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

OFFICE OF
THE INSPECTOR GENERAL

March 31, 1993

MEMORANDUM

SUBJECT: Management of Extramural Resources at the Environmental Research Laboratory, Athens, Georgia
Audit Report No. E1JBF2-04-0300-3100156

FROM: Kenneth A. Konz
Assistant Inspector General
for Audit

TO: Gary J. Foley
Acting Assistant Administrator
for Research and Development

Christian R. Holmes
Assistant Administrator
for Administration and Resources Management

Attached is the final report entitled "Management of Extramural Resources at the Environmental Research Laboratory, Athens, Georgia (ERL-A)." Our overall audit objective was to evaluate ERL-A's management and use of extramural resources in relation to applicable laws, regulations, and policies.

Over a period of up to 7 years, the audit concluded that ERL-A management had avoided or circumvented laws, regulations, and Agency procedures in the award and funding of certain contracts, cooperative (CAs) and interagency agreements (IAGs). ERL-A misused or abused the use of contracts, CAs, and IAGs for the apparent purposes of supplementing inadequate intramural resources and federal staff, retaining long-term on-site contractors, and favoritism to former employees, employers, and alma maters. This misuse and abuse of extramural instruments was promulgated under an ERL-A management culture that apparently encouraged research accomplishments at the expense of statutory, regulatory, and sound procurement and management practices.

Of equal concern, however, is the lack of proper review and oversight of ERL-A extramural activities by the Office of Research and Development (ORD), the Contract Management Division (CMD) - Cincinnati, and the Grants Administration Division (GAD). Inadequate oversight by these Headquarters elements precluded earlier detection and correction of resource management problems at ERL-A.

Action Required

We have designated the Office of Research and Development (ORD) as the action official for this audit. In accordance with EPA Order 2750, you as the action official, are required to provide this office a written response to the audit report within 90 days of the final audit report date. We also request, that as action official, you coordinate with and obtain a written response from the Assistant Administrator for Administration and Resources Management (OARM) for planned corrective actions related to recommendations for CMD -Cincinnati and GAD. Written responses should indicate milestone dates for any initiated or planned corrective actions.

ORD's response to recommendations in the draft report was considered sufficient to resolve most of the recommendations made to ORD and ERL-A management; however, ORD's planned actions on several recommendations need revision or clarification before resolution. These recommendations and our concerns are identified in appropriate sections of Chapter 3 and Appendix I.

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

If your staff has any questions or need additional information regarding this report, please have them contact me at 260-1106.

Attachments

EXECUTIVE SUMMARY

PURPOSE

Increasing workloads, without commensurate increases in federal staff and intramural funding, have contributed to a heavy dependence by the Office of Research and Development (ORD) on contractors and other extramural support for accomplishment of its mission. ORD's extramural funding substantially increased between 1987 and 1992 while intramural funding only marginally increased. During the same period federal staff at ERL-A actually decreased while the laboratory's workload more than doubled. Currently, almost 70 percent of ORD's annual fund allocations represent extramural resources. ORD's Fiscal Year (FY) 1990 Federal Managers' Financial Integrity Act (FMFIA) report identified the management of extramural resources as a material internal control weakness. The Agency perceived this program activity as a material weakness due to the substantial lack of EPA staff to properly manage and oversee extramural operations.

EPA has been criticized in prior years by Congress and the public for perceived over-reliance on contractor support to perform many of its critical mission functions. In 1992, OIG's identification of significant contract management weaknesses, related to one of EPA's largest technical support contracts,[1] substantially increased congressional criticism and oversight of EPA's extramural management processes. Some of the serious contract management weaknesses identified in this audit were related to contractor activities at ORD laboratories.

