimbursable contract, the contractor is paid for all allowable costs within the limit specified in the contract. The contractor assumes limited risk for performance and has little incentive to control cost. For these reasons, the FAR provides that costreimbursable contracts should only be used when uncertainties involved with performance do not permit costs to be estimated with sufficient accuracy to use any of the fixed-price type contracts.

The vast majority of EPA's contract dollars are awarded as cost-reimbursable, LOE contracts. These contracts are generally one of two types, cost-plus-fixed-fee (CPFF) or cost-plus-award fee (CPAF). In FY 1996, these two types of cost-reimbursable contracts represented 86 percent (\$11.2 billion) of the total value of all EPA contracts. Cost-reimbursable contracts can also be one of two forms, completion or term. Completion form contracts describe the scope of work as

<sup>&</sup>lt;sup>3</sup> Our audit included reviews of varying types of instruments used to assign tasks to contractors in our samples. These included WAs, DOs, and TOs. We recognize there are technical differences between these instruments; however, for the purposes of this audit we refer to all of these instruments as WAs unless we are specifically addressing one type.

a clearly defined task or job, with a specific end product required. If the contractor does not complete the work within the estimated cost, the Government may require more effort without an increase in fee, provided the Government increases the estimated cost. Term form (or LOE) describes the work in general terms and obligates the contractor to devote a specified level of effort for a stated period of time. At the completion of the performance period, the contractor is paid cost and fee if performance is considered satisfactory. Additional work is considered a new acquisition.

Another type of contract available to the Government is the indefinite delivery/indefinite quantity (IDIQ) contract. These contracts are appropriate when the Government cannot specify, above an established minimum, an exact quantity of supplies or services that will be needed. Orders (referred to as delivery or task orders) are placed against the contract after the award. These individual orders may be priced on a fixed-price, fixed-rate per item or service, fixed-rate per labor hour, or on a cost-reimbursable basis.

#### Policy on Performance-Based Contracting

Because of shrinking Federal resources, OMB has been emphasizing to Federal agencies the need to move from cost-reimbursable contracts to firmer priced, more performance oriented contracting that better ensures the receipt of quality goods and services at the best price. As a result, OMB's Office of Federal Procurement Policy (OFPP) Policy Letter 91-2, issued April 9, 1991, required the use of performance-based contracting methods to the maximum practicable extent when acquiring services. The requirements of this letter were subsequently incorporated into the FAR on August 22, 1997, as the policy for the Government's acquisition of services through the use of performance-based contracting methods.

In April 1996, OMB/OFPP issued an interim guidebook to assist agencies in implementing performance-based service contracts (PBSC). According to the Guide, a PBSC "emphasizes that all aspects of an acquisition be structured around the purpose of the work to be performed as opposed to the manner in which the work is to be performed . . . " Further, a PBSC must have three essential elements: (1) a performance work statement (PWS) which describes the work in terms of objective, measurable performance standards; (2) a quality assurance plan (QAP) which measures contractor performance in accordance with established performance measures; and (3) positive and/or negative incentives which are directly related to the results of the QAP measurements. The OFPP Guide encourages the use of fixed-price PBSCs; however the use of cost-reimbursable and other contract types, using PBSC criteria, is not precluded. Based on our conversations with OFPP officials, a PBSC may contain subjective performance measures when objective measures cannot be developed. Such a contract would be considered PBSC if it also contained a QAP and incentives/disincentives.

#### TASKS CONDUCTED UNDER COST-REIMBURSABLE LOE CONTRACTS COULD BE AWARDED UNDER CONTRACT TYPES MORE FAVORABLE TO THE GOVERNMENT

We reviewed 26<sup>4</sup> cost-reimbursable contracts (MPV \$2.8 billion) and 86 WAs (MPV \$39 million) issued under these contracts to determine whether the tasks specified in the SOWs could be awarded under cost-reimbursable completion, fixed-price, and/or performance-based (cost or fixed-price) arrangements. Generally, the contract SOWs were written in general terms and covered such a wide array of services that they could not be awarded in their entirety and current form as completion or fixed-priced contracts. However, many tasks performed under these contracts could be well defined and performed under completion form and fixed-price mechanisms. The way EPA wrote the contracts in broad terms to cover a smorgasbord of services precluded the use of completion form or other alternative mechanisms for the contract as a whole. EPA must better define its needs in the SOWs and break down SOWs into related tasks and services to facilitate the award of entire contracts as completion or fixed-price.

Almost all WAs we reviewed contained one or more tasks that were suited to issuance as completion, fixed-price, or performance-based efforts. Some of the WAs we reviewed already included well-defined SOWs and the entire WA could have been issued as completion or fixed-price if those options were available. However, except for RACs, the LOE contracts we reviewed essentially required that WAs be issued as LOE. Of the 86 WAs reviewed, we identified specific tasks or subtasks in (see Appendix IV for a list of WAs reviewed):

- 70<sup>5</sup> WAs that could be issued, at a minimum, as completion form efforts, if procured under contracts that permitted this type contract action.
- 74 WAs that were suited for issuance under fixed-price arrangements.
- 84 WAs that could be issued as performance-based efforts. This includes tasks that would require the use of subjective performance measures under OMB's expanded definition of PBSC.

#### **Potential for Completion Form Contracting**

<sup>&</sup>lt;sup>4</sup> Consists of a judgmental sample of six RACs and a random sample of 20 other contracts including 16 cost-reimbursable LOE, two IDIQ delivery order, one IDIQ task order, and one IDIQ time and materials type contracts.

<sup>&</sup>lt;sup>5</sup> This does not include 14 of the total 86 WAs reviewed that were actually issued as completion form DOs.

#### Response Action Contracts

RACs were awarded with the potential for 25 to 36 percent of the maximum potential value of the regional contracts to be issued under completion form WAs; however, regional COs have not made widespread use of WAs in this form. Although the mechanism was included in the contracts, the RACs structure contained little incentive to induce program staff to use this more efficient contract mechanism. Neither the contract documents nor the RACs management guidance required minimum usage of the completion form. All base contract use was tied to term form dollars. Regional contract managers believed the nature of Superfund work did not always permit them to define their needs in the format necessary for completion form. Also, completion form WAs had to be fully funded upon issuance and contract managers were concerned that program budgets would not permit widespread issuance of large dollar, fully funded WAs. As a result, only eight of 148 WAs, or \$843,323 out of \$33,892,890 in total dollar value, had been issued as completion form on ten RACs nationwide.

Our initial review of 18 randomly selected WAs, issued under our sample of six RACs, indicated that eight of the WAs included activities identified by RACs COs/POs as the type of activities with potential for completion form contracting. We subsequently concluded that all 18 of the WAs contained some tasks which could be issued as completion form. This conclusion was primarily based on extensive EPA experience in the work performed, the recurring nature of the work, and the fact that the SOWs for some term WAs reviewed included well-defined requirements/specifications, for specific end-products, that met completion form criteria. For example, a Region 6 remedial action WA included the task to develop and update the site plans. The WA SOW clearly defined the end products including the site plans, gave exact specifications for installation and development of ten wells and construction of a 6-foot fence topped with barb wire, and included a requirement for 48 hours of continuous testing of the well pumps.

Four of six regions (5, 6, 7, and 8) with active RACs had issued completion form WAs. With the exception of Region 7, all had been for contractor mobilization. Some regional COs and POs also believed completion form WAs could be effectively utilized for activities such as remedial actions, remedial designs, remedial investigation/feasibility studies and Brownfield projects; however, none of the regions had issued completion form WAs for these tasks.

In addition to the completion form mobilization WA, the Region 7 CO had also issued a sitespecific, risk assessment completion form WA for \$293,710. According to the CO, the decision to issue this WA as completion form was based upon the WAM's belief that the work was sufficiently well defined to develop a good estimate and scope of work and effectively price the project and deliverables. Regions 1 and 8 had also issued risk assessment WAs, but these WAs were issued as term form or LOE. According to the Region 8 CO, they had originally issued an ecological risk assessment WA as completion form, but the WAM believed that all the tasks except the contractor's work plan should be term form. The WA was subsequently revised to term form to prevent having a WA with components of both term and completion form. The WAM stated, that at the time, he did not believe he could sufficiently define the WA scope of work to meet completion form requirements. However, he said he did not understand the completion form mechanism as well then as he does now. The Region 8 CO stated the difficulty with completion form is the requirement for a well-defined scope and an identifiable end product. Other COs also stated that the potential for numerous change orders under completion form can become an administrative burden. Therefore, many contract managers may be reluctant to issue completion form WAs. However, Region 7 has proven that there are some RACs technical support tasks that can be sufficiently well defined and cost estimated, to make completion form an appropriate contracting mechanism for such efforts.

Although encouraged by RACs guidance to use the completion form mechanism for at least contractor mobilization, Regions 1 and 3 had not issued any completion form WAs. When questioned why the Region 1 mobilization WAs had not been issued as completion form, the Region 1 CO stated the former RACs PCO in EPA Headquarters had issued their mobilization WA as part of the contract award. According to the current RACs PCO, Region 1 funded the contract for the first year, totally as term form. OAM and Region 1 personnel subsequently decided it would be too time consuming to re-allocate such a small amount of funds to the completion form segment of the contracts. Region 3 awarded its RACs through a regional PCO. The Region 3 CO told us that at the time he did not think it mattered which contract mechanisms were used for WAs.

Regional COs and POs for RACs believed events, such as Potential Responsible Party (PRP) actions and site uncertainties, in some instances, would not allow for well-defined SOWs and reasonably accurate cost estimates. However, for the selected RACs WAs reviewed, the SOWs were usually well defined. Further, many of the tasks being performed under RACs were previously performed under ARCS and its predecessor, the Remedial Engineering and Management (REM) contracts, which were initially awarded in 1981. These contracts represent 16 years of EPA experience in contracting for Superfund remedial actions. The historical, recurring nature of this work should permit Agency personnel to define task requirements and reasonably estimate costs despite potential uncertainties. Therefore, the Superfund program should provide EPA with maximum opportunities to utilize completion form, as well as fixed-price type contracts.

Based on our file reviews and discussions with RACs contract managers and program staff, Agency personnel are opting not to utilize completion form WAs, in part, because of the comfort level they have obtained with purchasing hours, rather than products or results, under the more familiar term form WAs. Also, there is a lack of understanding of the completion form mechanism among program and contract managers. For instance, a file communication from one regional CO stated, "I don't like completion form work assignments because I don't understand them. However, it sounds like the benefit is the same as term form if used correctly." This statement emphasizes the need to train contract and program managers in alternative contracting forms and initiate regional performance goals designed to increase completion form usage.

In response to requests from OMB to increase performance-based contracting, Agency

management extolled the completion form component of RACs as demonstrating its commitment to OMB's performance-based contracting strategy. Further, in documents provided to OMB, EPA acknowledged that completion form offers advantages to the Government. However, EPA management has not actively pursued issuance of more completion form WAs under RACs to support its commitment claim or ensure advantages are realized.

#### Other EPA Contracts

All 20 of the other contracts we reviewed contained individual tasks that we concluded could be awarded as completion efforts. Specifically, of the 68 randomly selected WAs reviewed under these contracts, 14 were actually awarded as completion form DOs. An additional 52 LOE WAs either could have been issued in their entirety as completion form or contained some tasks that were suitable for completion form contracting. In our opinion, these WA tasks would produce measurable results or end-products for which costs could be reasonably estimated. In some cases these tasks were phases of work related to long term projects such as regulation development. Tasks we believe could be completion include: revising guidance documents, drafting guidance documents, evaluating and drafting responses to public comments, preparing draft Federal Register notices, audits of laboratories and other entities, special studies and evaluations, PRP searches, remedial designs, and remedial actions. In many instances contracting and program officials agreed that these tasks could be completion form at the WA level; however, since these tasks were issued under LOE contracts, this option was not available.

The amount of detail in the SOWs for the WAs we reviewed varied. Some WAs were already written in a completion type format with end products and due dates specified; however, the WAs were issued as LOE. For example, we reviewed a \$1,588,682 WA for remedial design issued under an LOE ARCS contract. Although issued as an LOE WA, the WA was written and negotiated like a completion effort with end-products specified in the SOW. In our opinion, this type of WA can be issued as completion form as long as this type of WA is permitted by the contract. Where unknowns existed in these WAs, such as the number of meetings a contractor would need to attend, an estimated number was provided for cost estimation. Others WA SOWs were not well defined and would need to be better written to enable the tasks to be issued as completion. For example, some WA SOWs covered a specific type of task such as public outreach, but were written in general terms with specific orders to be provided through EPA technical direction for individual projects. If WAs for this type task were issued for each individual project as it was needed, these WAs could be issued (if allowed by the contract) as completion form. Ideally, if the program office had historical workload data to estimate the total number of outreach projects expected over a period, one completion WA or contract could be issued to cover these needs. In the particular instance cited above, this was a new program requirement and such data was not available. However, as reported in Chapter 2, EPA generally did not have historical workload data on recurring activities which would enable them to award more defined contracts.

As previously stated, 14 contract actions we reviewed were actually issued as completion form

DOs. These WA tasks were issued as delivery or task orders under various types of IDIQ contracts. These tasks included, emergency cleanups, database conversions, software development, drafting Federal Register notices, and analyzing public comments to Federal Register notices. Similar types of tasks, e.g., software development and summarizing public comments, were included in the contract SOWs for LOE contracts we reviewed.

#### **Potential for Fixed-Price Procurements**

OMB requested in the 1998 Pass Back Decisions for the President's Budget that we analyze EPA's current use of fixed-price contracting to determine EPA's progress in awarding more of these contract types. To determine EPA's progress in awarding fixed-price contracts, we analyzed CIS data for types of contracts active in FYs 1992 and 1996. Our analysis showed that the number of fixed-price contracts, as a percentage of all EPA contracts, had increased slightly between 1992 and 1996. However, the dollar value in relation to other contract types had remained almost the same at about 8.6 percent of the value of all EPA contracts. Cost-reimbursable contracts, as a percentage of EPA's total contract value, increased slightly between 1992 and 1996 and still dominated EPA's contract dollars at about 86.7 percent of the total value. The chart below demonstrates that cost-reimbursable contracts continue to dominate EPA's contract inventory.

|                               | 1992   |                   |                        |                  | 1996   |                   |                        |                  |
|-------------------------------|--------|-------------------|------------------------|------------------|--------|-------------------|------------------------|------------------|
| Contract<br>Type <sup>6</sup> | Number | % of<br>Total No. | \$ Value<br>(Billions) | % of<br>Total \$ | Number | % of<br>Total No. | \$ Value<br>(Billions) | % of<br>Total \$ |
| FP                            | 502    | 44.90%            | \$1.31                 | 7.81%            | 434    | 51.36%            | \$0.99                 | 7.62%            |
| FPIF                          | 1      | 0.09%             | \$0.13                 | 0.76%            | 1      | 0.12%             | \$0.13                 | 0.98%            |
| CPAF                          | 154    | 13.77%            | \$11.68                | 69.39%           | 86     | 10.18%            | \$8.95                 | 68.59%           |
| CPFF                          | 379    | 33.90%            | \$2.22                 | 13.17%           | 254    | 30.06%            | \$2.28                 | 17.45%           |
| CR                            | 16     | 1.43%             | \$0.11                 | 0.65%            | 9      | 1.07%             | \$0.07                 | 0.43%            |
| CS                            | 5      | 0.45%             | \$0.04                 | 0.22%            | 8      | 0.95%             | \$0.024                | 0.19%            |

The chart above is based on CIS information that is not totally accurate. An analysis of fixedprice contract data disclosed that fixed-rate, IDIQ contracts were coded into CIS as fixed-price. We were told that no category for IDIQ contracts exists in the CIS so fixed-rate, IDIQ contracts often get coded as fixed-price. EPA personnel at two contract divisions were able to separate the

<sup>&</sup>lt;sup>6</sup> Contract types are fixed-price (FP), fixed-price plus incentive fee (FPIF), cost-plusaward-fee (CPAF), cost-plus-fixed-fee (CPFF), cost-reimbursement (CR), and cost-sharing (CS). Chart does not include fixed-rate, IDIQ contracts such as labor hour and time and materials.

IDIQ from the fixed-price contracts based on a separate contract database; however, the Washington divisions had to manually identify the IDIQ contracts. The CIS is currently being phased out and the new Integrated Contract Management System (ICMS) will soon replace the CIS. OAM officials indicated that the ICMS includes a contract category for IDIQ contracts.

In our sample of 86 WAs, we identified one or more tasks in 14 RACs and 60 other contract WAs that we believe did not contain significant performance uncertainties and could have been issued under fixed-price arrangements. However, these WAs were issued under LOE contracts that did not permit fixed-price contract actions. The tasks included some Superfund remedial actions, peer reviews, laboratory analysis of samples, logistical support for various types of meetings, graphical support, report preparation, training development, quality assurance audits of contract laboratories, data entry, and maintaining public dockets.

These types of services were often procured by other agencies, industry, EPA prime contractors, and, in some cases, by EPA under fixed-price contracts. For example, we found that the Army COE and the DOE contracted for some environmental cleanups under fixed-price contracts. We were informed by regional Superfund officials that PRPs conduct some of their Superfund site cleanups under fixed-price contracts. We noted that EPA has fixed-rate (by task), IDIQ contracts with laboratories to provide chemical analyses of Superfund site samples at fixed-rates. Similar types of analyses were performed at regional laboratories under LOE cost-reimbursable contracts. One ORD (Office of Research and Development) office in Cincinnati started procuring logistical support for meetings under fixed-price small purchases while many of the contracts we reviewed procured this support under cost-reimbursable LOE contracts. We noted at least one instance where an EPA region entered into a fixed-rate IDIQ contract to cleanup a Superfund site.

#### Times Beach Dioxin Removal

Region 7 awarded a fixed-rate contract for hazardous waste removal and disposal in Times Beach, Missouri. The purpose of the contract was excavation, removal, transportation and incineration of dioxin-contaminated soil and materials. The SOW estimated the approximate amount of soil that needed to be removed. It also estimated the approximate quantity and distance of materials to be transported from the 21 locations that comprised the Times Beach site. Many EPA program staff would consider this project as having too many uncertainties to award as a fixed-price contract. The SOW included with the solicitation outlined some of the uncertainties, through inclusion of information such as, "...some additional excavation may be required at the storage sites based on EPA sampling." Prior to the conclusion of the solicitation period, EPA staff took the potential bidders to some of the sites so they could get first hand knowledge of the work requirements. This practice is consistent with COE contractor initiatives, where the COE gets the contractor involved in the preaward process so that the contractor gains sufficient knowledge to reach agreement on work to be done and a realistic estimate of associated costs. EPA's IGCE estimated the cost for the work at \$8.7 million. The lowest sealed bid and contract award amount was \$3.1 million. A Region 7 official stated that this contract was part of the Region's effort to move away from cost-reimbursable contracts. The official further stated

that it is possible that the contract awarded on a term basis would have cost \$8 million. They decided to go with sealed bids and award to the lowest responsive bidder. The contract was awarded in April 1996 and the work was completed for about \$2 million by December 1996.

#### **Opportunities for Performance-Based Service Contracts**

Any tasks we identified as adaptable to completion form or fixed-price could be awarded under PBSC requirements. In addition, any of the 14 DO work assignments that were awarded as completion form could be issued as PBSCs. Therefore, 84 of the 86 WAs reviewed contained tasks suited for PBSC. The amount of effort required to convert these tasks to PBSC would vary greatly. The least difficult tasks to convert to PBSC would be those tasks that could be awarded fixed-price and lend themselves to the establishment of objective performance measures. Some Superfund cleanups and logistical support for meetings would fall into this category. Technical work for which objective performance measures could be established, such as Superfund remedial designs and software development, could also be awarded PBSC. Presenting a greater challenge in converting to PBSC, would be those technical tasks conducted under cost-reimbursable contracts for which objective performance measures cannot be easily established. For example, the various data analyses and resulting reports that contractors prepare in support of regulatory and policy development would fall into this category. In order to convert these tasks to PBSC, the Agency would need to develop subjective performance measures and use an award fee type contract to provide the necessary performance incentives.

The area with the highest dollar impact where PBSCs could be used was in the Superfund program. For example, we reviewed a delivery order, valued at \$2,842,405, issued under a CPAF emergency removal contract which was suited to PBSC requirements. The delivery order SOW already contained some objective performance requirements. For example, one SOW task instructed the contractor to "...remove all solid wastes (scrap metal, wood, dilapidated structures) from the site...." Another task instructed the contractor to "... remove all solid contaminated with CERCLA hazardous substances above the proposed removal action levels . . . contaminated soil shall be treated until it no longer exhibits a RCRA hazardous characteristic, allowing disposal as a solid waste."

We also noted that LOE contracts included routine recurring tasks that could be procured under fixed-price (either fixed-rate IDIQ or firm-fixed-price) arrangements and as performance-based contracts using objective performance measures. Administrative support functions such as logistical support for meetings, data entry, and maintaining public dockets, were examples of these types of tasks. These types of tasks could be removed from the LOE contracts and procured under separate PBSCs for each particular type of service. Although the individual cost of these tasks per WA was not large, if these tasks were broken out and rolled into separate contracts we believe they could result in significant dollar value PBSCs.

