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EPA

Report of Audit

EPA'S PLANNING, NEGOTIATION, AWARDING
AND ADMINISTERING OF EMERGENCY
RESPONSE CLEANUP SERVICES CONTRACTS

E5E26-05-0101-61508

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ABBREVIATIONS

CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
ERCS	Emergency Response Cleanup Services
FLSA	Fair Labor Standards Act
G&A	General and Administrative
GAO	U.S. General Accounting Office
NTP	Notice to Proceed
OSC	On-Scene Coordinator
PCB	Polychlorinated Biphenyl
PNA	Prenegotiated Agreement
RCRA	Resource Conservation and Recovery Act
RFP	Request for Proposal
SUPERFUND	CERCLA
TAT	Technical Assistance Team
TEP	Technical Evaluation Panel
TSCA	Toxic Substances Control Act

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

SEP 2 3 1986

THE INSPECTOR GENERAL

SUBJECT: Audit Report No. E5E26-05-0101-61508
Report on Audit of EPA's Planning, Negotiating, Awarding and Administering of Emergency Response Cleanup Services Contracts

FROM: John C. Martin
Inspector General

TO: Howard M. Messner
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Assistant Administrator for Solid Waste and Emergency Response (WH-562A)

INTRODUCTION

We have completed an audit of the Planning, Negotiating, Awarding, and Administering of the Emergency Response Cleanup Services (ERCS) Contracts. The objective of this audit was to evaluate the efficiency, effectiveness, and economy of the ERCS contracts. To evaluate the procurement process we:

- evaluated how well the Agency has fulfilled its mission relating to the present ERCS contracts.
- obtained information which will assist the Agency in designing and executing future contracts for similar services.

To accomplish our objectives, we reviewed the development of the ERCS concept and the procedures used to negotiate the fixed rates in the ERCS contracts. We also reviewed the general policies and procedures used by the prime contractors to carry out their responsibilities under the contract. We were particularly interested in examining the contractors' costs associated with providing ERCS services.

On a judgmental basis, we selected a limited number of services and items from certain delivery orders for detailed analysis. In general, we selected delivery orders which were among the largest for the respective contractor and services and items which were used most frequently on the selected delivery orders. Under the terms of the ERCS contracts, the contractors were required to be able to provide extensive resources (both labor and equipment) anywhere within large geographic areas within a matter of hours. When it becomes necessary for contractors to respond to critical emergencies within the minimum timeframe allowed in the contract, it is reasonable to assume that contractor costs could escalate considerably. Consequently, contractors may have proposed rates which would correspond to the maximum level of emergency response required by the contract. The delivery orders selected for review were not critical emergencies and neither unusual nor extraordinary response costs were identified.

The selection of large delivery orders with extensive use of services and equipment over several weeks or months would demonstrate the best rate consideration for EPA because the fixed rates for equipment were discounted for extended periods of use. Delivery orders of short duration would utilize the most expensive, least cost efficient hourly and daily equipment rental rates. The services and items reviewed were billed to EPA using both the negotiated fixed rates specified in the contracts and provisional rates which had not been contractually negotiated at the time of our audit.

Using the applicable Federal cost principles, we estimated contractor and subcontractor costs for these selected services and items and compared these estimates to the rates billed to EPA. The difference between our estimated costs for contractors and subcontractors and the rates paid by EPA is referred to in this report as "markup." Markup includes (1) costs which are not allowable or allocable to Federal contracts according to the Federal cost principles and (2) profit.

Our analysis of contractor and subcontractor costs was significantly hindered by inadequate cost accounting systems and the lack of utilization records for equipment. When there was insufficient data, we generally chose an option which would increase estimated cost and decrease markup. We based our methodology for determining equipment utilization on the average annual usage hours described in the U.S. Army Corps of Engineers' Construction Equipment Ownership and Operating Expense Schedule, dated June 1985.

The delivery orders and individual services and items selected for detail analysis are not a statistically valid sample of the universe of delivery orders nor of the related services and items under the ERCS contracts. Therefore, we have not projected our findings to all delivery orders. The markup percentages in this report apply only to the labor categories and items of equipment specifically reviewed. It is possible that a contractor could incur a loss on some items depending upon circumstances. Although our findings cannot be statistically projected to all delivery orders, we believe that our sample was sufficient to indicate (1) problems with contract administration, and (2) the potential effect of procurement weaknesses.

See the Scope and Methodology section of this report for further details.

SUMMARY OF FINDINGS

Responding to the expressed urgency of program needs, EPA negotiated multi-million dollar ERCS contracts in spite of numerous circumstances which resulted in a poor negotiation environment. Although concerned about the level of competition for the contracts, procurement officials concluded that competition was sufficient and that prices were reasonable based on price analysis techniques. Given this situation and identified problems on the previously used notice to proceed contracts, EPA officials believed that they exercised the apparently most viable alternative available at the time and executed the negotiated ERCS contracts. However, because EPA had not developed adequate information regarding the nature, scope, time frames, or resource requirements which would actually be required under the ERCS cleanup contracts, Agency officials were in no position to make the best procurement judgments and decisions. Although we found no direct violations of statutes or regulations in the award of the contracts, we believe that some decisions were made because EPA emphasized program needs over sound procurement practices. Consequently, the ERCS contracts may not be cost effective because, for most of the services and items reviewed, there were substantial markups between the costs and the fixed rates paid by EPA.

The cleaning up of hazardous substance releases generated a new industry which is still evolving. At the time of the ERCS procurement, the EPA program office responsible for hazardous waste cleanups wanted to award large contracts to firms which could provide a full range of emergency cleanup services over large geographical areas. In this situation, EPA encountered market conditions where advance contract planning was critical, yet difficult. From the start, EPA was faced with a limited market where few firms could do the work envisioned under the contracts. In addition, EPA's specific knowledge was limited in such critical areas as the level and type of resources required to accomplish emergency cleanup actions, and the actual costs of such resources. Without such information and a clear understanding of contractors' customary procedures and practices, EPA was not in the best position to properly negotiate ERCS contracts with a potential value of $185 million.

Procurement officials determined that adequate price competition existed for the ERCS contracts. Accordingly, the contracting officer did not request detailed cost information, but used price analysis techniques to evaluate the reasonableness of the fixed rates. Based on this evaluation, procurement officials were convinced that the proposed rates were reasonable for the market and that EPA was achieving cost efficiencies through volume discounts. Although our review confirmed that ERCS rates generally fell within the range of rates being charged for other cleanup actions, competition and available pricing data for this procurement were minimal. Therefore, we question whether it was in EPA's best interest to award such significant contracts using price analysis techniques as the sole basis for evaluating the reasonableness of the proposed fixed rates.

Our efforts to assess the overall reasonableness of the ERCS contracts were hindered by the lack of adequate competitive pricing data and cost records. It can truly be said that neither we nor the contractors can determine with any certainty what level of profits are made on ERCS contracts. Our initial review of the four prime contractors disclosed that one contractor had incurred losses on all four delivery orders selected for review. In our opinion, the

losses resulted primarily from poor business decisions made by the contractor and not from inherent aspects of the contract. In fact, our preliminary examination indicated that for the four delivery orders reviewed, the contractor had received a 50 percent markup on labor, which is slightly higher than the average labor markup found on the other delivery orders reviewed.

At the other three contractors, we performed the detailed analysis of records necessary to compare estimated costs with charges being levied against EPA under the ERCS fixed rates. For 9 of the 12 delivery orders reviewed, EPA paid 40 percent more for labor than our estimate of the contractors' total cost. We were not able to make the same analysis on equipment because the specific equipment providers were not always identifiable from the record. Consequently, we determined the incremental hourly, daily, weekly, and monthly estimated costs for specific types of contractor and subcontractor owned equipment. Average markups on equipment varied considerably depending upon (1) whether the equipment was owned by the contractor, the subcontractor or rented, and (2) which rate, hourly, daily, weekly or monthly, applied. For contractor and subcontractor owned equipment, the average markup for the different negotiated fixed rates reviewed ranged from 321 percent on hourly rates to 143 percent on monthly rates. Average markups for (1) specially modified, (2) rented, (3) provisional rate, and (4) small equipment items were generally similar. During our audit we found instances where labor was billed at more than double the cost and equipment was billed at more than 100 times its estimated cost. Other inflated charges were found in per diem, transportation, disposal, and materials.

The mechanisms used to date by EPA and its contractors to pay for site cleanups under the ERCS contracts have potentially resulted in an artificial pricing structure. By artificial, we mean a pricing structure non-competitively bid in which fixed rates were inflated far in excess of any amounts which could be supported by actual cost. Unless appropriate corrective actions are taken now, these artificial prices threaten to become the base for all future prices.

The time has come for EPA to take control of this situation. An expanded cleanup program means the pressure is on to expedite cleanup actions. At the same time, however, EPA must do it efficiently and economically. EPA cannot do so without getting a better understanding of the true costs of cleanups. With an estimated level of emergency removal actions approaching 200 per year, the importance of developing a competitive contractor environment where cleanups are done at a reasonable price is paramount to the success of EPA efforts.

FINDING NO. 1 - EPA NEEDS TO IMPROVE COMPETITION FOR ERCS CONTRACTS

Various factors limited the level of competition for the ERCS contracts. The limiting factors included restrictions and difficult contract specifications in the Request for Proposal (RFP). Although EPA had valid reasons for the restrictions and difficult specifications, the composite result of these factors and the infancy of the industry virtually eliminate effective competition. In addition, although procurement officials were disappointed at the level of competition on the ERCS contracts, they concluded that competition was sufficient to proceed with the negotiations. We believe that EPA emphasized program goals and objectives at the expense of good procurement practices. We are recommending specific actions that EPA take should take to

increase competition on future emergency removal contracts by removing barriers which limit competition and encouraging greater participation by firms in Federally funded cleanup actions.

FINDING NO. 2 - EPA NEEDS TO OBTAIN REASONABLE CONTRACT RATES

EPA procurement officials operated in a poor negotiating environment during the ERCS procurement because price competition, offeror independence, and price analysis were all inadequate. To award the contract, these officials relied primarily on their knowledge of prevailing market rates in determining that proposed contract rates were reasonable. Had more complete information or actual cost data been available, EPA would have been able to assess the reasonableness of the proposed fixed rates by comparing them with anticipated costs. We are recommending that EPA (1) not rely solely on price analysis when there are not at least two independent, responsible offerors for a specific contract at the Best and Final stage, (2) treat certain rates, guides and proposals as inadequate bases for price analysis, (3) attempt to obtain adequate cost data from offerors in any situation where price analysis is not clearly adequate as a basis for negotiation, (4) require as a condition for each ERCS contract that the contractor maintain adequate cost data for all equipment, labor and materials, (5) use provisional fixed rates, if adequate price analysis or cost data do not exist, and (6) pay particular attention to the reasonableness of proposed rates for items which have received heavy usage in past ERCS performance.

FINDING NO. 3 - USE OF FIXED RATES SHOULD BE LIMITED

EPA often paid unreasonable prices for subcontracted, rented or purchased services under the ERCS contracts. This occurred because EPA used a fixed rate structure to pay for the services regardless of where the services were obtained or what costs were involved. Prime contractors established subcontract fixed rates as a percentage of the ERCS fixed rates. This method allowed the prime contractors to retain a percentage of the ERCS fixed rates and did not consider subcontractor cost and markup factors. In addition, the fixed rate structure permitted contractors (primes and subs) to have excessive markups on rented equipment and purchased materials. Procurement officials believed that a single fixed rate schedule for each contractor (prime or sub) would simplify the negotiation and administration of the ERCS contracts. We are recommending that EPA limit the use of fixed rates to the labor services and equipment which are under prime contractor exclusive control or ownership. The costs for labor, equipment and materials which are subcontracted, rented, borrowed or purchased for the ERCS contracts should be reimbursed on a cost-plus-award-fee basis.

FINDING NO. 4 - EPA NEEDS TO BETTER PLAN TO OBTAIN AND UTILIZE DATA IN NEGOTIATIONS

EPA's program and procurement staffs did not adequately plan and execute the solicitation, review, and negotiation phases of the ERCS procurement. Therefore, EPA did not ensure that necessary information was obtained and used to appropriately develop ERCS' contractual provisions to safeguard the interests of the Federal government. Specifically, effective use was not made of experience gathered under previous procurements in determining equipment categories to be included in the ERCS contracts. Appropriate action was not taken to

identify and correct problems identified in previous Notice to Proceed contracts. Additionally, necessary information regarding company procedures and practices was not always obtained and used in negotiating clear, concise contractual provisions setting forth the nature and extent of services to be provided for the established rates. As a result, contractor charges to the ERCS contracts have been substantially inflated. We are recommending that (1) EPA staff better plan and execute major procurements, (2) EPA include provisions in upcoming ERCS contracts which prohibit payment for certain items, and (3) upcoming ERCS contracts be clarified in certain areas.

FINDING NO. 5 - EPA NEEDS TO CHANGE ITS METHODS FOR PROCURING TRANSPORTATION AND DISPOSAL SERVICES

Contractual provisions requiring ERCS prime contractors to competitively procure transportation and disposal services on a cost reimbursable basis have not worked. Overall, there are not effective incentives for zone contractors to properly plan and execute subcontracts for services at the lowest cost. This has resulted in increasing EPA's transportation and disposal costs. Additionally, the use of the prime contractor to oversee all services related to a cleanup has served to preclude EPA from becoming aware of inadequate work. We are recommending that EPA (1) award one master cost-plus-award-fee contract for the procurement of ERCS transportation services in all zones and (2) determine how to obtain preferred rates from disposal facilities for disposition of hazardous waste.

FINDING NO. 6 - EPA SHOULD IMPROVE CONTRACT MONITORING

Contracting officers did not monitor the ERCS contracts on a regular basis. As a result, the ERCS contractors did not (1) always comply with the terms of the contract, (2) provide services in a cost effective manner, and (3) comply with Federal laws. Specifically, the ERCS contractors (primes and subs) did not comply with (1) the Minimum Personnel Qualifications required by the contract, (2) the Purchasing and Subcontracting Agreement of the ERCS contracts, and (3) Federal labor laws. We are recommending that EPA (1) improve contract monitoring by actively reviewing contractor compliance with contract terms on a routine basis and (2) establish a monitoring board which includes program and procurement personnel from both headquarters and the regions.

Agency Comments

On August 29, 1986, EPA provided comments to our original draft audit report. Subsequently, on September 4, Agency officials provided a revised version of their earlier comments. This revised version considered changes to the draft report which had been agreed upon during discussions between Agency officials and the auditors. These agreed upon changes were made to provide for better reporting balance and to clarify the intent and context of the draft report's findings and conclusions.

Due to the voluminous nature of EPA's response, we have not included the complete response as an attachment to this report. Instead, we have paraphrased EPA's comments after each main section of the report and provided our evaluation thereon. Should any reader of this report wish to have a complete copy of the EPA response and our detailed analysis of it, the documents would be made available on request.

In general, the Agency did not agree with many of the draft report's findings and some of the recommendations. In some instances, the Agency proposed alternative corrective actions. Agency officials did agree with the findings (part of Finding No. 4 and Finding No. 6) regarding ambiguous contract provisions and a lack of adequate contract and on-site management. In their comments, they pointed out several programatic initiatives which have been taken to improve management of the ERCS contracts. The Agency also highlighted other areas in the report where it considered that there was agreement, stating:

> In your report you have acknowledged:
>
> - the "expressed urgency of program needs" that impelled us to enter into large-dollar ERCS contracts in spite of a "poor negotiation" environment (we executed those contracts and achieved the emergency response cleanup actions.);
>
> - that we exercised the "apparently most viable alternative available at the time" in executing the ERCS contracts;
>
> - that you "found no direct violations of statutes or regulations in the award of the contracts"; and that
>
> - your "review confirmed that ERCS rates generally fell within the range of rates being charged for other cleanup actions."

Most importantly, the Agency believed that there was basic agreement on future contract strategy for the removal program:

> We recognize the need to increase competition and move away from total reliance on four large contracts that were designed primarily for response to classical emergencies. Our program and procurement offices are now far along in implementing a strategy that will result in many smaller and less technically demanding contracts, including some on a site-specific basis. We believe this approach more effectively addresses the nature of the removal program as it has evolved over the past three years.

The Agency, however, had problems with many of the examples used as the basis for the audit report's conclusions. It stated that many of the examples in the report were misleading or in error. Of particular concern was the methodology used to develop the examples and conclusions. The Agency stated that the report used a small and select sample of sites and equipment to create the overwhelming impression that contractors were making enormous profits. According to its comments:

> Contractor profitability on hazardous waste cleanup projects costing millions of dollars cannot be determined simply by extrapolating from a few specific pieces of equipment (for which accurate data does not exist). The fact is that not only do we not know contractors' profits, we don't know all of their costs and expenses or their equipment utilization rates. Without this information, no meaningful, supportable assessment of overall profitability is possible.

The Agency also objected to the use of the U.S. Army Corps of Engineers' Construction Equipment Ownership and Operating Expense Schedule, arguing that the schedule has no applicability to composite rates and that the schedule's rates were based on full utilization, an average of 1,500 hours per year. The Agency concluded that "when one considers the thousands of pieces of equipment among all the equipment sources accessed under the ERCS contracts, it is clear that much equipment is sitting idle much of the time." Therefore, it was misleading to base calculations of markup on the premise that all equipment was being utilized full time.

Agency officials also believed that the negotiations and award of the ERCS contracts were well founded, and questioned what alternatives would have reflected more sound judgments and decisions. They argued that much of the information which the audit report cited as not having been available, could never be available for procurements like ERCS. Accordingly, procurement officials used price analysis, a technique which is recognized in Federal regulations as acceptable and permissable. The Agency believed that rates negotiated into the ERCS contracts were, as a whole, equal to or better than rates charged in the industry. Furthermore, they noted that the audit report acknowledged that the ERCS rates were representative of going rates in the industry and that the level of profit on the ERCS contracts could not be determined with any certainty.

In summary, EPA officials stated that the audit report failed to recognize the impact of the emergency nature of the removal program on procurement and on-site management decisions. They stated:

> A fair and objective assessment of those decisions cannot be made without recognizing the procurement and program officials are unavoidably constrained by urgency and overriding concern for protecting human health and the environment. . . .
>
> Finally, it must be recognized that in framing the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) Congress delineated its requirements for cost-effectiveness. CERCLA section 104(c)(4) clearly requires that remedial actions achieve cost-effectiveness, balancing the need for protection of public health and the environment with the availability of fund moneys. No such requirement exists in CERCLA section 104(c)(1) in defining the scope of removal actions. In fact, Congress provided in CERCLA section 104(h) that should it be necessary, emergency procurement powers could be authorized. This provision points out the unique view held by Congress of the scope of Superfund; Congress recognized that emergency response cannot always be achieved in a cost-effective manner. This is not to say that cost is not a factor

in the removal program. Only that protection of public health and the environment is the paramount consideration.

Additional Agency comments are included after the specific sections to which they pertain.

Auditor Evaluation

We are pleased with the various corrective actions the Agency has taken or plans to take on the award and management of the new ERCS procurements. However, we are concerned that the Agency's proposed actions do not go far enough and EPA might obtain similar results as those noted herein on the new procurements. We are convinced that a study of the problems identified in this report and the implementation of our recommendations will result in better, cost effective ERCS contracts in the future.

The Agency's listing of points of agreement in their comments could be misleading because they are taken out of context. The quoted language includes phrases which we inserted into the revised draft audit report to provide better balance. We do not agree that the negotiations were adequate or that the provisions of the contracts as executed were appropriate. We do agree that EPA needed the contracts to provide emergency response services.

We did not reach any conclusions on profits made by contractors. We do not believe our sample was small, as it included 19 percent of total obligations at the time of audit. Furthermore, the rates audited applied to all delivery orders, not just those sampled. The report did note that, in many instances, much of the total markup accrued to subcontractors rather than prime contractors.

We agree that we do not know contractors' profits, all of their costs and expenses, or their equipment utilization rates. Based on the best information available, we found that high markups were common. We wish to point out that any extraordinary cost incurred by a contractor in an emergency situation would be recorded in its accounting records, and therefore, included in our computations. Given that EPA officials lacked and continue to lack profit, cost and utilization information, we question their ability to determine the reasonableness of the rates. We believe we adequately demonstrated the deficiencies in the ERCS procurement process.

We reviewed the Agency's information regarding errors of "fact, context, relevance, and method of approach." Where necessary, we have modified our report. However, the overwhelming majority of the Agency's criticisms were erroneous or without supporting evidence.

We computed the average estimated cost for selected pieces of equipment in a given year, regardless of the location or circumstances under which the equipment was provided. This generic method of analysis was necessary because neither contractors nor EPA maintain records which identified the specific equipment item or the source of the equipment (i.e., contractor owned, subcontractor owned, rented, or leased) used on specific cleanups.

Although we did not use the U.S. Army Corps of Engineers' rate schedule, we did use the Corps' estimated utilization factors because the companies had no utilization records and we had no better basis upon which to rely. Our cost estimates were independently developed. These utilization rates are not based on full utilization, which would be 2,080 hours based upon 40 hours a week for 52 weeks. We know of no documentation of unusually long idle periods for ERCS equipment.

Our audit demonstrates that EPA did not adequately use available information in negotiating and awarding the ERCS contract, as detailed in Finding No. 4. The "limited historical experience" included hundreds of removals performed under Notice to Proceed contracts. We found that a number of equipment items showing high usage in prior removals were not included in the fixed price list for the ERCS procurements. We found that a number of problems in removal contracting that were identified in audit reports which were issued before the award of the ERCS contracts were not resolved during negotiations. We found no evidence that EPA analyzed response times required for prior removals. We believe much better contracts would have resulted from adequate analysis and use of available information.

The audit demonstrated that, in many instances, prime contractors obtained emergency response services from subcontractors at lower rates than the fixed rates in the contract. Although we did not determine profit levels, we did find that enormous markups over cost were common. We believe that EPA needs to recognize that it is the largest client for this industry, and therefore, rates accepted by EPA set an example for other clients. EPA's market position in this field makes it incumbent upon its negotiators to make special efforts to assure that EPA is not paying unreasonable markups, and not simply be satisfied that the rates are comparable to those paid by others.

We believe that cost data were (and are) needed because (1) emergency removal of hazardous substances was an infant industry, (2) EPA was the major industry client, and (3) there was a low level of competition for the contracts. Given the unavailability of cost data, EPA should not have negotiated fixed rates for three years at the time of award. While fixed rates were undoubtedly necessary for the first year of the contract, options for additional years should not have been exercised unless companies agreed to maintain and make available to EPA the cost data necessary to demonstrate the reasonableness of rates established in the ERCS contracts. Without such action, EPA's efforts to obtain cost data have been largely unsuccessful.

Our report acknowledged that the removal program must respond to emergencies. It in no way minimized the need to protect human health and the environment. Our recommendations were carefully framed to allow for responses that fully meet the time and technical requirements identified by the program in fulfilling its statutory mandate. Our report clearly recognizes the special procurement needs of the removal program. We do not challenge the need for ERCS contracts. However, we found many areas which needed improvement in order to meet the needs of the program at the lowest feasible cost.

We also recognize that CERCLA does not require the removal program to balance "the need for protection of public health and welfare and the environment at the facility under consideration, and the availability of amounts from the

Fund" (CERCLA, section 104(c)(4)). Our audit did not address the decisions of which responses were appropriate, once it was determined that a removal action was required. The CERCLA cost limitation relevant to the subject matter in our report is in Section 111(a): "The President shall not pay for an administrative costs or expenses out of the Fund unless such costs are reasonably necessary for and incidental to the implementation of this title." We believe the Congress intended for EPA to complete necessary removals at the lowest feasible costs given the time and technical constraints associated with the removals. Section 104(h) of CERCLA, cited in the response, specifically states that emergency procurement powers are "subject to the provisions of Section 111 of this Act." If such powers are deemed necessary, it provides for regulations to be promulgated governing such procurements. EPA has not promulgated such regulations.

In conclusion, we wish to restate one of our primary reasons for performing this audit, which was to "obtain information which will assist the Agency in designing and executing future contracts for similar services." We believe that this report contains valuable information for use on the new ERCS procurements. It is clear that many Agency assumptions on contractor practices and sole reliance on price analysis techniques did not result in the most cost effective contracts. In light of our findings, it is essential for EPA to use cost data to negotiate fixed rates in the new procurements. If such information is not currently available and it does not appear to be, the Agency should move as quickly as possible to use provisional rates until cost data can be obtained. Negotiation of new fixed rates based on price analysis or the rates established in the current contracts should be avoided for the long run and prompt action should be taken to implement the recommendations in our report.

ACTION REQUIRED

In accordance with EPA Order 2750, the action official is required to provide this office with a copy of its response within 90 days of the issuance of the audit report. Since this report deals primarily with procurement matters, we believe the Assistant Administrator for Administration and Resource Management should take the lead in coordinating the Agency response to this report.

We have no objection to the release of this report. Should you have any comments regarding this report, please contact me or Mr. Ernest Bradley, Assistant Inspector General for Audit.

BACKGROUND

Removal Actions

Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA commonly referred to as Superfund) authorized EPA to take action whenever there was a release or threat of release of hazardous substances which might present an imminent and substantial danger to public health or welfare.

Removal actions represent short-term responses designed to alleviate imminent threats while remedial actions represent responses of longer duration leading to permanent restoration of the site.

An immediate removal action is undertaken only if a response is needed within hours or days to prevent or mitigate significant harm to human health or the environment, and such action may not otherwise be provided in a timely manner by the responsible party. Immediate removals are limited by Section 104(c)(1) of CERCLA to six months in duration or one million dollars.

EPA uses contractors to undertake removal actions. Contractors are required to provide personnel, materials, and equipment specified for each cleanup action.

ERCS Contracts Background

For the first few years after Superfund authorization, EPA fulfilled its cleanup responsibility by utilizing interim emergency procurement procedures which permitted contracting for cleanup services under Notice to Proceed contracts. These types of contracts did not usually specify labor, equipment or other rates when initiated. Instead, these contracts identified the tasks to be accomplished and authorized a specific party to commence work. It was intended that rates and other terms would be negotiated as soon as possible. In practice, cleanup operations were often completed or well underway before negotiations were finalized.

The ERCS contracts provided an alternative approach for obtaining cleanup services. Although Notice to Proceed contracts may still be used in special circumstances (e.g., when a response is needed in less time than provided in an ERCS contract), nearly all initial cleanup actions which involve EPA are now provided through ERCS contracts.

On December 29, 1981, a solicitation was issued for a National Services Technical Assistance Team contract that included cleanup services and technical assistance services. After the solicitation was issued, EPA determined that the combined contract might create a conflict of interest situation. EPA was concerned that the objectivity of the contractor's technical assistance would be jeopardized if the same company conducted the cleanup. In March 1982, the solicitation was cancelled.