As early as 1983, OIG reported deficiencies in ORD's extramural procurement and management processes. In 1992, following the audit of the Computer Sciences Corporation (CSC) contract and identification of serious contract management problems and conflict of interest situations (COIs) at ORD's Duluth, Minnesota laboratory, OIG initiated joint audit/investigative surveys at several ORD laboratories to assess the full extent of extramural management problems in ORD field units. The OIG survey at the Environmental Research Laboratory - Athens, Georgia (ERL-A) identified problems with the laboratory's solicitation of contracts and other extramural agreements and the overall management and control of extramural resources. As a result of the survey, the OIG initiated an audit of ERL-A and related activities at the Office of Administration and Resources Management's (OARM's) Contract Management Division (CMD), Cincinnati, Ohio, and Grants Administration Division (GAD), Washington, D.C. The primary objective of the review was to

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[1] Audit Report No. E1NME1-04-0169-2100295, "EPA's Management of Computer Sciences Corporation Contract Activities," issued March 31, 1992.

determine if ERL-A, in coordination with CMD and GAD, properly used, administered, and controlled extramural funds to obtain services under contracts, cooperative agreements (CAs), or interagency agreements (IAGs) in compliance with applicable laws, regulations, and Agency directives.

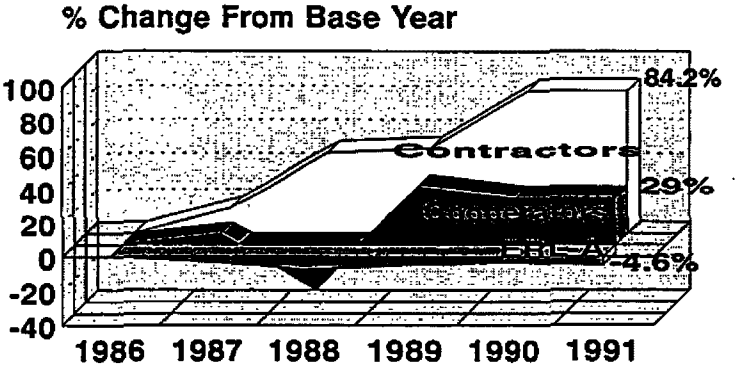
BACKGROUND

With a current annual budget of about $450 million, ORD's primary mission is to provide quality, timely scientific and technical information, products and assistance in support of Agency programs and goals through twelve environmental laboratories which employ about 1,900 EPA staff. ERL-A is one of the 12 ORD laboratories. Although environmental laws, which ERL-A research supports, increased from 2 in the early 1980's to 14 in 1992, ERL-A's EPA staff actually decreased during this same period.

To accomplish the mission with strictly imposed federal employment ceilings, ERL-A and other ORD laboratories have increased their dependency on extramural level-of-effort (LOE) contracts, CAs, and IAGs to conduct or supplement much of their research. Between FYs 1986 and 1991 contractor staff at ERL-A increased from 38 (30 percent of total ERL-A staff) to 70 (44 percent of total staff).

The following chart illustrates ERL-A's tremendous growth in extramural support in relation to EPA staff between 1986 and 1991.

ERL-A Staff Versus Contractor/Cooperator On-Site Support
FYs 1986 - 1991



	1986	1987	1988	1989	1990	1991
Contractors	0	15.8	47.4	50	84.2	84.2
Cooperators	0	6.5	-25.8	35.5	29	29
ERL-A Staff	0	-2.8	-7	-4.6	-3.2	-4.6

Fiscal Years

ERL-A's FY 1991 budget totaled $14.05 million. Of that, $7.7 million (54.8 percent) was appropriated for extramural research under contracts ($4.11 million), CAs ($2.91 million), and IAGs ($640,000). This included agreements with 5 contractors valued at approximately $4 million which provided 70 full-time contractor employees for laboratory support. Twenty other on-site personnel were provided under CAs and the Senior Environmental Employee (SEE) Program. Contractors, cooperators, and SEE personnel represented about 57 percent of ERL-A's available human resources, providing technical, scientific, and administrative support. In 1992, ERL-A's extramural funding increased to 58.5 percent of its total budget ($9.3 million of $15.9 million). Of this increase, 52 percent was for CAs and IAGs ($3.55 million in 1991 to $5.4 million in 1992). However, IAGs increased over 228 percent between 1991 and 1992 ($640,000 to $2.1 million).

With this level of dependency on extramural support, strong management controls were necessary to offset inherent contracting risks and the potential for fraud, waste, and abuse of federal resources. However, Agency managers either did not establish or properly implement the control systems needed to adequately protect against such risks. At ERL-A the priority of good contract management and control was lost among the high-priority scientific endeavors emphasized by research-oriented personnel.