We identified some technical tasks that were awarded as completion delivery orders or written in a completion format, and lent themselves to evaluation through objective performance measures.

In our opinion, these types of tasks were suited to PBSC. For example, we reviewed one delivery order with a final amended award amount of \$3,981,581. This delivery order included the tasks of a database conversion and a system development. Both the database conversion and the system development would lend themselves to the establishment of objective performance measures and the evaluation of these measures through a quality assurance plan. In fact, the delivery order, as written, contained acceptance criteria which generally fit within the PBSC requirements for performance standards.

A significant number of the technical tasks included in the contracts we reviewed did not lend themselves to fixed-pricing arrangements or evaluation based entirely on objective performance measures. Examples include technical studies and evaluations and analytical work provided in support of EPA policies and regulations. In addition, although these tasks were recurring in that the same general processes were used in performing the tasks, the individual circumstances associated with each task could vary greatly, e.g., the amount of data to be analyzed, the number of public comments received, etc.. Although some objective measures could be established for timeliness and report formats, evaluations of performance quality would require some subjectivity. For example, a performance measurement may be that a study's conclusions are adequately supported by the data presented. This determination would be based on an experienced reviewer's judgement and would constitute a subjective measurement. An evaluation of the quality of the contractor's work for these tasks would require the use of some subjective performance measures. In order to conduct these services under a PBSC arrangement, EPA would most likely have to award an IDIQ contract and develop generic performance-based SOWs for each type of task. The generic performance work statement could be modified to fit the individual circumstances of each DO.

#### **RACs Represent Best Opportunity for Transition Into Other Contract Types**

The RACs provide the greatest opportunity for more rapid transition into completion form, fixedprice and PBSC forms of contracting. Services provided in RACs have been performed under other EPA contracts for over 16 years. EPA has reported completion of hazardous waste cleanups at 428 sites; remedial design construction in process at 492 sites; remedial designs being prepared for 144 sites; and feasibility studies underway at 196 sites. The same general tasks are performed at all Superfund sites, though differing site conditions impact the effort required. Designers of the RACs program stated that this degree of experience is one reason they incorporated a completion form component into the contracts. Much of the RACs work is product or goal oriented, i.e., completion of feasibility studies and remedial designs. The COE, who oversees many of EPA's largest remedial construction projects, usually procures these services under completion form contracts. Further, EPA prime contractors generally award fixed-price subcontracts for remedial construction. Since 1982, EPA has used CPAF contracts to perform remedial work at Superfund sites. These incentive fee contracts require that the contractor's performance be evaluated, a basic tenant of PBSC. EPA has experienced problems in both contract cost estimation and use of award fees. However, the Agency is making progress in these areas with the recent actions to accumulate cost data under RACs and revise award fee

procedures, as discussed in Chapters 2 and 4.

EPA officials indicated that faulty site assessment data from prior contract work has often resulted in the need for unanticipated sampling or other work during the construction phase. These uncertainties make them cautious in awarding fixed-price, completion form or performance-based contracts for this type work. However, lessons learned from such experiences should diminish these uncertainties as a factor relative to the 196 sites currently in the remedial investigation stage. This situation presents substantial opportunities for use of alternative contract forms.

# **BARRIERS/LIMITATIONS AFFECTING THE USE OF OTHER CONTRACT TYPES**

Several barriers were identified that limit EPA's ability to fully use other types of contracts. These barriers include program officials' desires to retain their LOE contracts because of their flexibility, the resulting general and broad SOWs, lack of knowledge of alternative contract types, funding allocations and limitations, lack of historical cost data, and absence of program commitments to use other contract types.

# **Program Culture**

A prior Agency analysis<sup>7</sup> of EPA contracting practices discussed the Agency's heavy reliance on LOE contracts and reported that "... the complexity and diversity of the Agency's mission have fostered an Agency belief that it needs the most flexible contract vehicle available." This desire for flexible contract vehicles is still prevalent. POs we spoke to often cited the need for flexibility as to why they did not believe other contracting mechanism could be used. Agency contracting officials also confirmed that this belief still existed. For example, contracting officials indicated that the greatest barrier to moving toward other types of contracts is the culture of the program offices. These officials indicated that in order for the Office of Administration and Resources Management (OARM) to be successful in its promotion of the use of fixed-price, completion form, and performance-based contracts, senior program officials need to support OARM's efforts. Other Government agency officials we spoke to indicated that conversion to PBSC was not easy or quick and that obtaining both program and contracting officials buy-in to the concept of PBSC was the most difficult obstacle to overcome.

PO's and WAMs we interviewed cited several reasons why they believed they need the flexibility of an LOE WA contract. These include the unpredictable timing of certain tasks, changes in work direction due to influences beyond EPA's control, e.g., political or interest group concerns, and cost and completion uncertainties associated with the technical nature of some work. However, we still contend that many of these tasks, with consideration for contingencies, could be fixed-rate based on EPA's extensive experience in contracting for this work and, at a minimum, awarded under completion form PBSC requirements.

<sup>&</sup>lt;sup>7</sup> Staff Report of the Standing Committee on Contracts Management, June 1992.

# **Knowledge of Other Contract Types**

The program office's desire to retain their LOE contracts may be due, in part, to a lack of understanding of other contract types. We found that some program officials did not know about or understand the various types of contracting instruments that were available to them. This lack of knowledge was especially true for PBSC and completion form contracts. Program and contracting officials indicated that they envisioned PBSCs as fixed-price contracts for recurring, routine services for which objective performance measures could be established.<sup>8</sup> In addition, some POs and WAMs believed that completion contracts could only be fixed-price. Program officials also had very little experience or knowledge of the use of small procurements. When we discussed specific WA tasks with the WAMs and the possibility of using other contracting mechanisms, they agreed that in some cases, fixed-price or completion form contracts could be used. Other WAMs stated that they believed their programs could and should use other contract mechanisms.

#### **General Contract SOWs**

Many of the non-Superfund contract SOWs we reviewed contained a variety of tasks including both technical and administrative tasks. These included large umbrella contracts that provide a wide-range of support services to a particular program office. The SOWs described the tasks in general terms in anticipation of what specific work would be required over the life of the contract. Consequently, the contract SOWs did not specify exact deliverables and dates for these deliverables. This detailed information was included in the WA SOWs (or in some cases technical directives that supplemented the WA) when the need for a specific type of task became known. The inclusion of several different types of tasks makes it difficult to award the entire contract as either completion or fixed-price.

Correspondingly, we believe the inclusion of a variety of tasks under one contract could make it more difficult to develop a PBSC.<sup>9</sup> One of the features to look for in deciding whether to develop a PBSC is recurring tasks. Task repetition allows the development of standardized performance measures and QAPs to evaluate these measures. When the SOW contains many different tasks it is more difficult to write a PBSC. Several different sets of performance measures and QAPs would need to be developed to cover the range of services performed under these contracts.

<sup>&</sup>lt;sup>8</sup> Other Government agency officials we spoke to indicated that differing interpretations and definitions of PBSC were encountered in other agencies as well.

<sup>&</sup>lt;sup>9</sup> This is not to imply that a PBSC cannot be written to cover a wide range of services. Both Air Force and NASA officials indicated they had developed PBSCs for base support covering a wide range of services. For example, Air Force officials told us that they developed a PBSC for base support which covered service from cafeteria support to civil engineering.

# Funding

Both program and contracting officials mentioned the requirement to fund completion efforts upfront as a barrier to more completion form contracts and WAs. The services under LOE contracts are generally considered severable and thus can be funded incrementally. That is, year one's services can be funded with year one money and year two's services can be funded with year two money. Our interpretation of 48 CFR (Code of Federal Regulations) 16.306, suggests that the work performed under completion contracts and WAs are generally considered entire or non-severable. Consequently, the cost of the entire contract/WA must be fully funded with money available the year the contract or WA was executed unless the contract/WA is funded by no year appropriations such as Superfund. No year appropriations are available until expended. Therefore, a Superfund completion contract or WA could be incrementally funded even if the work will be conducted in future years.

The Director, OAM, indicated that program offices did not have sufficient resources to fund all WAs that could be issued as completion form. Therefore, program offices are reluctant to commit a significant portion of their budget to fund long-term completion projects at the expense of starting and maintaining several projects. A Region 9 PO expressed similar sentiments, stating that Region 9 could not afford to fund WAs fully because some task orders are multimillion dollar projects. If they were forced to fully fund one site, then work would have to stop at another site. Therefore, she stated she would encourage WAMs to "define WAs as LOE even if they could be completion form unless there is a compromise to the funding issue."

Program officials also mentioned that they receive final operating plans late in the fiscal year. Thus, when planning their contract efforts, they cannot be certain as to how much funding their office will receive. While the requirement of up-front funding could present a problem for very large, long term activities, activities such as risk assessments, remedial designs, etc., still lend themselves to completion form use. However, regions and program offices must carefully review performance goals and available funding to ensure optimal use of resources. Contracting officials told us that they could award more completion contracts, both IDIQ contracts with completion delivery orders, as well as entire completion contracts if not for the problems associated with the up-front funding requirement.

#### **Term Form Base Hours in RACs**

According to the RACs PCO, regions may also be discouraged from using completion form because its use does not count against the base hours in the term form of the contract. RACs have a separate completion form ceiling amount in the contract, but no base or minimum use requirements. The contracts guarantee a certain number of LOE hours will be ordered in the base period. Accordingly, the PCO believes, with RACs usage down nationwide, regions will be reluctant to place completion form WAs when they foresee difficulty in utilizing their LOE base hours.

# Lack of Historical Workload and Cost Data

As discussed in Chapter 2 of this report, the Agency did not have historical workload data needed to develop accurate cost estimates. The availability of this data would improve EPA's ability to award more completion and fixed-price contracts. With this data, EPA could develop more detailed SOWs which would allow contractors to better estimate their proposed costs.

# Lack of Program Office Commitments for PBSC

OAM is the only EPA office tasked with implementing PBSC. The Office of Emergency and Remedial Response (OERR) currently has commitments to OMB to initiate pilot PBSCs in the Superfund program. However, these commitments were essentially mandated by OMB, not EPA, by the FY 1998 Pass Back Decisions for the President's Budget. We could not identify any other commitments by EPA program offices and regions to plan and propose more completion form, fixed-price, and/or performance-based contracts. In our opinion, implementation of PBSC has to be a shared responsibility to be successful. Therefore, all programs and regions need to establish PBSC goals to emphasize the need for more efficient and results focused contracts and de-emphasize the more flexible but less efficient cost-type contracts.

# AGENCY PROGRESS IN AWARDING OTHER TYPES OF CONTRACTS

The agency has made some progress in awarding PBSCs. RTP Contract Management Division (RTP-CMD) had awarded two fixed-price PBSCs. These contracts were for audio/visual services and warehouse/mailroom services. At the time of our fieldwork, a third PBSC contract was in the process of being awarded for grounds maintenance/janitorial services. Cincinnati Contract Management Division (CCMD) had awarded one fixed-price PBSC for telephone hotline services. According to Superfund/RCRA Procurement Operations Division (SRRPOD) officials, a PBSC for administrative support services was recently awarded in Region 10. In addition, the Headquarters Procurement Operations Division (HPOD) was planning to award seven PBSCs at the time our fieldwork ended. This included four PBSCs for routine types of services and three technical service contracts in which some of the individual WAs/DOs will be performance-based. EPA Superfund program officials, with assistance from OMB's OFPP, currently plan to study one or more Superfund sites in order to develop model PBSC SOWs for specific types of remedial actions.

In addition, the CCMD has taken the initiative to educate and inform its customers (Office of Water (OW) and ORD) on the various types of contracts, including small purchases, available to them. CCMD has held several meetings with the two programs, discussing both the advantages and disadvantages of IDIQ and fixed-price contracts. According to CCMD officials, the response from program officials to CCMD's presentation on alternative contract types was generally favorable

# CONCLUSION

EPA's predominant use of term form, LOE contracts place the risk of cost and performance on the Government rather than the contractor. These contracts purchase labor hours with limited assurance of quality and no guarantee of an end product. Effective use of completion form, fixed-price, and performance-based contracts would move EPA toward more efficient, accomplishment-oriented contracting.

In general, the Agency can procure more of its contracted work through completion form, fixedprice, and/or performance-based contract types. For some tasks, it is obvious that procurement through more firm-priced contract type is feasible and appropriate. Many of these tasks lend themselves to PBSC since their performance can be evaluated using objective performance measurements. For other tasks, the transition to PBSC will be more difficult. These tasks do not lend themselves to objective measurement. However, through the development of subjective performance measures and appropriately structured CPAF contracts, these tasks could also be procured under PBSCs. For EPA to make the transition to these more defined contract types it will take a commitment from not just OAM but the Agency's senior program officials as well.

Through our discussions with contracting and program officials we identified several potential approaches to helping EPA award a greater percentage of its contracted services through completion, fixed-price, and/or performance-based contracts. These approaches include: (1) removing administrative tasks, such as logistical support for meetings, from the technical support contracts and awarding Agency-wide fixed-price requirements contracts for these repetitive services; (2) awarding IDIQ contracts which allow DOs to be issued under whichever pricing arrangement is appropriate; and (3) using fixed-price small purchases for infrequent and non-recurring tasks.

#### RECOMMENDATIONS

We recommend that the Acting Assistant Administrator for Administration and Resources Management in coordination with other appropriate senior Agency managers:

- 3-1 Establish goals for each Headquarters program office and each regional office for awarding more of its extramural funds under completion form, performance-based and/or fixed-price contracts.
- 3-2 Require Senior Resource Officials (SRO) to implement the provisions of OFPP Policy Letter 91-2 that require documented justification of the use of contract mechanisms other than PBSC when acquiring services.
- 3-3 Establish work groups of both OAM and program officials to:
  - a. develop model performance statements of work for recurring services that would facilitate increased use of completion form, fixed-price, and performance-based contracts. At least one workgroup should address tasks of a technical support

nature.

- b. develop a strategy for meeting OMB's contract reform goals. This strategy should include identifying candidate services for conversion from LOE, and deciding on appropriate contract types for facilitating this conversion.
- 3-4 Provide training on completion form and PBSC to both contracting and program officials.
- 3-5 Establish incentives to increase regional use of completion form WAs under RACs by establishing either: (1) a contract minimum for completion form use through conversion of LOE base hours to completion form capacity or (2) regional goals for completion form use with strict accountability for meeting such goals.
- 3-6 In coordination with the Director, OAM, and the Director, Office of Emergency and Remedial Response (Superfund), perform bench marking to determine appropriate uses of completion form assignments for RACs activities other than mobilization.

# AGENCY COMMENTS AND OIG EVALUATION

OARM's response generally agreed with the findings and most of the recommendations presented in Chapter 3. OARM did request clarification or correction of certain statements presented in the chapter. Changes were made as considered appropriate. OARM also expressed some disagreement with final report Recommendations 3-2 and 3-5.

During discussions with OARM officials prior to receipt of their response we agreed to drop two draft report recommendations. Draft report recommendation 3-5 requested the Agency to obtain a Comptroller General waiver from the requirement to fully fund completion form contract actions. OARM indicated that this was a statutory requirement that could not be waived. Draft report recommendation 3-8 required the Agency to ensure that IDIQ contracts were properly coded in the CIS. OARM informed us that the CIS was being phased out and replaced by ICMS and that ICMS included a specific category and code for IDIQ contracts.

A summary of OARM's comments on Chapter 3's findings and recommendation along with the OIG's evaluation of these comments are presented in Appendix II.

# **CHAPTER 4**

# AWARD FEE CONTRACTS GENERALLY PROVIDED LIMITED INCENTIVE FOR SUPERIOR PERFORMANCE

In November 1995, EPA modified award fee procedures to prohibit payment of award fees to contractors for satisfactory or substandard performance. However, for the 13 CPAF LOE

contracts reviewed, award fee plans still allowed fees to be paid for satisfactory performance. Review of actual awards under these contracts indicated that a majority of the contractors received award fees for performance elements rated satisfactory. Seven of the 13 contractors received award fees ranging from 25 to 100 percent of available fees (an average of 62.5 percent) for overall ratings of satisfactory. Contractors with exceeds satisfactory or outstanding evaluations received from 44.9 to 91.8 percent of available fees (an average of 80.9 percent). In many cases, only small differences in the percentage of award fees paid existed between satisfactory and above satisfactory performance. In a few instances, a higher percentage was paid for satisfactory performance than paid for outstanding ratings. These variances occurred from subjective decisions by various Performance Evaluation Boards (PEB) and differences in award fee plans (especially older plans) that permitted the use of up to 100 percent of available fees for satisfactory performance<sup>10</sup>. As a result, we concluded that award fees paid under these contracts provided only limited incentives for superior performance. In contrast, because award fees are based on LOE hours delivered, contractors do have an incentive to maximize the labor hours billed in order to increase the award fee amount. In addition to the 13 CPAF contracts, we also reviewed the use of award fees under the relatively new RACs program. These contracts provide that fees would only be paid for exceeds expectations or outstanding performance. Only two RACs contractors had received award fees at the time of this review and these fees were paid only for ratings of exceeds or outstanding.

EPA issued new award fee procedures on November 7, 1995, that restricted the payment of fees to performance ratings that exceed the satisfactory level. However, the new guidance was not applicable to active contracts or new contracts where the solicitation process had occurred prior to the effective date of the guidance. All 13 of the CPAF contracts in our sample were awarded prior to the new guidance. In fact, our contacts with EPA's three contracting divisions disclosed no CPAF solicitations and subsequent awards after the effective date of the new guidance. Unilateral contract modifications could have been made to bring the award fee plans for existing contracts in line with the new procedure; however, none of the award fee plans for the CPAF contracts in our sample were modified. We did identify three non-Superfund CPAF contracts and 10 RACs (CPAF) that restricted award fees to above satisfactory performance even though the contract solicitations occurred prior to the revised award fee procedures. However, EPA's award of CPAF contracts has decreased dramatically since the award fee procedures were revised. Most non-Superfund cost-reimbursable contracts are now awarded as CPFF. A contract manager indicated that the administrative burden of award fee contracts caused the shift to CPFF. This decline in CPAF is a concern since these contracts provide a mechanism by which the Agency could increase the use and benefits of PBSC. Because only a few existing CPAF contracts fully incorporated the revised guidance, we could not adequately evaluate whether the revised award fee procedures had corrected EPA's past problems with management of CPAF contracts.

<sup>&</sup>lt;sup>10</sup> This problem no longer exists because current award fee policy precludes use of fees for satisfactory performance.

# BACKGROUND

Past OIG audits and other internal EPA reviews criticized the Agency for not using the award fee mechanism in CPAF contracts as an incentive for high quality contractor performance. Specifically, EPA had given contractors awards for satisfactory, or in some cases, less than satisfactory performance and had not used contractor performance as a basis for new contracts or assignment of new work. In view of this past history, OMB wanted to know what percentage of maximum award fees contractors had earned and whether the fees awarded comport with their performance.

FAR 16.404-2(a) defines a CPAF contract as:

... a cost-reimbursement contract that provides for a fee consisting of (1) a base amount fixed at inception of the contract and (2) an award amount that the contractor may earn in whole or in part during performance and that is sufficient to provide motivation for excellence in such areas as quality, timeliness, technical ingenuity, and cost-effective management. The amount of award fee to be paid is determined by the Government's judgmental evaluation of the contractor's performance in terms of the criteria stated in the contract.

Chapter 15 - <u>Use of Cost-Plus-Award-Fee Contracts</u> of the <u>EPA Contracts Management Manual</u>, issued November 7, 1995, and revised June 24, 1997, provides guidance for the use of CPAF contracts. The requirements of this chapter are applicable to solicitations issued after the effective date of the Chapter. A feature of the guidance, which represents a significant change from prior award fee plan structures, is the requirement that the award fee plan must clearly state that no award fee will be paid for rating elements rated satisfactory or unsatisfactory.

# SAMPLED CONTRACTS AWARDED FEES FOR SATISFACTORY PERFORMANCE

Under the 13 randomly selected CPAF contracts, we reviewed 64 rating periods to determine whether award fees were paid for satisfactory or unsatisfactory performance. The contracts in our sample were awarded prior to the implementation of the current guidance which recommends no award fee for satisfactory or unsatisfactory performance. Under seven of 13 contracts reviewed, EPA awarded fees for 20 rating periods that were based on overall satisfactory ratings in accordance with the contracts' award fee plans. The percentage of available fees (\$4.9 million) awarded for overall satisfactory performance ranged from a low of 25 percent to a high of 100 percent or an average of 62.54 percent (\$3,066,321). Under seven contracts, award fees were paid for one or more rating elements that received satisfactory ratings. Five contractors received better than satisfactory ratings for all rating elements we reviewed. The remaining contractor received better than satisfactory for all rating elements except one, for which a satisfactory rating was given.