EPA decided to separate the contracts. Since cleanup services could be obtained under the existing mechanism for Notice to Proceed contracts, EPA proceeded to obtain the technical advisory contract first. After the contract was in place, EPA proceeded to obtain contracts for cleanup services.

General Information About ERCS Contracts

On March 17, 1983, the ERCS contracting officer made the following determination concerning the method of procurement:

> the proposed procurement is for services for which it is impracticable to secure competition by means of formal advertising. . . . Formal advertising is not feasible or practical for this procurement because the nature of the requirement makes it impossible to draft for an invitation for bids adequate specifications or any other adequately detailed description of the required services.

On April 19, 1983, an RFP was announced in the Commerce Business Daily. Although the RFP was ultimately sent to 235 companies, only 7 submitted proposals. One proposal was subsequently withdrawn. Between November 1983 and January 1984, four ERCS contracts were awarded from the six offers to provide cleanup services for four separate geographic zones in the country. These four contracts ranged from $26 to $66 million and could amount to a total of $185.9 million over the possible three year contract term.

Each ERCS zone contract was awarded for a one year period with the option to extend the contract for two separate one year periods. Each contract was a combination of contract types and included fixed rates and cost reimbursable items. In addition, each contract included a performance incentive feature which allowed the prime contractor to receive a monetary reward for "performance which is determined to be exemplary" on specific delivery orders. EPA is in the process of awarding new ERCS zone contracts for a possible four year period beginning in December 1986.

The ERCS contracts initiated a "management network system" for analyzing and responding to cleanup assignments. Actual cleanup services were authorized only by individual delivery orders on a case-by-case basis. Each delivery order was placed against an ERCS contract only after actual needs became known. This mechanism allowed for quantities of specified labor and equipment to be ordered at fixed rates which were designated in the ERCS contracts. More detailed contract information is provided below.

Management Effort (Cost-Plus-Fixed-Fee)

Each ERCS contract required that various managerial services be performed. This effort included all managerial, financial, administrative, and clerical functions which were necessary to initiate, support and track specific cleanup activities. Under the ERCS contracts, this management effort was reimbursed on a cost-plus-fixed-fee basis. Contracted amounts consisted of cost estimates for direct labor, miscellaneous other costs, and applicable provisional rates for fringe benefits, overhead, and general and administrative (G&A) expenses, plus fixed fees.

Cleanup Effort (Fixed Rate, Indefinite Quantity)

Each ERCS contract contained negotiated fixed rates for similar categories of labor and equipment, various types of materials, and miscellaneous other items. Contractors were to include overhead and G&A costs and profit in each proposed labor and equipment rate. Each ERCS contract

provided for a minimum dollar order amount. The contract fixed rates for labor, equipment and material would apply regardless of the quantity that EPA ordered.

Labor And Equipment Costs With Fixed Rate Provisions

Actual cleanup work could be performed under the ERCS contracts by (1) the prime contractor, (2) permanent contract team subcontractors (subcontractors making prior arrangements to assist the prime contractor in cleanup operations), or (3) subcontractors who were not part of the permanent team. The negotiated fixed rates apply to all specified labor and equipment services regardless of who provides the services.

Labor And Equipment Costs Without Fixed Rate Provisions

Labor and equipment categories without fixed rates are reimbursed at provisional rates. Originally, these rates were to be negotiated within 90 days of each delivery order completion. To date, however, these rates have not been negotiated and remain provisional.

Other Major Reimbursement Provisions

The ERCS contracts stated that costs for transportation and disposal of hazardous wastes must be subcontracted by the prime contractor. The contracts also stated that most material costs, including those of the prime contractor, must be treated as reimbursable costs. In addition, the prime contractor was allowed to bill a handling charge on all (1) material costs, (2) costs for waste transportation and disposal, and (3) costs of any subcontracted services without fixed rates.

Contract Responsibility

The Emergency Response Division, under the Assistant Administrator for Solid Waste and Emergency Response, was the program office which provided detailed specifications on the kind and quantities of goods and services which were needed in the ERCS contracts. Program officials from the Emergency Response Division were assigned to provide technical direction and monitor the ERCS contractors' work. The Procurement and Contracts Management Division, under the Assistant Administrator for Administration and Resources Management, was responsible for selecting the most appropriate type of contract, negotiating the contract, administrating all contract activities, and ensuring that contracting was done as authorized by law and regulation.

SCOPE AND METHODOLOGY

The audit of the ERCS contracts was performed under the authority provided by the Inspector General Act of 1978 (Public Law 95-452), as amended. We performed the audit in accordance with the Standards for Audit of Governmental Organizations, Programs, Activities, and Functions, issued by the Comptroller General. As required, we evaluated the significant administrative controls pertaining to the planning, negotiating, awarding, and administering of the ERCS contracts. The weaknesses which were noted are included in the Summary of Findings section and more fully discussed in the Findings and Recommendations section of this report. Nothing else came to our attention as a result of the specified procedures that would lead us to believe that controls which were not specifically tested were not in compliance with applicable laws and regulations. Our audit began in February 1985 and the field work was completed in April 1986.

Reason For Audit

Our audits of Notice to Proceed contracts had questioned and set aside substantial costs because the billing rates used by the contractors were not based on actual costs and there was insufficient documentation on which to evaluate their reasonableness. We were concerned that the billing rates in the Notice to Proceed contracts may have been used for comparison purposes during the negotiation of the fixed rates for the ERCS contracts. We were also concerned because many contractors based their rates on the prevailing industry rates and there was little evidence of competitive pricing. There was also the possibility that the advent of CERCLA and the infusion of large amounts of Federal funds had effectively established the going price for cleanup services.

Scope Of Work Performed

In February 1985, we initiated a preliminary survey of the negotiation and award of the four ERCS zone contracts. Our survey included a review of the development of the ERCS concept and the special circumstances which existed at the time that the ERCS contracts were awarded. The survey focused on the procedures used to negotiate the fixed rates for the cleanup part of the contract.

On September 26, 1985, we issued a draft survey report. The survey identified weaknesses in the procedures used to negotiate and award the ERCS contracts. We concluded that there was inadequate price competition in at least two zones and price analysis should not have been used as the sole basis for evaluating the reasonableness of the fixed rates. There were some reservations for the other two zones, but the competitive circumstances were different. While the survey had noted weaknesses in the procurement process, we had not determined the reasonableness of the negotiated fixed rates nor evaluated the overall efficiency, economy, and effectiveness of the ERCS contractual provisions.

To address these issues, we reviewed the general policies and procedures used by the four prime contractors to carry out their responsibilities under the ERCS contracts. We were particularly interested in examining the contractors' costs associated with providing ERCS contract services. We studied the requirements of the four contracts and requested that procurement officials clarify the meaning and intent of the contracts in areas which were vague or contradictory.

Originally, we judgmentally selected four delivery orders to review for each of the four zones. These 16 delivery orders were selected on the basis of dollar value and diversity. In order to obtain a good cross section of subcontractors, we selected as many delivery orders as we could that involved different subcontractors. Each of the delivery orders exceeded $250,000, and at the time of selection, was among the largest dollar value delivery orders completed in each zone. The largest delivery orders were most likely to show the maximum cost efficiency obtained by EPA because long term equipment rental rates were discounted. Delivery orders of short duration would utilize the most expensive, least cost efficient hourly and daily equipment rental rates.

Our initial review at one ERCS contractor disclosed that the contractor had not recovered all its expenses on the four delivery orders selected for review. These losses occurred primarily because the contractor was unable to recover its total indirect expenses on subcontracts. Some of the losses were the result of subcontracts with permanent team members. The contractor agreed to subcontract rates which resulted in losses. We suspect that the contractor's negotiators did not understand how indirect expenses were distributed and recovered. Because of these overall losses, we did not perform the same level of analysis on the contractor's 4 delivery orders as we did on the remaining 12 delivery orders. The examples and conclusions regarding the reasonableness of the fixed rates contained in this report are based on the results of detailed analysis of the 12 delivery orders at the other three contractors.

From our final sample of 12 delivery orders, we judgmentally selected individual services and items in order to compare the estimated costs with the charges to EPA under the ERCS contracts. In our selection process, we emphasized labor services and equipment items which either were frequently used or had a high dollar impact on our sample delivery orders. We also included some less expensive and specially modified equipment items. We included both services and items which were billed at negotiated fixed rates specified in the contracts and those which were billed at provisional rates.

We also reviewed a sample of subcontractors for the three contractors where detailed analysis was performed. The sample included (1) four permanent team subcontractors, (2) two transportation firms, (3) two waste disposal firms, and (4) three security firms. The sample also included one firm that provided both transportation and disposal services, and one firm that provided top soil.

We reviewed contractor and permanent team subcontractor charges and related costs on the delivery orders for labor, equipment, per diem, and materials. We also reviewed contractor and subcontractor procurement practices, pay policies and personnel qualifications to determine if they were in compliance with the ERCS contracts.

At the transportation and waste disposal firms, we determined: (1) whether they were properly licensed, (2) if they had been paid for services claimed under the delivery orders, and (3) whether the manifests reconciled with the billings. In addition, we reviewed their general pricing policies.

For security firms, we determined if the firms actually provided the guards or subcontracted the work to another firm. All of the firms provided the guards themselves. We reviewed invoices to determine the total amounts and the billing rates for the services.

In order to obtain information on the development and award of the ERCS contracts, we interviewed the responsible officials in the Procurement and Contract Management Division and the Emergency Response Division. We also reviewed (1) EPA and contractor (negotiation and contract) files and (2) contractor cost proposals.

In addition, we reviewed the audit reports on the Notice to Proceed contracts issued by our office between September 1982 and December 1983. We identified reported problems with the previous contracting method and reviewed contract files to determine if those problems had been addressed and corrected in the ERCS procurement.

According to the July 1985 Status Report on emergency response delivery orders, EPA had obligated slightly more than $59 million on 290 delivery orders. The total value of the 12 delivery orders in our sample was about $11.3 million. At the time, our sample represented 4 percent of the issued delivery orders and about 19 percent of the total obligated dollar amount.

The 12 delivery orders that we selected are not a statistically valid sample of EPA's universe of delivery orders under the ERCS contracts, and do not allow a projection of our findings to the total ERCS procurement. Rather, our review was designed to evaluate specific issues raised in the survey report and an August 2, 1985 letter from the Assistant Inspector General for Audit to the Director of the Procurement and Contract Management Division. While our findings cannot be statistically projected to all ERCS delivery orders, we believe that our sample was sufficient to indicate (1) problems with contract administration, and (2) the effect of procurement weaknesses identified during the preliminary survey.

Method Of Analysis

The contractors and subcontractors did not have a cost breakdown of their rates. The companies generally did not have adequate cost accounting systems that identify cost data to support their ERCS fixed rates. Consequently, it was necessary for us to construct the contractors' estimated costs using financial records and other data provided by the contractors. All known associated direct and indirect costs were included.

Whenever possible, we followed the Federal Contract Cost Principles and Procedures (41 CFR [Code of Federal Regulations] 1-15) which were in effect when the contracts started. In some instances, we were not able to follow the cost principles because of the inadequacies of the contractors' cost accounting systems. In those instances which are described below, we usually used estimated data provided by the contractors.

1. Indirect Costs

Each of the three prime contractors that we reviewed proposed indirect cost rates for use on their ERCS contracts. We completed a separate audit on the indirect costs proposed by one contractor. We used the rates which were accepted in that audit report when calculating the contractor's costs. For the other two contractors, we were not able to express an opinion on their proposed indirect costs because of deficiencies in their accounting

systems and the methods used by them to develop their rates. For the purpose of this audit, the contractors' proposed rates were used when computing estimated costs. Our preliminary indications were that the proposed rates were overstated and substantially so in the case of one contractor. Therefore, the use of the contractors' proposed rates was the most conservative approach. We also reviewed the indirect costs for two major subcontractors and computed estimated rates so that we could include an indirect cost factor in our computation of their estimated costs.

2. Labor

To compute labor costs, we identified the employees of the contractors and selected subcontractors who worked on the delivery orders that we reviewed. These employees were classified by the labor categories in the contracts and we computed an average pay rate for each category for each company. We added the applicable indirect costs to the pay rates and we compared the resulting computed hourly labor rates to contract rates. In addition, we compared the contractors' total labor costs for 9 of the 12 delivery orders against the total labor charges billed to EPA.

3. Equipment

Owned Equipment - The contractors did not know their actual costs associated with owning and operating their equipment. In order to estimate equipment costs for the three reviewed contractors, we used their financial records. We concentrated on frequently used equipment items for the selected delivery orders. In order to compare the contractors' costs to their ERCS rates, we computed estimated costs for a total of 76 items. In addition, we computed the costs for leased and small equipment items, and contractor-owned equipment that had been specially modified by the contractor.

The estimated rates for contractor-owned equipment were computed by using applicable cost factors including depreciation, repair and maintenance, insurance, personal property taxes, vehicle licenses and highway use taxes. Depreciation was taken directly from the contractors' and subcontractors' depreciation schedules.

When a contractor owned multiples of one item, the depreciation of all the items was averaged. Repair and maintenance expenses were not usually identified with individual equipment items in contractor records. We included this expense by applying a portion of repair and maintenance in the same ratio as accumulated depreciation. Our estimation method assured that older items of equipment were assigned a larger portion of repairs and maintenance.

In some cases, actual costs were used for insurance and taxes. If actual costs were not available, insurance and taxes were prorated based on either original purchase price, unit replacement value or accumulated depreciation. The use of accumulated depreciation as a method for allocating insurance and taxes resulted in a higher cost figure than would normally be realized. This method did not have a material effect on the estimated costs. If

anything, our estimated costs might be slightly overstated in a few instances. Other cost elements were based on actual costs.

After annual cost estimates were computed, we estimated hourly, daily, weekly and monthly costs. The contractors and subcontractors did not maintain equipment utilization records that could be used to compute the hourly cost for the equipment. As an alternative, we used the annual usage hours in the U.S. Army Corps of Engineers' Construction Equipment Ownership and Operating Expense Schedule, dated June 1985. The annual usage factor ranged from 1,500 to 1,550 hours depending on the average construction season in each of the three zones.

According to the Corps of Engineers' schedule, the average hours of use per year were determined by reducing the maximum available hours (40 hours per week, 52 weeks per year) to allow for lost time due to weather, holidays, equipment maintenance and repairs, mobilization and demobilization, and miscellaneous downtime. The contractors' estimated annual costs were divided by the appropriate number of annual average operating hours in the Corps of Engineers' schedule to arrive at the estimated hourly cost for each type of equipment.

The daily, weekly and monthly estimated costs were based on the estimated hourly cost: 8 hours equaled a day; 5 days equaled a week; 4.33 weeks equaled a month. Our method is consistent with the Corps of Engineers' method for determining the annual average hours of use and includes the same lost time factors in our daily, weekly and monthly costs.

Leased Equipment - To compute the cost for leased equipment, we used the actual lease cost and added a factor for G&A expenses. The computed hourly costs were compared to the ERCS hourly rate. In some cases, the total cost of the leased equipment was compared to the total charge for the equipment on a single delivery order.

4. Per Diem - The actual incurred subsistence costs were compared to the amounts charged to EPA.

Agency Comments

Agency officials objected to the methodology used to compute the estimated costs on which the conclusions were based. The Agency stated that the report took exception to the competitive basis for the awards and the price analysis performed on the fixed rate items. Therefore, the report sought to prove that the rates being charged under the contracts were unreasonable based on what the auditors had computed to be "estimated costs." Agency officials also stated that the report did not address the issue of whether EPA was paying more or less than other clients of the same contractors or whether the rates in the contract were higher or lower than those of other firms in the cleanup industry.

Selection Of Delivery Orders

The Agency stated that the findings were based on a partial review of 12 of 461 delivery orders and did not include any delivery orders from one of the zones. Examples were used repeatedly from the same contractors

or subcontractors and sometimes data were taken from fewer than the 12 delivery orders specifically reviewed.

Calculation Of Markup

The Agency stated that the report did not consistently use the term "markup". It indicated that the "markup" computed on subcontractor items was misleading and should have been computed as two separate markups at the subcontractor and prime contractor levels. Markup on small equipment items was calculated as the difference between acquisition cost and the total billed amount for a delivery order, which did not account for indirect costs, subcontractor profit or estimated useful life.

The Agency stated that the calculation of markup was also deficient for these reasons:

1. The estimated labor costs were computed using a simple average rather than weighted average.

2. All indirect costs applicable to equipment were not included, such as indirect labor, utilities, building depreciation, and costs associated with storage and other equipment handling functions that were part of the contractors' overhead rates.

3. The "estimated cost" for equipment included depreciation when the item was not fully depreciated. If the item was fully depreciated a usage charge was not calculated.

   In addition, the depreciation method used by the contractor for tax purposes was used in the "estimated cost" calculation. If the accelerated method was used, it would distort the costs.

Comparability Of Findings To Contract Situation

The selection of data was very limited and is not comparable to contract situations. For example:

1. The "estimated cost" considers what the cost is in a specific instance (ownership cost, rental cost, subcontractor cost) whereas the ERCS rates are composite rates which are applicable in all situations.

2. The annual equipment utilization hours based on the Corps' schedule were not applicable at small scale cleanup operations.

Report Presentation

The procurement officials also questioned our reliance on contractor developed workpapers without verifying the data. In addition, rental items were often rented for periods in excess of their actual use on EPA sites and may not have been used sufficiently to recover all rental costs. If contractors charge EPA direct for costs that they normally charge as indirect to other clients, the preaward audits should have identified this.

Auditor Evaluation

The audit report does not "seek to prove" that the rates negotiated under the ERCS contracts were unreasonable. The audit report presents what was found during our review. One primary purpose of the audit was to assist the Agency in designing and executing future contracts for similar services. The purpose was not to determine whether EPA is paying market rates. Market rates in an emerging industry do not necessarily ensure reasonableness in relation to the cost of services. Additionally, since EPA is a major consumer of cleanup services, we believe that it should be able to obtain better than market rates and establish its role as a leader for promoting economy and efficiency in cleaning up hazardous substances.

Selection Of Delivery Orders

We selected 12 delivery orders, which at the time of the audit, were among the largest in dollar volume. As stated in the report, EPA had obligated slightly more than $59 million on 290 delivery orders when we made our selection. The total value of the 12 delivery orders in our sample was about $11.3 million. At the time, our sample represented 4 percent of the total number of delivery orders issued and about 19 percent of the total dollar amount obligated.

The report used examples from various contractors and subcontractors in three of the four zones. The reason for excluding the contractor for the fourth zone was clearly explained in the audit report. We also included three transportation companies and three disposal companies in our review. Two of the transportation and two of the disposal companies were discussed in the report. We have no reason to believe that the companies selected were not representative of other companies which were not specifically reviewed.

Calculation Of Markup

The term "markup" is used consistently to mean the difference between estimated costs and the billed rate. In some places, we have combined both subcontractor and prime contractor costs to demonstrate an overall effect. All applicable indirect costs were included in our estimated costs. We included a schedule showing the "layering" effect of subcontractor markup. We do not show a markup for the small equipment items. Instead, we simply showed the difference between purchase prices and billed amounts on selected delivery orders. While the differences shown relate to only one delivery order, these items might well be used on more than one delivery order producing much greater differences between purchase prices and billed amounts.

Estimated labor costs were computed using a weighted average labor rate. When the total estimated labor costs per delivery order were computed, employee actual wage rates and hours were used. When the estimated average labor cost for a specific labor category was computed, the same wage and hour information was used.

All known overhead costs applicable to equipment were included in our estimated cost computations. We do not believe that using the contractors'

actual depreciation methods distorted the costs. If the accelerated depreciation method was used on recently purchased equipment, a large portion of the acquisition cost would be expensed in the early years, thereby increasing our estimated equipment costs. Conversely, if an item was almost completely depreciated, the contractor would have already recovered, through customer billings and tax write-offs, most of the acquisition cost. Therefore, the contractor had no additional cost to recover. Using the contractors' actual depreciation methods neither overstates nor understates equipment costs. The only acceptable methods for calculating depreciation costs are those allowed by generally accepted accounting principles and the U.S. Internal Revenue Service.

If an item was fully depreciated, a usage allowance might be appropriate depending upon circumstances discussed in Federal regulations. However, a usage allowance is not a cost to the contractor, and therefore, is not appropriate for inclusion in our estimated costs. It was not the purpose of the audit to determine a reasonable rate for the use of equipment.

Comparability Of Findings To Contract Situation

We reviewed equipment costs from various sources to show the effect of the composite rates in a variety of situations.

The ERCS contractors did not maintain equipment utilization logs. In lieu of the actual data, we used usage factors of 1500 to 1550 hours which were developed by the U.S. Corps of Engineers. We recognize that some equipment may be used less, and some more. In the absence of actual utilization records, we believe that the Corps' usage factors are the best available basis for estimating utilization.

Report Presentation

We used the best available information the contractors had available. These included audited financial records and interviews with contractor officials.

If a contractor rents a piece of equipment for a longer period than it is needed at an ERCS cleanup site, EPA should not pay for the additional costs. EPA has no obligation to participate in costs resulting from poor business decisions by the contractor.

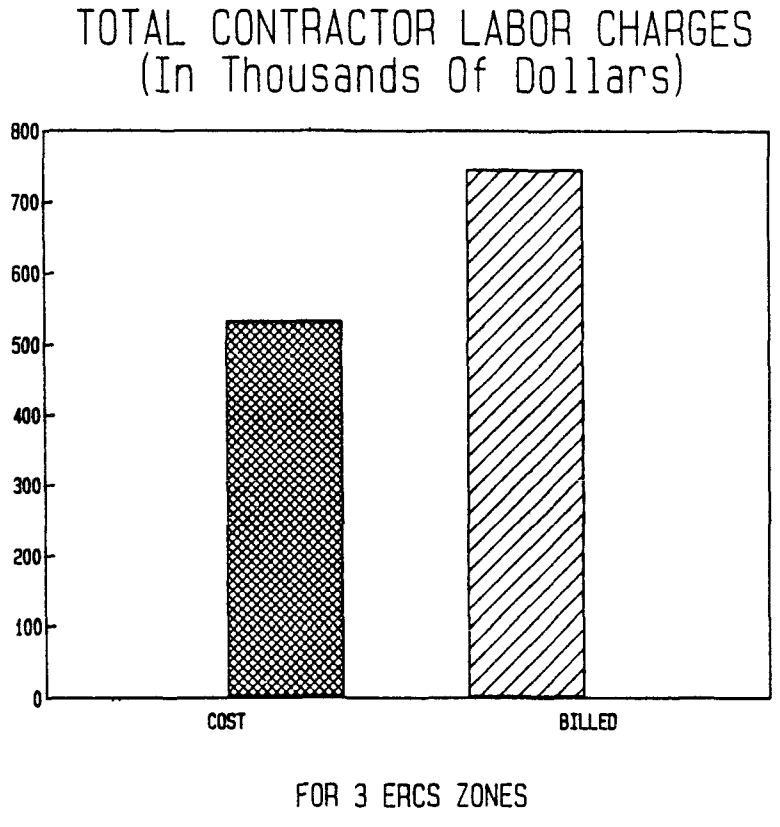
A preaward audit is designed primarily to render an opinion on proposed costs and review the overall adequacy of the contractor's accounting system. A preaward audit would not normally show how the contractor would allocate costs during the project period.

FINDINGS AND RECOMMENDATIONS

Because the issue of reasonableness of costs paid by EPA on Superfund removals has an overriding impact on our findings, we are prefacing our findings with our observations on the matter.

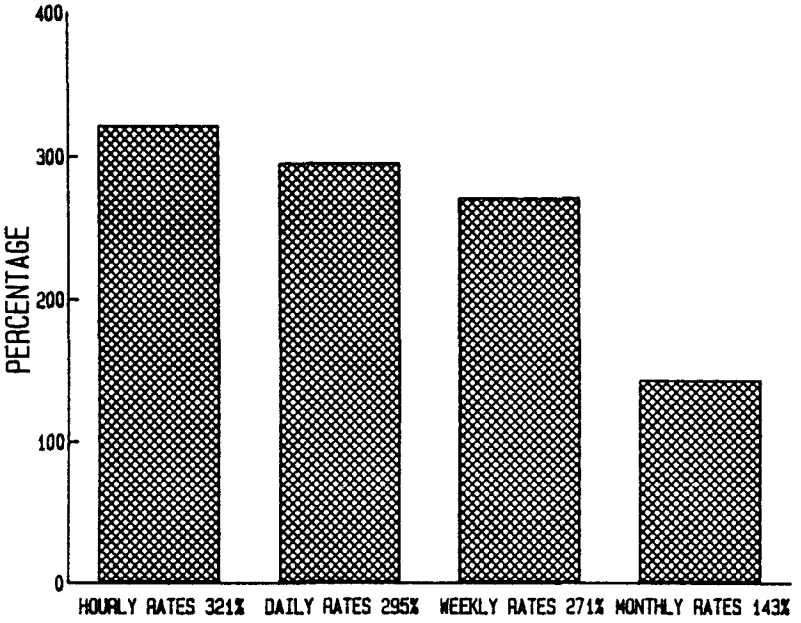
EXCESSIVE COSTS PAID FOR SUPERFUND REMOVALS

Although we have no reason to believe that rates established in EPA contracts exceeded those normally charged by cleanup contractors, we believe EPA paid excessive amounts for Superfund removals under the ERCS contracts. In our opinion, the rates discussed below are the high side of what should be expected even for emergency type cleanups requiring as short as two hour response time. For extended cleanup activities which do not require such response times, like the delivery orders we reviewed, the rates are clearly unreasonable when compared to actual costs being incurred. In analyzing contractor records, we estimated that contractors on the average were reimbursed for their labor costs plus a 40 percent markup. Additional markup also was paid for overtime and holiday hours.



Similarly, equipment markups were excessive. Contractor/subcontractor records showed an average markup (on fixed contract rates) ranging from 321 percent on hourly rates to 143 percent on monthly rates. High markups also occurred for provisional rate items, specially modified equipment, rented equipment, small equipment items, and materials. In addition, EPA paid excessive costs for per diem, as well as transportation and disposal.

AVERAGE PERCENTAGE MARKUP ON SELECTED CONTRACTOR/SUBCONTRACTOR OWNED EQUIPMENT



WITH NEGOTIATED FIXED RATES IN 3 ERCS ZONES

The contractors did not base their proposed rates on actual costs and their accounting systems were inadequate to develop the actual costs. In order for us to determine if the negotiated rates were reasonable, we used the contractors' financial records to estimate the costs. All applicable costs were used in the computations. Even though the costs used are only estimates, we believe that they are representative of the actual costs and provide a good basis for comparison purposes. For further information on the methodology used to develop our cost estimates, see the Scope and Methodology section of this report.