RESULTS IN BRIEF

ERL-A's apparent lack of intramural funding, coupled with a management emphasis on mission accomplishment by any available means, encouraged ERL-A's circumvention, avoidance, and noncompliance with laws, regulations, and Agency policies related to the use and funding of extramural contracts and agreements. The circumvention and avoidance of competitive awards and apparent favoritism toward certain contractors and institutions appeared to be accepted practices at ERL-A. Questionable uses of extramural resources, combined with heavy dependence on extramural support for critical functions and weak management controls, elevated ERL-A's vulnerability to wasteful, abusive, and potentially illegal practices. In addition, ERL-A's lack of control over extramural support agreements provided inadequate assurance as to the quality of the oversight of related research and the effective use of scarce Agency resources. Of equal concern, however, was the obvious lack of controls, oversight, and review of ERL-A extramural activities by ORD, CMD-Cincinnati, and GAD.

Misuse and/or abuse of contracts, CAs, and IAGs by ERL-A occurred over extended periods of up to 7 years. Questionable use or abuse of extramural resources was identified in all 5 contracts,

11 CAs, and 6 IAGs (maximum potential value of $44 million) reviewed during the audit. ERL-A improperly used extramural resources in: (1) awarding repetitive sole-source 8(a) contracts and related contract modifications to avoid competition and retain long-term on-site contractors and contractor staff, (2) splitting and underestimating contract requirements to avoid 8(a) dollar limit for sole source contracts and to avoid competitive award, (3) supplementing inadequate intramural funding and federal staff, (4) awarding an IAG to a foreign government without authority, (5) using IAGs to exchange extramural research funds with another Agency principally for federal employee travel, (6) awarding, primarily noncompetitively, assistance agreements for the direct benefit of ERL-A research projects. When competitive procedures were used, ERL-A biased the competition or compromised the award procedures through potential COIs of those who evaluated proposals.

In addition, improper uses of about $210,000 in Salary and Expense (S&E) funds and Superfund monies for acquisition and erection of an office building and excessive travel costs were also disclosed during our review of ERL-A's extramural resource activities (see Chapter 5).

PRINCIPAL FINDINGS

EPA'S MANAGEMENT CONTROL SYSTEMS DID NOT DETECT OR PRECLUDE ERL-A'S CONSISTENT ABUSES AND MISMANAGEMENT OF EXTRAMURAL RESOURCES

Our review of ERL-A's use and management of extramural resources involving the award of $44 million in contracts, CAs, and IAGs revealed frequent avoidance or noncompliance with statutes, regulations, policies and guidance that governed the acquisition, use, and management of contracts and assistance agreements (see Chapters 3 and 4). Questionable award and/or use of extramural resources were found in all 5 contracts, 11 CAs, and 6 IAGs reviewed. ERL-A's questionable actions were initially encouraged by the lack of intramural resources, including the FTEs (federal staff) needed to accomplish the laboratory's increasing research missions. Over a long period of growing extramural support but limited intramural funding and decreased EPA staff, ERL-A's activities evolved into a sequence of questionable awards and uses of extramural funds. Inadequate oversight by CMD-Cincinnati, GAD, and ORD, all contributed to ERL-A's misuse and abuse of extramural resources. A lack of written guidance and conflicting, incorrect guidance from these same three headquarters' elements, contributed to ERL-A's confusion as to the proper use of extramural support and assistance mechanisms. Overall, the management control systems needed to provide reasonable assurance that ERL-A's use and management of extramural resources was carried out in accordance with

applicable statute, regulation, and EPA policy were either not established or not working. As a result, procurement and assistance laws were abused and the overall use and management of extramural resources was not adequately managed and controlled.