Significant variances existed between contracts in the percent of award fees paid for satisfactory,

exceeds, and outstanding performance ratings. For instance, one contractor received 100 percent of available fees for an overall satisfactory rating while another contractor received only 55 percent of available fees for exceeds satisfactory performance. Even on the same contract, the award fees paid could vary greatly. For example, one contractor received 98.5 and 100 percent, respectively, of available fees for satisfactory performance during two rating periods. For two other rating periods, the same contractor was paid only 44.9 and 53.2 percent of available fees for exceeds satisfactory, exceeds, and outstanding performance level and the percentage of fees paid for satisfactory, exceeds, and outstanding performance is shown below.

| Overall<br>Rating | No. of<br>Rating Periods | Award Fees<br>Available | Award Fees<br>Paid | Average<br>% Paid | % Range     |
|-------------------|--------------------------|-------------------------|--------------------|-------------------|-------------|
| Satisfactory      | 18                       | \$4,902,891             | \$3,066,321        | 62.5%             | 25%-100%    |
| Exceeds           | 35                       | \$3,504,919             | \$2,724,211        | 77.7%             | 44.9%-91.8% |
| Outstanding       | 11                       | \$6,481,780             | \$5,358,607        | 82.7%             | 73.8%-90%   |

#### LIMITED IMPLEMENTATION OF REVISED AWARD FEE GUIDELINES

EPA has awarded significantly less CPAF contracts, especially for the non-Superfund programs, since issuance of the new award fee guidance. This decline in CPAF causes concern, since CPAF contracts incorporate one of the tenants of performance-based contracting, i.e., financial incentives for good performance, and represent one contract mechanism by which EPA could increase its use of PBSC. A contract official indicated that the administrative burden of award fee contracts caused a shift to CPFF. Through contacts with EPA's contract divisions, we did identify three CPAF contracts at RTP-CMD and seven RACs awarded after the guidance was issued; however, the contract solicitations for all of these contracts occurred before the date of the guidance. Therefore, the contracts were not required to comply with the guidance. However, the award fee plans for two<sup>11</sup> of the three RTP CPAF contracts did stipulate that no fees would be paid for satisfactory or worse performance. The plan included a base fee of 3 percent of estimated costs and a potential award fee of 7 percent of cost. These two contracts were later transferred to another contract division during an OAM reorganization and converted to CPFF. The fixed fee was set at 7.2 percent of estimated costs. The Director, RTP-CMD, stated that the award fee plan for the third CPAF contract would be modified to be more compliant with the new award fee guidance. RTP-CMD had modified the award fee plan of another contract it received during the OAM reorganization. However, the modification was to preclude award fees for unsatisfactory performance which were allowed under the original award fee plan.

<sup>&</sup>lt;sup>11</sup> FY 1996 awards of two large CPAF contracts for Environmental Services Assistance Teams (ESAT).

The solicitation and the award of three RACs occurred prior to the effective date of the revised award fee guidance. However, the RACs Performance Fee Plan incorporated many of the important aspects of the guidance. The RACs plan required that a performance fee was to be earned and payable only on completed WAs which were rated "exceeds expectations" or "outstanding." In addition, no performance fee was to be paid for WAs rated "unsatisfactory" and the contractor was required to return any provisional fee received. Because some RACs contracts were only recently awarded, or lacked significant activity, only the two RACs awarded by Region 7 had completed an award fee period and evaluation at the time of this review. For these two contracts, award fees were only paid for ratings of "exceeds expectations" or "outstanding."

Contracting officials cited the heavy administrative burden created by previous CPAF contracts as well as an overuse of CPAF in the past, as reasons why the use of CPAF contracts has declined. They also indicated that the fees were not large enough or disbursed quickly enough to influence contractor performance. This administrative burden could have been intensified with revision of the award fee policy in November 1995. The revised guidance required that award fee determinations be made within 60-75 days from the end of the evaluation periods. For the 13 CPAF contracts in our sample, award fee determinations, for all but two contracts, averaged more than 100 days after the evaluation period ended. For RACs, award fee determinations were not announced for up to 87 days after the evaluation period. Prior OIG audits have reported the lengthy delays in making award fee determinations and that contractors received substantial fees for satisfactory or worse performance. EPA revised Chapter 15 of the Contracts Management Manual on November 7, 1995, and June 24, 1997, to address concerns over the basis for award fees and timeliness of award fee determinations. The June 24 revision instructs program officials to ensure that the performance standards for PEB Chairpersons include a subcriterion for meeting the time frames established for the award fee process.

Contracts solicited or awarded before the new guidance could have been amended to reflect the new requirements. However, contracting officials indicated it was not feasible to amend most existing CPAF contracts because either (1) the majority of the performance periods had expired, (2) the existing award fee plans were already well behind schedule, and/or (3) the contractors would be unwilling to accept a plan with potentially lower award fees. Washington contracting officials indicated that such changes in award fee plans could not be made without negotiation. The RTP-CMD Director indicated that the modification of the award fee plan for the contract discussed earlier was a very difficult process due to resistance from both the contractor and the program office to eliminating award fees for unsatisfactory performance.

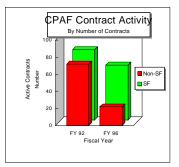
#### **EPA Awarding Less CPAF Contracts for Non-Superfund Services**

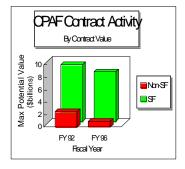
Information from EPA's CIS<sup>12</sup> for the number and dollar value of active CPAF (Superfund and

non-Superfund) contracts in FY 1992 as compared to FY 1996 shows a significant decrease in non-Superfund CPAF contract use since FY 1992. The graphs (right) show a minor decrease in Superfund CPAF contract use. However, FY 1996 RACs awards and at least three FY 1996 non-RACs CPAF contracts we identified are not included in the totals. The CIS data did not show any CPAF awards in FYs 1995 or 1996. Consequently, all of the active contracts reflected in the graphs were awarded prior to implementation of the new guidance.

# **Benefits of CPAF**

The substantial decline in EPA's use of CPAF in favor of CPFF contracts causes serious concern. CPAF contracts represent one mechanism by which EPA could increase its use of PBSC, provided the SOW contains appropriate performance standards and a QAP is developed for evaluating these standards. CPAF contracts furnish the ability to use incentives for the performance of services which do not lend themselves to objective performance measurement. As outlined in FAR 16.404-2 (b)(1)(i) CPAF contracts are to be used when the "... work to





be performed is such that it is neither feasible nor effective to devise predetermined objective incentive targets applicable to cost, technical performance, or schedule . . . " This condition applies to EPA technical service contracts that are more suited to evaluation through subjective performance measures established at the contract and WA level.

# CONCLUSION

Existing CPAF contracts were generally solicited and awarded before the award fee guidance restricted fees to above satisfactory performance. Therefore, current CPAF contracts, especially non-Superfund CPAF, continue to provide for payment of award fees to contractors for satisfactory performance and provide little incentive for superior performance. There has been a general decline in the Agency's use of CPAF contracts for non-Superfund services; and therefore, limited implementation of the current award fee guidelines. The excessive administrative burden of managing past CPAF contracts and their apparent inability to motivate better performance were major reasons cited for the decline. EPA issued guidelines to help correct the problems associated with the past use of CPAFs. Because of the limited implementation of these guidelines, we could not assess whether the new procedures were

<sup>&</sup>lt;sup>12</sup>As discussed in the scope section of this report we did not audit the CIS and cannot attest to its accuracy. The data is presented here to illustrate a general trend in CPAF usage that was substantiated by additional audit work.

successful in eliminating the past problems. If administered effectively with timely payments of fees that are sufficient to motivate improved contractor performance, CPAF contracts provide a mechanism by which the Agency could increase the use and benefits of PBSC.

# RECOMMENDATIONS

We recommend that the Acting Assistant Administrator for Administration and Resources Management in implementing Recommendation 3-3 in Chapter 3 of this report:

- 4-1 Instruct the workgroups to:
  - a. Identify impediments to use of CPAF type contracts and opportunities to streamline the related administrative processes.
  - b. Identify appropriate candidate contracts for an award under CPAF.
  - c. Develop a basis for award fee payments other than hours delivered.
  - d. Develop CPAF contracts for candidate services that meet requirements of PBSC.
- 4-2 Evaluate CPAF contracts with more than two years remaining before expiration for possible modification to incorporate current award fee procedures.

# AGENCY COMMENTS AND OIG EVALUATION

With one exception, OARM's response did not express disagreement with the findings presented in Chapter 4. OARM's comments indicated that changes were needed in certain recommendations but expressed little disagreement with the recommendations as a whole.

OARM's comments related to Chapter 4's findings and recommendations are presented in Appendix II along with the OIG's evaluation of these comments.

# CHAPTER 5

# CONTRACT PERFORMANCE PERIODS AND CAPACITY DID NOT PREVENT COMPETITION

For the 26 contracts reviewed, contract capacity and length of base and option periods did not

preclude adequate competition. The contracts ranged in dollar value from \$1.9 to \$474 million, but no correlation was found between the size of contracts and the number of competitive proposals received. For the largest contract reviewed (MPV \$474 million) with the longest performance period (10 years), EPA received four proposals. The highest bidder response for the 26 contracts in our sample was the 25 proposals received for a 10-year contract, valued at \$62 million. However, EPA may have received a large number of proposals for these 10-year contracts, because the solicitations anticipated multiple contract awards. EPA officials stated that contract competition was not a problem at the Agency, particularly in the Superfund program where the larger, long-term contracts were awarded. These officials also told us that for some types of services, there is a limited pool of vendors with the expertise to do the work.

Although no identifiable link between contract size and competition could be established, a potential impact on competition still exists with larger contracts, particularly for the large Superfund contracts that cover wide geographic areas. Small businesses may not have the resources to meet the contract requirements. For one contract in our sample, EPA preaward review comments noted that the contract's size may have been a factor in contractors' decisions to submit proposals. While adequate competition was found on the contract awards we reviewed, increased competition should be a desirable goal.

During the review, we identified significant unused capacity on many expired EPA contracts. This may indicate that the contracts should have been smaller in size. Many of the larger contracts with a large amount of unused capacity are the expired Superfund ARCS contracts. In response to past reviews, EPA officials have stated that changes in program direction created some of the unused contract dollars. However, EPA regions are reporting similar problems of underutilization with active Superfund contracts, especially the new RACs. This pattern could indicate that EPA should consider awarding fewer and smaller contracts in the future.

#### BACKGROUND

The Competition in Contracting Act (CICA) requires that Federal agencies conduct their procurements in a manner that obtains full and open competition. FAR Part 6, prescribes the policies and procedures to promote full and open competition in soliciting offers and awarding Government contracts. OIG Audit Report E1BMF3-24-0027-4100232, entitled *Competition in Contracting,* issued March 31, 1994, found that although EPA followed FAR procedures for competitive procurements, only one competitive proposal was received in more than 25 percent of the negotiated contracts awards reviewed. The report noted that large, diverse statements of work may have contributed to the low number of proposals received in response to EPA contract solicitations. EPA officials stated that contracts are structured with the size and duration that best suits the program objectives and provides for the least administrative burden to the Agency. They further indicated that limited staff resources precluded smaller contracts for shorter terms.

Generally, EPA contract base and option periods range between one and five years. Since 1982, Superfund remedial action contracts have been awarded for a 10-year performance period. RACs

were awarded with a 5-year base and an option for an additional five years. According to Superfund contract officials, the 10-year performance period is needed because it takes an average of seven to ten years for a hazardous waste site to move through the cleanup cycle of site identification and assessment to remediation. OMB questioned whether this extended base and option period and the overall size of some EPA contracts negatively impacted competition. OMB believed that more vendors may compete if the contracts were smaller or for a shorter duration.

# ADEQUATE COMPETITION OCCURRED FOR CONTRACTS REVIEWED

Twenty-four of the 26 contracts in our sample were awarded competitively.<sup>13</sup> Of the 24 competitive awards, all but one received two or more proposals and two had one proposal in the competitive range. Both contracts with one firm in the competitive range were \$6.1 million or less MPV with 3.5 to 5-year performance periods. The large dollar, 10-year contracts (valued at between \$62.5 and \$474 million), received the largest number of proposals that ranged from a low of four to a high of 25. Therefore, no direct correlation between the size of the contracts and the degree of competition could be established.

Although we determined that adequate competition occurred for the contracts reviewed, more competition would be a desirable goal. The largest contract in our sample, a RAC with an MPV of \$474 million, received four proposals, all in the competitive range. This solicitation resulted in two contract awards, both valued in excess of \$400 million. Length of base and option periods could have been a factor in limiting the proposals to four, but we found no evidence to support this premise. EPA's Superfund contracts, which make up the largest single category of active EPA contracts, are large, 10-year contracts which cover wide geographical areas. However, the Superfund contracts in our sample received the largest number of proposals, from 4 to 25 vendors.

The 26 contracts reviewed along with the performance period, MPV, and competitive proposals received for each contract award are shown in the chart below.

| Contract<br>Number | Length of<br>Contract | MPV         | Proposals<br>Received | Bidders In<br>Competitive Range |
|--------------------|-----------------------|-------------|-----------------------|---------------------------------|
| 68-W8-0124         | 10                    | 62,500,386  | 25                    | 11                              |
| 68-W9-0054         | 10                    | 288,760,199 | 22                    | 16                              |
| 68-W5-0004         | 10                    | 302,239,376 | 6                     | 5                               |
| 68-W6-0037         | 10                    | 253,364,629 | 6                     | 4                               |
| 68-W6-0025         | 10                    | 275,091,955 | 5                     | 4                               |

<sup>13</sup>Two contracts in our sample received only one proposal, but were small business or 8(a) set-aside contracts.

| Contract<br>Number | Length of<br>Contract | MPV         | Proposals<br>Received | Bidders In<br>Competitive Range |
|--------------------|-----------------------|-------------|-----------------------|---------------------------------|
| 68-W5-0022         | 10                    | 313,556,945 | 5                     | 4                               |
| 68-S6-3003         | 10                    | 168,763,187 | 5                     | 5                               |
| 68-W6-0042         | 10                    | 474,369,516 | 4                     | 4                               |
| 68-W1-0055         | 7.2                   | 140,048,750 | 4                     | 3                               |
| 68-W1-0035         | 6                     | 177,538,336 | 3                     | 2                               |
| 68-D3-00313        | 5                     | 24,811,610  | 9                     | 7                               |
| 68-C0-0047         | 5                     | 32,864,228  | 6                     | 3                               |
| 68-D2-01592        | 5                     | 19,636,373  | 6                     | 4                               |
| 68-W4-00019        | 5                     | 29,518,848  | 5                     | 3                               |
| 68-D6-00101        | 5                     | 60,425,542  | 5                     | 5                               |
| 68-C3-0303         | 5                     | 30,882,549  | 3                     | 2                               |
| 68-W1-0007         | 5                     | 44,247,918  | 3                     | 3                               |
| 68-D2-0174         | 5                     | 3,717,435   | 2                     | 2                               |
| 68-D6-0005         | 5                     | 65,424,934  | 2                     | 2                               |
| 68-D2-0156         | 5                     | 5,672,691   | 1                     | 1                               |
| 68-C4-0007         | 4                     | 4,705,360   | 4                     | 3                               |
| 68-W1-0014         | 3.5                   | 6,131,358   | 2                     | 1                               |
| 68-W3-0009         | 3.2                   | 1,898,933   | 8(a) Set-aside        | N/A                             |
| 68-C3-0332         | 3                     | 6,818,084   | 4                     | 2                               |
| 68-C0-0030         | 3                     | 3,681,710   | 2                     | 2                               |
| 68-W3-0024         | 3                     | 5,520,294   | SB Set-aside          | N/A                             |

Factors, other than size and duration, may contribute to the degree of competition in EPA contracts. An analysis of ESAT awards outside our sample indicated that incumbency and restrictive contract requirements may also affect competition. Competition for the two largest ESAT contracts was limited to two firms, both incumbents on prior contracts. Two smaller regional contracts also received limited competition. Only one firm made the competitive range for both contracts. The solicitation requirement that the winning firm perform work on-site at regional offices, or off-site within commuting distance of these EPA offices, may have reduced the competition for these smaller regional contracts. Prior audits have reported that incumbency and restrictive contract requirements are factors that limit competition for EPA contracts.

# BASE PERIODS WERE GENERALLY LIMITED TO ONE YEAR

OMB raised specific concerns about the length of contract base periods, especially the 5-year base period for RACs. However, except for RACs, all contracts in our sample had a 1-year base period. One year is generally the base period in EPA contracts, as well as contracts awarded by other Federal agencies. According to the RACs Acquisition Plan, the five year base period was needed because of the:

...uncertainties with respect to what specific direction the [Superfund] program will embark upon after reauthorization, a five year period of performance with an option to extend the term of the contract provides greater flexibility for the

Agency to react to unanticipated changes.

OAM officials also advised us that the RACs base period was five years because they believed it would take one to two years to determine that a contractor's performance was deficient. It would take another one to two years to replace them. The five year base period would provide sufficient time to identify poor performers and award replacement contracts. In addition, the 5-year base period lessens the administrative burden associated with exercising 1-year options.

#### INTERNAL EPA REVIEWS QUESTIONED POSSIBLE IMPACT OF CAPACITY

Time constraints for this review did not permit an extensive analysis of the impact that size and length of EPA contracts may have had on competition. We determined that for the 26 contacts in our sample, EPA obtained adequate competition, based on an established criteria of the receipt of at least two or more proposals within the competitive range. To determine reasons more vendors do not submit proposals would require extensive time and resources to identify and interview potential vendors and ascertain why they have not submitted proposals. We only identified two instances during this review where contractors stated in "no-bid letters" that the size of the contracts factored into their decision not to submit a proposal. Both contracts were small contracts valued at less than \$5 million each. For one contract, valued at \$4.4 million (3-year performance period), EPA's OGC questioned why this procurement could not have been awarded as a small business set-aside contract. EPA had utilized only 50 percent, or \$3.8 of the \$6.8 million available under the predecessor contract.

In a second instance, OGC questioned whether a solicitation for a 5-year contract valued at \$33 million would restrict competition. The solicitation resulted in receipt of three bids, with two included in the competitive range. The follow-on contract was split into three 3-year contracts, with two valued at \$10 million, and one valued at \$14 million, for a total of \$34 million. The follow-on contracts had 3-year terms instead of five. While splitting the follow-on procurement into smaller contracts may encourage more competition, the size of the total procurement is questionable. Only 66 percent of the MPV, \$20.5 million was expended in the 5-year period.

### CAPACITY OF EPA CONTRACTS MAY BE EXCESSIVE

Our analysis of CIS data for FYs 1994 through 1996 indicated that a significant portion of EPA contracts may be underutilized. We identified 63 expired contracts with obligations equal to 50 percent or less of the MPV. The size and dollar value of these contracts varied. Most were smaller contracts, ranging from \$1 to \$15 million; but, some were as large as \$125 to \$140 million. The performance period for the 63 contracts ranged from three to five years. A significant number of large A&E contracts, originally awarded for 10-year periods, were among the contracts that were substantially underutilized. These contracts had some performance time remaining, but at least 12 contracts, with MPVs of \$148 to \$280 million, had obligations equal to only 2 to 34 percent of the MPV. Based on the CIS data, these A&E contracts appeared to be ARCS contracts, the predecessor to the RACs. EPA has recognized that the ARCS contracts

were too large and made changes in the follow-on contracts, RACs, that reduced both the overall capacity and size of the contracts. However, EPA regions are currently reporting difficulties in meeting the RACs base period obligations. Other Superfund contracts, such as the ESS contracts, were also noted in the CIS data as being underutilized. EPA previously reported that changes in program direction created many of these excess capacity problems.

As previously stated, this information was obtained from a review of CIS data. Time constraints for this review did not permit a thorough evaluation of reasons for underutilization of specific contracts; however, we are recommending that this issue be pursued in a future OIG audit.

# CONCLUSION

No correlation could be established between the size and performance periods of EPA contracts and the competition that occurred during contract award. For the contracts we reviewed, the largest contracts with the longest performance periods received the highest number of competitive proposals. Although no correlation was found for the contracts reviewed, the capacity and length of a contract can potentially limit competition. Smaller firms may not be able to compete for larger contracts. Therefore, even if two or more firms submitted competitive proposals, it is possible that more firms could have made the competitive range if capacity and/or performance periods were smaller.

An analysis of CIS data identified potential excess capacity in EPA contracts. Past internal and external reviews have criticized EPA for excess contract capacity; however, EPA officials have stated that the additional capacity in their contracts does not result in any negative ramifications. If contract size inhibits competition, contracts costs could be negatively impacted, as larger firms with greater overhead costs and less competitive prices become the primary source for services. The amount of business a contractor receives is a primary factor in calculation of overhead costs. If significant amounts of anticipated revenue are not realized, contractors costs will rise and smaller contractors could be negatively impacted.

#### AGENCY COMMENTS

OARM's response expressed agreement with the chapter's conclusion that no clear correlation existed between the size and performance periods of EPA contracts reviewed and the competition that occurred during contract award. OARM also acknowledged the potential excess capacity identified on active and expired contracts during this audit. However, OARM emphasized that the Agency has taken action to significantly reduce excess capacity on its current contracts and efforts are ongoing to continue this downward trend in contract size.

(This page intentionally left blank.)

# **CHAPTER 6**

# **OMB CONCERNS SPECIFIC TO RACs**

With the development of the RACs, EPA attempted to remedy longstanding criticisms of Superfund contracting. New contract features and management procedures were to make RACs more efficient contracts, awarded on a regional basis, with greater opportunities for competition. OMB questioned whether RACs were awarded in the most cost effective manner with optimal opportunity for competition between contractors and whether certain RACs provisions could be used to increase competition for RACs WAs. We determined that RACs were awarded with adequate competition and in accordance with prescribed procurement procedures. Also, contract clauses related to regional crossover for WA awards appeared to provide opportunities for competition of RACs WAs. However, these provisions were intended only for use in capacity shortfalls and conflict of interest (COI) situations. EPA officials indicated that use of the clauses to enhance WA competition could potentially increase contract costs. The RACs further contained provisions for use of completion form WAs, but did not include any incentives to induce use of the contracting mechanism by program staff.