Labor

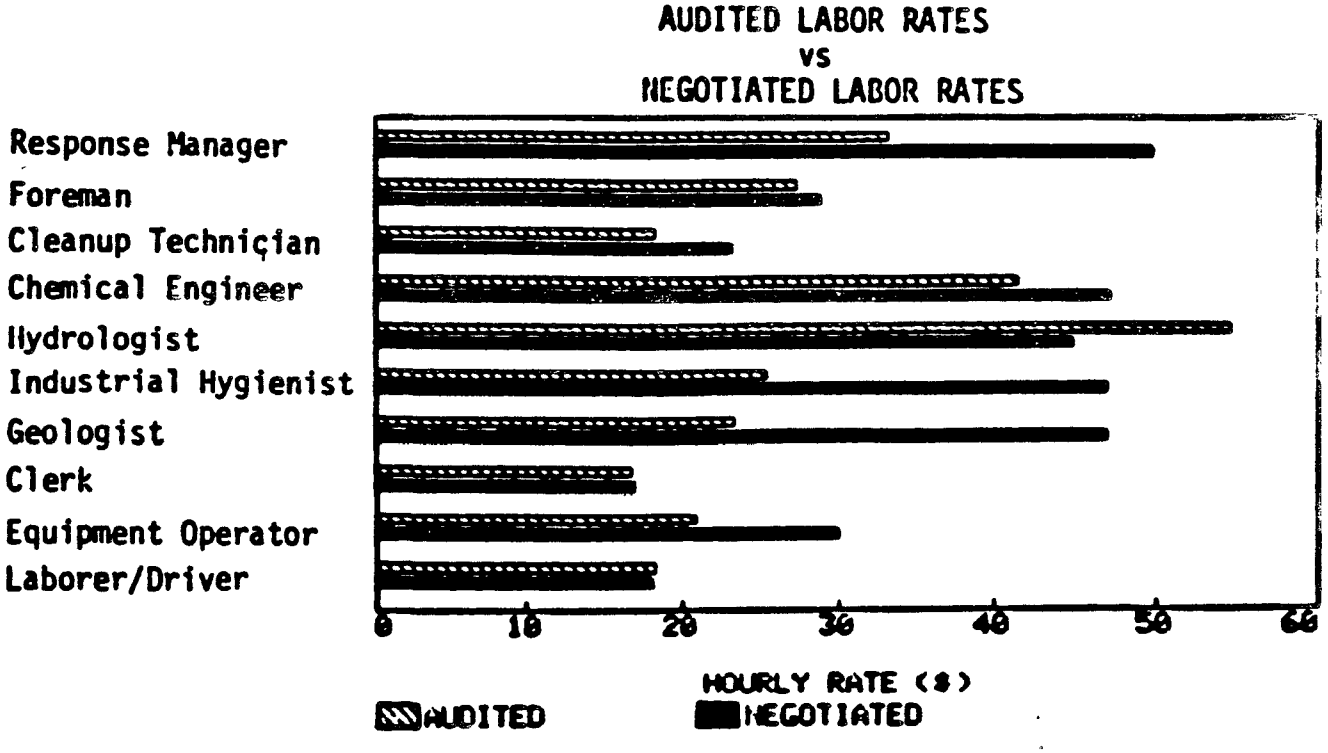
The total labor costs for nine delivery orders in three zones were estimated and compared against the billed charges using the negotiated rates. These delivery orders averaged a 40 percent markup over the contractors' costs. The markups ranged from 14 to 103 percent per delivery order.

Total Estimated Labor Costs	Total Billed Labor	Differences Amount	Markup
$ 332	$ 378	$ 46	14%
119,116	147,392	28,276	24%
41,166	54,279	13,113	32%
48,142	65,572	17,430	36%
116,714	163,029	46,315	40%
99,434	138,818	39,384	40%
5,247	7,620	2,373	45%
84,423	131,840	47,417	56%
17,386	35,298	17,912	103%
$531,960	$744,226	$212,266	40%

A review of the contractors' payroll policies illustrates the inconsistencies between the contractors' actual costs and the negotiated rates. These areas will be discussed individually.

Labor Rates

The average wages paid to employees in many instances were far less than the negotiated rates. Actual wages paid to employees working on 9 of the 12 delivery orders reviewed were analyzed to determine the average rate per labor category. After adding the overhead costs to the average wages, there was still a large difference between the estimated labor costs incurred by the contractors and amounts billed to EPA using the fixed contract rates.



The average contract rates exceed the estimated labor costs in most cases. The fixed rates allow the contractors to cover their costs and provide a substantial margin over the costs.

Overtime/Holiday Pay

All of the contracts provided overtime labor rates and one had holiday labor rates. However, two of the contractors did not (1) pay overtime rates, (2) pay overtime to legally designated employees, or (3) pay overtime at the legally required minimum amount. In addition, one contractor did not have special holiday pay rates even though its contract provided for it.

One contractor paid its employees at straight pay rates for overtime hours prior to October 1, 1985. Subsequently, the contractor began using an overtime rate which was less than one and one half the regular rate of pay. This policy is not in compliance with the Fair Labor Standards Act. In both instances, the contractor billed EPA the overtime rates in the contract.

When overtime pay was not paid for overtime hours actually worked, the markup averaged 45 percent. When overtime was underpaid, the markup averaged 39 percent. Some examples of the overtime rates (with the applicable overhead costs) and their relationship to the contract rates are illustrated.

Category	Estimated Costs	Overtime Contract Rates	Markup
No Overtime:			
Truck Driver	$24.18	$27.30	13%
Cleanup Technician II	24.65	31.50	28%
Chemical Engineer	41.54	58.80	42%
Clerk	14.14	21.50	52%
Response Manager	35.58	64.10	80%
Underpaid Overtime:			
Foreman I	32.11	36.00	12%
Foreman II	27.75	36.00	30%
Foreman III	30.44	42.00	38%
Cleanup Technician I	19.06	30.00	57%
Cleanup Technician II	20.81	33.00	59%
Truck Driver	18.43	30.00	63%

One ERCS contractor billed the holiday rate in its contract, but did not pay a special holiday premium rate for holiday work.

Category	Estimated Costs	Holiday Contract Rates	Markup
Clerk I	$29.45	$29.00	<2>%
Hydrologist II	54.67	66.00	21 %
Cleanup Technician I	24.69	32.00	30 %
Equipment Operator II	32.38	43.00	33 %
Response Manager	46.28	66.00	43 %

The policy of overtime pay varied with each contractor and subcontractor. For example, a review of security services on one delivery order demonstrated that the number of hours defined as overtime varied based on the firm's definition of overtime. The security firm paid its employees overtime for hours in excess of 40 per week; the security firm charged the contractor overtime for hours in excess of those subcontracted for. Lastly, the contractor billed EPA overtime rates for hours in excess of eight per day in accordance with the ERCS contract. The hours were billed according to the definition at each level.

	Audited Hours for Security Guards	Hours Billed to Contractor	Hours Billed to EPA
Regular	1,571	1,507	914
Overtime	3	101	694
	1,574*	1,608	1,608

* Security firm did not have timesheets to support 34 hours billed to the contractor.

Subcontractors

The negotiated labor rates apply to all subcontractors who provide employees covered under the fixed rates. These rates apply to all tiers of subcontracts. Consequently, each layer of subcontracting included another layer of cost and markup.

Equipment

The negotiated equipment rates and their estimated costs have wider differences than the labor rates. Contractors frequently did not base their rates on actual costs and did not know what their actual costs were. Our estimate of the contractors' costs revealed that large markups were evident on all types of equipment: contractor owned, specially modified, rented, and small equipment items.

Team Member Equipment

Equipment owned by the prime contractors or their subcontractors had wide variances between their estimated costs and the negotiated rates. The markups were significant whether the equipment was charged on an hourly, daily, weekly, or monthly basis. The average percent of markup on selected items of contractor/subcontractor equipment with fixed rates in three ERCS zones follows:

	Hourly	Daily	Weekly	Monthly
Contractor Owned Equipment	338%	310%	258%	150%
Subcontractor Owned Equipment	304%	279%	283%	135%
Average Markup	321%	295%	271%	143%

To evaluate the extent of markup on any individual delivery order, one must carefully consider the impact of time. Many cleanups are of short duration. On such jobs, equipment is generally billed on hourly or daily rates. As shown above, markup on equipment for such jobs will be higher than average. Our review, however, looked at some of the largest and longest cleanups which had been completed. Many items of equipment on these cleanups were billed on a weekly or monthly basis. Thus, on an overall basis, the markups on these jobs lower than average. For example, we reviewed 22 equipment items used by a contractor on three delivery orders. The total billed amounts for these items exceeded the total estimated cost by 150 percent ($147,040 ÷ $97,754) as shown below:

Equipment Description	Amount Billed	Estimated Cost	Markup Amount	Markup Percent
Contractor Owned				
Passenger Van	$ 2,741	$ 1,683	$ 1,058	63%
Pickup Truck	4,666	1,542	3,024	184%
4-Wheel Drive Pickup	2,473	817	1,656	203%
Decontamination Trailer	8,500	1,409	7,091	503%
Office Trailer	5,130	750	4,380	584%
2-inch Pump	4,725	333	4,392	1,319%
Subtotal	$ 28,235	$ 6,634	$ 21,601	326%
Subcontractor Owned				
4-Wheel Drive Pickup	$ 2,205	$ 1,809	$ 396	22%
Pickup Truck	6,610	5,369	1,241	23%
Dozer 850*	32,832	22,841	9,991	44%
Backhoe 215*	49,889	28,096	21,793	78%
Front-End Loader 1155	7,395	3,487	3,908	112%
Backhoe 580	8,826	3,099	5,727	185%
Passenger Van	126	43	83	193%
Front-End Loader 950*	17,848	5,970	11,878	199%
Dozer 450*	25,288	7,472	17,816	238%
Backhoe 880*	4,617	1,312	3,305	252%
Office Trailer	52	14	38	271%
Front-End Loader 955*	3,570	715	2,855	399%
Front-End Loader 951*	27,301	5,447	21,854	401%
Galley Trailer*	10,150	2,009	8,141	405%
ATC 3-Wheeler *	2,450	468	1,982	424%
250 KW Generator*	17,400	2,969	14,431	486%
Subtotal	$216,559	$91,120	$125,439	138%
Total	$244,794	$97,754	$147,040	150%

* These items of equipment were billed at provisional rates which are subject to negotiation.

In individual cases, markups on equipment were substantially greater or less than average. For example, we made the following analysis for a few items at selected subcontractors.

Item	Range of Estimated Costs	Range of Billed Rates	Range of Markups
4 Wheel Drive Pickup	$ 6.29 - $1,000.67	$ 8 - $ 756	27% - <31>%
Front-end Loader 963	$26.85 - $4,650.42	$ 58 - $5,457	116% - 17 %
Stakebed Truck (2-ton)	$ 2.95 - $ 510.94	$ 16 - $1,365	442% - 167 %
Backhoe 580	$ 6.82 - $1,181.22	$ 32 - $3,100	369% - 162 %
Hand Tools	$ .16 - $ 3.46	$ 11 - $ 126	6,775% - 3,542 %
Decontamination Trailer	$ 4.64 - $ 100.46	$305 - $3,000	6,473% - 2,886 %
Trash Pump (2-inch)	$ .10 - $ 17.32	$ 16 - $ 945	15,900% - 5,356 %

A review of the total costs for these items show the impact of these high markups. The trash pump was purchased in 1983 for $541 and depreciated over 5 years. No repair or maintenance costs were recorded for it. The amount billed at the negotiated rate for the pump on one delivery order totaled $4,025. The subcontractor purchased the decontamination trailer in 1977 for $1,345 and depreciated it over 10 years. The cost of repairs and maintenance through 1985 totaled $5,278. On one delivery order, the billings totaled $12,366.

Personal protection equipment had negotiated rates also. Levels B and C types of protection equipment were used on the delivery orders we reviewed. We compared the estimated costs of personal protection equipment from four delivery orders to the amount billed on those delivery orders. A comparison of costs and rates paid for protection equipment is shown on page 31. The amount billed for Level B equipment was 281 percent higher than the estimated cost of the equipment. The amount billed for Level C equipment was 185 percent higher, as shown below:

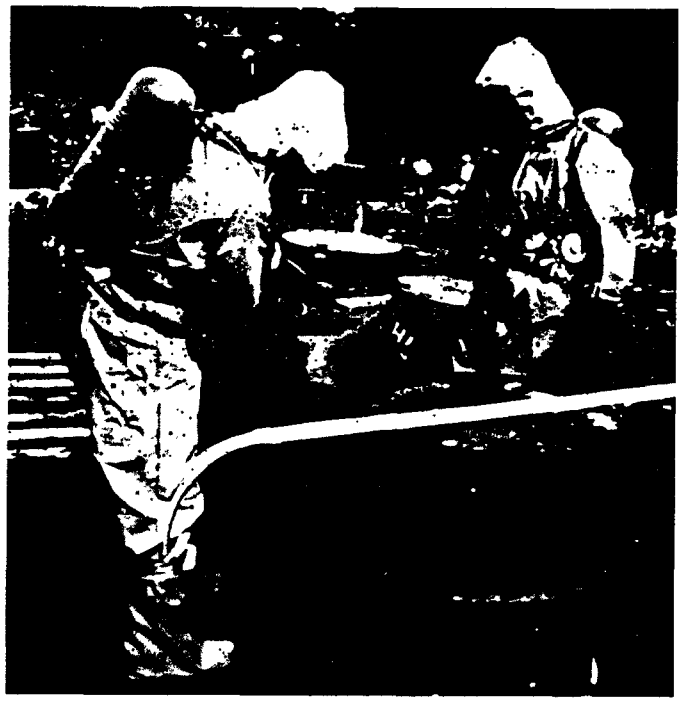
Delivery Order	Level B Protection			Level C Protection		
	Amount Billed	Estimated Cost	Markup	Amount Billed	Estimated Cost	Markup
1	$ 100	$ 12	864%	$19,188	$6,309	204%
2	26,087	4,925	430%	14,183	4,736	199%
3	8,675	4,208	106%	17,258	5,840	196%
4	-0-	-0-	-0-	25,979	10,004	160%
Total	$34,862	$9,145	281%	$76,608	$26,889	185%

Specially Modified Equipment

Specialty items fabricated or adapted by one contractor for cleanup use had particularly high markups. One contractor specialized in adapting standard equipment, available from construction equipment manufacturers or other vendors, to develop cleanup equipment. This contractor altered standard items or used standard items in special ways. The estimated markup was excessive, considering the small cost to alter the item or make the minor manufacturing adjustment.

One specialty item example is the heavy equipment safety package. A backhoe or front-end loader was adapted by adding the safety package to protect the operator from hazardous materials. The package included a manufactured frame for plexiglass; two pieces of plexiglass (one three-quarter inch thick and one one-quarter inch thick); an air supply tank; a respirator; installed stainless steel lines to the air tank; a bottle

PERSONAL PROTECTION EQUIPMENT



	LEVEL B	LEVEL C
AVERAGE ESTIMATED DAILY COST	$27.71	$16.93
ERCS RATE	$150.00	$65.00

SPECIALIZED ITEMS

LEVEL B	LEVEL C
SELF-CONTAINED BREATHING APPARATUS	FULL-FACE, AIR PURIFYING RESPIRATOR

COMMON ITEMS

CHEMICAL RESISTANT CLOTHING
(SUITS, GLOVES, BOOTS*)
*BOOTS USUALLY PROVIDED BY EMPLOYEES

DISPOSABLE CLOTHING
(SUITS, GLOVES, BOOTS)

HARD HAT

2-WAY RADIO

rack; a valve and hose; a fire extinguisher and mounting; an (optional) air conditioner. The estimated cost of the heavy equipment safety package ranges from $.75 per hour to $129.90 a month over the life of the package. The contractor charges range from a provisional rate of $10.00 per hour to $1,025 per month. This provides the contractor with markups ranging between 1,233 percent and 689 percent, respectively. Following are examples of other specialty equipment items:

Item	Range of Estimated Costs	Range of Billed Rates	Range of Markups
Diaphram Pump (2-inch) Stainless Steel	$ .82 - $ 142.02	$ 14 - $ 975	1,607% - 587 %
High Pressure Water Laser*	$ 3.42 - $ 27.36	$ 56 - $ 450	1,537% - 1,545 %
Drum Shredder*	$23.87 - $ 190.96	$375 - $3,000	1,471% - 1,471 %
Hydraulic Drum Grappler	$ 9.45 - $1,636.00	$ 22 - $1,584	133% - <3>%

*Provisional Rates - This rate is subject to negotiation.

Rented Equipment

When contractors and subcontractors rented equipment, the markups were still substantial but less than when they used their own equipment. To illustrate the impact, we reviewed one contractor's total equipment costs on four delivery orders. The costs totaled $22,865 while billings to EPA totaled $42,258. This resulted in an 85 percent markup (122 percent for contract items and 46 percent for the provisional items).

When the subcontractors rented equipment, both the subcontractors and contractors received markups on rented equipment. For example, one subcontractor incurred costs of $16 per day to rent a pickup truck. The subcontractor charged the prime contractor $45 per day. The prime contractor charged EPA $58 per day, a net markup of 262 percent over the basic $16 cost.

The difference between rented costs and ownership costs varied greatly. For example, a subcontractor used two 3-inch trash pumps on one delivery order; one was owned and one was rented. There was a wide disparity between the owned and rented rates.

	Daily Cost	ERCS Rate	Markup
Rented	$47.03	$105	123%
Owned	$ .58	$105	14,263%

Small Equipment Items

Small equipment items had negotiated rates which the contractors used for billing purposes. We compared the purchase price of these items against the billed amount on one delivery order. The billings exceeded the purchase price as shown below:

Equipment Item	Purchase Price	Billed Amount
Emergency Lighting	$ 348.00	$2,180.20
Non-Sparking Tools	399.00	2,085.00
125 lb Dry Chemical Fire Extinguisher*	1,635.00	3,960.00

* Provisional Rate - This rate is subject to negotiation.

Per Diem

The contract provided a fixed rate for per diem. Some contractors and subcontractors paid their employees' food and lodging expenses directly. However, the prime contractors billed per diem at the contract rate, instead of the actual expenses which were usually less. A review of seven delivery orders of one contractor and two subcontractors disclosed that EPA paid an additional $25,452 over costs for per diem. The differences between actual and billed per diem amounts were as follows:

Delivery Order	Total Cost	Billed Amount	Differences Amount	Differences Markup
1	$ 45,540	$ 41,175	$<4,365>	<10>%
2	15,222	14,880	<342>	<2>%
3	36,508	37,890	1,382	4 %
4	57,496	61,551	4,055	7 %
5	44,844	48,900	4,056	10 %
6	29,984	35,100	5,116	17 %
7	23,377	38,927	15,550	67 %
	$252,971	$278,423	$25,452	10 %

Transportation And Disposal

Transportation and disposal did not have fixed rates but were subcontracted at cost. However, the costs incurred for these services were not always cost effective. A review of transportation and disposal services totaling $1,156,946 disclosed that $240,528 was unnecessarily incurred due to poor procurement practices.

Transportation

A review of the transportation services on one delivery order disclosed that the services were not procured at the lowest price available. The contractor obtained three quotes for the transport services ranging from $400 to $500 per load. The highest quote was selected. In addition, the trucks of the selected firm could legally haul 50,000 pounds. However, on this job the average weight per load was only 43,901 pounds resulting in the need for an additional 54 loads. (On this same job, when the trucking company was paid by the weight transported, the average load was

49,819 pounds.) The final cost of the transportation for this delivery order was $224,051. If the contractor had selected the lowest bidder and paid for the hauling by the weight transported, the cost would have been $158,048, resulting in a savings of $66,003.

Disposal

Disposal services were also not procured cost effectively. The disposal services were reviewed for the same delivery order discussed in the preceding paragraph. The ERCS contractor (1) awarded the disposal services subcontract by telephone and (2) told us it entered into an oral contract. At the time, the disposer's price list for the type of contaminated soil at this cleanup site was 3.5 cents per pound. However, the price quoted for the delivery order was 4 cents per pound. About midway through the site cleanup, this price was increased to 4.5 cents per pound. As a result, the final cost to EPA was $837,301. If the price list cost of 3.5 cents was used, the cost would have been $690,320, or $146,981 less.

Another disposer was used on two other delivery orders both involving PCB (polychlorinated biphenyl) contaminated solids. The disposer charged preferred high volume customers as little as $100 per ton for disposal of PCB contaminated solids. Nonpreferred customers were charged between $120 and $180 per ton. On one delivery order EPA was charged $100 per ton, while on the second delivery order it was charged $180 per ton. During that time period, other customers were charged rates varying from $140 to $180 a ton. On the high rate delivery order, EPA was charged $61,974 (344.3 tons x $180 a ton) as opposed to the lowest preferred customer charge of $48,202 (344.3 tons x $140 a ton). Thus, EPA overpaid $13,772 due to the lack of consistently obtaining preferred customer rates.

Conclusion

The preceding schedules and examples illustrate the markups paid by EPA in excess of costs shown on contractor records. These amounts resulted from the environment in which the ERCS contracts were developed, awarded, and administered. The lack of competition and adequate information about contractor policies, practices, and composition of costs laid the foundation for unreasonable rates. The contracts' vagueness permitted varying interpretations and possible abuse of the contract terms. Lastly, the lack of contract monitoring opened the door to violations of the contract terms. As a result, EPA negotiated rates which appear unreasonable when compared to contractors' costs. The environment which led to this is discussed in the findings that follow.

Agency Comments

"The audit report uses illustrations from an extremely small and select sample of sites and items of equipment (all of which the report acknowledges as not being a statistically valid sample) to create an overwhelming impression that contractors are making hundreds (even thousands) of percent profit on the contracts. There is absolutely no evidence that our contractors are making the enormous profits implied in the audit report."

"Many of the illustrations, unfortunately, are misleading or in error." The Agency supplied information on a number of illustrations it believed to be misleading or in error. In particular the response took issue with the accuracy of our examples related to a drum punch and two decontamination trailers.

"The decision was made by procurement officials to develop and use composite rates because the ERCS rates were established based upon industrywide price comparisons. The amount of subcontractor cost and profit are a matter of agreement between the prime and the subcontractor. It has been recognized that separate agreements on rates between the prime and the different subcontractors can result in a variance in profit for the prime. Therefore, the new contracts will specify separate rates for the prime and subcontractors when those variations are determined to be unreasonable for inclusion as a composite fixed rate."

Auditor Evaluation

While the number of sites sampled was small, the rates examined apply to all sites. Additionally, our sample included more than 19 percent of obligations incurred for Superfund cleanups performed under ERCS. We reviewed equipment items which received heavy use on the selected delivery orders. The markups shown in this report are representative of the differences between allowable contractor/subcontractor costs and established billing rates whenever the selected equipment items were used. We believe the items reviewed were sufficient to demonstrate the level of markups being experienced on selected delivery orders. In performing this review, we reached no overall conclusions on the level of profits being made by EPA contractors.

With respect to the validity of illustrations used in our draft report, we have carefully reviewed each of EPA's comments, checked the computation of each example and found on an overall basis that few corrections were necessary in the final report. In a few instances, however, we found that contractor records upon which we relied contained errors and omissions. With the additional information provided us by EPA, we were able to identify such situations and make appropriate corrections for the final report. As shown below, this was the case for both the drum punch and one of the decontamination trailers.

Drum Punch

The Agency's comments regarding the drum punch example are correct in that the draft audit report compared the cost of a hand-held drum punch to the charges for a larger equipment-mounted drum punch. Our procedure during the audit was to review the daily report which indicated equipment items used on-site and compare them to the contractor's accounting records (primarily depreciation schedules). In the case of the drum punch, the depreciation schedules did not list this item. When we asked a contractor official for other supporting documentation, we were provided an invoice for $18.25. We further confirmed with the on-scene coordinator's (OSC) supervisor that the invoiced drum punch was in fact used on EPA clean-up sites. Based on this data, we prepared the draft audit report.

Upon receiving EPA's response that a different type of drum punch was used on the job in question, we inquired further and confirmed that the contractor had fabricated a special drum punch. The contractor did not

have any documentation which showed the costs to fabricate the drum punch in question. A company official stated that the company capitalizes all assets over $500 (e.g., records the cost in a capital asset account and depreciates the cost of the asset over its useful life).

During our audit, we found that the company prepared "asset sheets" for all fabricated items which we reviewed. (An asset sheet shows the fabrication cost and the depreciable life of the item.) All of the other fabricated items reviewed were valued in excess of $500 and were recorded on the company's depreciation schedules. However, there was no asset sheet for the drum punch and the drum punch was not recorded on the depreciation schedule.

In this regard, company officials told us that the cost to fabricate the drum punch was recorded in the equipment maintenance pool. The company classifies the maintenance pool as indirect costs. Therefore, if this information is correct, the cost to fabricate the drum punch is an indirect cost which was expensed (written off) in the fiscal year in which the drum punch was fabricated. Recoating the drum punch is also done in the maintenance shop and the associated cost to recoat the punch is treated the same way as the fabrication costs. Consequently, the company does not have any direct cost for fabricating and recoating the drum punch.

We allocated all maintenance costs as indirect expenses when computing our estimated equipment cost. Therefore, all fabrication costs which were recorded in the maintenance pool and not separately identified in a capital asset account are part of our estimated costs. We believe that our method is consistent with the way that the company treated the cost to fabricate and recoat the drum punch. Therefore, without duplicating costs either expensed in a prior fiscal year or already allocated by us as an indirect cost, we concluded that the contractor does not have any separate, identifiable fabrication cost for the punch, to compare to the ERCS rate charged to EPA for the drum punch. Therefore, we consider the total fixed-rate charges for this item to represent markup. We have modified our report to reflect this fact.

Decontamination Trailer

With respect to one decontamination trailer, the response indicates that the auditors did not include some $30,000 for equipment and conversion costs. In subsequent discussions, we found that the $30,000 of conversion costs had not been properly identified with the decontamination trailer. Instead, the costs were identified as a separate vehicle in the depreciation schedule. (It should be noted that the depreciation schedule had been audited by the contractor's CPA firm which found no deficiencies.) We recomputed the cost of this decontamination trailer taking into account the increased capital cost and found the resulting markup to be 503 percent. Our computations on the other decontamination trailer were correct.

We appreciate EPA's comments as they assisted us in correcting some errors in our report. However, even after the corrections were made, the issues remain the same. EPA is paying substantially more for Superfund cleanups than the costs incurred by our contractors. To date, no documentation showing the reasonableness of industrywide price comparisons have been shown us.

FINDING NO. 1 - EPA NEEDS TO IMPROVE COMPETITION FOR ERCS CONTRACTS

Various factors limited the level of competition for the ERCS contracts. The limiting factors included restrictions and difficult contract specifications in the RFP. Although EPA had valid reasons for the restrictions and difficult specifications, the composite result of these factors and the infancy of the industry virtually eliminate effective competition. In addition, although procurement officials were disappointed with the level of competition on the ERCS contracts, they concluded that competition was sufficient to proceed with negotiations. We believe that EPA emphasized program goals and objectives at the expense of good procurement practices.