MISUSE AND MISMANAGEMENT OF COOPERATIVE AND INTERAGENCY AGREEMENTS

Our review of 11 CAs ($11.15 million maximum value) and 6 IAGs ($1.3 million maximum value)[2] disclosed that in all 17 extramural agreements, ERL-A managers: (1) improperly used less restrictive CAs and IAGs to procure goods and services in lieu of the more controlled contracting process, (2) did not encourage the competitive award of CAs, (3) exhibited apparent favoritism in noncompetitive CA awards, and (4) did not effectively manage CAs to assure compliance with terms of extramural agreements or that government assets were safeguarded against waste or abuse. ERL-A staff apparently sacrificed adherence to statutory requirements and ORD policies and procedures to supplement inadequate intramural resources. In addition, ERL-A seemed unaware of the proper criteria for determining the use of CAs versus contracts. As discussed in Chapter 2, inadequate and inconsistent guidance from GAD and ORD Headquarters contributed to ERL-A's confusion over the proper use and selection of extramural agreements. Further, ORD and GAD oversight of ERL-A operations was insufficient to prevent misuse and mismanagement of extramural resources by ERL-A. ERL-A's misuse and mismanagement of extramural agreements resulted in a lack of assurance that the research performed under these agreements was properly overseen and that government resources were adequately controlled and effectively utilized.

Several deficiencies related to ORD's CA award and management processes had been previously identified by a 1983 OIG audit of ORD's CA program.[3] Nine years later these problems remained uncorrected at ERL-A. Based on our review at ERL-A, corrective action taken on the prior audit was both inadequate and ineffective because ORD issued faulty guidance, ERL-A ignored some of the controls instituted by ORD and ORD failed to oversee and ensure proper implementation by its laboratories.

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[2] ERL-A CAs and IAGs included in our sample, along with award dates and potential values, are shown in Appendix III.

[3] Audit Report No. E1gB2-11-0019-30828, "Review of the Office of Research and Development's Extramural Research Activities", issued March 31, 1983.

ERL-A ABUSED CONTRACTING PROCESS TO RETAIN LONG-TERM CONTRACTORS AND AVOID FULL AND OPEN COMPETITION

In all five on-site support contracts reviewed (maximum value of $31.6 million), ERL-A abused the procurement process to retain favored contractors and their employees and then utilized these same contracts to perform prohibited contracting activities. To obtain desired contracts and related services, ERL-A either avoided or biased the competitive procurement process for all five contracts[4]. Over the last six to seven years, ERL-A avoided competition by using the 8(a) set-aside program to obtain repeated sole-source acquisitions with current contractors. By using the 8(a) non-competitive process, ERL-A prevented: (1) the interruption of on-site contractor services and the loss of contractor staff providing long-term technical/administrative support, and (2) the additional administrative burden required under a competitive procurement. After one incumbent contractor at ERL-A no longer qualified for small business 8(a) status and related sole-source awards, the contract was removed from the 8(a) set-aside program, without adequate justification, to allow the incumbent an opportunity to compete. Then, during the follow-on "full and open" competition, ERL-A biased the procurement in favor of the incumbent. In another 8(a) set-aside procurement, ERL-A split and underestimated procurement requirements and costs to avoid the 8(a) competitive threshold and justify sole-source awards. Further, ERL-A improperly used these on-site contractors to supplement its in-house human resource needs. ERL-A's substantial dependency on on-site contractors, especially long-term contractor employees, to accomplish its mission resulted in less than arms-length relationships between ERL-A and contractor staff, including prohibited personal services and favored treatment toward incumbent contractors, and ERL-A ignoring the benefits that full and open competition brings to the procurement process.

CIRCUMVENTION OF STATUTORY AND REGULATORY REQUIREMENTS EXTENDED INTO USES OF INTRAMURAL RESOURCES

Our review of extramural resource management at ERL-A also disclosed questionable uses of intramural resources and a potential violation of appropriation law restrictions. These questionable actions related to the improper acquisition and construction of an office building with S&E appropriated funds and Superfund monies and the payment of excessive travel costs. The building was obtained through a fiscal year-end contract award. These questionable uses of intramural resources indicated

[4] Contracts include the three contracts in our sample which were subjected to indepth review and the limited review of two related predecessor contracts.

that the circumvention of laws and regulations and misuse of resources was not restricted to extramural funds.

ERL-A'S FMFIA PROCESS DID NOT ENSURE PROPER CONTROL OVER EXTRAMURAL RESOURCE MANAGEMENT

ERL-A's FMFIA process did not adequately identify internal control weaknesses or ensure proper implementation of FMFIA control objectives and techniques relative to the management of contracts, CAs, IAGs and other support/administrative activities that came to our attention during the audit. Many material control weaknesses in ERL-A's extramural resource and administrative activities were not previously identified in ERL-A's FMFIA risk assessments. In addition, ERL-A had not adequately assessed control techniques to ensure proper implementation by management staff. Critical control techniques identified in ERL-A's FMFIA documentation were either not implemented or improperly implemented by ERL-A management. As a result, there was insufficient assurance that Agency resources were safeguarded against waste, fraud, abuse, and conflicts of interest. Because many of ERL-A's extramural activities were of a mission-critical nature, proper control of the extramural and administrative operations were essential to the integrity of the Agency's programs.