OMB also expressed concern with the wide variance in indirect rates approved for RACs contractors. However, wide variances in indirect rates among contractors are not unusual. The variances can be caused by many legitimate reasons such as the differences in contractors' indirect cost pools and differences in allocation bases. However, PCOs also used unaudited contractor data to negotiate indirect rates or approved rates higher than the audit recommended rates. These actions could have permitted unreasonable and unsupported rates for some RACs contractors.

# BACKGROUND

Superfund's Long Term Contracting Strategy (LTCS) recommended a single response action contract structure for remedial action and oversight responsibilities. RACs provided professional A&E services to support these efforts. RACs, which replaced ARCS, were expected to provide regions with the ability to pursue various enforcement options, as well as remediation and oversight services. RACs were also to provide enhanced post-award competition of WAs based on contractor performance, i.e., the best performing contractors within a region would receive more of the WAs. RACs were awarded as A&E type contracts under procedures in Title IX of the Federal Property and Administrative Services Act of 1949 (commonly called the Brooks Act). The act stipulated that technical qualifications would be the determining factor for contract awards instead of other factors, such as cost.

Under RACs, work is assigned to contractors through WAs. RACs WAs can be issued as either term or completion form. Term form or LOE WAs require the contractor to devote a specific

level of labor hours for a specified time period. Completion form WAs require the contractor to deliver a specified end-product within an estimated cost as a condition for receipt of an award fee. This type of WA provided the Agency the ability to penalize a contractor with consistent overruns through the award fee process. Although RACs were regional contracts, contract provisions permitted regions to crossover and issue WAs to contractors in other regions if a shortage of capacity or COI situation occurred. This provision is referred to as the regional crossover authority.

Each RACs contract also included a subcontract pool fund for the prime contractor to obtain specialized services that could not be provided by the prime or its team subcontractors. EPA officials also stated that inclusion of the subcontract pool allowed EPA to more efficiently obtain vendors to do tasks, such as well drilling, analytical services, mapping or surveying, because prime contractors can award a contract more quickly than EPA. Prime contractors usually award fixed-price contracts for subcontract pool work.

# **OMB** Concerns With RACs

OMB officials expressed specific concerns and questions related to the new RAC program as follows:

<u>Indirect Rates</u> - Are the indirect rates for RAC contractors too high? Do the rates approximate the industry average? Are the variances among the team subcontractors normal variances throughout RACs since the contractors are performing the same general tasks? Do the team subcontractors' rates represent the industry average?

<u>Regional Crossover</u> - With the RACs extended base and option periods (five years each), EPA has locked up competition for Superfund remediation work for a number of years. Can competition between RACs contractors be increased by using regional crossover authority in issuing RACs WAs? Would this bring down contractor prices or increase competition?

<u>Subcontract Pool</u> - Can completion form WAs be used for work related to the subcontract pool? Is there a 20 percent limitation on subcontracting in RACs?

<u>Completion Form</u> - Why is there a ceiling on use of completion form in RACs, but not a "floor," or required base quantity, as provided for in the term portion of the contracts?

<u>A&E Contracts</u> - Why are all RACs awarded as A&E contracts? Other agencies do not use A&E contracts until they are in the remedial action phase.

Because of the limited time provided for this review, we were unable to perform a thorough evaluation related to certain OMB questions such as whether RACs indirect rates approximate the industry average for environmental cleanup type work. We were able to obtain information that addresses some of OMB's concerns.

# INDIRECT RATES FOR RACS NOT EFFECTIVELY NEGOTIATED

Indirect rates and their application to contract costs varied significantly among RAC prime and team subcontractors (see Appendix V). The most significant variances were found among team subcontractor rates. Both RAC contract placement officials and EPA contract auditors agreed that it is completely normal for indirect rates to vary among contractors. The award of the contracts under Brooks Act procedures also dictates that contractor costs are secondary considerations in award decisions. Therefore, even though some COs made an effort to resolve cost issues during contract negotiations, COs did not perform comparisons of indirect rates to industry averages or engage in lengthy cost negotiations after selection of the most technically qualified vendors. COs have the final decision in negotiating contract costs, including indirect rates. EPA policy does not require COs to consult with contract audit personnel during such negotiations that were often higher than audit recommended rates. This practice could result in excessive indirect costs being paid under RACs.

#### **Rates Variances Are Common**

OAM and OIG contract auditors indicated that there are several valid reasons indirect rates may vary significantly among contractors. The following are some of the general reasons provided:

- Contractor treatment of costs is an internal management decision that cannot be dictated by the Government. Some contractors include G&A costs in overhead pools and others do not. While contractors are required to accumulate certain costs, as prescribed by the FAR, they have fairly wide discretion in accounting for most of the costs they incur. The basic requirement is that costs are treated consistently under similar circumstances. Accordingly, there are fairly broad differences in the content of the indirect cost pools. For example, some firms may permit direct charging of clerical or office personnel, while others routinely include this type of labor in overhead or G&A. The same is true of supplies, postage, telephones, telecommunications, etc. Including these types of costs in indirect pools would obviously increase the rate in comparison to an accounting system which charged such costs direct.
- Contractors may have different allocation bases for determining their indirect rates. On the RAC contracts, some contractors allocate overhead by direct labor dollars only, while others include fringe benefits in the base (which lowers the rate). For G&A expenses, some RAC firms allocate over direct labor dollars; others over direct labor, fringe benefits, travel and other direct costs; and still others, over total cost input. Again, the larger the allocation base, the lower the rate.
- The number/composition of indirect cost pools may be different. Some RAC contractors have only one indirect cost center while others have as many as four. These pools accumulate essentially the same type of cost, but the costs are spread over different bases.

• The size and direction of a business could affect the indirect rates. Because there are fixed costs in essentially all indirect rates, a larger base should result in smaller indirect rates. Therefore, indirect rates should be declining for growing companies whose services are in demand.

Although the above represents valid reasons for indirect rate variances, when equitable application of rates is taken into consideration, contractors providing the same service in the same general geographic location should have overall direct and indirect rate costs that are ultimately similar. This means once indirect cost rates are applied to proposed direct labor, the resulting total proposed cost should be similar to that of other contractors that provide the same service in the nearby vicinity. Therefore, a contractor's total rate/cost should be comparable to other contractors in the industry.

# COs Do Not Compare Contractor Rates to Industry Averages

According to the current PCO for RACs, the reasonableness of rates is determined individually for each contractor. EPA does not ask a contractor to meet or beat another contractor's rates and contractors are not evaluated in terms of how their rates compare to other contractors. EPA contract auditors indicated that such comparisons could provide beneficial information on the reasonableness of contractor costs; however, the auditors believed that cost reasonableness was not a paramount concern in many EPA contract awards, particularly those awarded under the Brooks Act.

# Indirect Rates for Prime and Team Subcontractors Often Based on Unverified Data or Exceed Audit Recommended Rates

The PCOs used unaudited contractor-provided data in negotiating 67 of 99 (68 percent) indirect rates with RACs prime and team subcontractors. Specifically, unaudited rates were used in the negotiation of indirect rates for 18 of 25 (72 percent) prime contractors and 49 of 74 (65 percent) team subcontractors. The following schedule delineates the PCOs' basis for award.

|                                             | Indirect Rates   |                    |
|---------------------------------------------|------------------|--------------------|
| CO's Basis for Award                        | Prime Contractor | Team Subcontractor |
| Current but Unaudited Rate                  | 18 (72%)         | 49 (65%)           |
| Forward Pricing Rate Agreement              | 6 (24%)          | 6(8%)              |
| DCAA Established Rate                       | 0                | 10 (14%)           |
| FACO Review of Revised Rate                 | 0                | 2(3%)              |
| Proposed Rate (Unaccepted by DCAA)          | 0                | 2(3%)              |
| Revised Rate(s) Reviewed & Accepted by DCAA | <u> </u>         | <u>   5</u> ( 7%)  |
| Totals                                      | 25               | 74                 |

When audited rates were available, the PCOs often negotiated rates higher than the audit recommended rates. This occurred for 15 of 25 indirect rates approved for RACs prime

contractors and 21 of 72 indirect rates<sup>14</sup> for team subcontractors.

The PCOs awarded rates based on unaudited data and higher than audit recommended rates because:

- Contractors submitted revised rates to reflect more current cost and pricing data. Audits had been requested on the contractor's initial proposal but not any subsequent revisions. The PCOs accepted the contractor-revised information based on the premise of using the most current, accurate, and complete data. Our analysis revealed an average elapsed time of seven months between the audit report date and the completion of indirect rate negotiations.
- Because RACs are awarded under Brooks Act procedures, the PCO may not be placing sufficient emphasis on negotiating reasonable indirect rates. According to the current PCO, the duration of cost negotiations ranged from a half day to a full day. Based on RACs preaward documents reviewed, the PCOs did not always resolve or follow up on the audit findings relative to indirect rates, such as Cost Accounting Standards noncompliance, cost estimating deficiencies, treatment of unallowable costs, etc., as addressed in DCAA, OIG, or OAM's Washington Cost Advisory Branch reports. EPA cost-reimbursable contracts typically provide for CO-determined rather than audit-determined rates. This gives the CO the option to disregard audit findings and consider the rates fair and reasonable based upon materiality, historical experience, and other factors.

The FAR recognizes there may be a need for the contractor to update information prior to price agreement and provides for updated information through execution of a Certificate of Current Cost or Pricing Data. However, the FAR 15.804-4(d) cautions that possession of a Certificate of Current Pricing Data is not a substitute for examining and analyzing the contractor's proposal. Therefore, audit assistance may be necessary for subsequent review of any significant revisions to contractor pricing data. Without such, the Agency only has the representations of the contractor and interim payments may be too high. Due to the possibility of erroneous indirect rates being established in the contract, it is imperative for PCOs to ensure accuracy because future adjustments could have a significant impact on the total cost of the contract.

#### **RACs DO NOT PROVIDE FOR ROUTINE USE OF REGIONAL CROSSOVER**

<sup>&</sup>lt;sup>14</sup> A total of 72 rates are provided instead of 74 because we could not determine audit recommended rates in two instances and, therefore, conclude as to whether the final rates were higher or lower that the rates recommended by DCAA.

# AUTHORITY AND SUCH USE MAY NOT BE BENEFICIAL TO EPA

OMB expressed interest in whether the regional crossover authority provisions in RACs could be used to compete RACs work assignments across regions. For instance, if a contractor in one region provided better performance at less cost than contractors in another region, could the second region solicit WAs from the contractor in the first region under the regional crossover authority. According to OAM and OGC, RACs do not provide for WA competition, either within or across regions. A bilateral contract modification of RACs would be required for such competition to occur. OAM officials further indicated that the regional crossover authority was intended for use only in conflict of interest (COI) situations and capacity shortfalls. The consensus among RACs contract managers was that frequent use of the crossover authority would not increase RACs cost effectiveness but would potentially increase costs, create capacity imbalance between regions, and contradict the original intent of awarding regional contracts. Contract managers also said it would increase the difficulty of administering such WAs because the CO, PO, and WAM would not be located in the same region.

RACs contain provisions that permit each region to utilize the services of contractors in other regions under certain conditions. These regional crossover provisions provide:

(a) In the event of the Contractor's conflict of interest in conducting a specific work assignment (as determined by the Contracting Officer), or when maximum amount of effort has already been ordered or is about to be ordered by the Government [capacity shortfall], or in any other situations in which it is determined to be in the best interest of the Government, professional services for this Region may be ordered from another EPA Region's contractor.

RAC crossover authority, as currently written, does not preclude issuance of WAs across regional boundaries. However, the Agency believes that the intent of the provisions was only to address COI, capacity problems, and other unforseen circumstances. An OAM official stated that the crossover provisions were never intended for issuance or competition of WAs across regions. She also indicated that unrestricted use of this authority to issue WAs across regions could have legal ramifications because such use contradicts the original intent of regional contracts, i.e., contractors receiving contracts within a particular region would receive all of the RACs WAs except in cases of COI or capacity shortfalls.

OAM officials and RACs contract managers in five regions indicated that routine issuance (or competition if permitted) of WAs across regions would be unwieldy, administratively burdensome, and expensive. Contract costs would increase due to additional travel and per diem for the contractor and the EPA administrative burden of soliciting and evaluating WA proposals from a larger pool of contractors. Also, administration of the WA would be more difficult because the CO, PO, and WAM would be located in different regions. RACs officials were also concerned that such use of crossover authority would create an imbalance of capacity due to several regions using another region's contract capacity. Some regional COs and POs stated that

competition or issuance of WAs across regions would negatively impact timeliness of WA completion because it would take more time to award assignments due to the bidding and negotiation process involved.

Based on our limited review of the possible use of regional crossover authority to increase the cost effectiveness of RACs WAs, we concluded that such use may not increase the efficiency of RACs operations, but, instead, may increase costs, create an administrative burden, and negatively impact program accomplishments. However, we did not have time to thoroughly evaluate the possible impact of such crossover use or EPA staff comments that this process would negatively impact the RACs program.

# SUBCONTRACT POOL HAS NO PERCENTAGE LIMITATION AND CAN BE USED FOR COMPLETION FORM WAS

RACs subcontract pools have dollar limitations that are included in the contract as part of the contract MPV. Although the pools were provided for under the term form component of the contracts, related subcontract work can be issued under completion form WAs and charged against the completion form dollar ceiling. According to the RACs User's Guide, the subcontract pool provides specialized services for the prime contractor that ordinarily cannot be provided by the prime or its team subcontractors. Discussions with OAM personnel and regional COs and POs indicated that subcontract pool usage is restricted only by a dollar ceiling that generally represents a third of the contract value. There is no percentage limitation on subcontract pools.

In developing the RACs strategy, EPA's Office of Emergency and Remedial Response (OERR) decided there would be three contract sizes, each having specific maximum dollar limits for LOE hours, completion form, and subcontract pool. Therefore, the subcontract pool amount, as well as other segments of RACs, were established with maximum dollar limitations. Neither OAM officials nor regional COs and POs had knowledge of a percentage limitation on subcontract pools. For the ten RACs awarded at the time of this review, there had been minimum use of the subcontract pool. Some regions, such as Regions 3 and 5, had not utilized the subcontract pool because their contracts were relatively new. However, Region 7, as the first region to award a RAC, had cumulative subcontract pool payments of over \$1.7 million on one contract and over \$75,000 on another. The contracts contain a clause allowing a unilateral decrease for any unused portion of the pool inclusive of associated costs and fees.

According to file documentation and OAM officials, the subcontract pool is a sub-cost element of the term form segment of each RAC. However, the current PCO stated that, although the subcontract pool is defined as part of the term form segment, subcontract pool actions can be issued under completion form WAs and costs for subcontract pool efforts under completion form are considered part of and chargeable to the completion form ceiling established in the contracts. Specifically, a paragraph within the Completion Form Ceiling clause of the contracts states:

Subcontracting efforts and equipment pertaining to specific activities under completion form work assignments shall be charged against the overall completion ceiling.

Therefore, RACs do not preclude use of the subcontract pool for completion form activities.

# A CONTRACT FLOOR FOR COMPLETION FORM NOT DEEMED APPROPRIATE BY AGENCY OFFICIALS

Agency management provided the completion form segment in the RAC contracts to make the mechanism available to regional offices and encourage their use of this form of contracting. The term form segment of RACs provides adequate capacity to accomplish all program requirements. The completion form ceiling was an additional dollar amount added to the contract which was not based upon any actual or potential needs. According to an EPA official involved in the development of the RACs program, the intent of including completion form in RACs was to obtain "buy in" from the regions and voluntary use of the mechanism. This official did not believe they could have realistically set a mandatory lower limit for use of completion form. It was a new concept for the regions and a mandated "floor" would have likely been met with significant resistance. Regions are comfortable with the use of the term or LOE form of contracting. As a result, regional COs/POs did not believe the nature of the work is conducive to completion form contracting. Therefore, placing mandates for completion form usage in the contracts may have hindered progression towards completion form.

The current PCO was opposed to establishing a completion form floor within the contracts because he believed it would create a Government obligation. The contractor would have a right to the specified dollar minimum regardless of whether the work materialized or not. In the PCO's opinion, this could be very costly because the regions would be reluctant to issue completion form WAs when they are currently having difficulty using the existing term form base hours. The PO was more agreeable to restructuring the contracts to make completion form part of the contract base than to establishing a separate completion form base amount.

# **USE OF A&E CONTRACTS FOR RAC AWARDS REQUIRED BY STATUTE**

According to OAM's Regional Contract Placement Branch, A&E type contracts were the most appropriate mechanism for awarding RACs and statutory requirements prescribed that A&E contracts would be used to procure response action services. The Determination and Findings for RACs documented that Agency contracting officials believed it impractical to secure the kind and quality of services required without the use of A&E contracts.

According to the FAR, A&E services are professional services of an architectural or engineering nature which are required to be performed or approved by a person licensed, registered, or certified to provide such services. OMB officials wanted to know why the entire RACs SOW was awarded as A&E and whether other Federal agencies contracted in a similar manner.

#### **Current Superfund Legislation Limits Contracting Options**

Contracting options for RACs were limited by Superfund legislation which mandated implementation of Brooks Act procedures and use of A&E services for response actions and related activities. Section 119(f) of the Superfund Amendments and Reauthorization Act (SARA) of 1986 requires that:

Response action contractors and subcontractors for program management, construction management, architectural and engineering, surveying and mapping, and related services shall be selected in accordance with title IX of the Federal Property and Administrative Services Act of 1949 [commonly referred to as the Brooks Act].

The Brooks Act requires evaluation of technical qualifications first over other factors, such as cost reasonableness. However, the inability to obtain a reasonable cost with the highest technically qualified firm is a basis for terminating negotiations with this firm and opening negotiations with the second ranked firm.

We asked OAM officials whether there were portions of RAC work that were not of an A&E nature or that could be procured under other contracting means. OAM officials and at least one regional CO responded that certain portions of the RACs, such as enforcement support and preliminary site assessments, could be separated out and procured in another manner. However, these tasks were already included in other active EPA non-A&E contracts. EPA officials acknowledged that there is some overlapping of RACs and other contracts to ensure a contract vehicle remains available as contracts expire. Another OAM official stated that although most remedial activities do not require a licensed A&E certification, use of this mechanism is critical to remedy selection and design preparation. Project continuity, or having one contractor perform the entire effort from beginning to end was to establish contractor accountability for schedule delays, cost overruns, and public dissatisfaction. At least one OAM official confirmed that this method of procurement (A&E contracts) is more costly. Regions prefer to use other contract mechanisms, when available, because contracts like ARCS and RACs, do cost more to use. However, some Agency program and contracting personnel believe A&E contracts will save money in the long run, because the Agency will be able to hold one contractor accountable for all cleanup activities at a Superfund site. Also, EPA officials pointed out that potential PRP litigation made use of certified engineering services the best mechanism. Work done by A&E contractors was deemed more defensible in court.

In summary, RACs were procured as A&E contracts because of the statutory requirement. Additionally, OAM officials believed it was more beneficial to have all Superfund cleanup requirements under one contract. However, they were not opposed to a contracting mechanism, other than A&E, for Superfund work if it were permitted by law.

# Use of A&E Contracts By Other Agencies

Information provided by the COE disclosed that the COE has several contract vehicles available for remediation work that are not A&E contracts. They indicated that these contracts are used for services such as removal of contamination, construction (incineration, bioremediation, etc.), environmental impact statements, and compliance assessments. The COE advised us that they use A&E firms whenever issues of liability, or life and property, are involved. COE officials stated design work must be done by an A&E firm. The COE also listed work in the categories of preliminary assessments, site investigations, remedial investigations, sampling and analysis as A&E contract work. The COE's Total Environmental Restoration Contracts (TERC) are "cradle to grave" contracts like the RACs, and are not A&E contracts. The COE provides contract management and oversight on EPA's large Superfund sites. On EPA sites, the COE normally uses TERCs for the remedial action or construction phase of the cleanups and in that phase as remedial action contractors, not construction management. The COE engineers provide construction management and oversight for the TERCs contractors. The Navy and DOE also use non-A&E contracts in hazardous waste cleanup activities.

When EPA enters into an interagency agreement with other Federal agencies to perform hazardous waste clean-up activities, the contracting mechanism used by the other Federal agency must meet the requirements of SARA Section 119(f). Therefore, if the other Federal agency performs the work specified in SARA as A&E, and a different form of contracting was used (other than A&E), there may have been a violation of the law. EPA needs to be aware of the contracting mechanism being used to perform various aspects of site clean-ups, to ensure that the appropriate contracting mechanism is being used by other Federal agencies.