The Office of Federal Procurement Policy Act (Public Law 93-400) states that it is the policy of Congress to promote economy, efficiency and effectiveness in procurement activities of the Federal government by:

> Establishing policies, procedures, and practices which will require the Government to acquire property and services of the requisite quality and within the time needed at the lowest reasonable cost, utilizing competitive procurement methods to the maximum extent practicable;

Title 41 CFR 1-1.302-1 states that irrespective of the method of procurement, competitive offers shall be solicited from all qualified sources as are deemed necessary by the contracting officer to ensure full and free competition.

Restrictions In The Request For Proposal

There were restrictions in the RFP that greatly contributed to the lack of competition for the ERCS contracts. These restrictions are discussed below.

Limited Number Of Prime Contracts

The RFP stipulated that EPA would only award four prime contracts, one each for four large and distinct geographic zones. The RFP also required the offerors to be able to provide substantial resources within very short timeframes. It is unlikely that a small or medium size business would have the capacity to accept a contract the size of ERCS.

Accordingly, we believe that EPA's decision to limit the number of contracts, thereby creating very large geographic response zones, limited the number of potential offerors. The four zones are described below and shown in Table 1:

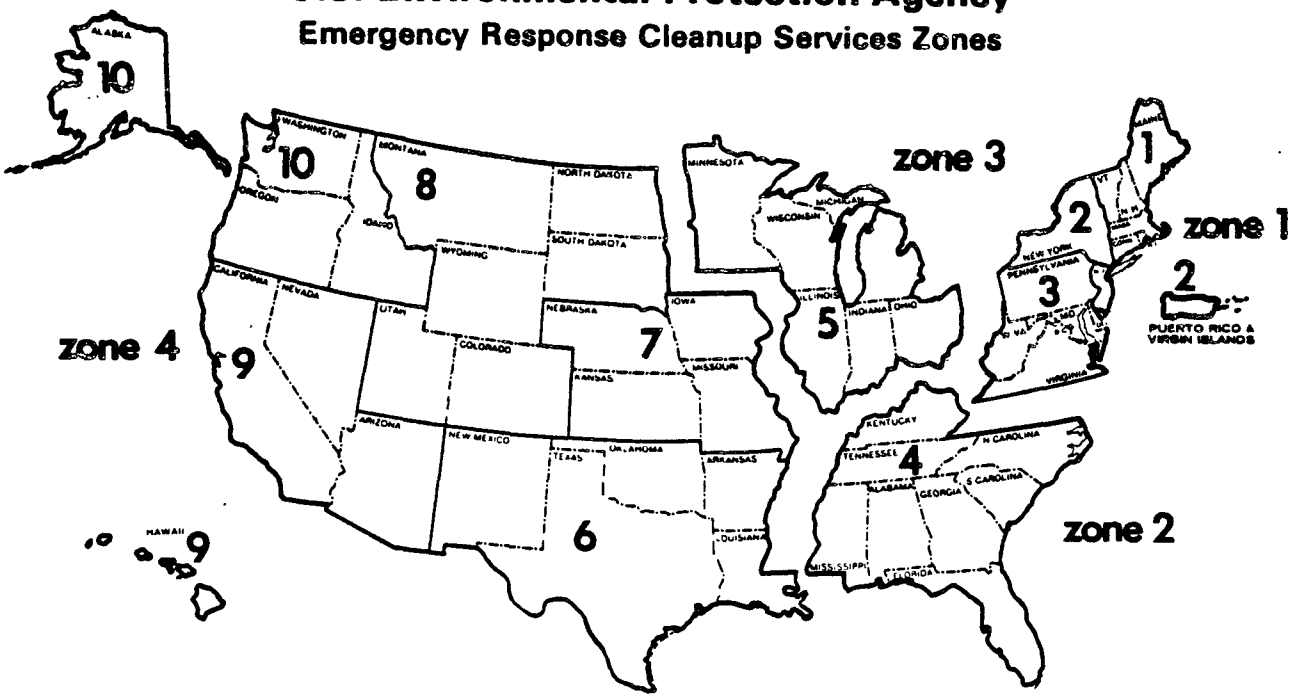
1. the northeastern section of the United States including Puerto Rico and the Virgin Islands (EPA Regions 1-3);
2. the southeastern section of the United States (EPA Region 4);
3. the states bordering the Great Lakes states except New York and Pennsylvania (EPA Region 5);

4. the states west of the Mississippi River except Minnesota including Alaska, Hawaii and the Pacific Islands (EPA Regions 6-10).

Table1

U.S. Environmental Protection Agency

Emergency Response Cleanup Services Zones



Mandatory Composite Rates

The RFP stipulated that each proposed fixed rate must apply regardless of whether the prime contractor or a subcontractor performed the service. The contracting officer told us that this requirement was a practical necessity for various reasons including the fact that it would have been extremely difficult to negotiate or administer a contract if different rates were applicable to each cleanup company. This requirement for composite rates imposed a significant obligation on all potential offerors to expend considerable time and funds to negotiate agreeable rates with potential subcontractors. Accordingly, the requirement may have discouraged proposals.

Mandatory Subcontracting Of Transportation And Disposal Services

The RFP stipulated that the transportation and disposal of hazardous wastes must be subcontracted. EPA initially decided to use fixed rates whenever feasible. According to the contracting officer, the transportation and disposal of hazardous wastes, however, was not susceptible to the proposing of fixed rates because they "are far too dependent upon unknown and variable conditions." Therefore, it was decided to make transportation and disposal costs reimbursable items. In addition, it was decided not to allow prime contractors to use their own transportation

and disposal facilities, "To avoid the appearance of collusive bidding or other possibilities of prejudicing the competitive process." Thus, the contracts required the zone contractors to competitively subcontract the transportation and disposal of hazardous wastes.

Contract file documents indicated that transportation and disposal costs accounted for approximately 35 percent of historic cleanup costs. The contracting officer speculated that there may have been firms that did not submit an ERCS proposal because they did not want to be precluded from using their own transportation and disposal facilities.

Original Ineligibility To Receive A Second ERCS Contract

The RFP stated that in no event would any one firm be awarded more than one prime zone contract. This determination was based on the possibility that an ERCS contractor might have contributed to the hazardous waste at a cleanup site (a conflict of interest situation) and EPA would have to obtain services from another zone contractor. In addition, EPA officials believed that this restriction would increase the number of companies which would submit proposals. On June 22, 1983, however, EPA modified the RFP to permit a single offeror to be awarded more than one zone contract.

This restriction was eliminated from the RFP five days after the original due date for offers. By that time, most offerors would have already prepared their proposals and would have had great difficulty in establishing the necessary network of subcontractors for other zones.

Combined proposals for more than one zone were not permitted. Offerors had to submit a separate proposal for each zone contract sought. Considering the fact that no firm submitted more than one proposal, we believe that the original restriction still reduced the total number of proposals by discouraging the offerors from competing against each other for more than one contract.

Difficult Contract Specifications

The RFP required offerors to have an extraordinary level of response capability. They were required to provide all the personnel, materials and equipment necessary to conduct emergency removals and initial remedial measures for oil and hazardous substance releases. Offerors were requested to propose fixed rates for 22 different personnel categories and 104 equipment items. In addition, the RFP requested rates for four personnel categories and 16 equipment and material items for oil spills. Successful offerors were required to provide these extensive resources, including heavy equipment, "at any zone location on a 24-hour per day basis, seven (7) days a week within the response time limits specified."

The response times varied for different locations within each zone ranging from 1.5 to 24 hours from the receipt of a written or verbal delivery order. For example, the contractor responsible for the northeastern section of the United States would be required to have equipment, materials and personnel in San Juan, Puerto Rico within 2 hours. The contractor responsible for the

western half of the United States would be required to respond in Oahu, Hawaii within 3 hours and Alaska within 24 hours. These response times are very difficult to meet.

The RFP also requested that the offerors provide a high level of management and administrative support services. For example, successful offerors would act as agents for EPA and subcontract for all transportation and disposal services in accordance with procedures that EPA outlined. EPA also anticipated that extensive subcontracting efforts would be needed to fulfill the level of services required by the contract. Successful offerors were expected to retain, maintain and support a zone network of cleanup personnel, equipment and materials to be available on a 24-hour basis.

In addition, the RFP required the designation of a full-time program manager and listed 13 specific duties, some of which are listed below:

- retain and manage the distribution of cleanup resources;
- control and account for all costs;
- develop a uniform recordkeeping system;
- prepare and submit all required reports (four mandatory reports and five optional reports);
- develop, implement and manage a quality assurance program and separate plan for each cleanup;
- obtain special services in a timely and cost effective manner;
- implement a comprehensive program safety plan.

EPA clearly wanted a single point of accountability. The RFP stated that companies wishing to do business together were encouraged to prepare their proposals on a prime contractor/subcontractor basis. Joint ventures, teaming agreements, and other similar arrangements were permissible only if the companies formed one corporate entity to bear total and complete contract responsibility.

In conclusion, the RFP required offerors to (1) propose single fixed rates for equipment and services which could be requested under the most extreme conditions and circumstances, (2) provide a high degree of managerial and administrative support, and (3) be the sole point of accountability for the entire removal action. It is reasonable to conclude that offerors would increase their proposed rates to account for the risks involved with the acceptance of a contract requiring substantial response capabilities within limited timeframes.

Competition Virtually Eliminated

The two factors discussed above -- (1) restrictions in the RFP, and (2) difficult contract specifications -- had a tremendous impact on eliminating competition for the ERCS contracts.

Limited Industry Capability

The size and complexity of the ERCS contracts as structured by EPA, in conjunction with the infancy of the industry, meant that very few companies had the capability of providing all of the required services, and extensive subcontracting relationships that would be necessary. This situation was summarized by the Acting Director of the Emergency Response Division on May 31, 1983:

> Providing cleanup services for emergency responses to hazardous substance releases is a relatively new and evolving industry . . . it is estimated that currently there are only six commercial firms with an adequate capability for providing a full range of hazardous release response services. However, the Agency's interim removal source list contains over 300 separate firms with partial cleanup capabilities that have expressed interest in being considered by EPA for future cleanup work.

We asked both program and procurement officials if there had been any analysis of prior removal actions to determine (1) the routine or average level of response which was used, (2) the frequency of high level response (classic emergency), and (3) the response timeframes necessary to carry out EPA's responsibilities. We were told that no analysis had been done. Regional program officials were asked to provide, and did provide, their estimates for response requirements for each zone. These estimates were included in the RFP.

Response times varied for different locations within each zone ranging from 1.5 to 24 hours from the receipt of a verbal or written delivery order. We reviewed response times for four delivery orders and found that at EPA's direction, three of the four responses did not follow the timeframes specified in the contract. For example, on two delivery orders EPA did not require the contractor to be on-site until two and five days after issuance of the delivery orders. In both instances, the contractor's response manager was on-site, but removal equipment did not arrive until two days later.

The level of response and response timeframes would have a great effect on the number of proposals submitted. Small or medium size firms located in the northeastern section of the United States were unlikely to submit a proposal on a contract which required services in San Juan, Puerto Rico within 2 hours. This likelihood was affirmed when the only offeror for the northeastern zone was one of the largest cleanup firms in the United States.

It is the contracting officer's responsibility to ensure that requirements which might unnecessarily reduce the number of offerors are excluded from the proposal. Since EPA had been using contractors to provide immediate removal services since 1981, the contracting officer had a source of data on which to evaluate the program office's specifications. Our review shows that the quick response time which was included in the RFP was not used for all cleanup actions. As a minimum, the contracting officer should have instructed the program office to provide supporting analyses or data for its specifications. This step might have indicated that the

high level of response requested in the RFP was not always necessary and other less costly options could have been considered.

Restrictive Subcontracting Relationships

All of the firms who submitted proposals made arrangements with other companies to provide subcontracting services. As noted in the contract files, the only firm which submitted a proposal for one zone made subcontractor arrangements with most of the small cleanup firms located within that zone. These firms agreed to an "exclusive arrangement" not to assist any other potential prime contractor within that zone.

Since each such arrangement eliminated a potential subcontractor for any other offeror, and since the number of potential subcontractors was limited, each subcontracting relationship reduced the possibility that any other party could put together enough subcontracting relationships to fulfill the ERCS requirements. Accordingly, in at least one zone, the type of subcontracting relationships that evolved limited the number of contractors who could muster enough subcontractor relationships to make a viable proposal. In a memorandum to the file, the contracting officer acknowledged this effect and commented on the legal issue:

> While such arrangements obviously limit the amount of competition the Government might enjoy, this is considered to be an individual business decision made by all companies involved, and does not violate the requirement for an independent price determination, nor does it represent an act of collusion.

Interrelationships Between Bidders

The RFP was sent to 235 parties. As a result of the discussed factors, only seven companies submitted proposals. Six of the seven proposals contained reciprocal prime contractor/subcontractor relationships (i.e., two firms were either the prime contractor or a subcontractor to each other -- see Table 2). After one proposal was withdrawn, there were only single proposals for two zones and two proposals for each of the other two zones. Because of the limited number of offerors and the reciprocal prime contractor/subcontractor relationships, it is debatable whether any two offerors prepared their proposals independently from one or more of the other proposals.

TABLE 2

ERCS BIDDERS
AND THEIR SUBCONTRACTING RELATIONSHIPS WITH EACH OTHER

Prime Bidders	ZONE A		ZONE B		ZONE C		ZONE D
Company No.	1*	2	3	4*	5**	6*	7*
Prime Bidders Included as Subcontractors							
Company No.	5	7	7	2	1	7	6
						2	3
							2

*WINNER
**WITHDREW

Two specific interrelationships existing at the time that the ERCS contracts were negotiated are discussed below. We have obscured the zones and companies as best possible to protect confidential business information.

Company 2 Interrelationships

Company 2 was either the prime contractor or a subcontractor in four of the six final proposals. The company submitted a proposal for one zone and was included as a subcontractor on proposals for each of the other three zones.

Company 7 Interrelationships

Company 7 was the prime contractor or a subcontractor in four of the six final proposals. The company submitted the only proposal for one zone and was a subcontractor on a proposal in each of the other three zones. Company 7 submitted a proposal as the prime contractor in Zone D which had the largest anticipated contract. The company was physically located in another zone and wanted to have a presence in its own zone. Consequently, Company 7 approached Company 6 to submit a proposal as the prime contractor and use Company 7 as a subcontractor. Company 6 did not have previous experience conducting immediate removals at hazardous waste sites. The company proposed to subcontract most of the actual cleanup work. Company 6 prepared its proposal in close alliance with Company 7. Company 6 believed that such an alliance would be detrimental to receiving the contract. In order to alleviate the EPA negotiating team's concern for their close alliance, Company 6 hired a local fire chief, who had emergency response experience, to answer questions on the technical aspects of the proposal.

In an internal memorandum, Company 6 stated that the fire chief's presence would downplay the importance of Company 7 on the team. After completing initial negotiations with EPA, Company 6 established pricing goals in order to negotiate rates with its six key subcontractors. The pricing goals were the same for all the subcontractors except Company 7's, which were higher. Various Company 6 memoranda indicate the influence Company 7 had on Company 6's relationship with other subcontractors and the rates it proposed to EPA.

A notation in the files, dated December 20, 1983, indicated that the proposed equipment rates on the cost data worksheets were prepared with Company 7's "guidance" and should not be used for subcontract negotiations. Other Company 6 annotations stated that (a) Company 6 used Company 7's rates across the board to prepare its proposed rates, (b) that Company 7 would be paid at 95 percent of the fixed rates negotiated with EPA, and (c) that Company 6 renegotiated lower equipment rates for categories of equipment that were not provided by Company 7. Company 6 "tried to limit . . . revisions to equipment that . . . [Company 7] will probably not provide."

Program Goals Emphasized At Expense Of Good Procurement Practices

The ERCS procurement was complex and difficult. It took almost one year to develop the RFP and almost six months to negotiate the four contracts. As previously noted, the Federal regulations state that it is the contracting officer's responsibility to ensure full and free competition. In addition, 41 CFR 1-3.801-2 states:

> Each contracting officer is responsible for performing or having performed all administrative actions necessary for effective contracting. The contracting officer shall exercise reasonable care, skill, and judgment and shall avail himself of all of the organizational tools (such as the advice of specialists in the fields of contracting, finance, law, contract audit, engineering, traffic management, and cost or price analysis) necessary to accomplish the purpose as, in his discretion, will best serve the interests of the Government.

Procurement and program officials did not always agree on procurement decisions. In at least one instance, a major factor limiting competition was the result of the decision to limit the number of contracts to four, which was contrary to procurement officials' recommendation. We were told that the size and number of contracts/zones were discussed among EPA officials prior to issuing the RFP. The program officials wanted one or two nationwide contracts because they would be easier to administer and monitor.

Procurement officials disagreed. They wanted ten contracts, one per EPA region, to obtain better competition. One procurement official stated:

> We knew the size of ERCS [zones] would limit competition. We were uncomfortable with the situation. There was no other competition out there. The contract [zone] was too big. By its very nature, it limited competition.

Program and procurement officials compromised on four zones, but subsequent events raised the issue again.

When program officials first submitted their ERCS procurement request, the projected level of effort for waste removal services was estimated at $10 million per year across the country. This capacity was later increased to $60 million per year and finally to $120 million per year. One month before the ERCS proposals were due, a senior procurement official wrote:

> Under the ERCS procurement as it now exists, this potential $120 million would reside under four prime contracts, one for each of four geographic zones. Providing such a magnitude of cleanup and removal services under the one contractor per zone concept presents several potential problems, some of which could adversely impact the Agency's ability to carry out its responsibilities under Superfund. . . . It is our recommendation that the Agency award several prime contracts in each of the four zones rather than a single contract per zone.

Procurement officials were concerned that under the ERCS concept of four zones/four contractors, EPA would not have the ability to consider contractor capabilities or cost efficiencies on a site-by-site basis. In addition, these officials anticipated a large volume of subcontracting under ERCS including the subcontracting of entire removal projects. Under these circumstances, the contractor, rather than EPA, could select the firm undertaking the cleanup.

A senior procurement official was also concerned about cost documentation and stated:

> We would expect cost documentation to be more difficult to monitor, obtain, audit, and verify. These same conditions would increase the likelihood of overcharges on rental equipment, subcontracted services, and purchased materials and supplies.

As late as June 9, 1983, 30 days after the ERCS RFP was published and 5 weeks before the offerors' proposals were due, procurement officials were promoting the use of "pre-negotiated agreements" in lieu of the ERCS zone contracts. These officials believed that pre-negotiated agreements had considerable advantages over the ERCS contracts.

On June 12, 1983, a senior program official responded to the suggestion to replace the ERCS contract mechanism:

> I . . . see no major benefit in withdrawing the current RFP procurement action. . . . Indeed, as program manager I would find withdrawing the current RFP to be untimely, and disruptive to the implementation of the removal program. The field is ready to implement the ERCS Zone Contract. Resources are being expended on developing an ERCS User's Manual. Several meetings with field personnel have taken place and we feel comfortable with the contract package we have been working with for over a year. . . . I recommend the ERCS Zone Contract proceed on an expedited basis.

On June 16, 1983, procurement and program officials formally agreed to go forward with the procurement of four zone contracts at the capacity of $60 million per year. The remaining $60 million per year response capacity was to be secured through several smaller contracts under a separate solicitation. Until late 1985, however, no action was initiated to solicit proposals for smaller cleanup contracts.

A substantial portion of the money would be set aside for small and disadvantaged businesses. EPA expected this procedure to increase the number of contractors available for use by EPA and alleviate some of the other concerns. However, EPA has not awarded any of the smaller ERCS contracts to date and only the four zone contractors are available for immediate removal action.

We believe that limiting the number of contracts, thereby creating very large geographic response zones, is a prime example where program needs were emphasized at the cost of good procurement practices. Procurement officials clearly believed that the number and size of the zones would reduce competition. However, the program officials' concern over their ability to administer and monitor more removal contracts was given greater weight and the number of contracts was limited to four.

In addition, observations on certain prime contractor/subcontractor relationships should have caused the contracting officer to pursue other options. The contracting officer observed that Company 6 and 7's offers were "very similar" and that Company 7 had not submitted a proposal for the zone in which nearly all of its resources were located. Further, the contracting officer believed that Company 6 and Company 7 were discussing equipment rate negotiations conducted between each company and EPA. Company 7 would say to the contracting officer, "Look, we are above [EPA's cost objective] on this item, but way below on that item." The contracting officer had not previously discussed the item mentioned by Company 7 with Company 7. Instead, the contracting officer had discussed the item only with Company 6; thus, Company 7 should not have known about the cost information.

Procurement officials clearly expected that the ERCS RFP would require substantial subcontracting for all necessary labor and equipment. Consequently, some discussion between offerors was anticipated and the reciprocal prime contractor/subcontractor relationships were not completely unexpected. The contracting officer also expected Company 6 and 7 to discuss equipment rates to some extent because Company 6 did not own any cleanup equipment of its own and would rely on Company 7 to provide equipment.

In our opinion, the contracting officer's observations were sufficient to indicate that it was questionable whether the single proposals for two zones were independently prepared. Procurement officials should have considered canceling the RFP for these two zones and evaluated other options. However, the contracting officer was aware that the contracts were needed in order to meet EPA's new program objective to aggressively initiate removal actions. We believe that the program office's need for the contracts was a major factor in the decision to award the contracts.

Conclusion

The overall environment which existed at the time that the ERCS contracts were procured was an unusual one, which made it significantly unlikely that all firms would independently propose their best prices or negotiate in good faith. Although 235 parties requested the ERCS RFP, only seven firms submitted proposals for the four contracts. The various factors which limited the level of competition must be considered in order to evaluate the merits of awarding these contracts under the circumstances that existed.

The magnitude and the difficulty of the proposed contract, the interrelationships among six of seven offerors, and the other limiting factors previously discussed, raise significant questions as to whether all proposed prices were submitted independently in a competitive environment. In particular, two companies had ample opportunity to become familiar with each other's proposal through their reciprocal prime contractor/subcontractor relationship. The similarity of their proposals shows that they shared common positions. When we consider that there was no competing proposal for either company in their respective zones, EPA has less assurance that each company proposed competitive rates or negotiated in good faith.

We have indicated that better planning and more aggressive actions by procurement officials would have improved the ERCS procurement process. However, we believe that the underlying cause was the emphasis on program needs and goals at the expense of good procurement practices. Recently, the General Accounting Office (GAO) issued an audit report on EPA's general use of employee service contracts[1] and drew a similar conclusion:

> GAO believes that EPA is emphasizing the accomplishment of program goals and objectives at the expense of sound contract management. According to EPA officials, this emphasis is a direct result of the need to respond rapidly to protect the public, deal with emergencies, and meet legal deadlines. While GAO agrees that EPA's program objectives are important and that extraordinary contracting measures might be needed in limited numbers of cases, it is also important that EPA adhere to the requirements of federal procurement regulations. If properly followed, these regulations are designed to provide EPA the contracting flexibility it needs and ensure that the government receives good value for its contracting dollars.

Agency Comments

The Agency believed that it had done a good job in maximizing competition on the ERCS contracts and that contracting for cleanups on a zone basis significantly enhanced competition when compared with the procedures which were used previously. In addition, the Agency stated that while the results of the solicitation process may not have fulfilled its expectations, the results still

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1 The Environmental Protection Agency Should Better Manage Its Use of Contractors (GAO/RCED-85-12, January 4, 1985)

permitted award of contracts in all zones based upon what was overall an effective competition.

The Agency supplied extensive additional comments on our finding justifying its zone ERCS procurement decisions. We have summarized what we consider the Agency's major points as follows.

Limited Number Of Prime Contracts

Procurement and program personnel, after extended discussions, mutually agreed that the award of four zone contracts provided the best balance between the Agency's resource limitations and procurement officials' efforts at maximizing competition. Procurement officials believed that a sufficient number of firms possessing adequate capabilities existed to establish competitive networks of contractors within each of the four zones.

Mandatory Composite Rates

Agency officials stated that the use of composite rates required offerors to expend considerably less time in discussions with their subcontractors than would have been necessary had specific rates for each subcontractor been required.

Mandatory Subcontracting Of Transportation And Disposal

Agency officials commented that their method of procuring transportation and disposal services -- having the ERCS contractors perform competitive solicitations as a part of their cleanup activities -- maximized competition. Otherwise, 35 percent of the contracts would have been awarded noncompetitively.

Original Ineligibility To Receive A Second ERCS Contract

Agency officials stated that, although contractors were initially barred from receiving more than one ERCS contract, this requirement was subsequently changed. Considering that significant proposal preparation work had already been completed by the time of this change, additional preliminary proposal preparation did not need to be duplicated. Offerors clearly were afforded ample time to submit additional proposals.

Difficult Contract Specifications

Agency officials commented that cleanup contractors had in the past provided both to industry and the Government the type of services the audit report considers to be beyond their capability. The companies were "full service" contractors, performing cleanups and arranging transportation and disposal. Further, management tasks such as controlling and accounting for costs, and maintaining a uniform system of records, are matters of good business practice, required of any firm that intends to remain viable.

Limited Industry Capability

The Agency stated that procurement officials had identified 15-20 firms which could provide the needed capabilities on a zone or multi-zone basis. Procurement officials believed that these firms could supplement their capabilities by subcontracting with any of 300 firms which had been identified as having partial capabilities. Procurement officials believed that a sufficient number of firms possessing adequate capabilities existed to establish competitive networks of contractors within each of the four ERCS zones.

Restrictive Subcontracting Relationships

Agency officials stated that there was no evidence to support the opinion that exclusive agreements were used in more than one zone.

Interrelationships Between Bidders

The Agency stated that it was not surprised that larger firms which prepared proposals as prime contractors in one zone were engaged as subcontractors in other zones. The objective of prime contractors was to assure response capabilities adequate for total zone coverage. The Agency added that the mere existence of these contractor interrelationships did not compromise the independence of the proposals submitted.

The Agency concluded that the various firms knew each others commercial rates and that a subcontractor's rates would be known to its prime. However, the Agency believed that (1) the rates that a prime contractor intended to propose to EPA, (2) a prime's overall bidding strategy, (3) a prime's subcontractor network, and (4) other crucial details of a prime's proposal, would not be disclosed to any other firm.

Program Goals Emphasized At Expense Of Good Procurement Practices

Agency officials disagreed with our conclusion that program goals were emphasized at the expense of good procurement practices. They stated that just prior to beginning negotiations program officials were concerned that major modifications to the zone ERCS RFP would be disruptive to implementation of the removal program. However, they were willing to consider supplemental contracting arrangements. Agency officials quoted (from the same June 14, 1983 memorandum quoted in the audit report) a senior program official who wrote:

> I suggest that after this contract mechanism [four ERCS zone contracts] has been implemented for a period of six months, we evaluate its effectiveness in supporting the Emergency Response program. Concurrently, I also recommend that our staffs explore the appropriateness of PNAs [prenegotiated agreements] as a back-up emergency contracting approach. If the ERCS procurement does not result in a contract for each ERCS zone, or if awarded ERCS contracts are not achieving the desired results, a contingency contracting approach would be needed and perhaps PNAs [prenegotiated agreements] would be an appropriate alternative.

Agency officials concluded that in no event were contracts awarded because program considerations were given primary importance. Alternative contractual methods were available which could have been used had compelling reasons, such as evidence of collusion, been present.

Auditor Evaluation

We believe our report adequately demonstrates that EPA did not do a good job in maximizing competition the ERCS contracts. The facts are that (1) the Agency only had seven bidders to the original ERCS zone contracts, and (2) even with the Agency's actions to stimulate competition, only five firms are under consideration for the four zone contracts currently being recompeted. With these facts in mind, the Agency's argument on the sufficiency of competition is weak.

For each contract, only one or two firms made offers. Our report lists factors that limited competition. It is true that a portion of the work is on an emergency basis. However, it is also true that a significant portion does not require response within emergency timeframes. By failing to provide contract mechanisms which differentiated between these response needs, EPA was vulnerable to paying premium rates for all removals regardless of how quickly a response was required. Our comments on the detailed points made by Agency officials follow.

Limited Number Of Prime Contracts

While awarding four zone contracts provided a modicum of competition, the geographic boundaries established were so large as to minimize competition. The resources necessary to assemble an extensive subcontracting network over a large geographic zone and meet all the other requirements of the solicitation would be a great burden for a small firm. The investment required in preparing an adequate proposal, with the knowledge that there would be a high probability of no return due to competition from larger, more experienced firms, would be a substantial disincentive to making an offer.

Mandatory Composite Rates

We concede that composite rates allowed prime contractors to spend less time negotiating with their subcontractors once the contracts were awarded. However, we have demonstrated that the Government paid in some cases a high price for this easing of negotiations. Paying for subcontracted services on a cost reimbursable basis would have avoided the need for continual renegotiations with subcontractors.

Mandatory Subcontracting Of Transportation And Disposal

We disagree that the contract succeeded in maximizing competition on this 35 percent of the contract. In Finding No. 5, we demonstrate that there has not been good competition in the selection of transportation and disposal firms.

Original Ineligibility To Receive A Second ERCS Contract

The Agency has not demonstrated that there was sufficient time for those already bidding in other zones to compile additional proposals. Creating an adequate subcontracting network after many of the desirable subcontractors had already affiliated with their offerors could pose a very great burden. We note that the new ERCS zone solicitations do not contain the zone award limit and some offerors have proposed in more than one zone.

Difficult Contract Specifications

We reiterate that the number of bidders for the new round of ERCS zone contracts is less than the number of bidders for the original ERCS zone contracts. In addition, only two of the four ERCS contractors were experienced "full service" firms. One firm was specifically created so it could bid on this procurement, and another was an environmental engineering firm which had never independently performed an emergency cleanup. With its leading role as the largest client of this industry, EPA should seek to enhance the capability of various firms to provide these services.

Limited Industry Capability

We requested documentation on the "15-20" firms which the Agency indicates were identified by procurement officials. None could be provided. We have seen no evidence that so many firms had full capabilities over such broad geographic areas.

Restrictive Subcontracting Relationships

Because any one offeror had exclusive subcontracting arrangements with many of the leading response contractors in a geographic area with specified minimum response times, it would have been very difficult for another potential offeror to establish an adequate network of subcontractors.

Interrelationships Between Bidders

We have documented from the company's file one successful bidder which shared much information about its proposal, including information on rates, with a successful bidder in another zone. The bidder from the other zone was a key subcontractor for this prime contractor's proposal.

Program Goals Emphasized At Expense Of Good Procurement Practices

The quote from a senior program official further demonstrates our point that programmatic decisions were overriding good procurement practices. The program's willingness to have a greater number of contracts, providing a more competitive environment, was clearly highly qualified. More than three years later, no additional contracts are yet in place.

Recommendations

To ensure that the objectives of both the program and procurement offices are met, EPA needs to improve its procurement planning procedures to ensure that conditions do not exist which would unnecessarily limit full and free competition on future ERCS proposals. In addition, EPA needs to actively take steps to expand the number of responsive, responsible contractors available to conduct emergency removals and initial remedial actions. Listed below are our recommendations followed by Agency and auditor comments.

1. We recommend that EPA emphasize to the contracting officer and senior management officials the need for better procurement practices on future ERCS proposals.

   Agency Comments

   The Agency stated that everyone involved in contracting for ERCS procurements works diligently to ensure that sound procurement practices are used at all times. Management personnel are continuously involved in work reviews to confirm that exacting standards are met. This approach to ERCS procurements has been true of the program since its inception.

   Auditor Evaluation

   We are not convinced that sound procurement practices were used at all times in regard to ERCS procurements to date.

2. We recommend that EPA increase the number of zones to better correspond to the geographic concentration of past cleanup sites and the availability of cleanup contractors in their proximity; areas outside the contiguous 48 States should be treated separately (separate contracts or separate rate schedules).

   Agency Comments

   The Agency commented that the zone ERCS contracts are being supplemented by regional ERCS contracts but that this approach cannot be used in all regions due to workload limitations.

   Auditor Evaluation

   On September 5, 1986, we obtained from Agency officials their latest projections for regional ERCS contracts. Currently, the Agency anticipates 18 regional ERCS contracts with a total potential value of $57 million. This compares with a total potential value of $306 million for the four new ERCS zone contracts currently being planned. While we recognize the planned award of regional ERCS contracts as a step forward, we believe that the Agency is still planning to rely too heavily on the zone contracts. Thus, we believe our recommendation is necessary.

3. We recommend that EPA analyze responses conducted under the current ERCS contracts to determine and categorize the different response levels and timeframes which were used. On the basis of the analysis, negotiate

separate contracts or multi-level/multi-rate contracts to correspond more closely to various levels of response found to be needed in the field (lower rates for routine removals when some planning time is available and premium rates for life threatening emergencies).

Agency Comments

The Agency stated that the original ERCS solicitation identified an estimated mix of emergency and routine response times. Offerors were informed that the Government would not require contractors to meet minimum response times in all cases.

Auditor Evaluation

Providing an estimated mix of emergency and routine response times in the original ERCS contracts was not adequate. Contractors were aware that the actual mix could differ substantially from the estimate and the rates would not be adjusted for that. Therefore, they would be inclined to propose based on the worst case scenario to ensure the profitability of the contract. We believe it was not in the best interests of EPA to include emergency and routine responses in the same contracts at the same rates.

4. We recommend that all ERCS RFPs prohibit the use of "exclusive subcontracting arrangements" by offerors.

Agency Comments

The Agency stated that it is not in a position to mandate such a prohibition. Such agreements are legal and the result of individual business decisions.

Auditor Evaluation

We recognize that such agreements may be legal in some circumstances where not constrained by the RFP. However, EPA can prohibit such exclusive agreements in an RFP when it appears they could unduly limit competition. In the case of ERCS, we believe exclusivity agreements potentially serve to reduce competition.

5. We recommend that EPA use other contract mechanisms such as pre-negotiated agreements, firm-fixed-price or cost-plus-award-fee contracts when feasible.

Agency Comments

The Agency commented that such contracting mechanisms were already being developed. Prenegotiated agreements, now called regional ERCS contracts, are being negotiated. Firm-fixed-price and cost-plus-incentive-fee contracts are being prepared for use at dioxin sites in Region 7. In addition, an Invitation for Bids for transportation and disposal of hazardous wastes at a site in Region 3 recently opened, and award of a firm-fixed-price contract is imminent.

Auditor Evaluation

The regional ERCS contracts are a step forward. However, as noted in our evaluation after Recommendation No. 2, EPA's reliance on the anticipated regional ERCS contracts is minimal when compared to the anticipated value of the new zone contracts. We believe that EPA's reliance on the four zone contracts should be limited to bona fide, life threatening, classic type emergencies. Other contract arrangements or methods should be used for other types of removals. In our opinion, EPA needs to do considerably more in this area than is currently planned.

6. We recommend that EPA develop additional contractor experience or expertise through special limited (single site) or mini-response contracts where the level of difficult or quick response time is not a major factor. If necessary, EPA should provide safety and technical support in order to use contractors with limited response capabilities to develop a pool of responsive, responsible contractors.

Agency Comments

The Agency stated that this effort is ongoing under the regional ERCS contracting effort. A number of these contracts are being reserved exclusively for small and small disadvantaged contractors. Contracts to clean up specific contaminants are in preparation for use at the Region 7 dioxin sites. The Invitation for Bids mentioned in the Agency's comments to Recommendation No. 5 involves a cleanup action at a single site in Region 3.

Auditor Evaluation

The planned Agency efforts, are consistent with our recommendation. However, the comments do not address the second part of the recommendation.

7. We recommend that EPA evaluate the need for technical and administrative support currently included in the ERCS contracts (management effort) and, if warranted, obtain these services from firms which specialize in providing these services.

Agency Comments

The Agency commented that management effort tasks required by the ERCS contracts are essential, and are an integral part of any cleanup contractor's business. They cannot be severed. Award of separate contracts for such services is impracticable.

Auditor Evaluation

The Agency comment does not indicate that a detailed evaluation of our recommendation has been made. We have not challenged the need for the tasks, but believe it is possible some are severable. We note that one of the present zone contractors is an environmental engineering firm, which performs little actual cleanup services.

FINDING NO. 2 - EPA NEEDS TO OBTAIN REASONABLE CONTRACT RATES

EPA procurement officials operated in a poor negotiating environment during the ERCS procurement because price competition, offeror independence, and price analysis were all inadequate. To award the contract, these officials relied primarily on their knowledge of prevailing market rates in determining that proposed contract rates were reasonable. Had more complete information or actual costs data been available, EPA would have been able to assess the reasonableness of the proposed fixed rates by comparing them with anticipated costs.

When adequate price competition exists, Federal Procurement Regulations (41 CFR Chapter 1) encourage the use of price analysis techniques to evaluate the reasonableness of price proposals. As discussed in Finding 1, we have concluded that various factors combined to preclude effective competition in the ERCS procurement. The EPA contracting officer, however, made a determination that adequate price competition existed for the fixed rate part of the ERCS contracts. Accordingly, the contracting officer did not request detailed cost information. Aside from this determination, a procurement official stated that the Contracts Division knew the contractors did not have cost information. If the Contracts Division had determined that cost analysis was required and it was unable to obtain the needed cost information after it requested the information, then the Contracts Division would not have been able to award the contracts.

The contracting officer used price analysis techniques to evaluate the reasonableness of proposed fixed rates. Based on this evaluation, the contracting officer negotiated final fixed rates and awarded the four ERCS contracts. The Federal Procurement Regulations define price analysis and when it is appropriate. Title 41 CFR 1-3.806(b) states that "Government procurement is primarily concerned with the reasonableness of the price which the Government pays and only secondarily with the eventual cost and profit to the contractor." However, 41 CFR 1-3.807-2(a) states:

> Some form of price or cost analysis should be made in connection with every negotiated procurement action. The method and degree of analysis, however, is dependent on the facts surrounding the particular procurement and pricing situation.

Title 41 CFR 1-3.807-2 describes price analysis techniques and contrasts them with cost analysis techniques:

> Price analysis is the process of examining and evaluating a prospective price without evaluation of the separate cost elements and proposed profit of the individual prospective supplier whose price is being evaluated. Price analysis may be accomplished in various ways, including the following:
>
> (i) The comparison of the price quotations submitted;
>
> (ii) The comparison of prior quotations and contract prices with current quotations for the same or similar end items . . . it must also be recognized that such comparison may not detect

> an unreasonable current quotation unless the reasonableness of the prior prices was established . . . .
>
> Price analysis techniques should be used to support or supplement cost analysis wherever appropriate.
>
> Cost analysis is the review and evaluation of a contractor's cost or pricing data . . . . It includes the appropriate verification of cost data, the evaluation of specific elements of costs, and the projection of these data to determine the effect on prices . . . .

Title 41 CFR 1-3.807-3(f) provides guidance on whether price analysis or cost analysis should be used. The Regulation states: "When there is adequate price competition . . . cost or pricing data shall not be requested regardless of the dollar amount involved." Title 41 CFR 1-3.807-1(1) (i) and (iii) define "adequate price competition" as follows:

> Price competition exists if offers are solicited and: (A) At least two responsible offerors (B) who can satisfy the purchaser's (e.g., the Government's) requirements (C) independently contend for a contract to be awarded to the responsive and responsible offeror submitting the lowest evaluated price (D) by submitting priced offers responsive to the expressed requirements of the solicitation. Whether there is price competition for a given procurement is a matter of judgment to be based on evaluation of whether each of the foregoing conditions (A) through (D) is satisfied. Generally, in making this judgment, the smaller the number of offerors, the greater the need for close evaluation.
>
> A price is "based on" adequate price competition if it results directly from such competition or, if price analysis (not cost analysis) shows clearly that the price is reasonable in comparison with current or recent prices for the same or substantially the same items procured in comparable quantities under contracts awarded as a result of adequate price competition (e.g., exercise of an option in a contract for which there was adequate price competition if the option price has been determined to be reasonable . . . .

Reliance On Price Analysis

The contracting officer made a determination that the negotiated prices were based on adequate price competition for each of the four ERCS contracts. For example, the contracting officer's summary of negotiations for one zone contract stated that "it is considered that adequate price competition exists in [a zone] since at least two responsible offerors responded to the solicitation." Accordingly, the contracting officer did not make any attempt to obtain specific cost data. Instead, the contracting officer relied on the technique of price analysis to set EPA's price objectives for the ERCS contracts and evaluate the reasonableness of each proposed fixed rate. For example, in the contracting officer's summary of negotiations for this zone, the price analysis which was performed is described as follows:

> A price analysis was performed on the fixed-rate cleanup portion of the two offers received for [the zone]. Proposed rates for labor and equipment were compared to the rates proposed by the other [final] 5 ERCS offerors, as well as to standard commercial price lists on file in HPO [headquarters procurement office] for similar items of equipment. The proposed rates were also compared to rates currently or recently being paid under Notices to Proceed, and to industry rental guides such as the Rental Rate Blue Book and Rentals Unlimited pursuant to FPR 1-3.807-1. . . .

In addition to the rate comparisons mentioned in the contracting officer's summary of negotiations, other rate information was available which the contracting officer had access to at the time of the negotiations. For instance, rate information was available for planned removal actions and cleanups performed by contractors for the Coast Guard under basic ordering agreements. Prior audits had determined that some of the rates which were being paid under EPA's Notice to Proceed contracts met the requirements for catalog prices of commercial items sold to the general public.

We examined labor and equipment rates from other cleanup actions that was available to the contracting officer at the time of the ERCS negotiations. We concluded that the negotiated ERCS rates generally fell within a range of those rates charged by contractors for certain other cleanup actions. The contracting officer may have informally compared the ERCS rates with the rates of these other cleanup actions (such as, those performed under basic ordering agreements and planned removals). There was no documentation in the contract files to support these comparisons. Based on the documented and informal rate comparisons, procurement officials stated that they considered the negotiated ERCS contract rates in line with market prices.

We will examine the usefulness of each of the four price standards mentioned in the contracting officer's summary of negotiations.

Notice To Proceed Prices

In our opinion, the prices which were contained in Notice to Proceed (NTP) contracts do not provide a valid basis for evaluating the reasonableness of proposed fixed rates. The primary reasons for our opinion were expressed by the ERCS project officer in his "Comments on Draft Guidance Manual for Costing Immediate Removal Actions," dated December 6, 1983:

> One of the major weaknesses of the NTP contracting system has been that rates for cleanup equipment, materials, and personnel were usually negotiated with the contractor noncompetitively and after the work was completed. I am concerned about how representative these data may be of fair and reasonable prices.

This office audited the incurred costs of Notice to Proceed contracts and identified numerous problems with the contractors and their billing practices. Recurrent audit findings noted that: (1) contractors claimed catalog prices which were only based on commercial rates of competitors; (2) poor or non-existent cost records made it impossible to evaluate labor and equipment costs; (3) contractors charged rates for small equipment items that cost only

a fraction of the rental charge; and (4) EPA was charged for excessive markups on subcontractor costs.

Standard Price Lists

The contracting officer attempted to compare the proposed fixed rates for each of the 22 labor categories with standard price lists from five cleanup contractors (two of these same five contractors ultimately received ERCS contracts). However, rates were not shown in any of these standard price lists for seven of the 22 labor categories in the ERCS RFP. Furthermore, four labor categories listed in the RFP were contained in only one standard price list. We have concluded that there was little or no comparative standard for half of the labor categories in the ERCS contracts except for the prices which were contained in the other ERCS proposals (we will consider the comparability of these proposals in a subsequent paragraph).

Industry Rental Guides

The contracting officer also attempted to compare the proposed equipment rates with the rates in industry rental guides. However, rates were not shown in the contracting officer's guides for 50 of the 104 equipment categories. In addition, some of the RFP's descriptions of equipment items were so general that price proposals could not be meaningfully compared with rental guide rates. For example, the contracting officer's Summary of Negotiations for one zone contained the following remark: ". . . there were many types of items which could fit our description, with hourly rates ranging from $6 to $225." Furthermore, some of the rates that were shown in the rental guides were merely suggested or generic rates (i.e., the actual rates would differ depending on various factors, such as the model of the equipment, etc.).

Furthermore, one of the rental guide's rates included costs, such as interest on investment, that are not allowed by 41 CFR 1-15.205-17. A proposed clarification of the Federal Acquisition Regulations (48 CFR 31.105) states:

> Unallowable costs would not be rendered allowable based on the use of construction equipment cost schedules . . . . For example, schedules need to be adjusted for Government contract costing purposes if they are based on replacement cost, include unallowable interest costs, or use improper cost of money rates or computations. Contracting officers should review the computations and factors included within the specified schedule and ensure that unallowable or unacceptably computed factors are not allowed in cost submissions.

Accordingly, we have concluded that there was little or no comparative price standard for nearly half of the 104 categories of equipment in the ERCS contracts, except for the prices which were contained in the other ERCS proposals.

Comparability Of Proposed ERCS Rates

The primary price analysis technique, which was used by the contracting officer to evaluate the reasonableness of proposed fixed rates, was to compare the rates of the ERCS offerors. The rates of the initial seven offerors were

compared, and the subsequent rates of the offerors' best and final proposals were also compared. We question whether adequate price competition existed among these seven firms. In particular, we question whether the successful proposals for two zones were based on adequate price competition. Our concern is based on several considerations.

First, the ERCS contracts were not formally advertised contracts where a firm might be expected to submit its best and most reasonable prices in its initial proposal. In contrast to this type of competitive procurement, the ERCS RFP stated that, "Technical quality shall be considered more important than cost or price" (emphasis added). The RFP also stated that the "Selection of an offer for negotiation and award shall be accomplished in accordance with FPR 1-3.805." This regulation states in part that:

> After receipt of initial proposals, written or oral discussions shall be conducted with all responsible offerors who submitted proposals within a competitive range . . . .

Accordingly, each firm knew that extensive negotiations would take place and that contract award would not be based primarily on proposed prices. In this context, we question whether each firm's initial proposal reflected genuine price competition. The unreasonableness of the initially proposed equipment rates of one company is indicated by the comments of EPA's Technical Evaluation Panel (TEP):

> The Technical Evaluation Panel has found evidence that the equipment rates proposed to the Government are extremely excessive [emphasis added]. This evidence points out that not only is the Government subject to potential overcharges, but also that a precedent for establishing new standards of expenditure in the cleanup industry will far exceed that which the TEP believes is presently the accepted norm.

Aside from the indications that firms might not have submitted reasonable initial proposals, we noted that there was minimal or no competitive incentive for two of the companies to negotiate in good faith. For one zone, only one proposal was submitted and 41 CFR 1-3.807-1(1)(i) states that "Price competition exists if . . . At least two responsible offerors . . . independently contend for a contract" (emphasis added). Since only one company contended for this contract, it did not have any pressure from other offerors to negotiate lower rates.

In another zone, only two firms submitted proposals, and one of the firms withdrew its proposal before the other's final negotiation session. We question how much competitive pressure remained for the remaining offeror to negotiate lower and more reasonable fixed rates under these circumstances. In this connection, we note the contracting officer's statement in the summary of negotiation for this contract: "As a result of lengthy negotiations, [the company's] best and final offer included a reduction of over $9.3 million for the cleanup effort."

The fact that there was such a large concession as $9.3 million for a contract with the potential of $37.3 million raises concern regarding (1) the competitiveness and reasonableness of the company's first proposal, (2) the compara-

bility of the initial seven ERCS proposals, (3) the merits of maintaining that the seven proposals reflect adequate price competition, and (4) the justification for performing a price analysis by comparing the seven proposals to evaluate the reasonableness of each individual proposal.

These concerns are reinforced by comments made by the contracting officer. She did not believe the best and final offers of two companies represented their best proposals, and advised the companies that there would not be an award unless they lowered their proposed prices. She reopened negotiations "at the eleventh hour" and obtained additional reductions of about $2 million from one company and $440,000 from the other. The $440,000 was in addition to an earlier reduction of $9.3 million made by the same company.

Accordingly, the facts that (1) the initial proposals were not submitted for formally advertised contracts when a firm might normally be expected to submit its best offer, (2) proposed prices were not the primary basis for award, and (3) significant price concessions were obtained both before and after the scheduled final negotiation session, indicate that the proposed prices may not have been reasonable or based on meaningful competitive considerations.

We also question whether all of the six final offerors "independently contended" for the four ERCS contracts within the meaning of 41 CFR 1-3.870-1(b)(1)(i). In Finding 1, we discussed the interrelationships which existed among the offerors and the special circumstances which reduced the level of competition. Aside from these considerations, the contracting officer treated all proposals as if they were for the same contract, rather than evaluate each proposal in light of the specific zone for which it was submitted. We question the merits of comparing seven proposals which were submitted for four different geographic areas of the country. The contracting officer addressed this subject in summarizing the negotiations for one zone's ERCS contract:

> [This zone] had only one offeror. However, adequate price competition is considered to exist for the purposes of determining the reasonableness of the proposed fixed rates pursuant to FPR 1-3.807-1(b)(1). The other three zones being procured by the same RFP are considered to be essentially the same requirement except for estimated quantities and geographic coverage. The geographic differences are believed to be minimal as our 2 1/2 years of procurement experience with this industry has demonstrated that prices do not vary significantly from one area of the country to another. The estimated quantities [for this zone] are very close in [another zone], and the scope of this procurement is so large in <u>each</u> zone that price differentials should not be substantial by reason of estimated volume. In all zones, a large amount of subcontracting is anticipated. Therefore, as adequate price competition existed under [3 zones] of RFP WA 83-H030, and prices thereunder were determined to be fair and reasonable, comparison of rates obtained in those zones is considered to satisfy the requirements of FPR 1-3.807-1 (b)(1)(iii).

Given that the ERCS contracts are similar, the contracting officer's principal rationale for comparing the ERCS proposals is that prices in Notice to Proceed contracts "do not vary significantly from one area of the country to the other."

We compared eight frequently used labor categories in three zones (located in the Northeast, Southeast and Midwest) to determine if the actual average labor rates varied between geographical locations. The rates of the three zone contractors and three major subcontractors were used. As can be shown in the following schedule, the rates did vary between zones with variances between 5 and 104 percent.

LABOR CATEGORY	ZONE WITH LOWEST RATE		ZONE WITH HIGHEST RATE		RANGE
	ZONE	RATE	ZONE	RATE	
Laborer	Midwest-sub	$ 5.50	Northeast	$ 5.78	5%
Foreman 2	Northeast	8.00	Southeast	9.81	23%
Equipment Operator II	Northeast-sub	7.02	Midwest	8.73	24%
Cleanup Technician I	Northeast	5.67	Southeast-sub	7.55	33%
Cleanup Technician II	Northeast	7.17	Midwest	11.50	60%
Response Manager	Southeast	10.58	Southeast-sub	19.25	82%
Foreman 3	Southeast	8.50	Midwest-sub	16.01	88%
Truck Driver	Southeast	5.77	Midwest	11.75	104%

In summary, we do not agree that the seven initial ERCS proposals reflected adequate price competition or that the prices in these proposals should have been used as standards of reasonableness for the other proposals. Our judgment is based on the importance we attribute to the following combination of factors:

1. No more than two of the seven offerors competed for a specific contract.

2. The interrelationships among the offerors (subcontracting, composite rates, etc.) reduced the likelihood that each of them competed independently with each other on prices.

3. The contractors' knowledge that (a) extensive negotiations would be held, and (b) contract award would not be based primarily on proposed prices, reduced the likelihood that the proposed prices would be competitive or reasonable.

4. This expectation is strongly supported by the facts that EPA's Technical Evaluation Panel found one company's initial equipment rates to be "extremely excessive," and another company's price reductions amounted to nearly 27 percent of its final maximum contract potential (concessions of nearly $10 million for a contract which could total $37.3 million).

5. There should be significant cost differences for cleanup services in different parts of the country, and these differences reduce the value of comparing ERCS proposals for different geographic regions.

Based on the above considerations, we question the use of proposed rates of ERCS offerors as a major component of price analysis. This is particularly true for the two zones with only one final offeror.

Negotiation Of Rates

We reviewed the negotiations conducted with one contractor in detail. During the initial negotiation session, EPA representatives identified to the contractor 15 equipment items anticipated to have high usage during cleanup

actions. This determination of high usage items was different from the usage assumptions contained in the RFP.

We compared the total costs proposed by the contractor for these 15 equipment items for the base year, including the option to increase quantity. The total costs were estimated using hourly, daily, weekly, and monthly rates proposed by the contractor times the estimated usage rates for each of these four time periods as contained in the RFP. The contractor increased the proposed costs for all 15 items in its next proposal, the best and final.

During a subsequent session, the contracting officer negotiated down the costs for all 15 items. However, 10 of the 15 high usage items remained at costs higher than those in the earlier proposal.

The magnitude of the charges in the estimated base year costs for items identified as high usage is shown below:

HIGH USAGE EQUIPMENT ITEMS

Percent of Change in Costs Proposed to Final Rates	Number of Items
-55% to 0%	5
1% to 55%	4
56% to 150%	3
over 150%	3
Total	15

The total potential dollar increase for the base year for the 15 high usage items, based on usage factors in the RFP, was $410,195. This was a 50% increase over costs associated with the earlier proposed rates.

Our analyses indicated that the ERCS contractor increased the costs for the equipment items identified by EPA in negotiations as high usage items. By the last negotiation session, the winning contractor's competition had withdrawn its proposal. Therefore, the contractor had no competitive incentive to negotiate lower rates. Even though the negotiations resulted in some price concessions, the contractor gained from the negotiations on the equipment items representing the high estimated usage.