# RECOMMENDATIONS

We recommend the Acting Assistant Administrator for Administration and Resources Management:

- 6-1 Require that COs consult with cognizant audit personnel prior to contract negotiations concerning revised indirect rates, which are higher than initially proposed or may result in a rate higher than the audit recommended rate.
- 6-2 Require COs to document efforts made to resolve outstanding audit issues relative to indirect rates and prepare justifications for approving rates while resolution is still pending.
- 6-3 During the forthcoming Superfund reauthorization, seek a change in Section 119(f) of SARA to permit use of contract types, other than A&E, for program management, surveying and mapping, and related services.
- 6-4 Meet with other Federal agencies and obtain bench marking information on contract

mechanisms used for hazardous waste cleanup. Determine Superfund cleanup activities that may be feasible for non-A&E contracts.

# AGENCY COMMENTS AND OIG EVALUATION

OARM expressed some disagreement with our conclusions and recommendations regarding indirect rates for RACs. OARM did not express any substantial disagreement with the other findings and recommendations presented in Chapter 6. OARM did indicate that certain statements in the chapter needed to be clarified or corrected. Changes were made as considered appropriate.

Draft report recommendations 6-3 and 6-6 were dropped from the final report. Draft recommendation 6-3 essentially duplicated Recommendation 3-5 in Chapter 3 of the final report. Recommendation 6-6 related to a determination by EPA that the COE was complying with SARA Section 119(f) in the use of A&E contracts for remediation on EPA's Superfund sites. Information received from the COE in response to draft report clarified that the COE's use of non-A&E contractors, such as TERCs, was for work which Section 119(f) did not require to be done by A&E contractors.

A summary of OARM's comments on Chapter 6 findings and recommendations are presented in Appendix II along with the OIG's evaluation of these comments

(This page intentionally left blank.)

#### AGENCY RESPONSE

#### MEMORANDUM

| SUBJECT: | Draft Report E1SKF7-04-0037<br>OMB Requested Review of EPA Contracting       |
|----------|------------------------------------------------------------------------------|
| FROM:    | Alvin M. Pesachowitz<br>Acting Assistant Administrator                       |
| TO:      | Elissa R. Karpf<br>Deputy Assistant Inspector General<br>for External Audits |

The Office of Administration and Resources Management (OARM) and the Office of Solid Waste and Emergency Response (OSWER) appreciate the opportunity to respond to the concerns raised in the subject draft audit report. We value the Office of the Inspector General (OIG) as an independent management control and take seriously any concerns the OIG might raise.

To the extent possible in the time frame allotted, we have looked into the issues raised in the draft audit report. We believe that we are acting properly and are continuously improving the effectiveness and efficiency of contract management. While we agree with many of the findings in the draft report, we also believe the Agency has made significant progress in terms of the visibility and quality of contracts management. As indicated, progress is continuous as we proceed with several initiatives to streamline the process and increase management integrity and accountability.

Detailed comments on the draft report are attached. These issues are provided in the materials that follow. To simplify our response, the findings and recommendations are discussed by subject in the order of appearance in the report. Thank you for considering our comments in preparation of the final report.

If you have any questions or comments, please call me at 260-4600, or have your staff call Betty L. Bailey, Director, Office of Acquisition Management, at 202/564-4310.

Attachment(s)

# **ATTACHMENT 1**

# **GENERAL CONCERNS**

We have taken the liberty to clarify, chapter by chapter, what we believe are misperceptions or misunderstandings on the part of the OIG. Even so, there are several comments we would like to make that apply to all of the chapters of the draft audit report.

We believe the OIG's use of the term work assignment (WA) to encompass all task order types fails to recognize the inherent differences between WAs, delivery orders, and task orders. One significant difference is that WAs are not funded; the contract is funded. Not so with delivery orders. Hence, while delivery orders and task orders issued under indefinite delivery/ indefinite quantity (ID/IQ) contracts are instruments that create obligations against which appropriations may be expended to liquidate the obligations, WAs issued under level-of-effort (LOE) contracts do not create obligations and are not funding instruments. Rather, under LOE contracts, monies for performance of contract tasks are obligated at the contract level and WAs are management tools used to control the flow of work and expenditure of those contractually obligated monies.

Keeping in mind that contracts are **awarded**, WAs are **issued**, and work plans are **approved** should help limit the confusion. WAs are not awarded; the only time a WA might be considered awarded is when multiple contracts are awarded under the Federal Acquisition Streamlining Act (FASA) and the WA is issued and competed among the contractors receiving one of the initial multiple award contracts.

Finally, we believe the OIG should recast the reasons behind the OMB request to review various contracting issues. As we discussed, we believe the language should be clarified to reflect the specific Passback language:

"Agency-wide Contract Issues - The Office of Inspector General, working with the Office of Acquisition Management and appropriate program offices, is requested to review contracting procedures and implementation for Superfund and other agency contracts relating to: 1) use of fixed price contracts; 2) accuracy of independent government cost estimates; 3) contract capacity; 4) use of award and incentive fees; 5) use of completion vs. term forms; 6) length of base period and option periods; and 7) other items at the discretion of the review team. A preliminary draft of the report is requested to be forwarded to OMB with submission of the FY 1999 budget request in September of 1997."

## **CHAPTER 2**

# INDEPENDENT GOVERNMENT COST ESTIMATES NOT ALWAYS PROPERLY PREPARED OR EFFECTIVELY USED FOR COST CONTROL

This chapter discusses the development and utilization of Independent Government Cost Estimates or IGCEs. The OIG reports that IGCEs were not appropriately prepared or adequately used in contract negotiations.

#### **Agency Response**

#### 1. IGCEs Were Not Used as a Negotiating Tool

The OIG implies that the Agency did not do a proper job in negotiating its work assignments based on the OIG's perceived use and accuracy of an IGCE. Numbers alone do not tell the whole story, and recognition should be made that prices negotiated were considered to be fair and reasonable. While we agree that there are improvements to be made in the development of good, realistic IGCEs, we believe, however, that the Agency has come a long way in this area from several years ago when IGCEs were rarely done.

We believe that IGCEs are most effectively used when they are used to *monitor* costs, not as indicated in the report for "control" purposes. It is recommended that the word *control* be replaced with words which indicate that IGCEs may be used to *monitor* the cost of performance. EPA's Guide for Preparing Independent Cost Estimates" at 3.B. states:

"A good IGCE can be used to prepare the budget, prioritize areas of concern and monitor the work in process. You must always keep in mind that the IGCE is an estimate and may differ from final cost."

The draft report also states that providing contractors with the LOE estimate in a WA (as opposed to a TO or DO) reduced the effectiveness of the IGCE as a cost control mechanism and compromised the IGCE as an independent estimate since the contractor is being provided information on fund availability.

As the OIG indicates later in the report, the estimate for the WA and the amount of available funds are irrelevant to each other. We don't believe that providing the government estimate of total LOE hours results in contractor proposals based on available funding. This occurs only if the total hours set forth by the government when the WA is issued is based on the available funding. The contractor's cost estimate will be based on the hours stipulated regardless of the government's basis for the estimate of hours.

In addition, the draft report makes little distinction between work assignments, task orders, or delivery orders. Little distinction is also made between LOE versus completion

efforts. While we do not disagree with the direction the OIG appears to be going, i.e., that more completion type efforts are desirable, in a true LOE WA, we must provide the contractor with the maximum number of hours (at the WA not task level). LOE WAs are "best efforts" assignments. Without the government estimate on the number of hours needed, the contractor has no way of gauging the magnitude of the WA. In fact, Federal Acquisition Regulation (FAR) language on term form contracts repeatedly states that the contractor is to devote a "specified" level of effort.

The OIG also makes the assumption that completion form WAs may be issued under a LOE contract. This is true only if the contract was awarded as such or allows for different types of task orders. Otherwise, WAs issued under an LOE contract require the contractor's best effort. Hence, the OIG's statement that contractors are not "held accountable for completion or individual tasks" fails to take into account that we are using cost reimbursable, term form LOE contracts. We believe the OIG should be careful not to mix contract types in the report.

We agree, however, that if WAs are truly written as completion efforts (assuming the contract allows them to be issued under the contract) it would not be appropriate to provide the contractor with an estimate of the hours anticipated.

# 2. IGCEs Lacked Detail Necessary for Effective Cost Control

The draft report is very critical of the lack of detail of IGCEs at the task level and fails to mention EPA's "Guide for Preparing Independent Cost Estimates." The Guide provides for either the "top-down" or "bottoms-up" method for preparing an IGCE. When the top-down method is used, costs will rarely if ever be broken out at the task level. This may be appropriate depending on the requirement and contract type.

The draft report also indicates that IGCEs which do not provide for a breakout of costs at the task level prevent any accumulation of individual task costs for historical purposes. IGCEs have no impact on the accumulation of actual costs. The reporting requirements of the contract dictate whether cost details are provided to the Government at the task level.

It is also noted that EPA provided additional hours to allow for completion of tasks already started. The report concluded that this practice increases the potential for contractors to continuously bill for hours without being held accountable for completion of individual tasks. Here again, if the comment was intended to apply to WAs, LOE contracts are a "best efforts" arrangement.

# 3. RACs IGCE Process Needs Improvement

We believe that the OIG misunderstands the role and use of IGCEs in the A/E process and award of response action contracts (RACs). The draft report's statement concerning EPA's emphasis on technical proposals, and less emphasis on negotiating contract costs, is by definition true and should not be surprising. This is so because, as noted elsewhere in the report, we are required by statute to obtain such A/E services using Brooks Act procurement procedures. Those procedures dictate emphasis on the most highly qualified technical proposals as opposed to lowest cost.

We are concerned with the discussion referring to contractors preparing the government's cost estimate. We note that it is common industry practice for the design contractor to prepare a construction cost estimate along with the plans and specifications for the facility or remedy they were commissioned to design. This estimate helps provide a benchmark for judging the adequacy of the design, but is not intended to be blindly accepted by EPA as the Government's cost estimate as the report implies.

OSWER Directive 9202.1-12, jointly signed by OSWER and OAM personnel and issued in July 1993, makes a clear distinction between the contractor's estimate at the remedial design stage and the IGCE. This guidance document describes methods that should be used to develop the government's construction cost estimate, including use of in house expertise if available or use of other Federal agencies such as the Army Corps of Engineers (COE). If the auditors have found that this guidance was not being followed, and that the contractor's estimate was being used as the IGCE with no review or modification, then the clarification needs to be made.

While we agree that the inexperienced or untrained personnel should not be preparing IGCEs, we do not agree that a temporary Government employee should not prepare an IGCE just because the employee is temporary. There may be cases where a temporary employee is just as qualified as permanent staff, if not more so. An employee's temporary status is irrelevant, as long as the employee has the proper qualifications.

### 4. No process for Accumulating Historical Contract Costs or Evaluating IGCEs

In general, the draft report reflects an over dependence on historical workload data in developing accurate cost estimates and IGCEs. We do not dispute the importance of historical cost data, however, other factors and/or variables are equally important. An over reliance on historical data does not allow for adjustments due to past inefficiencies of contractors, improvements in productivity, or changes in technology.

This section of the report also discusses cost estimating techniques and procedures used by the COE. The historical cost data base referred to may be the microcomputer computer-aided cost engineering system (MCACES). The EPA Superfund program contributes information to this system. We also participate in the interagency cost estimating workgroup and have helped develop several of the cost estimating tools such as the remedial action cost engineering and requirements system (RACER) and MCACES. In fact, we mandate the use of MCACES in our RACs to estimate remedial action costs during remedial designs.

### **OIG Recommendations**

The Acting Assistant Administrator for Administration and Resources Management in coordination with other appropriate senior Agency managers:

### 2-1 Obtain cost estimator training for contracting officers (COs) and project officers (POs) similar to that received by COE contract managers.

We agree that cost estimator training would be a valuable tool for POs and work assignment managers (WAMs). We believe that COs should be deleted from the recommendation since this is not a CO function, but more appropriate for SROs and program offices. We will research cost estimator training and make the appropriate recommendations to program offices.

It should be noted that specific training in developing detailed IGCEs to all POs and WAMs using models like the COE's MCACES and RACER would be best suited for Regional POs and WAMs. This type of training was provided several years ago and could be presented again.

- 2-2 Emphasize to program staff that IGCEs should include a detailed cost analysis of each task and/or subtask to be performed under a contract or WA as a basis for effective cost negotiations and as a mechanism for tracking actual costs for specific work.
- 2-3 Instruct POs and COs not to accept IGCEs that do not include estimated costs for individual contract or WA tasks, or that do not otherwise comply with EPA guidance. Emphasize to COs that IGCEs are a cost control tool that should be effectively utilized during contract and WA negotiations

As we noted earlier, IGCEs are not a cost control tool but a tool to monitor costs. We agree that project officers or contracting officers should follow current guidance provides for both the "bottoms-up" and "top-down" method of estimating when preparing IGCEs. The "top-down" method will not provide a breakout of anticipated costs at the task level. In addition, OSWER Directive 9202.1-12 states that "estimates must, at a minimum, be broken out by task and subtask as outlined in the statement of work (SOW) . . ."

OAM will issue a memorandum to program officials regarding IGCE issues raised by the OIG, and will emphasize that were appropriate, cost analyses of tasks and/or subtasks should be included in the overall IGCE. OSWER will also reemphasize or reissue the OSWER guidance as appropriate, to ensure that IGCEs contain the necessary detail to be used as an effective negotiating tool.

## **2-4** Develop processes to evaluate IGCEs and accumulate historical contract workload and related cost information in a database format. Form focus

### groups, to include program staff, to identify existing impediments to developing historical cost databases on an individual program basis.

This information is already called for in RAC contract work assignments, and options are now being considered for how best to utilize that information in an interactive data base format. The goal is to form a data base that will capture our own cost information so that it can be used as an IGCE resource, and to have this data base feed the Interagency Historical Cost Analysis System (HCAS) that is being developed by the COE and others.

The SROs of each AA-ship meet periodically as the Resource Management Committee to discuss various resource issues. At the next meeting in October, OAM and the OIG will make a joint presentation to address this and other OIG reviews. OAM will include the database issue in that discussion.

## 2-5 Instruct program staff to seek available cost information from other Federal agencies, such as the COE, or private entities that are contracting for similar work when preparing IGCEs.

Several of the Regional offices already use the COE or the Bureau of Reclamation for the types of assistance noted above. OSWER is currently exploring ways to encourage other Regional offices to utilize the cost estimating expertise of these Agencies for support.

In addition, in its memorandum to program officials regarding IGCE issues raised by the OIG, OAM will highlight the types of assistance that is available through other Federal agencies.

2-6 Develop model SOWs to determine if ranges can be established for contingencies, or information gathered to clarify and define contract tasks and resolve uncertainties involved in work currently performed under LOE contracts.

OSWER believes that their ability to comply with this recommendation is dependent on the ability to create the historical cost data base referred to in recommendation 2-4. If a data base of historical RACs costs is developed, cost contingencies for individual tasks could be developed.

We agree that model SOWs can be helpful. We believe, however, that in many cases, it is our inability to define specific contract tasks and resolve uncertainties which led to the award of an LOE contract. As opportunities present themselves, we will aid program offices in developing model SOWs. We will bring this issue to the attention of the Resource Management Committee for their consideration.

2-7 Instruct POs and WAMs not to use contractors and inexperienced, temporary employees to prepare Government cost estimates. Require that program personnel preparing IGCEs have the necessary experience and training to ensue that accurate, detailed cost estimates are developed. In its memorandum to program officials, OAM will also emphasize that experienced and properly trained Government employees should be preparing IGCEs and that contractors should not be involved.

### **CHAPTER 3**

### EPA HAS NOT MADE OPTIMAL USE OF MORE EFFICIENT CONTRACT TYPES

The OIG maintains that EPA continues to rely on cost-reimbursable LOE contracts that essentially buy labor hours and place the majority of risk for performance on the Agency. Consequently, the OIG believes that EPA may also be paying excessive costs for services that could be procured under different contract types.

### **Agency Response**

### 1. Tasks Conducted Under Cost-Reimbursable LOE Contracts Could Be Awarded Under Contract Types More Favorable to the Government

We agree that more WAs issued under LOE contracts could probably be issued as completion, firm, fixed-price, or performance based efforts. We are not convinced, however, that the extent to which those opportunities exist is as great as the OIG believes. Even if those opportunities do exist, they carry with them significant vulnerabilities Government-wide.

For example, in December 1996, the OIG forwarded to us the article "Combining Cost-Plus and Time and Materials Contracts to Earn Excess Profits: A Case Analysis," with its comments against using more than one type of WA under an LOE contract type due to the increased potential for contractors to earn excess profits. (See Attachment 2.) In addition, Attachment 3 includes an article from the September 1997 Contract Management Magazine published by the National Contract Management Association also arguing against the use of fixed-price and performance based contracting arrangements in the environmental arena as inappropriate for the type of work at hand. Moreover, despite espousing the opposite, the promise from the Hazardous Waste Action Coalition of sample SOWs for performance-based contracting in the environmental arena has never materialized. EPA has been working with several Government and industry groups to identify best practices in this arena and will continue to do so.

### 2. Potential for Completion Form Contracting

We agree that there is a potential for more completion form WAs under RACs contracts. However, only Region 7 has had any success with the completion type of WA - not yet enough to draw the conclusion that completion form efforts are an appropriate contracting mechanism for many more actions. Regardless of the historical knowledge we have accrued under the Superfund program, the variability of site conditions will always have an impact and lend a great deal of uncertainty to a cleanup effort. Numerous change orders, as noted in Attachment 3, are costly in terms of valuable scarce resources.

#### 3. Barriers/Limitations affecting the Use of Other Contract Types - Funding

The discussion of funding indicates the OIG's position that 48 CFR 16.306 suggests that work performed under completion contracts and work assignments is considered non-severable. The Superfund program is funded with no year appropriations, and such appropriations are available for obligation without any fiscal year limitation. Thus a multi-year non-severable work assignment can be incrementally funded because the no year appropriation remains available until it is expended. On August 28, 1995, the Director of the OAM Superfund/RCRA Procurement Operations Division issued a memo clarifying the fact that completion form work assignments under RACs may be incrementally funded.

The statement that the IG "could not identify any program or regional office commitments to plan and propose more completion form, fixed-price, and/or performance-based contracts" is factually incorrect. The OSWER Office of Emergency and Remedial Response (OERR) has made a strong commitment to OMB to implement performance based service contracting (PBSC) pilots within the Superfund program. OERR's continues to work with OMB on this initiative.

The Office of Management and Budget's (OMB's) FY 1998 Passback tasked EPA to prepare one performance-based cleanup RAC contract and one performance-based cleanup contract for Emergency and Rapid Response Services (ERRS) as a pilot project within eight months. In response to this, OERR met with OMB representatives to offer an alternative approach for the application of PBSC within the Superfund program. OERR's approach was to canvass the ten Regional offices to ascertain FY 97 candidate sites (i.e., at the work assignment and/or delivery order level) that offered the type of work and contracting vehicles appropriate for the successful application of PBSC.

Consequently, OERR conducted conference calls with designated leads in each Region and found eleven (11) candidate sites offering both remedial and removal PBSC opportunities within the Superfund program. OMB reviewed these sites, but since most of them were sites where the prime contractor was subcontracting the cleanup work, OMB requested that we try to identify candidate sites where the prime contractor has direct responsibility for the cleanup and where opportunities exist to influence both the design and construction as PBSC. OERR is working closely with the Regional designated leads to identify new FY 97 PBSC candidate sites, as well as FY 98 sites that meet OMB's criteria.

Currently, EPA has received approval to implement the principles and techniques of PBSC for Residential Cleanup Services at three pilot sites bordering both Regions 6 and 7. During the week of August 11, OERR representatives together with COE personnel met with EPA Region 6 and conducted a two day PBSC Workshop. The purpose of this workshop was to develop a PBSC ordering instrument (i.e., work assignment and/or delivery order) and other ancillary documents to acquire Residential Cleanup Services for use at the three pilot sites. The results of our collective efforts were provided to OMB for review and approval at our meeting on Thursday, September 4, 1997.

Finally, the OAM and OERR are sponsoring a five day training course offered by the Naval Center for Acquisition Training (NCAT) to Regional and headquarters personnel to

educate them on PBSC concepts and techniques. The first of several planned training sessions will be conducted on September 8 -12 in Washington, D.C.

### **OIG Recommendations**

The Acting Assistant Administrator for Administration and Resources Management in coordination with other appropriate senior Agency managers:

## **3-1** Establish goals for each Headquarters program office and each regional office for awarding more of its extramural funds under completion form, performance-based and/or fixed-price contracts.

In the upcoming October meeting of the Resource Management Committee, OAM and the OIG will make a joint presentation to the Senior Resource Officials representing each of the Agency's AA-ships. At that time, this and other issues will be discussed.

Also, as part of the development of the Superfund Contracts 2000 Work Group initiatives, we will continue to work with the program and encourage movement towards completion form performance-based service contracts.

## **3-2** Require Senior Resource Officials (SROs) to justify awarding contracts that do not comply with OFPP Policy Letter 91-2 regarding PBSC.

Not all requirements are suitable for PBSC and requiring the SRO to justify all non-PBSCs is contrary to streamlining the pre-award process, will increase an already extended lead time. We believe the training that is already scheduled, coupled with the initiatives currently underway by OAM and OSWER will help to address the issue. In addition, we will add PBSC to our list of issues to be presented to the RMC in October.

### **3-3** Establish work groups of both OAM and program officials to:

a. develop model performance statements of work for recurring services that would facilitate increased use of completion form, fixed-price, and performance-based contracts. At least one workgroup should address tasks of a technical support nature.

Several Government-wide work groups have developed sample SOWs which are available on the Internet and have been identified to contracting and program officials.

Regardless, this is also an issue that will be identified at the October RMC meeting for discussion with the various program offices.

## b. develop a strategy for meeting OMB's contract reform goals. This strategy should include identifying candidate services for conversion

### from LOE, and deciding on appropriate contract types for facilitating this conversion.

OAM is currently working on over 50 separate initiatives to help meet OMB's contract reform goals, of which PBSC is one. We have embarked on a plan of continuous improvement, including choosing the appropriate contract type for the requirement.

In addition, the PBSC work group with members of OAM, the program office, and OMB currently exists to identify PBSC specific WA candidates. The work group is projected to identify the fiscal year 1998 PBSC sites by the end of the first quarter.

## **3-4** Provide training on completion form and PBSC to both contracting and program officials.

PBSC training, provided by the naval Acquisition Training Center, is scheduled to begin September 8, 1997 for both contracting and program officials. The training will be provided to all contracting officials and provided for other program officials as well.

# **3-5** Request a waiver from the Comptroller General to the requirement to fully fund completion form WAs at time of award. Such a waiver could resolve program office concerns over funding this type of WA and increase the Agency's use of completion form contracting.

Since this is based on the Bona Fide Needs Rule, a statutory requirement which cannot be waived, it was agreed that this recommendation would be withdrawn.

**3-6** Modify existing RACs contracts to establish an appropriate base amount for completion form as currently exists for term form, LOE contract actions. In addition, future RACs awards should include a minimum completion form usage amount.

We do not believe that it is feasible, or in the Government's best interest, to re-negotiate RACs, as doing so will obligate the Government to meet stated minimums for completion level amounts which will only increase the Government's fiscal liability.

As part of the development of the Superfund Contracts 2000 Work Group initiatives, we will work with the program to address this issue.

# **3-7** In coordination with the director, OAM, and the Director, Office of Emergency and Remedial Response (Superfund), perform benchmarking to determine appropriate uses of completion form assignments for RACs activities other than mobilization.

As noted above, OAM and OSWER are working together on several initiatives which will address the appropriate uses of completion form assignments for RACs contracts.

## **3-8** Review coding of contract types in the Contract Information System (CIS) to ensure that fixed-price and ID/IQ contracts are accurately identified.

As more and more of our contracts are awarded through the Integrated Contract Management System (ICMS), our dependence on CIS diminishes. At this time, we do not believe that it is in our best interest to devote the resources to altering CIS.

### **CHAPTER 4**

### AWARD FEE CONTRACTS GENERALLY PROVIDED LIMITED INCENTIVE FOR SUPERIOR PERFORMANCE

This chapter of the report discusses the benefits of CPAF-type contracts and expresses concern over the decline in the use of CPAF and the increase in use of fixed fee (CPFF) type contracts.

By way of clarification, please note that available award fees are calculated based on hours ordered not costs billed. The latter would present a cost-plus-percentage-of-cost situation which is prohibited.

#### **Agency Response**

#### 1. Limited Implementation of Revised Award Fee Guidelines

The draft report is critical of the Agency as a result of the overall decline in the number of award fee contracts. The report attributes the decline to the new administrative requirements and award fee restrictions implemented by the Agency. In fact, these restrictions were developed in part to respond to earlier OIG reviews which were extremely critical of the Agency and our mismanagement of award fee contracts.

Overwhelmingly, the decline of the CPAF and the increased use of CPFF is the result of the great administrative burden on EPA personnel associated with CPAF contracts. The costs of this effort must be weighed against the expected benefits resulting from use of the CPAF contract type. When the costs are greater than the expected benefit in terms of motivating contractor performance, use of the CPAF type contract is not appropriate.

Contracts Management Manual (CMM) Chapter 15 serves to strengthen and reinforce the limitations set forth in FAR Part 16 regarding use of award fee contracts. FAR 16.405-2(c)(3) specifically states that no cost-plus-award-fee contract shall be awarded unless the contract amount, performance period, and expected benefits are sufficient to warrant the additional administrative effort and cost involved. The CMM requires that a determination be made that the contract is likely to be less costly and that it is impractical to obtain the supplies or services without the use of this type of contract.

In addition, the conclusion drawn by the OIG does not take into account attempts by the Agency to split large mission contracts into smaller contracts which were no longer suitable for award fee contracts.

### **OIG Recommendations**

The Acting Assistant Administrator for Administration and Resources Management in implementing Recommendation 3-3 in Chapter 3 of this report:

**4-1 Instruct the workgroups to:** 

## a. Identify impediments to the use of CPAF type contracts and opportunities to streamline the related administrative processes.

As requirements for CPAF type contracts are identified, we will look into potential streamlining initiatives. We will also present this to the RMC at the October meeting for further discussion.

### b. Identify appropriate candidate services for an award under CPAF.

When each new contract action, the CO in conjunction with the program office, determines the appropriate contract type for the requisite requirement. We believe that this is the proper way the contract type decision should be made.

## c. Develop award fee plans that provide proper incentive for superior performance and that, for LOE contracts, base award fees on some element other than costs billed.

As noted earlier, award fee awarded in a LOE contract is based on LOE hours delivered during the evaluation period, not costs billed. We believe that the current policy as written provides proper incentive for superior performance.

## d. Develop CPAF contracts for candidate services that meet requirement of PBSC.

As noted in (b) above, CPAF contracts will be developed for requirements as appropriate.

### **4-2** Evaluate existing CPAF contracts for possible modifications that incorporate current award fee procedures.

The policy incorporating the current award fee procedures is now two years old. We do not believe that it is in the Government's interest to modify existing contracts since most of them should be expiring soon.

### **CHAPTER 5**

### CONTRACT PERFORMANCE PERIODS AND CAPACITY DID NOT PREVENT COMPETITION

We believe that the OIG correctly concludes that there is no correlation between the size and performance periods of EPA contracts, and the competition that occurred during contract award.

The OIG observes, however, that an analysis of CIS data identified potential excess capacity in EPA contracts. We would like to note, however, that the Agency has already significantly reduced the excess capacity on its contracts, and continues to make efforts to continue this downward trend.

### CHAPTER 6 OMB CONCERNS SPECIFIC TO RACs

This chapter addresses several questions posed by OMB regarding Superfund's Response Action Contracts or RACs. In general, the OIG found that RACs contracts were awarded with adequate competition and in accordance with prescribed procurement procedures. Contract clauses related to regional cross-over by contractors do not, however, allow for competition of RACs WAs.

### **Agency Response**

### 1. Indirect Rates For RACs Not Effectively Negotiated

We disagree with the implication that using unaudited rates will cost the Government more. These are provisional billing rates, not final rates, which will be audited and will represent the actual cost to the Government. Provided the billing rates are not too far off from what the final rate are (which can happen whether the rates are audited in the preaward stage or not), the impact will be slight, other than potentially paying too much before closeout, and having to recoup it later.

### 2. Use of RACs Regional Crossover Authority to Increase Competition May Not Be Beneficial to EPA

At pages 49-51 of the draft audit, the OIG discusses whether the regional crossover authority in RACs could be used to compete RACs work assignments across regions. The OIG states that it believes that the crossover provision could legally be used in this manner, however, the provision was intended for use only in conflict of interest (COI) situations and capacity shortfalls. The OIG concludes that, based upon its limited review of possible use of regional crossover authority, competing RAC WAs may not increase the efficiency and effectiveness of RACs operations but rather, may increase costs, create an administrative burden and negatively impact program accomplishments.

We do not disagree with the OIG's conclusion that a hypothetical competition of WAs issued under RAC contracts, either within or across regions, may not increase the efficiency and effectiveness of RACs operations, but rather, could result in increased costs and administrative burdens. However, this audit section incorrectly states that WAs may be competed among RACs, either within or across regions.

The Agency's active RAC contracts do not provide for WA competition, nor were they intended to do so. Rather, as the OIG correctly notes, the regional crossover provisions in these contracts were designed to enable EPA to utilize another contract to obtain RAC services in those instances where COI concerns or capacity shortfalls prevent a RAC from performing a particular WA. Competing WAs among RACs would be such a significant change to these

contracts, that to do so would require EPA and the affected RACs to negotiate bilateral contract modification(s). This would undoubtedly increase administrative burdens associated with the RAC contracts and could result in increased costs to the Agency.

### 3. Use of A&E Contracts for RAC Awards Required by Statute

We agree that Section 119(f) of the Superfund Amendments and Reauthorization Act (SARA) of 1986 requires the implementation of Brooks Act procedures and the use of A/E services for response actions and related activities.

We believe that there is a fundamental difference in the nature of the work being done under the COE's Total Environmental Restoration Contracts (TERCs) versus the EPA RACs. During the development of the TERCs, COE personnel had discussions regarding the Brooks Act and its application to these contracts. The COE ultimately determined that the focus was clean up and not program management, construction management, A/E services, surveying and mapping, or related services. It was for this reason that the TERCs were not awarded as A/E contracts.

Within the COE contract tool box, there are also A/E contracts (as noted in the report) which are used when the product is a design, investigation, or study. EPA uses the RACs for more of these services in the conduct of RI/FS and remedial design work. When assigned a remedial action, the RAC's responsibility is limited. We therefore do not believe a direct comparison can or should be made between the COE TERCs and the EPA RACs.

### Recommendations

The Acting Assistant Administrator for Administration and Resources Management:

6-1 Require that COs consult with cognizant audit personnel prior to contract negotiations concerning revised indirect rates, which are higher than initially proposed or may result in a rate higher than the audit recommended rate.

COs will continue to seek advice and counsel from cognizant audit personnel; however, the auditors do not determine the final rates or direct the method of charging. Such final decisions are within the discretion of the CO. Since all rates billed are provisional until final audit, and annual submissions are required by the contractor to determine rates, we do not believe that excessive indirect costs are paid under RACs.

## 6-2 Require COs to document efforts made to resolve outstanding audit issues relative to indirect rates and prepare justifications for approving rates while resolution is still pending.

It is OAM's standard practice to have COs follow-up on indirect cost issues after contract

negotiations and prepare contract file documentation. We will remind COs of the importance of doing this consistently.

## 6-3 Modify existing RACs contracts to incorporate completion form as part of the required base usage amount.

This recommendation is essentially the same as recommendation 3-6. In order to modify existing RACs to establish an appropriate base amount for completion form as currently exists for term form, we believe that the terms and conditions of each individual contract would have to be renegotiated to include provisions allowing completion-form WAs, as well as the appropriate base amounts. We do not believe that it is feasible, nor is it in the Government's best interest, as doing so will obligate the Government to meet stated minimums for completion level amounts which will increase the Government's fiscal liability.

OSWER also disagrees with this recommendation and recommendation 3-6 which are essentially the same. It believes that the use of completion form work assignments should not be a requirement that is established in the contracts, but rather established as a management policy. In other words, use of completion form work assignments is an EPA management issue and not a contractual issue.

## 6-4 During the forthcoming Superfund reauthorization, seek a change in Section 119(f) of SARA to permit use of contract types other than A&E for program management, surveying and mapping, and related services.

All elements of Superfund contracting are being examined in the Superfund Contracts 2000 Work Group. The work group is discussing separation of the remedial work from the predesign site assessment work. To the extent that it is logical to break out services, we will use separate contract vehicles to acquire these services.

## 6-5 Meet with other Federal agencies and obtain benchmarking information on contract mechanisms used for hazardous waste cleanup. Determine Superfund cleanup activities that may be feasible for non-A&E contracts.

On a continuing basis, EPA is exploring other agencies' contract strategies and methods for the purpose of benchmarking Agency Superfund contracting techniques. EPA believes its acquisition strategies and contract types provide value equal to those of other agencies' contracts. This is another issue to be addressed by the Superfund Contracts 2000 Work Group.

## 6-6 Review the current interagency agreements to determine whether the requirements of SARA Section 119(f) are being met.

As we discussed subsequently, we do not believe that a review of current interagency agreements is the correct approach, especially since no instances were found in which an incorrect contracting mechanism was used by another Federal agency.

Regardless, OAM will coordinate with the COE to ensure the proper usage of A/E contracts in accordance with SARA 119(f).

APPENDIX I Page 21 of 28

APPENDIX I Page 22 of 28

APPENDIX I Page 23 of 28

APPENDIX I Page 24 of 28

APPENDIX I Page 25 of 28

APPENDIX I Page 26 of 28

APPENDIX I Page 27 of 28

APPENDIX I Page 28 of 28

### OIG EVALUATION OF AGENCY RESPONSE

Specific OARM comments on the report's findings and recommendations as presented in Appendix I are summarized below along with the OIG's evaluation of these comments.

### **Chapter 2 - Comments on Findings**

### IGCEs Were Not Used as a Negotiating Tool

OARM disagreed that IGCEs should be used for cost control as reflected in the draft report. OARM believed that IGCEs were most effective when used to monitor costs. OARM cited EPA's IGCE guidance which stated: "A good IGCE can be used to prepare the budget, prioritize areas of concern and <u>monitor</u> the work in process (emphasis added)."

While we agree that a good IGCE does represent a valuable tool for monitoring post-award contract costs, the finding addresses preaward use of the IGCE. FAR 15.805-3(c)(4) and 15.807(a) discuss the usefulness of IGCEs as a tool for cost analysis and establishing prenegotiation objectives. Therefore, we substituted the term "cost analysis" for "cost control" where appropriate.

OARM disagreed that providing contractors with the government estimate of LOE hours used in the IGCE would necessarily compromise the IGCE process. OARM did agree that when the government's labor hour estimate is based on available funding, the effectiveness of the IGCE could be reduced. OARM further stated that, in a true LOE WA, the government must provide the contractor with the estimated hours because such WAs are best effort assignments and the contractor has no other way of gauging the magnitude of the WA.

As indicated in the report, many IGCEs for LOE WAs reviewed at RTP, Cincinnati, and Washington seemed to be based on the budgeted or available funding for each WA. A member of the Task Force that developed EPA's IGCE guidance stated that LOE IGCEs should be treated no differently that IGCEs for completion form type contracts. Although we are essentially buying hours, a good SOW will provide a basis for the types of labor required for the hours EPA is buying. The member further said that it would only be appropriate to provide the contractor with the government's labor hour estimate when EPA has already developed the labor mix for the WA requirements.

A well defined SOW should provide a contractor with sufficient information to estimate costs. Providing contractors with the government's estimate of labor hours establishes an opportunity for the contractor to skew the labor mix, if necessary to use all available hours included in the government's estimate. Contrary to OARM's response, we do not believe the FAR definition of an LOE contract defines the procedures EPA should employ in developing IGCEs and negotiating WA costs.

OARM's response further contends that the OIG makes the assumption that completion form WAs may be issued under an LOE contract. OARM states this assumption is true only if the contract allows for different types of task orders. Therefore, the OIG's statement in the report that contractors are not "held accountable for completion of individual tasks" fails to take into account that the contracts are term form, cost reimbursable which provide only for the contractor's best efforts, not task completion.

We could not find any statement in the draft report that completion form WAs could be issued under LOE contracts. The report does indicate that whenever a contract action of any type is initiated, the Government should establish goals for the action, either completion of tasks, a period of performance or some other attainment. These goals form the basis for developing the IGCE. As discussed in Chapter 3, many of the LOE WAs reviewed were often written, although not issued, as completion form with specific goals to be obtained or tasks to be completed during the WA performance period.

### IGCEs Lacked Necessary Detail for Cost Analysis

OARM indicates that the draft report failed to mention EPA's IGCE guidance. OARM also points out that the IGCE Guide provides for either a "top-down" or "bottoms-up" method of preparing IGCEs. The "top-down" approach rarely results in costs broken out at the task level.

Contrary to OARM's response, the draft report recognized and quoted from EPA's guidance for preparing IGCEs in the Background section for Chapter 2. We agree that this guidance provides for both detailed and summary type cost estimates; however, Section 3-2 of this guidance also stated: "The Agency wants the bottom-up type of detailed IGCE for all work assignments and delivery orders."

### RACs IGCE Process Needs Improvement

OARM indicated that the OIG misunderstood the role and use of IGCEs in the award of A&E contracts. This comment was based on the draft report statement that during the RACs award process, EPA placed more emphasis on technical proposals than on negotiating costs. OARM points out that Brooks Act procedures for acquisition of A&E services requires emphasis on the most highly qualified technical proposal rather than the lowest cost.

We recognize that RACs were awarded under Brooks Act procedures. However, once the most highly qualified proposals are identified, price reasonableness of these proposals must be addressed. Review of RACs awards for four regions provided insufficient evidence that contract costs were effectively negotiated. A&E procedures provide for going to the next qualified vendor if a reasonable price can not be agreed upon. This did not occur in any of the contracts reviewed, despite significant variances between IGCEs and final contract amounts. To address OARM's concerns, we recognized in the final report that the Brooks Act required EPA to emphasize technical qualifications in the RAC awards.

OARM expressed concern with our reference to a contractor who essentially prepared the government's cost estimate for a follow on contract action. OARM indicated that it is common industry practice for contractors who prepare the remedial design to also estimate construction costs for the design remedy. OARM agreed with the report that inexperienced and untrained personnel should not prepare IGCEs but disagreed that a temporary employee should not prepare an IGCE just because the employee is temporary.

We recognize that it may be common practice for contractors to prepare and cost out remedial designs. However, the work involved in the cited WA was not related to design or construction. According to the PO, the ARCS contractor prepared the estimate as part of an ARCS WA for a river study. The RACs contractor was tasked to performed a health and ecological risk assessment. The PO said since the tasks to be performed were similar, she used the ARCS' estimate, and added additional hours for start-up and re-sampling. This was clarified in the final report. Furthermore, we agree that temporary status does not necessarily indicate that an employee is unqualified to prepare an IGCE. However, regional files documented that the employee was "not familiar with the Brownsfield initiative and did not take into consideration certain requirements" in preparing the IGCE. We added this information to the final report.

#### No Process for Accumulating Historical Contract Costs

OARM's response indicated that the draft report reflected an over dependence on historical costs in developing accurate costs estimates. OARM indicated adjustments for past contractor inefficiencies, improvements in productivity, or changes in technology are important considerations in IGCE preparation. The response also indicates that the RACs mandate use of the COE's Microcomputer Computer Aided Cost Engineering System (MCACES) to estimate remedial action costs.

We agree that factors other than historical cost have to be considered in preparing IGCEs. Our review focused on the Standing Committee conclusion that creation of an historical cost data base would substantially improve IGCEs. However, in the five years since the Standing Committee Report, EPA has not made the commitment to create and use this type of information in preparing IGCEs. WAMs, POs and others interviewed stated that they relied on their personal experience to develop IGCEs. Therefore, the quality of the cost estimate is dependent to a large degree upon the experience level of the WAM and PO. WAMs and POs generally believed that access to historical cost data would be a valuable resource in creating more effective IGCEs. We did not identify any requirement that POs and WAMs use MCACES in preparing RACs cost estimates. While such a requirement may exist, none of the RAC POs or WAMs interviewed indicated that any data base or system was used to develop their cost estimates. These POs and WAMs did state that estimates were primarily based on their personal experience.

### **Chapter 2 - Comments on Recommendations**

OARM Response to Recommendation 2-1

OARM agreed that cost estimator training would benefit POs and WAMs, but disagreed that COs need the training because IGCE preparation is not a CO function. OARM indicated that it would research this type training and make recommendations to the program offices.

### **OIG** Evaluation

We continue to believe that COs need training to enhance their ability to evaluate IGCEs prepared by POs and WAMs and properly use the IGCEs to negotiate contract costs. Therefore, we changed the recommendation to require CO training in the review and use of IGCEs.

OARM Response to Recommendations 2-2 and 2-3

OARM again concludes that IGCEs are not a cost control tool but a tool to monitor costs. OARM also emphasizes that POs and WAMs, under current IGCE guidance, have a choice between the detailed "bottoms-up" approach and the summary "top-down" approach.

### **OIG** Evaluation

As previously stated, the term "cost analysis" was substituted for the term "cost control" in describing IGCEs in Chapter 2. Although the IGCE guidance referred to in OARM's response does outline two approaches to IGCEs, Section 3.2 of the guidance subsequently provides that EPA wants IGCEs prepared using the detailed "bottoms-up" approach. As a result we continue to believe that these are valid and reasonable recommendations.

OARM Response to Recommendation 2-4 through 2-7

OARM expressed no serious disagreement with these recommendations. OARM referred to some planned or ongoing initiatives related to several of the recommendations including presenting several of the recommendations to the Agency's Resource Management Committee.

### **OIG** Evaluation

In response to the final report, OARM should identify specific completed actions or planned actions with milestone dates for completion for each recommendation to facilitate resolution of these recommendations.

### **Chapter 3 - Comments on Findings**

OARM disagreed with the statement that the OIG could not identify any program or regional office commitments to plan and propose more completion form, fixed price, and/or performance based contracts. OARM indicated that OERR had a strong commitment to OMB to implement performance based pilot contracts within the Superfund program.

We recognize that OERR currently has commitments to pilot PBSC contracts in the Superfund program. However, these commitments were essentially mandated by OMB in the FY 1998 Pass Back Decisions for the President's Budget. The final report was changed to acknowledge OERR's commitments.