Conclusion

We have concluded that since there was limited competition among the offerors, price analysis above did not ensure the reasonableness of the final negotiated rates. Furthermore, the pricing factors used by the contracting officer in performing price analysis had limited usefulness.

Agency Comments

Agency officials stated that fair and reasonable prices were negotiated for the ERCS contracts for all four zones. Officials contend that in two zones price reasonableness was achieved through adequate price competition. In the other two zones, officials determined price reasonableness by comparing rates proposed with those found to be reasonable as the result of price competition.

The fact that initial proposals may have been unreasonable is irrelevant. Final proposals in all four zones were fair and reasonable as evidenced by the magnitude of concessions made by the offerors.

Use Of Price Standards

The Agency's response indicated that overall, procurement officials determined that proposed rates were reasonable by comparing them with rates accepted as reasonable on Notice to Proceed contracts, commercial price lists, and industry rental guides. Additionally, procurement officials used rate information from Coast Guard basic ordering agreements and EPA planned removal actions, which were negotiated on a competitive basis. In addition, prior audits found that rates in some Notice to Proceed contracts qualified as established catalog prices for commercial items sold to the public. The same was true of some standard price lists. While industry rental guides were not complete, they were useful in providing baseline cost information. Unallowable elements of cost were minimal compared to the total rate and other allowable costs.

Comparability Of Proposed ERCS Rates

The response stated that the report is incorrectly concerned about the impact of emphasizing technical factors over cost factors on price competition and places far too much emphasis on initial rather than final proposals. While offerors may not initially submit their best proposal from either a cost or technical standpoint, negotiations with the government permit offerors to improve their technical proposals and offer more advantageous pricing to the Government.

Officials disagreed that two firms cited in the report had no incentive to negotiate in good faith since they either knew or could have known they were the only offeror in their respective zones. The Agency obtained major price concessions from the two firms and achieved reasonable pricing in each offeror's final submission. Concessions of $9.3 million, $2 million, and $440,000 prove this point.

Officials disagreed that proposals may not have been independently prepared because they indicated that the report does not have sufficient basis to support this conclusion.

Officials also disagreed with the report's issue that the seven initial ERCS proposals may not have reflected adequate price competition or that prices in these proposals should not have been used as standards of reasonableness for the other proposals.

Negotiation Of Rates

Officials disagreed that a contractor increased labor and equipment rates after it knew EPA's negotiations objectives. The report's conclusion is based on a very small sample of negotiated items. During negotiations, EPA obtained concessions of $9.3 million and $440,000 from the contractor whose contract potentially amounted to $37.3 million. They indicated that a comparison of all rates between initial and final proposals shows a downward trend.

Auditor Evaluation

We disagree with many statements made by Agency officials in their reply. In view of the significant differences that we found between costs and the ERCS rates, we have concluded that the procedures that Agency officials used to determine price reasonableness were inadequate. Our comments to specific statements made by Agency officials follow.

Use Of Price Standards

The response states that the procurement officials used rate information from Coast Guard basic ordering agreements and EPA planned removal actions to help determine that proposed rates were reasonable. While such information was available, we saw no documentation to show that EPA used these additional bases of comparison. Since negotiations were primarily about 126 fixed rates for labor categories and equipment items, we question whether contracting officers could have had this level of detail "in mind" sufficiently for effective use during negotiations.

Although prior audits showed that rates included in some Notice to Proceed contracts qualified as established catalog prices for commercial items, in a great many cases proposed prices did not qualify. Furthermore, items which could meet the minimum conditions to qualify as catalog prices carried no presumption of inherent reasonableness.

The Agency's response stated that the procurement officials used other bases or sources of information if one source had rates appearing excessive. The inadequacies of each basis of comparison are not necessarily fully avoided because other inadequate bases were also used. In addition, the infancy of this industry made it questionable whether the reasonableness of prices could be determined based on market experience. With EPA as a major industry client purchasing its services under these fixed rates, we question whether there is a fully competitive marketplace or whether the ERCS rates have become the basis for industry pricing.

Comparability Of Proposed ERCS Rates

Agency officials state that the report is incorrectly concerned about the impact of emphasizing technical factors over cost factors on price competition. Our report, however, did not question the relative weighting of technical and cost factors.

Officials also replied that while offerors may not initially submit the best proposal from either a cost or technical standpoint, negotiations result in improvements in technical proposals and more advantageous pricing to the Government. While we agree this is the general rule, our report demonstrates that the Government did not always obtain more advantageous pricing. In the instance described in the report, the procurement officials did not believe the "Best and Final" offers represented the most attractive proposal and reopened negotiations after receipt.

Officials also stated that the report does not have a basis for questioning whether all of the six final offerors "independently contended" for the four ERCS contacts. We believe the information we have presented in our report regarding company interrelationships and exchanges of information strongly suggests that the offerors did not independently contend for the ERCS contracts.

The response further stated that the report's questioning of the merits of comparing seven proposals submitted in four different geographical areas is improper. The Agency's response included a table depicting minimum hourly wages in four areas of the country prescribed by the Department of Labor. In our opinion, this data further demonstrate our point. Since the percentages shown in the table are variances, the actual differences between the low and high zones are twice the percentages shown. The table shows zone differences averaging over 19 percent and as great as 30 percent. Our use of actual wages similarly showed substantial variations between zones and individual firms. Thus, a comparison of rates between contractors bidding in different zones across the country would do little to establish the reasonableness of proposed labor rates.

Negotiation Of Rates

The Agency's response depicted the manner in which all rates increased and decreased between initial and final proposals. Officials stated there is a clear downward trend in the rates in all instances. The second column of this table, however, shows 39 increases in rates.

In addition, our review showed that during negotiations, an EPA program representative identified expected high usage equipment items that were different from those indicated as high usage in the RFP. Four of the 15 items designated as high usage in the negotiations were not so identified in the RFP. As our report states, the ERCS contractor increased its prices from its earlier proposed rates for equipment items identified during negotiations as high usage items.

Recommendations

1. We recommend that EPA not rely solely on price analysis when there are not at least two independent, responsible offerors for a specific contract at the Best and Final stage.

Agency Comment

Agency officials stated the ability to perform price analysis does not depend exclusively on the presence of at least two independent and responsible offerors for a specific contract at the Best and Final offer stage.

The recommendation would eliminate alternatives allowed in the Federal Acquisition Regulation, thus eliminating important contracting tools.

Auditor Evaluation

The Agency has not documented that price comparisons were performed with contracts that had been awarded as a result of adequate price competition. Also, given the infancy of the industry, we believe that minimum adherence to regulatory requirements would not give adequate assurance of reasonable prices. Thus, officials should not rely only on price analysis when there are not at least two independent responsible offerors for a specific contract at the Best and Final stage.

2. We recommend that EPA treat the following as inadequate bases for price analysis:

   a. Notice to Proceed rates,

   b. Prior ERCS zone contract rates,

   c. Industry rental guides which include costs that are unallowable for government contracts, and

   d. Proposals for ERCS contracts in different geographical areas.

Agency Comment

The Agency's response stated that the recommendation would eliminate important pricing information. The first three items assure that pricing on instant procurements is in line with prevailing market prices, while the last item provides current price information which is comparable from zone to zone and is crucial to reasonable pricing.

Auditor Evaluation

The bases cited are not sufficient to ensure reasonableness of negotiated rates. To treat certain pricing information as inadequate does not mean they must be ignored. Instead, the information should be considered, but not relied upon when determining the reasonableness of proposed rates. We believe an artificial pricing structure may have been created in this industry. Accordingly, historical prices cannot be properly used as benchmarks by which to judge the reasonableness of future prices.

3. We recommend that EPA attempt to obtain adequate cost data from offerors in any situation where price analysis is not clearly adequate as a basis for negotiations. Given the history of the interrelationships among potential ERCS contractors, cost data should be obtained whenever there is any indication of a lack of offeror independence, such as occurred in the initial ERCS procurement.

Agency Comments

Officials agreed that cost data may be necessary when pricing data will not support an adequate price analysis. They did not agree that there was a lack of offeror independence in the original ERCS procurement.

Auditor Evaluation

Our report presents information which strongly suggests the likelihood of a lack of offeror independence in the original ERCS procurement. In any situations where there are indications of less than independent competition, we believe cost data should be used as a basis for negotiations.

4. We recommend that EPA require as a condition of each ERCS contract that the contractor maintain adequate cost data for all (a) equipment items (including utilization logs), (b) labor categories, and (c) materials. In addition, a retainage provision should be included to ensure compliance with this condition and the Agency should strongly consider such compliance as a major factor in determining whether to execute options to extend or increase the ceiling of the contract.

Agency Comment

The Agency's response points out that current contract provisions already require contractors to maintain documentation to support certain costs and payroll charges. Furthermore, the contracting officer or his representative, have access to all such records.

Auditor Evaluation

The primary deficiency on maintenance of cost data is in the area of equipment. The ERCS contracts do not currently require the maintenance of such data. Our recommendation did not address access to records because the Agency has adequate legal basis for access.

5. We recommend that in any instance in which a contract is awarded without sufficiently adequate price analysis or cost data, EPA move as expeditiously as possible to require that the fixed rates are provisional pending submission of adequate cost data. When this is accomplished provisional fixed rates should be subject to later negotiation and downward adjustment retroactive to the contract effective date, when the contractor's markup on individual rates exceed an established ceiling. In the event that negotiations to finalize provisional rates reach an impasse, the contracting officer should unilaterally make a rate adjustment under the Disputes clause. A unilateral rate adjustment should be subject to resolution under a standard disputes provision. In the future, option years should not be exercised without the submission and evaluation of cost data predicated on base year actual experience.

Agency Comment

Officials stated their policy is never to award a contract without adequate price analysis or cost analysis, except under extremely urgent circumstances which warrant the use of a letter contract (or Notice to Proceed). If provisional rates under the ERCS contracts were used, they would encounter the same problem experienced under the Notice to Proceed contracts (no competitive incentive to control costs).

Although contractors could be required to maintain adequate records by contract provisions, the adequacy of records is subject to judgment and, therefore, problematic.

Auditor Evaluation

We have modified our recommendation to rely on the contracting officer's unilateral settlement rights rather than an arbitrary formula. However, we do not accept EPA's apparent conclusion that it may be fruitless to impose records requirements by contractual provision.

The differences between the Notice to Proceed contracts and the ERCS contracts regarding use of provisional rates are: (1) the Notice to Proceed contracts were sole source, while the rates under ERCS contracts are competed, and (2) the Agency would set provisional rates under the ERCS contracts, not the contractor.

6. We recommend that EPA pay particular attention to the reasonableness of proposed rates for items which have received heavy usage in past ERCS performance. In addition, EPA should agree to higher rates than previously proposed by an offeror only if the reasonableness of the higher proposed rates is well documented.

Agency Comment

Officials agreed with this recommendation. More accurate and detailed actual utilization records are becoming available and this data will be a prominent part of the ERCS rate price analysis for new procurements.

FINDING NO. 3 - USE OF FIXED RATES SHOULD BE LIMITED

EPA often paid unreasonable prices for subcontracted, rented or purchased services under the ERCS contracts. This occurred because EPA used a fixed rate structure to pay for the services regardless of where the services were obtained or what costs were involved. Prime contractors established subcontract fixed rates as a percentage of the ERCS fixed rates. This method allowed the prime contractors to retain a percentage of the ERCS fixed rates and did not consider subcontractor cost and markup factors. In addition, the fixed rate structure permitted contractors (primes and subs) to have excessive markups on rented equipment and purchased materials. Procurement officials believed that a single fixed rate schedule for each contractor (prime or sub) would simplify the negotiation and administration of the ERCS contracts.

As discussed in Finding No. 1, procurement officials expected that the ERCS contract would require substantial subcontracting to obtain necessary labor and equipment. All subcontractors or other firms proposed for regular use under the contract and considered in the technical evaluation of the offeror's capabilities were considered part of the "permanent contract team." The RFP required the proposed fixed rates to be 'composite rates', which would apply regardless of whether the prime contractor or permanent team subcontractor performed the actual work. The intended use of the "composite rates" was clarified in 1985, when the Director of the Procurement and Contracts Management Division wrote:

> This principle of fixed rate contracting holds true regardless of whether or not the employees who perform the services are from the prime contractor, a permanent contract team, or any other subcontractor. . . . The same principle of fixed rate contracting utilize[d] for labor applies [to equipment] . . . . The prime contractor is to be paid the agreed upon fixed rates for all scheduled equipment in accordance with Exhibit C of the contract irrespective of ownership.

Subcontracted Services

Each prime contractor negotiated different labor and equipment rates with its team subcontractors. Generally, the prime contractor's negotiating strategies were based on obtaining a percentage of the fixed rates. We found no evidence that subcontractors' costs and markups were considered during the negotiation process. Consequently, prime contractors did not have knowledge or interest in subcontractors' markups, as long as the markups could be passed along to EPA and the prime contractor could still retain a percentage of the fixed rates.

One prime contractor paid its team subcontractors 93.4 percent of the fixed rates for labor and equipment. We selected for review one of its team subcontractors which had provided substantial services on three delivery orders. We compared the subcontractor's 1984 rates to the prime contractor and associated costs for selected labor and equipment items. The selected labor classifications included equipment operators 1 and 2, technicians 1 and 2, a driver, and a laborer. The equipment items included a pickup, 4-wheel drive, 2-ton and dump trucks, a passenger van, an over-the-road tractor, a wheel type front-end loader, and a backhoe. On the average, the subcontractor's estimated

labor and equipment costs were respectively about 61 and between 34 and 59 percent of the average fixed rates paid by EPA. Thus, EPA paid about 63 percent more for labor than the subcontractor's labor costs and between 69 and 192 percent more for equipment than the subcontractor's equipment costs.

Although we cannot statistically project the labor and equipment markup percentages to the actual costs paid by EPA, we believe that the percentages are sufficiently representative to reasonably approximate cost and markup. EPA paid $878,652 for the work performed by the subcontractor on the three delivery orders. Using our estimated markup factors of 63 percent for labor and 69 to 192 percent for equipment, we estimate that EPA paid between $342,000 and $579,000 more than the subcontractor's costs (total markup) depending upon the labor and equipment mix. Of the possible total markup, the prime contractor's actual share was $54,936 and the subcontractor received the balance.

A second prime contractor did not use a fixed percentage formula to pay its subcontractors. However, we reviewed the 1984 rates for three different subcontractors and found that the prime contractor usually did not pay the subcontractors more than 80 percent of the ERCS fixed rates. The remaining 20 percent was retained by the prime contractor. On one delivery order, a subcontractor billed the prime contractor $57,795 for labor and equipment. The prime contractor billed EPA $70,864. The subcontractor's costs were not available.

One subcontractor's rates, which were billed to the prime contractor for ERCS work as shown in the following schedules were higher than some of the rates listed in its catalog. The rates billed to the prime contractor were generally 80 percent of the contractor's ERCS rate.

Labor Classification	ERCS Rate	Subcontractor Billed Rate	Subcontractor Catalog Rate	Percent of Increase Catalog to Billed Rates
Technician/Handler Level 1	$21.00	$16.80	n/a	-
Technician/Handler Level 2	26.50	18.80	n/a	-
Laborer	18.00	15.00	$15.25	<2>
Equipment Operator Level 1	25.00	20.00	17.75	13
Welder/Electrician	30.00	24.00	19.75	22
Foreman Level 2	30.00	24.00	19.75	22
Equipment Operator Level 2	30.00	24.00	17.75	35
Foreman Level 3	34.00	27.50	19.75	59
Supervisor	50.00	40.00	22.75	76

The catalog rates listed were in effect in January 1984, when all the ERCS contracts were in effect. The subcontractor's catalog was revised twice through April 1985. However, with three exceptions, the catalog rates were always lower than the ERCS subcontract rates. None of the catalogs differentiated prices between the classification levels, but the subcontractor billed the different classification levels under its ERCS subcontract. Also, the subcontractor added the labor classification "Technician/Material Handler" to the catalog in June 1984.

A third prime contractor did not use fixed markups. The markups varied considerably from subcontractor to subcontractor and item to item. While the prime contractor's average markup on subcontracted services was generally reasonable (0 to 15%), the subcontractors' rates included substantial markups. For example, the ERCS contract specified a daily fixed rate of $221 for a Case 580 Backhoe. The prime contractor had an agreement with one of its subcontractors to pay $200 per day for the same Case 580 Backhoe. The subcontractor's estimated costs for providing the backhoe were only $60 per day. Consequently, for a single day's use, EPA would pay an estimated $161, or about 268 percent more than the subcontractor's estimated costs. Since the prime contractor did not apply G&A expenses to its ERCS subcontracts, the prime contractor's daily markup was $21 per day or about 13 percent of the total markup.

Average markups do not take into account the wide markup variances from item to item and the amount of utilization for the different items. Continuing with the same prime contractor/subcontractor arrangement for a Case 580 Backhoe discussed in the preceding paragraph, we compared the actual charges on a specific delivery order to the total estimated costs. Using the fixed rates in the ERCS contract, EPA paid $11,176 for the Case 580 Backhoe as follows:

Three Months at $3,100 per Month	$ 9,300
One Week at $992 per Week	992
Four Days at $221 per Day	884
Total Charge	$11,176

Based on their agreement, the prime contractor paid its subcontractor $10,130 for the same backhoe:

Three Months at $2,810 per Month	$ 8,430
One Week at $900 per Week	900
Four Days at $200 per Day	800
Total Charge	$10,130

The subcontractor's estimated costs were computed as follows:

Three Months at $1,299 per Month	$3,897
One Week at $300 per Week	300
Four Days at $60 per Day	240
Total Estimated Cost	$4,437

Consequently, in this specific instance, EPA paid 152 percent ($6,739) more than the subcontractor's total estimated costs. Since the prime contractor did not apply G&A costs to ERCS subcontracts, the prime contractor's portion of the markup was $1,046; the subcontractor's portion was $5,693.

A similar example occurred with a 2-inch trash pump. On one delivery order the subcontractor charged the prime contractor $3,220 for the use of a 2-inch trash pump. EPA paid $4,025 to the prime contractor for the same pump, a 25 percent markup. The subcontractor's estimated costs for the period billed were $66. The pump was purchased in 1983 for $541 and its useful life for depreciation purposes was five years. Consequently, EPA paid $3,959 more than the subcontractor's cost. Of the total markup, the prime contractor received $805 and the subcontractor received $3,154. Although these examples may appear extreme, it was common for EPA to pay rates in excess of 150 percent over costs.

Similarly EPA paid its subcontractors amounts substantially in excess of the purchase price for small equipment items. The examples below were from one subcontractor; the amounts paid by EPA represent the charges on a single delivery order:

Equipment Item	Subcontractor's Purchase Price	Paid by EPA
125 lb Dry Chem Fire Extinguisher	$1,635	$3,960
Non-Sparking Tools	399	2,085
Emergency Lighting*	348	832

* Net book value for this item is $0. The purchase price was fully depreciated from 8/3/78 to 8/2/81 on the straight line basis.

The ERCS contract also provided fixed hourly rates for security guard services. Most prime contractors obtained guard services from a local security firm near the cleanup site. We reviewed the costs for three firms to provide security services at four cleanup sites in three different zones. We compared these costs to the amounts that EPA paid and found that it paid 49 percent more than the security firms billed for their services:

	Paid by Contractor	Paid by EPA	Difference	Markup Percent
1.	$ 8,489	$20,880	$12,391	146
2.	29,435	43,673	14,238	48
3.	13,921	17,009	3,088	22
4.	11,937	13,712	1,775	15
Total	$63,782	$95,274	$31,492	49

Procurement officials had been alerted prior to the ERCS procurement that the application of prime contractor fixed rates to subcontract tasks would create high markups. Within the 14 months prior to ERCS negotiations, we issued nine audit reports on Notice to Proceed contracts which included issues that were subsequently relevant to the ERCS procurement. Two audit reports questioned subcontract labor charged at prime contract rates as being unreasonable, because the rates included the prime contractor's overhead and other "loaded" rate costs, which did not apply to subcontract labor.

In August 1985, we wrote to procurement officials specifically disclosing that prime contractors were obtaining security services for considerably less cost than the negotiated fixed rates. We were told that this situation was an aberration from what EPA intended and that contracting officers would negotiate contract modifications which would eliminate the fixed rate for security guard services and provide for reimbursement based on actual costs. Although the contracting officers made the change in early 1986, the modification was effective only for the remaining contract period.

Rented Equipment

Both prime contractors and subcontractors charged fixed rates for rented equipment. Generally, for both the prime contractors and subcontractors, the estimated incurred costs for leased or rented equipment were significantly less than the applicable fixed rates.

We estimated the costs incurred by one prime contractor for all 24 items of rented equipment used on four delivery orders. Our estimate included the actual rental costs paid by the prime contractor and a general and administrative expense factor which was estimated by the prime contractor. When compared to the fixed rates charged to EPA, we estimated that EPA paid 85 percent more than the prime contractor incurred. The prime contractor incurred estimated costs of $22,865 and charged EPA $42,258.

One of the more significant examples of excessive markup on rented equipment was an office trailer (8 ft. x 32 ft.). On one delivery order, EPA paid $3,535, or $2,934 (488%) more than the estimated costs of $601 incurred by the prime contractor. In another instance, the prime contractor reimbursed an employee $1,446 for his passenger sedan. This prime contractor billed EPA $2,651.

Subcontractors also rented equipment for use at cleanup sites. The subcontractors used fixed rates to charge prime contractors which in turn used different fixed rates to charge EPA. Generally, both the subcontractors and prime contractors each received part of the markup on rented equipment. For example, one subcontractor's cost was $16 a day to lease a pickup truck. The subcontractor charged the prime contractor $45 per day. The prime contractor charged EPA $58 a day, a net markup of 262 percent over the basic $16 cost. We reviewed 15 other equipment items which the subcontractor had leased with following results:

Description	Subcontractor's Daily Cost	Subcontractor's Daily Rate	ERCS Rate	Markup Percent
Vibrating Compactor	$305	$580	$864*	183
Trash Pump (4-inch)	58	143	157*	171
Scraper (TS-14)	305	742	816*	168
Trash Pump (3-inch)	47	84	105	123
Dump Truck	122	219	240	97
Lowboy w/ Tractor (less than 20 tons)	152	263	290*	91
Lowboy w/ Tractor (20-40 tons)	244	378	415*	70
Dozer (D-8)	487	734	807*	66
Air Compressor (250 FM)	91	136	150*	65
Steam Jenny	51	67	74	45
Front-end Loader	292	350	385*	32
T-4 Blade Dozer	244	275	300*	23
Vacuum Truck	305	318	350*	15
Dozer (HD-11)	341	350	385*	13
Gradall (G-1000)	609	475	522*	<14>

* Provisional Rate - The rate is subject to negotiation.

Materials

The ERCS contract also provided certain fixed material rates. We compared materials used on four delivery orders to the prime contractor's inventory list and selected a sample of seven common items. Three of these items had fixed rates in the ERCS contract and the remaining four items had provisional rates. The rates charged to EPA were 21 to 652 percent more than the prime contractor's costs:

Item	Contractor's Cost	Paid By EPA	Markup Percent
Stainless Steel Pans	$ 1.33	$ 10.00*	652
Sand	1.71	6.00*	251
Visqueen	25.50	65.00*	155
Pool Liner	134.45	240.00*	78
55 Gallon Drums 17E	15.47	22.00	42
Overpacks	67.21	90.00	34
Gallon Cans	1.07	1.30	21

* Provisional Rate - The rate is subject to negotiation.

* * * * *

Procurement officials told us that EPA wanted to closely monitor the actual amount of cleanup services performed and quickly document the cost of cleaning up the emergency situations. An attempt was made to identify frequently used labor and equipment and establish a fixed rate for these items. Therefore, prime contractors could be paid immediately at the established fixed rate and other services could be paid provisionally. We were also told by the contracting officer that the composite fixed rates were a practical necessity for various reasons including the fact that it would be extremely difficult to negotiate or administer a contract if different rates were applicable to each cleanup company.

Allowing prime contractors to claim substantial quantities of subcontracted, rented or purchased items and services at fixed rates which are substantially higher than the actual costs for the items violates the test of reasonableness contained in 41 CFR 1-15.201-3:

> A cost is reasonable if, in its nature or amount, it does not exceed that which would be incurred by an ordinarily prudent person in the conduct of competitive business. The question of the reasonableness of specific costs must be scrutinized with particular care in connection with firms or separate divisions thereof which may not be subject to effective competitive restraints. . . . In determining the reasonableness of a given cost, consideration shall be given to . . . The action that a prudent businessman would take in the circumstances, considering his responsibilities to the owners of the business, his employees, his customers, the Government, and the public at large; and (d) Significant deviations from the established practices of the contractor which may unjustifiably increase the contract costs.

Conclusion

The rate structure in the ERCS contract permitted contractors (prime and sub) an unreasonable markup on many labor, equipment and material items. We find no acceptable reason to routinely use a fixed rate structure for services and other items which allows the contractors (prime and sub) to markup their costs exorbitantly.

We recognize EPA's desire to (1) have a single point of accountability for each cleanup, (2) closely monitor the actual amount of cleanup services performed, (3) promptly pay the contractors and (4) immediately document the cleanup costs. However, we also recognize that EPA's contract rate structure was not cost effective in many instances. Procurement officials would have realized the excessive markup and profit potentials if they had made better use of the information available from the Notice to Proceed audits and obtained reliable cost data from the offerors.

EPA must ensure that the procurement process obtains and utilizes the best possible information on which to make judgments and negotiate prices. Fixed-rate-contracts are not cost effective unless the fixed rates are reasonable and reflective of the circumstances involved. The factors which limited the ERCS procurement -- restrictions in the RFP and difficult contract specifications -- undoubtedly affected the contract pricing structure and the way contractors conduct their business under the contract. Implementation of the recommendations in Finding No. 1 would most likely reduce some of the unreasonable charges brought about by the fixed rate pricing structure. However, to ensure that this problem is eliminated, we make the following recommendation.

Recommendation

We recommend that EPA limit the use of fixed rates to the labor services and equipment which are under the prime contractors' exclusive control or ownership. The costs for labor, equipment and materials which are subcontracted, rented, borrowed or purchased for the ERCS contracts should be reimbursed on a cost-plus-award-fee basis. The amount which EPA pays for any item on the cost-plus-award-fee basis should be limited to the negotiated fixed rate for the same or similar item. The award fee should be based on (1) the prime contractor's effectiveness in obtaining and utilizing cost and pricing data for negotiating subcontract prices, and (2) the reasonableness of the subcontract prices when compared to the prime contractor's own costs.

Agency Comments

Officials said the report's conclusion that the rates in the present ERCS contracts permitted the contractors an unreasonable markup on many items may be founded if the validity of the reports estimates and assumptions withstand the scrutiny of negotiations with the affected contractors. They agreed that the procurement process must obtain and use the best possible information to make judgments and negotiate prices. Officials believe this was done given the infancy of the cleanup industry and the lack of cost data. Overall, they said the ERCS contracts provide more cost effective terms and conditions than those available to the private sector for emergency cleanups.