### **Chapter 3 - Recommendations**

OARM Response to Recommendation 3-1

OARM indicated that establishment of program and regional goals for completion form, PBSC, and fixed price contracts would be an issue discussed at the October 1997 Resource Management Committee meeting. OARM also stated that they would work through the Superfund Contracts 2000 Work Group to encourage program office movement toward completion form, PBSC contracts.

### **OIG** Evaluation

Specific planned or completed actions for implementing program and regional goals and milestone dates for completion of planned actions will be needed to resolve this recommendation.

OARM Response to Recommendation 3-2

The draft recommendation required the SRO to justify contract awards that did not comply with OFPP Policy Letter 91-2. OARM expressed concern that requiring SROs to justify all non-PBSC contracts would extend current contract lead times and contradict the current process to streamline preaward actions.

#### **OIG** Evaluation

We believe the Agency should implement OMB Policy Letter 91-2 that states: "In addition, agencies shall justify the use of other than performance-based contracting methods when acquiring services, and document affected contract files." The recommendation was changed to require SROs to implement the Policy Letter provisions that require a justification for contracts that do not meet PBSC criteria.

OARM Response to Recommendation 3-3

OARM's response indicated that model SOWs developed by Government-wide work groups and available on the Internet had been identified to contract and program officials. OARM also stated that the issue of model SOWs would be discussed at the October 1997 Resource Management Committee meeting.

**OIG** Evaluation

We will need specific corrective actions completed or planned, with milestones for completion, to resolve this recommendation.

### OARM Response to Recommendation 3-4

OARM indicated that PBSC training for program and contracting officials is scheduled to begin September 8, 1997.

### **OIG** Evaluation

The cited training is considered responsive to the recommendation. However, a milestone date for completion of the training of all contracting and appropriate program officials is needed to resolve this recommendation.

OARM Response to Recommendation 3-5

OARM did not believe it was feasible or in the Government's best interests to renegotiate RACs because this would increase the Government's fiscal responsibility to the meet the minimum funding levels for both completion form as well as the LOE contract actions.

### **OIG** Evaluation

We agree that establishing a minimum in RACs for completion form may increase the minimum contract capacity that the Government must fund. We recognize that such an increase in the minimum funded capacity concerns EPA since the regions are currently having difficulty in using the minimum capacity for LOE WAs. However, we continue to believe that some type of incentive is needed to encourage regions to expand the use of completion form WAs. Because we encountered such strong resistance to the use of completion form WAs during the audit, we believe only a persuasive incentive will result in realizing the established goal for completion form under RACs. This incentive can be in the form of a minimum contract capacity for completion form or regional goals for completion form usage with clear accountability for meeting these goals. In addition, the minimum capacity for completion form. This action would result in no increase in the total minimum capacity for RACs

To address the Agency's concerns with RACs capacity and increased fiscal obligations, we changed the recommendation to permit the Agency the option of establishing a minimum by converting LOE capacity to completion form capacity, or establishing regional goals under which regions would be held accountable for minimum levels of completion form use.

### OARM Response to Recommendation 3-6

OARM's response provides that OAM and OSWER are working on several initiatives which

address the appropriate uses of completion form assignments for RACs.

### **OIG** Evaluation

The initiatives referred to by OARM were not identified in the response. Information on these initiatives with milestone dates will be needed to close out this recommendation.

### **Chapter 4 - Comments on Findings**

OARM disagreed that the November 1995 change in award fee policy caused the significant decline in CPAF contract awards as stated in the draft report..

The draft report did not attribute the decline in CPAF contracts solely to EPA's change in award fee procedures. The report clearly stated that EPA officials interviewed identified the significant administrative burden of CPAF contracts and insufficient size of award fees as the primary reasons for less use of this type of contract. EPA's guidance changes did intensify the administrative burden by setting a certain number of days for completion of award fee determination time frames. However, we deleted our conclusion that these new administrative requirements may have impacted program officials decisions on the type of contracts to award.

### **Chapter 4 - Comments on Recommendations**

OARM Response to Recommendation 4-1a

OARM indicated that they would look into the possibility of streamlining the administrative process related to CPAF contracts. OARM also stated that they would present the streamlining issue to the Resource Management Committee meeting in October 1997 for further discussion.

**OIG** Evaluation

Specific corrective actions with milestone dates for completion will be needed to resolve this recommendation.

OARM Response to Recommendation 4-1b

OARM believed that the CO and program office were the appropriate parties that should determine contract type.

### OIG Evaluation

The intent of the recommendation was for the workgroups to identify candidate services that would be appropriate for CPAF contracts. The workgroups could then make recommendations to the CO and program offices involved. The final decision as to the type of contract appropriate

for the requisite requirements would still be made by the CO and program office.

OARM Response to Recommendation 4-1c

OARM believed that the current award fee policy provided proper incentive for superior performance.

**OIG** Evaluation

We agree that the current policy does provide incentive for superior performance. However, the recommendation related to development of model award fee plans based on this policy. Since our review did not disclose significant problems with award fee plans developed under the revised policy, we dropped that part of the recommendation related to plan development from the final report.

OARM Response to Recommendation 4-1d

OARM's response stated that CPAF contracts would be developed for requirements as appropriate.

OIG Evaluation

Specific actions and milestone dates for completion will be needed to resolve this recommendation.

OARM Response to Recommendation 4-2

According to OARM's response, they did not believe it was in the Government's best interest to modify existing CPAF contracts since most of them would soon be expiring.

**OIG** Evaluation

At our exit conference on September 24, 1997, OARM agreed to consider modifying CPAF contracts that had more than two years remaining before expiration. We changed the recommendation to reflect this agreement.

### **Chapter 5 - Comments on Findings**

OARM agreed with the findings. There were no recommendations included in this chapter.

### **Chapter 6 - Comments on Findings**

Indirect Rates For RACs Not Effectively Negotiated

OARM disagreed with the draft report's implication that use of unaudited rates would increase contract costs. OARM points out that the negotiated rates are only provisional and are subject to audit before being finalized. If the provisional rates are later determined to be too high, EPA can recoup the money.

The draft report did not specifically state that acceptance of unaudited rates would result in excessive costs. Our intent was to emphasize that acceptance of rates, especially those questioned by auditors and the Agency's cost advisory staff, based on unverified contractor data makes the Agency vulnerable to excessive rates. Delays in final audits, along with the potential for lost records and changes in contractor ownership, could mean that rates agreed to at contract award may be the rates billed through most of the contract's life. When final audits are performed, contractor records may not contain sufficient information to support significant adjustments to the rates incurred. Therefore, EPA may not be in a position to recoup excessive indirect costs. We believe it is better to prevent excessive charges rather than pay excessive costs based on the premise that a final audit will identify any overcharges and EPA will be able to recover any excessive payments.

### Use of RACs Regional Crossover Authority For WAs

OARM expressed concern that a statement in this section indicated that RACs WAs could be competed. OARM emphasized that RACs do not provide for WA competition either within or across regions and that bilateral modifications to RACs would be required to permit such competition.

This section was revised to clearly state that, according to OAM and OGC officials, RACs do not provide for any competition of WAs.

### Use of A&E Contracts for RAC Awards Required by Statute

The OARM response states that fundamental differences exist between the work performed under the COE TERCs contracts and that performed by under RACs. Therefore, OARM does not believe that a direct comparison can be made between the COE TERCs and the EPA RACs.

We disagree that there are fundamental differences between TERCs and RACs. Based on information obtained from the COE, both contracts cover all phases of remedial work at a hazardous waste site. We agree, however, that work performed under TERCs for EPA primarily consists of remedial cleanups. Our intent was not to make a direct comparison of TERCs with RACs but to point out that all activities performed under RACs, such as remedial actions, do not require an A&E contractor. Therefore, the possibility exists that these activities could be separated from A&E contracts in the future and awarded under separate non-A&E contracts by EPA.

### **Chapter 6 - Comments on Recommendations**

### OARM Response to Recommendation 6-1

OARM's response stated that COs will continue to seek counsel and advice from cognizant auditors; however, COs, not auditors, make the decisions on final rates. OARM further states that since contractors must justify their indirect rates on an annual basis and rates billed are subject to audit, they do not believe that excessive indirect costs are paid under RACs.

### **OIG** Evaluation

The decision on final rates is the responsibility of the CO and not the auditors. However, when contractors propose rates that are significantly higher than audited rates, we believe that COs should discuss the rates and the contractor's basis for varying from the audited rates with the cognizant auditors before accepting the rates. The auditors may be able to provide the CO with information that raises questions about the contractors basis for the higher rates.

Appendix V shows that some indirect rates accepted by COs were significantly higher than the rates of other contractors performing similar tasks. In one instance, a contractor had different rates for different contracts. The cognizant auditors and EPA's cost advisory reports questioned the rates. While variations in company accounting methods and operations can create such differences, cognizant auditors, in these instances, had performed reviews of the contractors costs and activities and were in the best position to comment on the accuracy of the rates. We do not specifically state that rates were excessive but appeared questionable because they were (1) significantly out of line with rates used by other contractors and (2) the auditors questioned the validity of the rates. Also, our intent was to emphasize EPA's inherent vulnerability (particularly on A&E contracts where technical capabilities outweigh cost considerations) to excessive rates when COs accept unverified contractor data at negotiations to justify rates that may be billed over the life of the contract.

### OARM Response to Recommendation 6-2

The response states that it is OAM's standard practice to follow up on indirect cost issues and prepare related documentation for the contract file. OARM indicated that they will remind COs of the importance of consistently documenting resolution of indirect cost issues.

### **OIG** Evaluation

Specific actions with milestone dates for completion will be needed to resolve this recommendation.

OARM Response to Recommendation 6-3 (draft report recommendation 6-4)

OARM said that the requirement under SARA Section 119(f) to use A&E contractors for specific

Superfund activities would be examined in the Superfund Contracts 2000 Work Group. OARM indicated that the Work Group is currently discussing the separation of remedial work from the pre-design site assessment work. The response further indicated that where it is logical to breakout non-A&E services, OARM would use a separate non-A&E contract to acquire these services in the future.

### **OIG** Evaluation

OARM's response did not directly address the recommendation. The recommendation requested that the Agency seek changes to SARA 119(f) during the forthcoming Superfund reauthorization to permit non-A&E contracts for all Superfund remediation work not related to remedial design. However, we also recognize that breaking out non-A&E services for separate contracts is probably the second best alternative to a change in the law. The Agency's response to the final report should specifically address the recommendation with milestones for completion of any planned actions.

OARM Response to Recommendation 6-4 (draft report recommendation 6-3)

OARM stated that EPA is researching other agencies' contract strategies and methods for the purpose of bench marking Superfund contracting techniques. The response further stated that this is another issue to be addressed by the Superfund Contracts 2000 Work Group.

### **OIG** Evaluation

Specific actions taken or planned with milestone dates for completion will be needed in the Agency's response to the final report to resolve this recommendation.

(This page intentionally left blank.)

### SAMPLING METHODOLOGY

In order to accomplish our audit objectives related to cost-reimbursable contracts, we reviewed a judgmental sample of RACs contracts and two random samples of other EPA cost-reimbursable contracts. We judgmentally selected six of 10 active RACs. We also randomly selected a sample of 20<sup>15</sup> cost-reimbursable contracts and a random sample of five cost-plus-award-fee contracts. The RACs sample and the initial random sample of 20 contracts were used to evaluate IGCEs, contract type, effect of capacity and length on competition, and, where applicable, use of award fees. In order to ensure adequate coverage of the award fee objective, we randomly selected an additional five CPAF contracts for which only the award fee process was evaluated. Both random samples were selected from a database file downloaded from EPA's CIS. The file contained contracts that were active in FYs 1994 through 1996. The samples were selected using Interactive Data Extraction and Analysis (IDEA) software.

In selecting RACs for review, our main selection criteria were contracts with the most activity as determined by the number of work assignments issued. In addition, we avoided selecting more than one contract with the same prime contractor.

Our primary sample of 20 contracts was selected from the universe of all cost-reimbursement contracts active in fiscal years 1994 through 1996, excluding contracts that expired in fiscal year 1994 and RACs. A total of 507 contracts was in this audit universe. In order to ensure that our sample included contracts of different sizes and from each EPA contracting location, we stratified the audit universe by location (RTP, Washington<sup>16</sup>, and Cincinnati) and MPV of the contract. Three dollar ranges were established for the RTP and Cincinnati locations: \$0 to \$4,999,999; \$5,000,000 to \$24,999,999; and \$25,000,000 and above. The Washington contracts were divided into the same three strata as outlined above but with one additional stratum: \$100,000,000 and above. This fourth stratum was created for the Washington universe because of the large number of contracts of more than \$100 million at this location. Contracts were randomly selected from each of these strata for each contracting location using computer software.

We also selected an additional random sample of five cost-plus-award-fee contracts. We used the same cost-reimbursable contract universe described above and segregated out the CPAF

<sup>&</sup>lt;sup>15</sup>Two of our originally selected contracts were expired and had been replaced with follow-on contracts which were administered differently than the prior contract. Therefore, we reviewed the current, successor contracts rather than the expired contracts.

<sup>&</sup>lt;sup>16</sup>Regional contracts were included in the Washington location universe.

contracts. This identified a universe of 110 CPAF contracts.

| Contract Type                     | Number of<br>Contracts | Maximum<br>Potential Value | Average Value  |
|-----------------------------------|------------------------|----------------------------|----------------|
| RACs- Universe                    | 10                     | \$3.1 billion              | \$310 million  |
| RACs- Sample                      | 6                      | \$1.8 billion              | \$300 million  |
| All Cost <sup>17</sup> - Universe | 507                    | \$13.9 billion             | \$27.4 million |
| All Cost - Sample                 | 20                     | \$1 billion                | \$49.0 million |
| CPAF <sup>18</sup> - Universe     | 110                    | \$9.9 billion              | \$90.5 million |
| CPAF - Sample                     | 5                      | \$224 million              | \$45.0 million |

The following table summarizes the universe and sample sizes for our samples:

Since our audit objective required us to evaluate WAs, we selected a sub-sample of WAs from our sample of six RACs and 20 other cost-reimbursable contracts. For each of the contracts in our sample, we identified all WAs with a value over \$25,000 and issued during the period July 1994 through September 1996. We randomly selected one to five WAs issued under each sample contract for detailed review, depending on the number of work assignments awarded. These samples were selected by the auditors in the field using random numbers tables. The following table shows the number of WAs selected for review per contract based on the total number of WAs that had been issued at the time of this review:

| Number of WAs<br>Issued | Number of WAs<br>Reviewed |
|-------------------------|---------------------------|
| 1-3                     | All                       |
| 4-20                    | 3                         |
| 21-50                   | 4                         |
| 51 and above            | 5                         |

### **APPENDIX IV**

<sup>&</sup>lt;sup>17</sup>Excludes RACs contracts. Includes CPAF contracts.

<sup>&</sup>lt;sup>18</sup> Subset of Cost universe.

## **CONTRACTS REVIEWED**

## Random Sample of 20 Cost-Reimbursable Contracts:

| <u>NUMBER</u> | <u>TYPI</u> | E AWARD   | EXPIRE                        | MPV                           | <u>TITLE</u>                                   |
|---------------|-------------|-----------|-------------------------------|-------------------------------|------------------------------------------------|
| 68C00047      | CPAF        | 26-Sep-90 | 24-Dec-95                     | \$32,864,228                  | TECH. SUPPORT FOR SITE PROGRAM-SITE A          |
| 68C10030      | CPFF        | 17-Jul-91 | 30-Sep-95                     | \$3,681,710                   | TECHNICAL SUPPORT FOR PEER REVIEW              |
| 68C30303      | CPAF        | 02-Jul-93 | 30-Sep-97                     | \$30,882,549                  | TECHNICAL SUPPORT FOR WATER PROGRAMS           |
| 68C30332      | CPFF        | 12-Apr-94 | 31-Aug-96                     | \$6,818,084                   | DEVELOPMENT OF HUMAN HEALTH DOCUMENTS          |
| 68C40007      | CPFF        | 07-Mar-94 | 31-Jan-97                     | \$9,259,281                   | REGULATION DEVELOPMENT PROCESSING/ANALYSIS     |
| 68D60005      | CPAF        | 26-Mar-96 | 26-Mar-01                     | \$65,424,934                  | ENVIRONMENTAL SERVICES ASSISTANCE TEAMS        |
| 68D60010      | CPFF        | 30-Sep-96 | 30-Sep-01                     | \$60,452,542                  | NSPS CONTRACT                                  |
| 68D20156      | CPFF        | 21-Sep-92 | 30-Sep-97                     | \$5,672,691                   | SUPPORT FOR RADIOACTIVE WASTE, MIXED WASTE     |
| 68D20159      | CPFF        | 30-Sep-92 | 30-Sep-97                     | \$19,636,373                  | TECH. SUPPORT FOR AIR EMISSIONS INVENTORIES    |
| 68D20174      | CPFF        | 30-Sep-92 | 30-Sep-96                     | \$3,717,435                   | TRANSPORTATION CONTROL MEASURES                |
| 68D30031      | CPFF        | 26-May-93 | 30-Sep-97                     | \$16,073,986                  | TECH. SUPPORT FOR AIR POLLUTION CONTROL        |
| 68W10007      | CPAF        | 22-Feb-91 | 30-Sep-96                     | \$44,247,918                  | HEADQUARTERS TECH. ENFORCEMENT SUPPORT         |
| 68W10014      | ТМ          | 26-Jul-91 | 11-Nov-94                     | \$6,131,358                   | <b>REG/NEG CONSULTATION DISPUTE RESOLUTION</b> |
| 68W30009      | CPFF        | 22-Jan-93 | 30-Apr-96                     | \$1,898,933                   | INFORMATION MNGMENT AND COMMUNICATION          |
| 68W30024      | CPFF        | 22-Jul-93 | 21-Jul-96                     | \$5,520,294                   | TECHNICAL SUPPORT GLOBAL CLIMATE CHNGS         |
| 68W40019      | CPFF        | 22-Mar-94 | 21-Mar-99                     | \$29,682,501                  | ENFORCEMENT SUPPORT                            |
| 68W80124      | CPAF        | 30-Sep-88 | 28-Sep-98                     | \$62,500,386                  | FUNDING ARCS REGION II                         |
| 68W10055      | CPAF        | 30-Sep-91 | 30-Sep-97                     | \$127,317,045                 | MISSION ORIENTED SYSTEMS ENG. SUPPORT          |
| 68W10035      | CPAF        | 04-Feb-91 | 31-Mar-97                     | \$177,538,336                 | EMERGENCY REMOVAL                              |
| 68W90054      | CPAF        | 09-Jun-89 | 09-Jun-99                     | \$288,760,199                 | ARCS REGION 9                                  |
|               |             |           | Total Non-RACs<br>Average MPV | \$998,080,783<br>\$49,904,039 |                                                |

## **CONTRACTS REVIEWED**

# Judgmental Sample of RACs:

| NUMBER<br>68-W6-0042 | <u>TYPE</u><br>CPAF | <b>AWARD</b><br>30-Sep-96 | <b>EXPIRE</b><br>30-Sep-06 | <u>MPV</u><br>\$474,369,516      | <u>TITLE</u><br>RACs REGION 1 |
|----------------------|---------------------|---------------------------|----------------------------|----------------------------------|-------------------------------|
| 68-S6-3003           | CPAF                | 30-Sep-96                 | 30-Sep-06                  | \$168,672,293                    | RACs REGION 3                 |
| 68-W6-0025           | CPAF                | 30-Sep-96                 | 30-Sep-06                  | \$275,091,955                    | RACs REGION 5                 |
| 68-W6-0037           | CPAF                | 13-Sep-96                 | 13-Sep-06                  | \$253,364,629                    | RACs REGION 6                 |
| 68-W5-0004           | CPAF                | 15-Jun-95                 | 15-Jun-05                  | \$302,239,376                    | RACs REGION 7                 |
| 68-W5-0022           | CPAF                | 29-Sep-95                 | 29-Sep-05                  | \$313,556,945                    | RACs REGION 8                 |
|                      |                     |                           | Total RACs<br>Average MPV  | \$1,787,294,714<br>\$297,882,452 |                               |

## **CONTRACTS REVIEWED**

## **Random Sample of five CPAF Contracts:**

| <u>NUMBER</u> | <u>AWARD</u> | <u>EXPIRE</u>             | MPV                           | CONTRACT TITLE                                    |
|---------------|--------------|---------------------------|-------------------------------|---------------------------------------------------|
| 68W90057      | 16-Jun-89    | 14-Jun-99                 | \$66,306,241                  | REGIONAL PROGRAM MANAGEMENT                       |
| 68D00110      | 30-Sep-90    | 30-Sep-95                 | \$14,535,657                  | OPER,MAINT & MOD OF CLINICAL RESEARCH<br>FACILITY |
| 68W40005      | 06-Jan-94    | 31-Dec-96                 | \$67,056,252                  | RCRA REPA - ZONE III (WEST COAST) FOR OWPE        |
| 68C30309      | 30-Sep-89    | 30-Sep-95                 | \$10,660,990                  | ON-SITE TECHNICAL SUPPORT SERVICES                |
| 68W80092      | 22-Jun-88    | 22-Jun-98                 | \$65,342,544                  | ARCS AWARD REGION III - TETRA TECH                |
|               |              | Total CPAF<br>Average MPV | \$223,901,684<br>\$44,780,337 |                                                   |