Officials considered the report's recommendation that EPA limit the use of fixed rates to the labor and equipment under the contractors' exclusive control or ownership as consistent with their recent ERCS reprocurement solicitations. However, some specific fixed rates for frequently used items that are owned by Government approved subcontractors will be negotiated with the same requirements for cost data as the prime's fixed rates. All other items will be reimbursed on a cost basis with the prime contractor's award fee determined periodically predicated on the efficiency of its subcontracting program.

Officials also stated the request for proposals for new procurements will limit the total charge for each specific equipment item used in a delivery order to its current replacement cost plus any mobilization costs. Officials believed this provision will help avoid future instances where EPA could pay substantially more than the acquisition cost for a piece of equipment.

Officials also commented that primes and subcontractor fixed rates will contain a certain amount of profit. However, when analysis shows excessive profit rates, adjustments for alternative treatment will be made. Also, in new ERCS procurements, the costs of certain small tools will be recovered indirectly. New procurement provisions will also provide that equipment charges be limited to its current replacement cost plus mobilization.

With respect to guard services, officials stated that, based on current audit reports, contractors are incurring costs far below the fixed rates in the contract. Lower costs were incurred because contractors used local sheriffs, employees, etc. whose rates were lower than the contract rates. Therefore, the current ERCS contracts have been modified to delete guard services from the fixed rate list.

With respect to contractor (prime and sub) markups on rented equipment, officials said most of the items are provisional rate items that will be negotiated at contract definitization. Current contracts eliminated a fixed rate for the pickup truck and will make reimbursement based on the item's actual cost.

Auditor Evaluation

We are pleased that Agency officials have already begun action to implement our recommendation. We have interpreted EPA's comments on fixed rates to mean that they will consider individual fixed rates for subcontractors. Regarding the changes under the new procurement, we question how well individual items of equipment can be controlled and tracked to ensure that the total charge under a delivery order will not exceed replacement plus mobilization costs. Furthermore, if this restriction applies on a delivery order basis, contractors would still be able to recover the purchase price of an equipment item many times over by using the same piece of equipment on subsequent delivery orders. We also wish to point out that the conclusions in this report contradict the Agency's belief that the procurement process obtained and used the best possible information on which to make judgments and negotiate prices. In addition, there has been no evidence provided to support the contention that the ERCS contracts' terms, rates, and conditions are necessarily any better, or for that matter any worse, than those available to the private sector.

FINDING NO. 4 - EPA NEEDS TO BETTER PLAN TO OBTAIN AND UTILIZE DATA IN NEGOTIATIONS

EPA's program and procurement staffs did not adequately plan and execute the solicitation, review, and negotiation phases of the ERCS procurement. Therefore, EPA did not ensure that necessary information was obtained and used to appropriately develop ERCS' contractual provisions to safeguard the interests of the Federal government. Specifically, effective use was not made of experience gathered under previous procurements in determining equipment categories to be included in the ERCS contracts. Appropriate action was not taken to identify and correct problems identified in previous Notice to Proceed contracts. Additionally, necessary information regarding company procedures and practices was not always obtained and used in negotiating clear, concise contractual provisions setting forth the nature and extent of services to be provided for the established rates. As a result, contractor charges to the ERCS contracts have been substantially inflated.

To obtain contractual equity, substantial EPA and contractor efforts must be expended resolving contractual problems. For example, significant time will have to be spent:

- negotiating after-the-fact equipment rates,
- identifying and resolving claims for items of cost which contractors did not incur or which were substantially in excess of costs actually incurred,
- identifying and resolving items of cost inappropriately charged under the contracts.

Alternatively, EPA may have to live with significantly inflated charges on existing ERCS contracts. Such a dilemma could have been avoided had appropriate steps been taken in the procurement process.

The planning and negotiating phases of contract procurement actions are complex and complicated processes which require considerable attention and involvement of both program and procurement personnel. The background section of Chapter 22 of the EPA Contracts Management Manual says:

> . . . Procurement planning is the process by which the efforts of all personnel responsible for the procurement of personal property and non-personal services are coordinated and integrated through a comprehensive plan. This involves analysis of the requirements and the documentation of technical, business, policy, operational and other procurement considerations into a comprehensive plan . . . to achieve the end results of a particular program requirement.

The development and proper execution of such a plan require considerable knowledge, work, and expertise on the part of program and procurement personnel. For example, considerable knowledge of the market from which the agency intends to obtain the services is necessary in order to maximize competition. In some instances special approaches may be necessary to help develop an increased market. Staff involved in the procurement also needs to make maximum utilization of information regarding problems which occurred on previous contracts for like services. This would assist in making sure necessary information is

requested, obtained and analyzed so that clear contractual provisions are developed to preclude problems in the future. In addition, reviews are needed of contractual provisions to assure that any misunderstandings between the Agency and contractor regarding the services and their prices are resolved by the time the contract is awarded.

Analysis Of Previous Contracts

Program and procurement officials had not adequately utilized experience available from previous procurements in planning ERCS. EPA had previously issued hundreds of Notice to Proceed contracts to accomplish removals for oil and hazardous substance releases. However, EPA staff had not adequately analyzed these contracts in preparation for ERCS.

Previous EPA experience was not used in planning the required contractual response times. As described in Finding No. 1, EPA staff had not analyzed previous removal actions to determine the normal response times required for cleanups. This precluded adequate consideration of possible contractual alternatives which might have resulted in increased competition and produced lower rates for removals not requiring such quick response capability.

Similarly, previous EPA experience was not appropriately used in deciding which equipment items should have fixed rates in the contracts. In planning for the equipment rate portion of the ERCS contracts, EPA program officials provided lists of equipment items which they believed would be required to accomplish removals. Based on this input, the RFP for the ERCS contracts requested separate rates be proposed on 104 different pieces of equipment.

Actual ERCS experience has proved this list was inadequate. Accordingly, contractors had to request that provisional equipment rates be established for more than 100 additional items of equipment during 1985. On an overall basis, we found that funds paid for the provisional equipment items represented a significant portion of total equipment charges. On one delivery order, the charge made for provisional equipment totaled $119,094, 49 percent of total equipment charges.

Our review of equipment with provisional rates showed that a number of high use items had been left off EPA's initial list. This list did not include such items as over-the-road tractors and trailers, Cat 215 backhoes, D-6 bulldozers, three models of front-end loaders, etc. A review of charges on previous Notice to Proceed contracts showed, however, that these items had been repeatedly used on removals. Accordingly, we have concluded that EPA had not adequately analyzed previous EPA experience when it developed the equipment lists in the RFP.

Since equipment with provisional rates represents a significant portion of equipment costs charged to the ERCS contracts, substantial efforts will have to be expended finalizing the rates. This process will be further complicated by EPA's failure to obtain cost data supporting the provisional rates or requiring contractors to maintain or develop such information. Negotiation after-the-fact is always difficult, especially in circumstances where adequate cost information is not available for use in negotiations.

Analysis Of Previous Problems

In planning and carrying out the ERCS negotiations, EPA program and procurement officials did not adequately identify and resolve potential problems such as those that already occurred on previous cleanup contracts. During our audit of selected ERCS delivery orders, we found that EPA was overcharged in many of the same areas as previously identified in the audits of the Notice to Proceed contracts. Specifically, repetitive problems occurred with respect to (1) overtime, (2) holiday pay, (3) travel and per diem, and (4) equipment. In reviewing the contract files, we noted that specific information regarding the proposing contractor's policies and practices in many of these areas apparently was not requested, provided, or properly utilized in developing ERCS contract provisions.

Overtime

Procurement officials did not use prior experience or information obtained from prior audits of Notice to Proceed contracts to identify problems in overtime charges. Thus, procurement officials did not include a requirement in the original ERCS contracts that overtime compensation must be paid to employees as a precondition to contract payments, even though prior audit reports had disclosed the overtime payment discrepancy.

Nine Notice to Proceed contract audit reports were issued. These reports contained issues relevant to the ERCS contracts within 14 months prior to the award of those contracts. Three of the nine reports disclosed problems with overtime payments. Contractors did not reimburse employees at the overtime premium rate in the same manner in which the overtime was billed in each of these reports. Instead employees were paid at the regular rate or given compensatory time. In one case, one contractor charged its standard billing rates for work performed between 8:00 a.m. and 4:00 p.m. on weekdays. The contractor charged overtime for all work performed before 8:00 a.m. and after 4:00 p.m. on weekdays. However, the contractor only paid overtime premiums to employees for work in excess of eight hours a day during the week, regardless of the time period worked.

Procurement officials did ask each offeror to state its policy covering overtime payments. Only one of the four offerors responded. The contractor stated that employees who were normally overtime exempt were paid time and a half for overtime. The contractor further stated, however, that some of its permanent team subcontractors did not usually pay overtime premiums to professional employees. Procurement officials apparently ignored the information and negotiated contract provisions which allowed overtime payments for all labor in excess of eight hours, whether or not employees were reimbursed at overtime rates.

Procurement officials apparently did not pursue obtaining responses from the other three offerors. Despite this fact, these three contractors received overtime reimbursement even though they did not pay their employees an overtime premium in a variety of cases.

Our review confirmed that even though the contractors had claimed overtime under the ERCS contracts, overtime wages were not paid to employees. In most cases the overtime hours were worked, but the employees were paid

the straight hourly rate for overtime hours worked. In these instances the differential was quite significant. Overtime charges for response managers and chemical engineers are prime examples of contract charges without corresponding payments to employees. Response managers cost the contractor $35.58 per overtime hour including overhead and G&A expenses; EPA, however, paid the contractor $64.10 per hour. A chemical engineer cost the contractor $41.54 per overtime hour including overhead and G&A; EPA, however, paid the contractor $58.80 per hour. In these instances the contractor made 80 and 42 percent markups, respectively, for overtime hours for those positions.

When labor was subcontracted, the markup was compounded. One of the subcontractors paid its salaried employees the regular hourly rate for both regular and overtime hours. This subcontractor was able to increase markups from 50 to 100 percent because overtime was never paid. The contractor then claimed the fixed rate which included a markup to the subcontractor's rates. For example, an industrial hygienist cost the subcontractor $28.43 per overtime hour including overhead and G&A; EPA, however, paid $55.30 per hour. A chemical engineer cost the subcontractor $35.53 per overtime hour including overhead and G&A; EPA, however, paid the contractor $58.80 per hour. Markup for these two labor categories was 95 and 65 percent, respectively.

As a result, EPA paid $32,626, or 34 percent in excess of the overtime costs, for one delivery order. Also, EPA paid $15,980, or 76 percent, in excess of overtime costs for prime contract employees on two other delivery orders.

On August 2, 1985, the Assistant Inspector General for Audits requested a clarification for contract reimbursement of overtime where the employee was not reimbursed. As a result of the inquiry, procurement officials wrote modifications to the contracts about January 31, 1986, that required contractors to pay overtime to employees as a precondition for overtime contract payments for the remainder of the contract. This overtime pay also had to be part of the individual employee's employment agreement and consistent with previously established corporate practice.

Holiday Pay

During negotiations procurement officials asked each offeror its policy concerning paying holiday premium rates. Each offeror responded that holiday pay was paid at the same rate as overtime. In one case, procurement officials ignored the information. Contractual provisions allowed one contractor to claim holiday pay, even though the offeror had responded that normally exempt employees were paid time-and-a-half for holidays to a maximum of $18 per hour. In this regard, however, the contracting officer stated that the contractor gave the impression that it paid a holiday premium to employees. Other contracting officials stated they "envisioned during negotiations that the contractor's labor costs for such period (Saturday, Sundays, or holidays) would be higher."

Our audit showed this contractor handled holiday pay in accordance with its stated policy. The contractor charged holiday pay to the Government, but did not pay holiday premium wages to employees. Employees were paid

the overtime rate, which was 1.5 times the regular rate, for all holiday premium labor. The contractor billed EPA a higher rate for holiday pay than for overtime pay. For example, a clerk I made $6.70 per hour for regular labor and $10.10 per hour for overtime and noliday pay. The contractor billed EPA in accordance with established rates at $18.00 for regular pay, $26.00 for overtime, and $29.00 for holiday pay.

A response manager made $15.87 per hour for holidays. The total cost to the contractor including overhead and G&A expenses was $46.28. The contractor charged $66.00 per hour. An equipment operator II made $11.10 per hour for holidays. The total cost to the contractor including overhead and G&A was $32.38. The contractor charged $43.00 per hour. Overall for four delivery orders, the total cost to the contractor including overhead and G&A was $107,740. The contractor charged $140,103. Thus, the contractor received $32,363, or 30 percent, over and above employees' compensation for the four delivery orders reviewed.

At the start of the audit, the Assistant Inspector General for Audits requested a clarification for contract reimbursement where the employee worked on Sundays or holidays but did not receive premium pay for this time. In response, the contract was modified on February 11, 1986, to require the contractor during the remainder of the contract to bill holiday pay only when the contractor incurred the additional labor cost.

Travel And Per Diem

Procurement officials did not ask contractors how they would adjust travel reimbursement charges when the full per diem charges were not incurred. They did not ask the question, even though previous audits disclosed that contractors did not always incur full per diem costs. In this regard, nine audit reports, that were relevant to the ERCS contracts, were issued on Notice to Proceed contracts within 14 months prior to ERCS contract awards. Three of the nine audit reports disclosed that contractors billed excessive travel costs. Two of the reports specifically stated that contractors did not pay employees a per diem. Instead, contractors paid travel expenses directly to vendors. In addition, the reports disclosed that contractors provided the same facilities to their subcontract employees and billed the full per diem rate. Further, one contractor, in its Travel Plan for the Cost Proposal, stated that employees were required to utilize double occupancy when traveling. Procurement officials apparently did not use this information and instead allowed a per diem rate that was high enough to include single occupancy for employees.

Clear contractual provisions were not developed, however, to deal with this situation. On one hand, a contract stated:

> Allowable travel expenses shall be determined in accordance with Subpart 1-15.2 of the Federal Procurement Regulations. In the performance of necessary travel allocable to a particular delivery order the contractor shall use the least expensive means available, ... Reimbursement of travel and subsistence expenses shall be exclusive of profit . . . . (Article XII, Paragraph J)

While another portion of the contract said:

> If cleanup personnel are required to temporarily relocate, a per diem of $60 per person will be charged for the base year. If personnel do not require lodging for a given day, the per diem for that day will be $30.

Similar clauses were included in the other contracts.

We found that in fact contractor travel was charged to EPA on a per diem (per person per day) basis, as allowed by the contract. Actual costs, however, were much lower than per diem charges, creating a profit for contractors. The contractors charged EPA a $50 to $60 per diem rate, depending upon the zone contract.

The contractors incurred lower cost than the per diem rate through (1) providing meals and doubling up employees in hotel rooms and (2) paying the subcontractors a per diem rate less than the contract billing rate. Some contractors did not pay traveling employees a per diem. Instead, they paid all allowable expenses incurred by employees directly to the vendor (i.e., hotel, restaurant, etc.) or to a company representative that paid all bills.

One contractor received added markup on travel because employees shared hotel rooms, thereby reducing the cost. The contractor did not correspondingly reduce the billing to EPA. Another contractor received more than $25,000 (74 percent) in per diem reimbursement above the travel cost for one delivery order. The contractor was paid $59,654 for per diem, galley trailer, food purchases, and the cooks labor. In this instance the contractor paid lodging costs directly to the hotel. Additionally, the contractor paid employees $10 to cover meals which were not provided on site. The contractor's total cost for this delivery order totaled only $34,165.

At the start of the audit, the Assistant Inspector General for Audits requested a clarification for contract reimbursement for per diem when the employees did not receive full per diem. In response, contracts were modified about January 31, 1986 to require the contractor for the remainder of the contract to bill per diem only when the contractor incurred the full per diem cost.

Equipment

In preparing the ERCS RFP, EPA recognized the possibility that in some instances usage charges for equipment could substantially exceed full purchase price. Accordingly, the RFP asked each offeror to explain its method when long-term use caused the usage charges to exceed the original purchase price. In responding, two zone contractors indicated a willingness to renegotiate in such instances. The other two zone contractors simply did not respond. In reviewing the contracts, however, we found no indication that equipment rates were subject to any renegotiation or adjustment in such circumstances.

During our review of contractor records, we found ERCS equipment rates applied to items whose costs had been fully recovered under ERCS contracts or items that were non-capital (less than one-year life), inexpensive items, as well as expensive, long-life items. Following are examples where contractors charged more than the cost of the item under the ERCS contracts or recovered a substantial portion of the cost within a short time.

One contractor purchased three all terrain vehicles for $1,900 and used them at one site. Total charges for the three vehicles on two delivery orders was $3,000, or $1,100 more than the vehicles cost. For one delivery order alone, the charge to EPA was $2,000. After the completion of the cleanup, the contractor stored the vehicles and subsequently used two of them at another ERCS cleanup site. The contractor charged approximately $1,000 for their use on the second cleanup site. These vehicles may still be usable for charging against other delivery orders.

Another contractor purchased an all terrain vehicle for $1,635. It claimed a usage rate of $50 per day for a total charge of $1,313 over a span of 51 days at a cleanup site. Consequently, 80 percent of the cost was recovered at one cleanup site. This vehicle was then available for use at other sites for which additional usage charges could be levied.

In another instance a contractor used a drum punch on a delivery order. The contract did not include a fixed rate for the punch and the contractor charged $53 a day for its use. On one delivery order, the punch was used for a month. The contractor charged EPA $1,274: (1) $1,000 for one month's usage, (2) $232 for two weeks and one day standby and (3) $42 for two days of mobilization. The drum punch was fabricated in the company's equipment maintenance shop. The company did not account for the drum punch on its property records, maintain a depreciation schedule for it, or maintain an "asset sheet" identifying its fabrication cost and expected useful life. The fabrication and maintenance costs are apparently included in the company's overhead expenses and are, therefore, allocated to all equipment. There are no separate, identifiable costs associated with the fabrication or maintenance of the drum punch. Thus, the $1,232 charge for usage and standby has no cost associated with it which was not recovered elsewhere. We cannot determine what costs may have been associated with the $42 mobilization charge (see Mobilization and Demobilization of Equipment section of this finding).

Other significant examples of instances where EPA was charged substantially more than actual equipment costs are shown in the section of the report entitled Excessive Costs Paid for Superfund Removals.

In future contracts EPA should clearly act to prevent such overcharges. The question here is what should be done to remedy this situation on the already existing ERCS contracts. Even though our review in the above areas indicated the EPA was substantially overcharged, we are uncertain whether the Agency should seek to recover such overcharges on an after the fact basis.

Substantial resources will have to be expended doing detailed review of charges to individual delivery orders. Significant time will need to be spent attempting to negotiate resolutions on a case by case basis. Should this be done, however, given EPA's real chance to recover? The contractors generally did charge the costs in accordance with contractual provisions.

Adequacy Of Contract Provisions

EPA officials did not always request or obtain the necessary information on company procedures and practices to permit them to write clear and concise provisions for the ERCS contracts. In reviewing contractor records, we identified potentially significant problems resulting from unclear contractual provisions with respect to management and mobilization and demobilization. As a result, contractors claimed:

- management costs properly charged elsewhere,
- mobilization and demobilization costs on days when equipment was being used.

The Federal Procurement Regulations are quite clear that contractual provisions must be clear. For example:

> Title 41 CFR 1-1.307-1(c) states: "Purchase descriptions, as well as other forms of specifications, must accurately reflect the needs of the Government." (July 1, 1983)
>
> Title 41 CFR 1-1.305 further clarifies: "'Specification' . . . is a clear and accurate description of the technical requirements for a material, product, or service . . . ." (July 1, 1983)

The new Federal Acquisition Regulations, not in effect at the time the contract was executed, are even more specific. Title 48 CFR 1-10.004(b)(4) requires:

> Purchase descriptions of services should outline to the greatest degree practicable the specific services the contractor is expected to perform. (July 1, 1985)

Management

Procurement officials did not ask the offerors what their established practices were for billing commercial customers. As a result, the management portion of the contract was written in vague terms allowing inappropriate charges to the management portion that should have been included in the contractor's overhead rate or handling fee. The management portion of the contract encompassed various managerial services, including all financial, administrative and clerical functions which were necessary to initiate, support, and track cleanup activities. This effort was reimbursed on a cost-plus-fixed fee basis. Contracted amounts consisted of costs for direct labor, miscellaneous direct costs, and applicable rates for indirect costs, plus fixed fees. The RFP's special instructions for management effort states:

> It is envisioned that there will be a certain amount of management effort necessary to complete all non-site-specific tasks under these contracts. The proposed costs shall include the time of the Program Manager . . . the cost of maintaining a 24-hour Zone Call Center . . . , all costs associated with preparation of the routine reports and invoices required by this contract, and the costs associated with managing the Quality Assurance Program aspects of the contract.

The contract files documented the rationale for this provision:

> Due to the large geographic area to be covered by each contract, the probable use of a substantial number of subcontractors, and the requirement for many routine reports and invoices under these contracts, there will be a certain amount of non-site-specific management effort required.

The contract did not prohibit a contractor from charging direct labor to the management portion of the ERCS contract for the same type activity that was indirectly charged to commercial customers. However, this practice does not comply with the definition of reasonableness required by Federal regulations. Reasonableness is defined by 41 CFR 1-15.201-3 which states in part:

> A cost is reasonable if, in its nature or amount, it does not exceed that which would be incurred by an ordinarily prudent person in the conduct of competitive business . . . . In determining the reasonableness of a given cost, consideration shall be given to: . . . (d) Significant deviations from the established practices of the contractor which may unjustifiably increase the contract costs. [emphasis added]

Federal regulations also clarify how direct and indirect costs may be charged. Title 41 CFR 1-15.203(a) states:

> An indirect cost . . . is one which, because of its incurrence for common or joint objectives, is not readily subject to treatment as a direct cost . . . . After direct costs have been determined and charged directly to the contract or other work as appropriate, indirect costs are those remaining to be allocated to the several cost objectives. No final cost objective shall have allocated to it as an indirect cost any cost, if other costs incurred for the same purpose, in like circumstances, have been included as a direct cost of that or any other final cost objective. [emphasis added]

Of the three zone contracts we reviewed in detail, contractors charged items to the management portion that should have been (1) charged to a specific delivery order or (2) included in indirect costs.

For example, one contractor inappropriately directly charged the management portion of the contract $51,777 for overhead type functions, such as clerical and accounting duties. It is possible that a portion of the charges were a function of the extraordinary administrative burden placed on the contractor as a result of the ERCS contract requirements and may be above the normal level of administrative effort for the contractor.

However, a portion of these charges were ordinary indirect costs associated with the cost of doing business.

Another contractor charged $60,717 for labor to the 1984 management portion of the contract for functions which were charged indirect on all commercial jobs. Similarly, the contractor charged $20,297 of such labor to the management portion of the ERCS contract in 1985. Upon reviewing employee time records, we found these individuals were claiming the EPA activities directly under the management portion of the ERCS contract. They were charging similar work for commercial customers to the company's indirect costs. The contractor also charged $27,096 to finish paperwork on several delivery orders. This cost should have been billed to the individual delivery orders.

The third contractor also claimed labor costs on the management portion for work which should have been charged as indirect labor. The contractor charged direct costs of $13,077 for subcontract administration, accounting and clerical labor costs. Under the contractor's normal accounting system, these costs would have been charged indirectly because they usually could not be identified with a specific project. This contractor claimed that the $13,077 was for "above normal effort" for obtaining subcontracts and, therefore, charged these costs directly to the management contract. In so doing, the contractor violated the intent of the contract and recovered costs for these type of functions (1) indirectly through the fixed rates and the handling fee and (2) directly through the management contract. The ERCS RFP stated that costs for the management and administration of team member subcontracts must be included in the fixed rates of the cleanup portion of the contract. Management and administrative cost for non-team subcontracts would be recovered through the site specific handling charge.

In conclusion, the contract did not require that contractors charge EPA according to the established billing practice of the contractor. Therefore, contractors charged tasks directly to EPA that they indirectly charged to commercial customers. In changing from their normal policies, the contractors charged directly for ERCS labor and then allocated indirect labor for similar tasks performed for other contracts to the ERCS contract in the overhead and G&A charges. By deviating from their established billing practices, the contractors did not reasonably nor equitably allocate costs.

Mobilization And Demobilization Of Equipment

EPA officials apparently did not obtain and evaluate necessary information to negotiate appropriate contractual provisions for equipment mobilization and demobilization. In this regard, EPA's ERCS RFPs simply requested the offerors to indicate what their proposed mobilization and demobilization rates were. No request was apparently made for the offerors to provide further amplification or explanation of the services provided under this category or nature of the costs being recovered.

In reviewing three of the zone contracts in detail, we noticed that mobilization and demobilization costs varied. One contractor received reimbursement through mileage surcharges for vehicles and major pieces

of equipment. Another contractor received reimbursement for mobilization by charging the full normal usage rates for vehicles and through a surcharge of 35 percent of the rates established for major pieces of equipment such as backhoes, front-end loaders, and cranes. The third contractor was given not only mileage surcharges, but also was authorized mobilization and demobilization surcharges of 40 percent of the regular established rates for all other equipment items. Consequently, we were charged for mobilization and demobilization of such unusual items as tool sets, small pumps, etc. In this regard, however, we found no indication that explanations were obtained regarding the appropriateness of mobilization and demobilization charges for such small items.

We reviewed contractual provisions and accounting records that related to mobilization and demobilization. Generally we concluded the costs of the vehicles used to transport equipment and the driver were reimbursed through direct charges to the ERCS contracts. In addition, costs of loading or unloading equipment were recovered through direct charges or the contractor's indirect cost rates. Accordingly, we were unable to identify an appropriate cost basis for any mobilization and demobilization charges.

Further, the mobilization/demobilization provisions of the contract were silent concerning total daily charges and did not limit the total payment for equipment use plus mobilization/demobilization charges. Accordingly, we found instances where a contractor received payment for more than one full day's equipment charge. In some instances, the contractors charged EPA on the same day for mobilization, usage, and/or demobilization. Therefore, the contractor recovered more than 100 percent of the daily usage rate, in some instances as high as 300 percent.

One zone contractor charged double or triple the daily rate for several equipment items in one day. Following are examples:

1. EPA paid $550 for a mobile lab on August 31, 1984. The contractor charged the daily rate ($275) twice - once for a day's usage and again for mobilization.

2. In another case, the contractor charged $292.50 for a two-ton truck: $80.50 for mobilization, $84.00 for demobilization, and $128.00 for mileage. The daily rate for a two-ton truck was $95.00.

3. EPA paid $160.15 for one day's usage of a passenger van: $70.00 for the daily usage rate and $90.15 for mobilization plus mileage.

Without a complete understanding of the services contemplated and recovered costs, we do not have sufficient basis to make any judgment on the appropriateness of these contractor charges. However, these charges do not seem reasonable.