APPENDIX V Page 1 of 3

# SCHEDULE OF WORK ASSIGNMENTS REVIEWED

| Contract        | WA/DO            | WA/DO                | WA/DO Cor  | ntained Tasks S | uited to [2]: |
|-----------------|------------------|----------------------|------------|-----------------|---------------|
| <u>Number</u>   | <u>Number</u>    | Amount[1]            | Completion | Fixed-Price     | <u>PBSC</u>   |
| 68C00047        | 53               | \$764,860            | Yes        | Yes             | Yes           |
| 00000011        | 71               | \$ 54,983            | Yes        | Yes             | Yes           |
| 68C00030        | 3-51             | \$ 59,998            | Yes        | Yes             | Yes           |
|                 | 3-57             | \$ 78,238            | Yes        | Yes             | Yes           |
|                 | 3-61             | \$ 38,977            | Yes        | Yes             | Yes           |
| 68C30303        | 2-40             | \$181,000            | Yes        | Yes             | Yes           |
|                 | 3-47             | \$249,875            | Yes        | Yes             | Yes           |
|                 | 3-92             | \$ 48,482            | Yes        | Yes             | Yes           |
|                 | 2-93             | \$ 87,393            | Yes        | Yes             | Yes           |
|                 | 3-115            | \$ 39,946            | Yes        | Yes             | Yes           |
| 68C30332        | 1-13             | \$ 53,402            | Yes        | Yes             | Yes           |
|                 | 1-15             | \$ 49,800            | Yes        | Yes             | Yes           |
|                 | 1-24             | \$ 64,602            | Yes        | Yes             | Yes           |
|                 | 2-31             | \$ 66,362            | Yes        | Yes             | Yes           |
| 68C40007        | 2-14             | \$ 25,653            | Yes        | Yes             | Yes           |
|                 | 2-15             | \$155,851            | Yes        | Yes             | Yes           |
|                 | 2-17             | \$ 79,360            | Yes        | Yes             | Yes           |
|                 | 4-15             | \$ 37,555            | Yes        | Yes             | Yes           |
| Cincinnati subt | total            | \$2,136,337          |            |                 |               |
|                 |                  |                      |            |                 |               |
| 68D60005 [2]    | 10-96-0-04       | \$194,063            | Yes        | No              | Yes           |
|                 | 9-96-0-7         | \$169,988            | Yes        | Yes             | Yes           |
|                 | 10-96-0-02       | \$200,494            | Yes        | Yes             | Yes           |
|                 | 06-96-0-02       | \$478,972            | Yes        | Yes             | Yes           |
| 68D60010-14 [3  | <b>3</b> ] ERG 3 | \$ 53,546            | NA         | Yes             | Yes           |
|                 | ERG 4            | \$ 20,218            | NA         | Yes             | Yes           |
|                 | ERG 6            | \$153,168            | NA         | Yes             | Yes           |
|                 | MRI 5            | \$ 74,945            | NA         | Yes             | Yes           |
|                 | ECR 4            | \$189,526            | NA         | Yes             | Yes           |
|                 | PES 4            | \$ 16,888            | NA         | Yes             | Yes           |
|                 | RTI 17           | \$120,981            | Yes        | Yes             | Yes           |
|                 | PES 6            | \$ 27,069            | Yes        | Yes             | Yes           |
|                 | ERG 8            | \$263,725            | Yes        | Yes             | Yes           |
|                 | MRI 9            | \$198,537            | Yes        | Yes             | Yes           |
| 68D20156        | 3-8              | \$ 78,750 <b>[4]</b> | Yes        | Yes             | Yes           |
|                 | 4-8              | \$102,693            | Yes        | Yes             | Yes           |
|                 | 4-4              | \$ 45,833            | Yes        | Yes             | Yes           |
| 68D30031        | I-16             | \$ 79,962            | Yes        | Yes             | Yes           |
|                 | II-19            | \$ 74,977            | No         | No              | No            |
|                 | II-20            | \$ 65,535            | Yes        | Yes             | Yes           |
| 68D20159        | 2-05             | \$ 27,141            | Yes        | No              | Yes           |
|                 | 3-01             | \$275,603            | Yes        | No              | Yes           |

# APPENDIX V Page 2 of 3

| Contract      | WA/DO      | WA/DO                  | WA/DO Cor  | ntained Tasks S | uited to [2]: |
|---------------|------------|------------------------|------------|-----------------|---------------|
| <u>Number</u> | Number     | Amount[1]              | Completion | Fixed-Price     | <u>PBSC</u>   |
|               | 4-01       | <u>\$ 77,745</u>       | Yes        | No              | Yes           |
| RTP Subtotal  | 4-01       | \$2,990,359            | 165        | 110             | 165           |
| 68W10007      | C11318     | \$ 91,475              | Yes        | Yes             | Yes           |
|               | C11315     | \$ 32,007              | Yes        | Yes             | Yes           |
|               | R11301     | \$126,927              | Yes        | Yes             | Yes           |
|               | C11317     | \$ 61,833              | Yes        | No              | Yes           |
| 68W30009      | CO2        | \$132,380              | Yes        | Yes             | Yes           |
|               | CO3        | \$150,787              | Yes        | Yes             | Yes           |
|               | C05        | \$112,018              | Yes        | Yes             | Yes           |
| 68W30024      | WA 102     | \$158,503              | Yes        | Yes             | Yes           |
|               | WA 201     | \$ 86,577              | Yes        | Yes             | Yes           |
|               | WA 202     | \$194,514              | Yes        | Yes             | Yes           |
| 68W40019      | WA 10      | \$146,315              | Yes        | Yes             | Yes           |
|               | WA 18      | \$142,110              | Yes        | Yes             | Yes           |
|               | WA 22      | \$ 58,073              | Yes        | Yes             | Yes           |
| 68W80124      | 037-2PY4   | \$178,613              | No         | No              | No            |
|               | 038-2PY1   | \$ 90,762              | Yes        | Yes             | Yes           |
|               | 040-2QB1   | \$150,000              | Yes        | Yes             | Yes           |
| 68W10055      | DO 82      | \$3,351,556            | NA         | Yes             | Yes           |
|               | DO 70      | \$2,339,469            | NA         | Yes             | Yes           |
|               | DO 78      | \$3,981,581            | NA         | Yes             | Yes           |
| 68W10135      | DO 53      | \$453,000              | NA         | Yes             | Yes           |
|               | DO 71      | \$ 50,000              | NA         | Yes             | Yes           |
|               | DO 76      | \$ 75,000              | NA         | Yes             | Yes           |
|               | DO 104     | \$2,842,405            | NA         | Yes             | Yes           |
|               | DO 116     | \$4,384,000            | NA         | Yes             | Yes           |
| 68W90054      | 54-45-96FJ | \$199,450              | Yes        | No              | Yes           |
|               | 54-46-9J5N | \$1,588,682            | Yes        | Yes             | Yes           |
|               | 54-47-9NJ5 | <u>\$7,588,547</u> [5] | Yes        | Yes             | Yes           |
| Washington Su |            | \$28,766,584           |            |                 |               |
| 68-W6-0042    | 004        | \$ 50,000 <b>[6]</b>   | Yes        | Yes             | Yes           |
|               | 008        | \$203,821              | Yes        | Yes             | Yes           |
|               | 012        | \$362,391              | Yes        | Yes             | Yes           |
| 68-S6-3003    | 004        | \$760,261              | Yes        | Yes             | Yes           |
|               | 005        | \$ 20,000[6]           | Yes        | Yes             | Yes           |
| 68-W6-0025    | 001        | \$150,000 <b>[6]</b>   | Yes        | Yes             | Yes           |
|               | 003        | \$200,000 <b>[6]</b>   | Yes        | No              | Yes           |
|               | 005        | \$150,000 <b>[6]</b>   | Yes        | Yes             | Yes           |

| Contract             | WA/DO  | WA/DO            | WA/DO Con  | tained Tasks S | uited to [2]: |
|----------------------|--------|------------------|------------|----------------|---------------|
| <u>Number</u>        | Number | <u>Amount[1]</u> | Completion | Fixed-Price    | <u>PBSC</u>   |
| 68-W6-0037           | 003    | \$ 75.841        | Yes        | Yes            | Yes           |
|                      | 006    | \$203,421        | Yes        | Yes            | Yes           |
|                      | 009    | \$688,922        | Yes        | Yes            | Yes           |
| 68-W5-0004           | 004    | \$653,038        | Yes        | No             | Yes           |
|                      | 008    | \$545,588        | Yes        | Yes            | Yes           |
|                      | 012    | \$ 87,494        | Yes        | Yes            | Yes           |
|                      | 016    | \$138,018        | Yes        | No             | Yes           |
| 68-W5-0022           | 005    | \$440,484        | Yes        | Yes            | Yes           |
|                      | 010    | \$309,155        | Yes        | Yes            | Yes           |
|                      | 015    | <u>\$134,500</u> | Yes        | No             | Yes           |
| <b>RACs Subtotal</b> |        | \$5,172,934      |            |                |               |

Total All WAs/DOs [7] \$39,066,214

#### **ABBREVIATIONS:**

NA = Not applicable, was issued in completion form.

#### FOOTNOTES:

[1] = Final WA/DO amount, including amendments. This total does not represent the dollar value of tasks that could be issued or awarded under other contract types. Total dollar value of tasks suited to award or issuance under other contract/WA types would be less than the WA/DO amount in many cases.

- [2] = Yes means one or more tasks included in the WA were suited for award or issuance as completion, fixed-price, or PBSC. Tasks that were suited to fixed-price were also included in the completion category.
- [2] = Contract transferred to Washington, SRRPOD

[3] = Five contracts compete for Task Orders.

- [4] = Amount shown is cumulative cost. Final issue/award amount not in file.
- [5] = Final amount pending. Amount shown is IGCE.

[6] = Amounts provided are expenditure limits and not final negotiated amounts for the WA.

[7] = Two contracts in our sample did not have any issued WAs within the scope of this review. These contracts are not included in this schedule.

# **RACs INDIRECT RATES**

| PRIME        | <u>Overhead</u> |
|--------------|-----------------|
|              |                 |
| Contractor A | 40.50%          |
| Contractor B | 43.00%          |
| Contractor C | 45.50%          |
| Contractor D | 68.80%          |
| Contractor E | 68.80%          |
| Contractor F | 100.83%         |
| Contractor G | 105.00%         |
| Contractor H | 105.31%         |
| Contractor I | 151.37%         |
| Contractor J | 178.40%         |
| Contractor G | 190.00%         |

| PRIME        | <u>G&amp;A</u> |
|--------------|----------------|
|              |                |
| Contractor C | 6.40%          |
| Contractor B | 7.00%          |
| Contractor F | 10.28%         |
| Contractor H | 10.32%         |
| Contractor A | 20.40%         |
| Contractor E | 67.40%         |
| Contractor D | 67.40%         |

| PRIME        | G&A-Sub |  |
|--------------|---------|--|
|              |         |  |
| Contractor F | 5.20%   |  |

| PRIME        | <u>Fringe</u> |
|--------------|---------------|
|              | Benefits      |
| Contractor D | 31.70%        |
| Contractor E | 31.70%        |
| Contractor A | 35.60%        |
| Contractor C | 39.70%        |
| Contractor B | 39.80%        |

|              | Material |
|--------------|----------|
| PRIME        | Handling |
|              |          |
| Contractor A | 4.80%    |

25 Indirect Rates

| RACS TEAM SUBs OVERHEAD RATES |             |          |
|-------------------------------|-------------|----------|
| PRIME                         | TEAM Sub    | Overhead |
|                               |             |          |
| Contractor A                  | Team Sub A  | 1.00%    |
| Contractor C                  | Team Sub B  | 39.05%   |
| Contractor G                  | Team Sub C  | 39.83%   |
| Contractor A                  | Team Sub D  | 46.49%   |
| Contractor F                  | Team Sub E  | 49.00%   |
| Contractor F                  | Team Sub F  | 49.00%   |
| Contractor H                  | Team Sub G  | 49.00%   |
| Contractor H                  | Team Sub H  | 49.00%   |
| Contractor A                  | Team Sub I  | 50.16%   |
| Contractor H                  | Team Sub J  | 54.00%   |
| Contractor F                  | Team Sub K  | 54.00%   |
| Contractor D                  | Team Sub L  | 61.00%   |
| Contractor C                  | Team Sub M  | 65.01%   |
| Contractor H                  | Team Sub N  | 70.80%   |
| Contractor B                  | Team Sub O  | 80.00%   |
| Contractor E                  | Team Sub P  | 84.40%   |
| Contractor A                  | Team Sub Q  | 96.77%   |
| Contractor D                  | Team Sub R  | 98.00%   |
| Contractor J                  | Team Sub S  | 99.61%   |
| Contractor G                  | Team Sub T  | 107.06%  |
| Contractor G                  | Team Sub U  | 110.24%  |
| Contractor E                  | Team Sub V  | 112.90%  |
| Contractor J                  | Team Sub W  | 119.00%  |
| Contractor J                  | Team Sub X  | 121.10%  |
| Contractor I                  | Team Sub Y  | 126.00%  |
| Contractor I                  | Team Sub Z  | 128.78%  |
| Contractor F                  | Team Sub AA | 132.24%  |
| Contractor B                  | Team Sub BB | 140.00%  |
| Contractor F                  | Team Sub CC | 140.00%  |
| Contractor A                  | Team Sub DD | 140.00%  |
| Contractor C                  | Team Sub EE | 140.00%  |
| Contractor D                  | Team Sub FF | 146.00%  |
| Contractor H                  | Team Sub GG | 165.00%  |
| Contractor J                  | Team Sub HH | 165.00%  |
| Contractor J                  | Team Sub II | 166.00%  |
| Contractor A                  | Team Sub JJ | 170.80%  |
| Contractor G                  | Team Sub KK | 170.80%  |
| Contractor B                  | Team Sub LL | 173.80%  |
| Contractor C                  | Team Sub MM | 173.00%  |
| Contractor G                  | Team Sub NN | 174.30%  |
| Contractor G                  | Team Sub OO | 175.90%  |
| Contractor A                  | Team Sub PP | 185.75%  |
| Contractor B                  | Team Sub QQ | 228.85%  |
|                               |             | 220.03%  |

| RACS TEAM SUBs G&A RATES |             |                |
|--------------------------|-------------|----------------|
| PRIME                    | TEAM Sub    | <u>G&amp;A</u> |
|                          |             |                |
| Contractor J             | Team Sub II | 3.20%          |
| Contractor A             | Team Sub D  | 9.15%          |
| Contractor H             | Team Sub N  | 9.55%          |
| Contractor J             | Team Sub W  | 10.00%         |
| Contractor E             | Team Sub P  | 10.30%         |
| Contractor E             | Team Sub V  | 12.78%         |
| Contractor A             | Team Sub Q  | 14.12%         |
| Contractor C             | Team Sub M  | 14.91%         |
| Contractor A             | Team Sub I  | 17.90%         |
| Contractor C             | Team Sub B  | 18.30%         |
| Contractor F             | Team Sub RR | 18.75%         |
| Contractor H             | Team Sub S  | 18.75%         |
| Contractor G             | Team Sub C  | 19.95%         |
| Contractor J             | Team Sub X  | 30.00%         |
| Contractor D             | Team Sub L  | 32.50%         |
| Contractor A             | Team Sub A  | 40.00%         |

| RACS TEAM SUBs FRINGE RATES |             |               |
|-----------------------------|-------------|---------------|
| PRIME                       | TEAM Sub    | <u>Fringe</u> |
|                             |             | Benefits      |
| Contractor G                | Team Sub T  | 23.23%        |
| Contractor A                | Team Sub A  | 27.00%        |
| Contractor D                | Team Sub L  | 30.10%        |
| Contractor A                | Team Sub I  | 32.34%        |
| Contractor A                | Team Sub D  | 32.55%        |
| Contractor C                | Team Sub M  | 33.14%        |
| Contractor F                | Team Sub RR | 34.00%        |
| Contractor H                | Team Sub SS | 34.00%        |
| Contractor G                | Team Sub C  | 35.68%        |
| Contractor E                | Team Sub V  | 35.90%        |
| Contractor C                | Team Sub B  | 37.23%        |
| Contractor E                | Team Sub P  | 38.20%        |
| Contractor G                | Team Sub NN | 49.30%        |

| RACS TEAM SUBs Sub-G&A RATES |            |         |
|------------------------------|------------|---------|
| PRIME                        | TEAM Sub   | SUB-G&A |
| Contractor C                 | Team Sub B | 5.41%   |

| RACS TEAM SUBs MTL HANDLING RATES |            |                 |
|-----------------------------------|------------|-----------------|
| PRIME                             | TEAM Sub   | <u>Material</u> |
|                                   |            | <u>Handling</u> |
| Contractor G                      | Team Sub C | 4.65%           |

74 Indirect Rates

## **ABBREVIATIONS**

| A&E   | Architectural and Engineering                     |
|-------|---------------------------------------------------|
| ARCS  | Alternative Remedial Contract Services            |
| CCMD  | Cincinnati Contract Management Division           |
| CFR   | Code of Federal Regulations                       |
| CICA  | Competition In Contracting Act                    |
| CIS   | Contract Information System                       |
| CMD   | Contract Management Division                      |
| СО    | Contracting Officer                               |
| COE   | Army Corps of Engineers                           |
| CPAF  | Cost-Plus-Award-Fee                               |
| CPFF  | Cost-Plus-Fixed-Fee                               |
| CR    | Cost-Reimbursable                                 |
| CS    | Cost-Sharing                                      |
| DCAA  | Defense Contract Audit Agency                     |
| DO    | Delivery Order                                    |
| DOE   | Department of Energy                              |
| EPA   | Environmental Protection Agency                   |
| ESS   | Enforcement Support Services                      |
| ESAT  | Environmental Services Assistance Teams           |
| FAR   | Federal Acquisition Regulation                    |
| FMFIA | Federal Managers' Financial Integrity Act         |
| FP    | Fixed-Price                                       |
| FPIF  | Fixed-Price-Incentive-Fee                         |
| FY    | Fiscal Year                                       |
| GAO   | General Accounting Office                         |
| HPOD  | Headquarters Procurement Operations Division      |
| IDIQ  | Indefinite Delivery Indefinite Quantity           |
| IGCE  | Independent Government Cost Estimate              |
| IGD   | Inspector General Division                        |
| LOE   | Level of Effort                                   |
| MPV   | Maximum Potential Value                           |
| NASA  | National Aeronautical and Space Administration    |
| OAM   | Office of Acquisition Management                  |
| OARM  | Office of Administration and Resources Management |
| ODC   | Other Direct Costs                                |
| OERR  | Office of Emergency and Remedial Response         |
| OFPP  | Office of Federal Procurement Policy              |
| OGC   | Office of General Counsel                         |
| OIG   | Office of Inspector General                       |
| OMB   | Office of Management and Budget                   |
|       |                                                   |

| OSWER  | Office Solid Waste and Emergency Response      |
|--------|------------------------------------------------|
| PBSC   | Performance-Based Service Contracts            |
| PCO    | Placement Contracting Officer                  |
| PEB    | Performance Evaluation Board                   |
| PO     | Project Officer                                |
| PRP    | Potential Responsible Party                    |
| PWS    | Performance Work Statement                     |
| QAP    | Quality Assurance Plan                         |
| RAC    | Response Action Contract                       |
| REM    | Remedial Engineering and Management            |
| RTP    | Research Triangle Park, North Carolina         |
| SOW    | Statement of Work                              |
| SRRPOD | Superfund/RCRA Procurement Operations Division |
| TERC   | Total Environmental Restoration Contracts      |
| TES    | Technical Enforcement Services                 |
| ТО     | Task Order                                     |
| WA     | Work Assignment                                |
| WAM    | Work Assignment Manager                        |
| WBS    | Work Breakdown Structure                       |

### DISTRIBUTION

#### Office of the Inspector General

Acting Inspector General (2410)

#### Headquarters Office

Acting Assistant Administrator for Administration and Resources Management (3101) Director, Office of Policy and Resources Management (3102) Acting Chief Financial Officer (3101) General Counsel (2310) Director, Office Of Acquisition Management (3801F) Director, Contracts Management Division - Research Triangle Park, NC (MD 33) Director, Contracts Management Division - Cincinnati, OH (MS-CMD) Agency Followup Coordinator (3304) Agency Audit Followup Official (3101) Comptroller (3301) Director, Financial Management Division (3303F) Director, Budget Division (3302) Special Assistant to the Deputy Administrator for Management Issues (1103) Associate Administrator for Regional Operations and Stat/Local Relations (1501) Associate Administrator for Congressional and Legislative Affairs (1301) Associate Administrator for Communications, Education and Public Affairs (1701) Audit Follow-up Coordinator - OARM (3102)

### **Regional Offices**

Regional Administrator, Region 1 Regional Administrator, Region 2 Regional Administrator, Region 3 Regional Administrator, Region 4 Regional Administrator, Region 5 Regional Administrator, Region 6 Regional Administrator, Region 7 Regional Administrator, Region 8 Regional Administrator, Region 9 Regional Administrator, Region 10

#### External

General Accounting Office Office of Management and Budget