Conclusions

Throughout this finding we have pointed out instance after instance where the lack of adequate information hindered the negotiation of the ERCS contracts. Adequate data were not obtained regarding the (1) nature and type of services

to be obtained; (2) resources necessary to provide such services; and (3) customary procedures and practices used by firms who provide such services. Additionally, available experience and data were not effectively used to negotiate fair and reasonable contractual provisions to safeguard the interests of the Federal government. Because of these problems, contractors were authorized to charge costs against the ERCS contracts at inflated rates.

EPA is now faced with a complicated situation. Not only does the Agency need to adjust the new ERCS contracts so these problems do not happen in the future, but it also needs to make a realistic appraisal to decide whether there is any substantial opportunity of recovering the excessive charges already paid. This choice must be carefully weighed against the substantial efforts which may be required to pursue these matters and the potential cost benefit which might accrue from such cost recoveries.

Agency Comments

The Agency agreed that better planning could have occurred. However, the Agency did plan but the planning was limited due to the fact that Superfund was a relatively new program.

Analysis of Previous Contracts

The Agency stated that past experience is not necessarily a valid basis upon which to determine response times, and that EPA must have the capability to respond immediately. The response times were based upon such factors as location of potential removal sites and population densities.

The Agency believes it adequately relied on past experiences in estimating equipment categories and quantities. The steps followed were determining categories using the Notice to Proceed source list, weighing these items according to typical on-site use and estimating actual usage by applying the weight elements against average response project periods. The Agency was aware that additional items might be necessary, and, therefore, provided for provisional rates in the contract.

Analysis of Previous Problems

The Agency agreed that it did not anticipate the problems noted in overtime, holiday pay, travel and per diem. The Agency has since clarified the contract language. On equipment, the Agency stated that profits on a particular item at a site are not necessarily indicative of similar profits on the contract as a whole. It is unrealistic to expect a contractor to provide fully depreciated equipment free of charge.

Adequacy of Contract Provisions

The Agency agreed with the report on mischarges on the management portion of the contract and unclear contract provisions on equipment mobilization and demobilization charges. EPA will negotiate with the contractors based upon audit reports to ensure that final costs are properly allocated. Modifications have been made to ERCS to clarify mobilization, demobilization and other charges.

Auditor Evaluation

Analysis of Previous Contracts

We agree that the Agency must be able to respond immediately. Past experience is an indication of the range of response times likely to be needed. We believe that the lack of different rates or contracts for different response times tends to force the paying of premium rates for all responses.

We have demonstrated that adequate use was not made of the Notice to Proceed experience in developing the equipment list. This failure is a major factor why a substantial number of equipment items were charged at provisional rates. We recognize that not all needed equipment items can be anticipated but those with high historical usage certainly can.

Analysis of Previous Problems

We have not stated that profits on a particular item of equipment at a specific site are indicative of the profits on the contract as a whole. We do not expect a contractor to provide equipment free of charge, nor would any of our recommendations lead to that result.

Recommendations

1. We recommended that EPA staff better plan and execute major procurements such as ERCS. In this regard:

   a. program staff must thoroughly analyze previous experiences to identify the nature of services required, timeframes in which such services are actually required, and specific resources which have been used in the past.

   b. program and procurement staff must carefully analyze problems identified from previous experiences and take appropriate actions to preclude such problems from reoccurring in the future.

   c. program and procurement staff must obtain all information requested from prospective contractors and appropriately utilize this information to ensure that contract provisions adequately safeguard the Federal interests.

2. We recommend that appropriate provisions be included in the upcoming ERCS contracts to prohibit the payment of:

   a. overtime or holiday pay unless the employees themselves are so compensated in accordance with the contractors' customary practices.

   b. travel costs or per diem in excess of costs actually being incurred.

   c. equipment rental costs in excess of costs actually incurred in purchasing and maintaining such equipment.

Agency Comments

The Agency generally agreed with the auditor's first two recommendations.

3. We recommend that upcoming ERCS contracts:

   a. clarify the management portion of the contract to ensure that tasks charged directly to the ERCS contracts are also charged directly to the firm's other commercial contractors (i.e., not claimed as indirect costs). If this is not possible, EPA should not pay directly for management services.

   b. clarify the nature of services and composition of costs to be charged for mobilization and demobilization. In doing so, EPA should determine whether contractors can recover regular usage charges as well as mobilization/demobilization costs on the same day.

Agency Comments

EPA agrees with the recommendation. The new ERCS will include a contract clause identifying which cost categories are to be charged as program management and which are to be excluded. Additionally, EPA has included in the new ERCS solicitations special cost proposal instructions on mobilization and demobilization, as well as clear contract terms as to when mobilization/demobilization rates apply.

Auditor Evaluation

Although the Agency agrees with the recommendation, the contracts are yet to be negotiated.

FINDING NO. 5 - EPA NEEDS TO CHANGE ITS METHODS FOR PROCURING TRANSPORTATION AND DISPOSAL SERVICES

Contractual provisions requiring ERCS prime contractors to competitively procure transportation and disposal services on a cost reimbursable basis have not worked. Overall, there are not effective incentives for zone contractors to properly plan and execute subcontracts for services at the lowest cost. This has resulted in increasing EPA's transportation and disposal costs. Additionally, the use of the prime contractor to oversee all services related to a cleanup has served to preclude EPA from becoming aware of inadequate work.

In the cleanup portion of the contract, EPA initially decided to use fixed rates whenever feasible. According to the contracting officer, the transportation and disposal of hazardous wastes, however, were not susceptible to the proposing of fixed rates because they "are far too dependent upon unknown and variable conditions . . . ." Therefore, she decided to make transportation and disposal cost reimbursable items. She decided not to allow prime contractors to use their own transportation and disposal facilities, "To avoid the appearance of collusive bidding or other possibilities of prejudicing the competitive process . . . ." Thus, the contracts required the zone contractors to competitively subcontract the transportation and disposal of hazardous waste.

The zone contractors were to be reimbursed for the direct costs of the transportation and disposal subcontracts plus a percentage handling fee. Therefore, they had little incentive to obtain the best price. We found that the zone contractors did not regularly use documented competitive procedures which are required to obtain these subcontracts. This resulted in excess costs to EPA. We also found that the zone contractors did not consistently ensure that these services were properly performed by the selected subcontractors. The zone contractors' level of control over the entire process made it difficult for EPA to obtain timely knowledge of problems.

The number of contractors available for hazardous waste transportation and disposal are substantially different. These two areas are discussed below.

Transportation Services

The market for transportation services is highly competitive, with many companies licensed to haul hazardous wastes. This market condition should enable the zone contractors to obtain the best prices for subcontracted transportation services through competitive procurements. However, our review of procurement procedures used by the zone contractors to obtain transportation services showed that competitive quotes were not always obtained and the lowest bidder was not always selected.

Our review of four delivery orders of one zone contractor showed three transportation subcontracts ranging from $29,628 to $66,482. For only one of the three did the contractor have documentation that the subcontract was procured competitively and the lowest bid selected. One of the transportation companies was selected by location with no regard to price. There was no documentation to support the selection of the third subcontractor.

Failure to arrange for transportation services in a timely manner may be one reason why the best price was not always obtained. With respect to the above

contractor, an EPA on-scene coordinator expressed concern that on one delivery order the contractor waited nine weeks to secure transportation services. He believed this may have resulted in a higher price than would have been paid had the procurement been timely. The failure to arrange transportation services in a timely manner also interfered with on-site operations and caused delays, probably resulting in higher on-site costs and increased risks of public exposure to hazardous substances.

Even when contractors obtained competitive quotes, they did not always award the contract to the lowest acceptable bidder. On one delivery order, a zone contractor obtained quotes by telephone from three transportation firms. The three quotes ranged from $400 to $500 per load. The zone contractor verbally accepted the highest quote, noting on the bid sheet that the accepted subcontractor was more compatible with the disposal subcontractor and that the trucks of the selected firm could legally haul 50,000 pounds. However, on this job, which was bid per load, the average weight per load was only 43,901 pounds; this resulted in the need for an additional 54 loads. (On this same delivery order, when the trucking company was paid by the weight transported, the average load was 49,819 pounds.) The final cost for transportation on this delivery order was $224,051. If the contractor had selected the lowest bidder and paid for the hauling by the weight transported, the cost would have been $158,048 resulting in a saving of $66,003.

In addition to failing to consistently obtain the best available price, the zone contractors also did not consistently ensure that the material to be transported and the transport vehicles were properly prepared. On one removal action, the hazardous material was not properly solidified for transport and liners were not properly placed in the trucks. This resulted in leakage of hazardous material during transport. The leakage was discovered by the disposer when the trucks reached the disposal facility. The leakage resulted in avoidable costs of $17,791 for the disposer to clean up the trucks and the spill caused by the leaking trucks. The disposer told us that there were several other incidents in which leaking trucks had arrived at his facility from EPA Superfund sites.

The zone contractors maintain responsibility for all aspects of each removal action, including transportation and disposal. They are reimbursed for the direct costs of transportation plus a percentage handling fee. Also, a performance incentive pool is available which may be awarded in whole or in part for exemplary performance. By use of an exemplary performance incentive, the zone contractors have a disincentive to fully and timely disclose problems which arise to EPA. If the (1) on-site contractor, (2) transportation contractor and (3) disposal contractor were each separately accountable to EPA, then EPA would be much more likely to be informed of problems and have the opportunity to take prompt action to remedy the causes. Thus, the affected contractor would have an incentive to promptly report to EPA or its agent either (1) on-site cleanup contractor deficiencies resulting in problems for the transportation contractor, or (2) transportation contractor deficiencies resulting in problems for the disposal contractor.

Our review indicated that the method of procuring transportation services needs to be changed to prevent excessive costs and poor performance. A separate contract awarded and administered by EPA should be considered for procuring ERCS transportation services. The contractor would not have to necessarily

be a transportation company, but should be knowledgeable about the hazardous waste transportation market. A cost-plus-award-fee contract could be used. Under this type of contract, incentives could be provided to the contractor for procuring needed transportation services timely at reduced costs.

Disposal Services

There are only a limited number of permitted disposal facilities with acceptable waste management practices, and each facility may only accept designated types of hazardous waste. For PCB disposal, for example, there are only two facilities available in the country. Given this market condition, carefully designed procurement practices are required to obtain the best price available. Under the ERCS contracts, we found that the best market prices for disposal services were often not obtained. For example, we reviewed two disposal subcontracts for $258,449 and $385,577 awarded by one zone contractor, and found no documentation to support the selection of the disposal firms. In one of these instances, the OSC was concerned that the contractor's selection of the disposal facility might not be cost effective.

Another zone contractor awarded a disposal service subcontract by telephone to a firm whose price list indicated a price of 3.5 cents per pound for disposal of the type of material being disposed. However, for the EPA cleanup, the firm quoted a price of 4 cents per pound to the zone contractor and subsequently increased the price to 4.5 cents per pound about halfway through the site cleanup. The disposal firm claimed the increase was a rate increase effective for all customers. However, the firm accepted waste from another Superfund site at the 4 cent rate after the 4.5 cent rate supposedly went into effect. The OSC believes the disposal firm's increase represents an overcharge.

The zone contractors do not always obtain preferred customer rates for disposal. One zone contractor used the same disposal facility on two delivery orders. This facility had negotiated annual contracts with preferred customers at a rate of $100 per ton for PCB contaminated solids, while other customers were charged rates varying from $120 to $180 per ton. At one site the zone contractor obtained the $100 per ton rate for 141.77 tons disposed, while it paid $180 a ton for disposal of 344.3 tons from another site. Agency officials told us that the disposal firm established a new rate of $180 a ton for all customers which was effective before the second disposal. However, a review of invoices after the supposed effective date of the $180 rate disclosed that charges to customers varied from $140 to $180 per ton.

Under the ERCS contracts, disposal contracting is done separately for each delivery order and the zone contractors do not know their disposal needs for future delivery orders. Therefore, preferred customer annual contracts are not obtained under the current ERCS structure.

The zone contractors also do not always accurately identify the material to be disposed. In one instance, a zone contractor labeled material to be disposed as PCB liquids regulated under the Toxic Substances Control Act (TSCA), although most of the material, which had very few traces of PCBs, was actually regulated under the Resource Conservation and Recovery Act (RCRA). Because of the highly toxic nature of PCBs and the two available disposal facilities, the cost of disposal of PCBs is higher than for most hazardous materials regulated under RCRA. The inaccurate identification of the material disposed may have

resulted in excess disposal costs. This example again illustrates the control problems created by assigning overall responsibility for all aspects of a cleanup to a single zone contractor. EPA would be more likely to promptly learn of identification inaccuracies if the on-site cleanup, transportation, and disposal contractors were each separately accountable to EPA.

Agency Comments

The Agency stated that "By deferring the contracting for these numerous individual transportation and disposal requirements until after the ERCS prime contracts are in place, the Agency has increased its cost effectiveness and enhanced competition." The Agency indicated that transportation and disposal contractor selection may be determined primarily by factors other than cost.

The Agency agreed that the market for transportation services is highly competitive. However, the Agency indicated that some firms "over book their limited number of trucks by quoting low prices and then accepting other higher paying jobs if and when they arise." The Agency stated that selection factors include "the number of trucks a company has available at the time, its reputation for safety, its proximity to the site, its license restrictions, and its relationship (good or bad) with the chosen disposal facility." The Agency also stated that trucks could not haul their maximum gross loads in the example we cited because of load densities and state weight limitations on bridges and highways.

The Agency stated that "cost is not necessarily the determining factor in selecting a disposal facility." Facility compliance with regulatory requirements, the nature of the waste, and the distance and route to be travelled are the predominant factors.

The Agency stated:

> The waste disposal industry has developed a reputation for selectively doing business on its own terms and conditions. They decide whose waste they will accept, when it may be delivered, whose trucks are acceptable, and most important the price they have decided to charge.
>
> When the disposal facility knows the location of the cleanup site (we are required to report the origin of the waste) and the next closest approved disposal facility, it is easy to calculate the difference in the transportation costs between the two and if inclined increase the price quote so as to enhance its profits and still be the lower (transportation plus disposal) cost overall. Presently there is no recourse, regulatory or otherwise, than to pay the increased price or incur the excessive transportation costs to the other disposal facility.

Xylene
Xyle-

The Agency noted "additional improvements" in the ERCS contracts. These would allow the OSC to approve using the nearest contractor, including the ERCS contractor, for transportation of less than $5,000 or, with the approval of the contracting officer, of less than $25,000.

The Agency indicated that the use of an exemplary performance incentive in the zone contracts does not act as a disincentive to full and timely disclosure of performance problems to EPA because of "the daily on-site presence of the OSC, who is charged with the continuous monitoring of performance of all site

activity." The Agency noted that the OSC is assisted by the Technical Assistance Team (TAT) and that numerous other Agency personnel have review and monitoring responsibilities. "As a direct result of the past ERCS incentive plan, the new recompetes for these requirements are going to have a large portion of the cleanup costs on a cost-plus-award-fee basis and will include a periodic evaluation of the future ERCS contractors' performance."

Auditor Evaluation

We understand the reasons for the transportation and disposal subcontracting provision of the ERCS contracts. However, our audit demonstrated that in practice the provision has not served to keep costs down or to allow full competition. We understand that technical needs must be met, but did not find evidence that they were met in the most cost effective manner.

We also understand that some hauling firms may not be suitable in particular circumstances. Competitive bids should be sought from firms with adequate capacity and technical capability. Special arrangements between disposal firms and transportation firms serve to diminish competition and should be viewed in that light. Upon further review, we did not find that the ability to haul maximum gross loads was limited in the case we cited by load densities and state weight limitations. The fact that truck manifests and bills of lading showed that truck loads of contaminated soil being hauled from the EPA cleanup site varied in weight more than 60 percent indicated that trucks were not always fully loaded. Thus, we believe a number of the loads could apparently have been consolidated. Further, State Highway officials advised us that under state road and bridge standards properly loaded trucks could carry substantially more than the weight limitations cited in the Agency response.

We recognized in the report the severe limitations on available disposal facilities. Our finding focused on obtaining the lowest possible price at a selected disposal facility. We found indications that some disposal firms may offer preferential rates to preferred customers.

The "additional improvements" cited by the Agency only allow sole source procurement for small transportation subcontracts. They do not enhance competition or resolve the deficiencies noted in the finding.

We note that the OSC may be responsible for multiple sites at the same time and is not always able to be on-site. Our audit clearly demonstrated that the review and monitoring activities of Agency personnel and the TAT have been inadequate to prevent the problems we noted. The planned changes to a cost-plus-award-fee basis and periodic performance evaluations could produce improvements.

Recommendations

1. We recommend that EPA award one master cost-plus-award-fee contract for the procurement of ERCS transportation services in all zones. The contractor would not have to necessarily be a transportation company, but should be knowledgeable about the hazardous waste transportation market.

Agency Comments

The report's recommendation that EPA award and administer a separate contract for the procurement and management all of the transportation services at cleanup sites is not feasible nor is it in the best interest of the Agency due to the following:

- The time, place, destination, and nature of the waste to be transported cannot be specified in advance of the need in order to award one contract.

- The Superfund Off-Site Disposal policy has the net effect of requiring the Agency to make disposal decisions on a site-specific basis.

- The OSC is responsible under the National Contingency Plan for directing all on-site work. Therefore, the OSC is responsible for the selection of the disposal facility which impacts on the transportation service required.

- Permit requirements for hauling hazardous wastes vary substantially from state to state and even county to county thus individual regional management contracts would be necessary.

- Any additional contracts would be an extra layer of contracting which would duplicate what the existing cleanup contractors now routinely perform for their commercial customers.

The present method of subcontracting for the transportation services under the ERCS delivery orders is effective and needs only to have more detailed documentation supporting the rationale as well as the cost benefits associated with selecting other than the lowest bid. A periodic compliance review is scheduled to be implemented. (See response to Finding No. 6). Where possible, the Agency will consider awarding separate contracts for transportation and disposal on a site-specific basis, such as that which is being done at the Shaffer site in West Virginia.

Auditor Evaluation

The first three points the Agency raised are true but do not demonstrate that our recommendation is infeasible. The many factors involved seem to indicate the desirability of a procurement for a specialized service that could take full account of all factors while seeking full price competition.

Permit requirements do vary. However, they are known and the selected contractor would be responsible for maintaining a detailed knowledge of them.

Our recommendation would involve an extra layer of contracting, but the advantages of our recommended approach, as outlined in our finding, outweigh this disadvantage.

We have demonstrated that the present method of transportation subcontracting has not effectively served to minimize costs. Better documentation and periodic compliance reviews would be improvements. However, we believe our recommendation would provide a more effective alternative. We support the use of competitively procured site-specific transportation and disposal contracts where appropriate.

2. We recommend that EPA determine how EPA can obtain preferred rates from disposal facilities. The method found most feasible should be implemented to obtain preferred rates for Superfund work by EPA, the U.S. Army Corps of Engineers and the States, including their contractors. EPA should also consider whether it is feasible to incorporate into these arrangements other publicly funded hazardous waste disposal, such as EPA laboratory waste and waste from State-funded response actions.

Agency Comments

While the report's recommendation to award separate preferred rate contracts has many of the same shortcomings as those previously mentioned against separate transportation contracts, any preferred customer rate agreements obtainable would assist the ERCS contractors in subcontracting for these services. Some critical concessions in the liability areas would probably be requested by the disposal facilities for any preferred rates granted. The Agency stated that they will initiate a study of the feasibility of entering into such agreements with any willing disposal facility.

Auditor Evaluation

The feasibility study which the Agency indicates it will initiate would be the first step to implementing our recommendation.

FINDING NO. 6 - EPA SHOULD IMPROVE CONTRACT MONITORING

Contracting officers did not monitor the ERCS contracts on a regular basis. As a result, the ERCS contractors did not (1) always comply with the terms of the contract, (2) provide services in a cost effective manner, and (3) comply with Federal laws. Specifically, the ERCS contractors (primes and subs) did not comply with (1) the Minimum Personnel Qualifications required by the contract, (2) the Purchasing and Subcontracting Agreement of the ERCS contracts, and (3) Federal labor laws.

Title 48 CFR 1.602-2 states that contracting officers are responsible for (1) ensuring performance of all necessary actions for effective contracting, (2) ensuring compliance with the terms of the contract, and (3) safeguarding the interests of the United States in its contractual relationships.

In addition 41 CFR 1-3.903-2 states that:

(a) When the prime contract is not to be placed on a firm fixed-price basis, review of subcontracts prior to placement may be desirable since the ultimate cost to the Government will depend in part on subcontract prices and performance. Contract provisions requiring advance notification to the contracting officer of proposed subcontracts for materials, components and other purchases may be appropriate both for information as to sources and prices and to provide an opportunity for review and for approval or objection by the contracting officer prior to award of the subcontracts.

(b)(3) In those instances where a contractor's purchasing system . . . has been deemed adequate, review of subcontracts generally may not be necessary. However, contracting officers shall conduct periodic reviews of the application of the system to insure conformance therewith.

The need to conduct contract monitoring was reinforced by a program official who said that on-scene coordinators in the field frequently did not understand the ERCS contract terms and were not always able to get satisfactory explanations in a timely manner from the Procurement and Contract Management Division.

Proper contract monitoring of the ERCS contractors and subcontractors would have detected the following deficiencies.

Minimum Personnel Qualifications

Minimum personnel qualifications for the contractors' professional and cleanup personnel are included in the ERCS contracts. One company included in our review used personnel who did not meet the minimum requirements. We reviewed the qualifications of 74 employees on three delivery orders and found that 8 employees did not meet the minimum qualifications.

These employees worked as cleanup technician II, chemist II and foreman III. Each of these positions required minimum experience levels, which the eight employees did not meet. For example, we found employees with less than 1 year of experience who were classified at the technician II level which requires 2 to 6 years of specialized experience.

Purchasing And Subcontracting Agreement

The ERCS contracts state that: "Competition shall be obtained to the maximum practicable extent." Furthermore, one ERCS contractor's own procurement policies, which were incorporated as part of the contract, stated that it would utilize an in-house centralized purchasing function to obtain the best price for goods and services. The subcontracts we reviewed for this contractor, however, showed that the contractor failed to adhere to these policies.

For four delivery orders issued to the contractor, we reviewed the 12 largest subcontracts. The subcontracts had dollar values which ranged from $9,707 to $528,137. Three of these subcontracts were procured competitively in accordance with the contract. The remaining nine subcontracts (1) had no documentation to demonstrate competitive procurement; (2) had only one bid; or (3) were awarded to a firm other than the lowest bidder with no explanation. As discussed in Finding No. 5, we found instances where improper procurement actions by an ERCS contractor may have led to EPA being overcharged.

Federal Labor Laws

The ERCS contracts specify that overtime should be paid in accordance with the requirements of the "Contract Work Hours and Safety Standard Act" and the "Fair Labor Standards Act" (FLSA).

The ERCS contracts require that "laborers, mechanics, guards, and watchmen be compensated at a rate of one and one-half times their basic rate of pay for all hours worked in excess of eight (8) hours per day or forty (40) hours per week, whichever yields the greater number of overtime hours."

The FLSA applies to supervisory, professional and clerical personnel. These individuals are designated as exempt or non-exempt from FLSA regulations. Non-exempt employees are to be paid no less than one and one-half their regular rates of pay for all hours worked in excess of forty hours per seven-day work week.

In reviewing the pay rates of two ERCS contractors and their subcontractors, we found that these Federal labor laws were not always complied with. One contractor did not pay overtime to any of its employees. The remaining contractor paid overtime up to $18.00 per hour. One employee, who should have been paid $21.45 an hour for overtime, was adversely affected by this policy. However, as shown in Finding No. 4, EPA was charged increased rates for overtime hours worked.

The ERCS contracts are also subject to the Service Contract Act which includes a requirement for a Department of Labor wage determination. We found that the minimum wage rates specified in the wage determination were not always paid to the employees of the ERCS contractors and subcontractors. A review of the wage rates of 192 employees of two contractors and their subcontractors revealed that 149 were paid less than the rates specified in the wage determination. We found instances where welders and equipment operators, who should have been paid a minimum of $9.62 per hour under the wage determination, were paid as little as $5.50 per hour by an ERCS contractor.

In summary, the contracting officers have managed the ERCS contracts by exception. Questions and problems are addressed, but contractor compliance is not reviewed on an ongoing basis. As a result, goods and services were not procured in an effective or cost efficient manner. Contractors violated Federal labor laws and assigned employees to work who were not qualified to perform under the terms of the contract.

Recommendations

We recommend that EPA improve contract monitoring by actively reviewing the contractors' compliance with the contract on a routine basis. Given the extensive programmatic and contractual coordination involved in the management and administration of the ERCS contracts, we recommend that EPA establish a monitoring board which includes program and contracts personnel from both headquarters and the regions. This board would provide all users of the ERCS contracts with uniform interpretations of the contracts and promote consistent contract administration.

Agency Comments

With the implementation of the Agency's contract management improvement program and the hiring of more contracts management personnel, officials said they have made significant improvements in monitoring ERCS. Award fee provisions in planned zone and regional ERCS contracts would encourage better oversight by EPA and the contractors. Contract specialists would also institute a review system to ensure that the contracts are properly monitored. Officials plan the following additional steps to resolve problems noted in the report. They believe these actions will implement the recommendation that EPA improve contract monitoring. Officials did not believe that the recommended "monitoring board" was necessary.

Contract Monitoring

Agency officials said they have assisted OSCs by issuing contract manuals and providing training. They plan the following actions in FY 1987 to further improve guidance to OSCs.

- Visits to every region to provide OSC training on the ERCS.
- A program by procurement officials and the headquarters program office which will involve reviewing contractor performance, observing/ assisting the OSC, and evaluating contract billing and payment procedures.

Minimum Personnel Qualifications

As a result of the audit and program review, procurement and program personnel will institute quarterly program management reviews of zone and regional ERCS contracts. OSC training will emphasize to OSCs to be alert for contract employees who may not meet qualification requirements.

Purchasing and Subcontracting Agreement

Officials recognized the need for general improvements and will:

- conduct purchasing system reviews of the new zone ERCS contracts within a short time after award;
- review purchasing systems of regional ERCS contracts as part of program management reviews;
- give OSCs additional instructions on proper subcontracting procedures.

Federal Labor Laws

Officials said they have notified the U.S. Department of Labor of past violations. In addition, officials will review new ERCS contracts to determine if employees are paid according to the contract and the law. To help identify labor law violations, officials will request audit assistance.

Auditor Evaluation

The Agency's proposed actions should improve contract monitoring. However, officials have not explained why a monitoring board is not necessary. We believe that including regional and headquarters program and procurement officials on a monitoring board would foster uniform contract interpretations and administration, which would not be ensured by the steps currently proposed. The Regional involvement and uniform interpretations are important aspects of our recommendation. We believe the proposed activities would be more effective if overseen by a monitoring board.

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