MISSING RECORDS AND INCONSISTENT STATEMENTS BY ERL-A, CONTRACTOR, AND COOPERATOR STAFFS DELAYED AND POTENTIALLY LIMITED AUDIT DISCLOSURE

During our audit, several impediments were encountered at ERL-A that hampered the accomplishment of audit fieldwork and may have limited our assessment of laboratory operations. Impediments included: (1) inconsistent (often contradictory) statements by ERL-A staff, contractors, and cooperators and (2) missing documentation in ERL-A's contract/cooperator and/or laboratory correspondence files. In some cases, the inaccurate statements made by ERL-A employees, contractors, and cooperators appeared to be "textbook" answers to our questions rather than answers that accurately reflected ERL-A day-to-day operations. Evidence obtained indicated that ERL-A staff had been briefed prior to start of audit fieldwork as to our audit objectives and the "correct" answers to our questions. Also, some of the missing records could be attributed to ERL-A's improper record retention procedures. However, according to certain ERL-A managers, the laboratory was seriously concerned about the negative impact of our audit on ERL-A's operations and, in particular, about the effect on contractors that worked at the laboratory. This concern was based on the impact of the recent OIG audit of Duluth ERL on that laboratory's operations. The missing records and conflicting statements necessitated alternative record reviews and additional interviews which would not have been necessary if

full disclosure had been made when questions were first asked. These impediments significantly delayed completion of audit fieldwork and left us unsure that all pertinent information and conditions had been disclosed.

RECOMMENDATIONS

ORD, as well as CMD and GAD need to substantially strengthen their oversight and control over the procurement, award, and use of extramural resources at ERL-A to decrease the Agency's vulnerability to abusive, and wasteful practices, ensure compliance with applicable laws, regulations and policies, and establish effective use of Agency resources. In addition, ERL-A's vulnerability from over-reliance on contractor and cooperators for performance of mission critical functions needs to be reduced. Risk reduction can be achieved through increased use of EPA staff to perform critical laboratory technical operations and to retain Agency expertise and control over these vital research activities. ERL-A staff's awareness of the proper ethical conduct of government business needs to be increased. ERL-A management should also be advised that laws, regulations, and policies governing the use and management of extramural resources were established to protect the government's interests and to safeguard government resources. Circumvention or noncompliance with these requirements cannot be tolerated.

AGENCY COMMENTS

ORD generally agreed with the findings and those recommendations made to ORD management. OARM did not agree with many of the findings related to CMD - Cincinnati contract oversight and 8(a) noncompetitive and subsequent competitive awards to one on-site ERL-A contractor. Also, OARM expressed some disagreement with certain statements and conclusions related to GAD oversight and approval of certain IAGs and CAs at ERL-A. However, OARM did agree with most of the recommendations related to CMD - Cincinnati and GAD operations. Both ORD and OARM responses included substantive planned or initiated corrective actions to correct the deficiencies identified. Because ORD included milestone dates for completion of initiated or planned actions, most of the recommendations to ORD will be resolved upon issuance of this report.

ORD and OARM responses to the report's findings and recommendations have been summarized at the end of each appropriate report chapter along with OIG's evaluation of these responses. Agency responses to each individual recommendation and any planned and initiated corrective actions or additional Agency actions needed for resolution of each recommendation are

presented in Appendix I. ORD and OARM's complete responses to the draft report's findings and recommendations are available upon request from the Office of Inspector General.

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CHAPTER 1

INTRODUCTION

PURPOSE

Due to increasing workloads and limited federal staffs, the Office of Research and Development (ORD) has become highly dependent on extramural support to accomplish its mission. Almost 70 percent or $342 million of ORD's total 1992 allocation of about $490 million was used for on-site and off-site extramural support obtained through contracts, cooperative agreements (CAs), grants, and interagency agreements (IAGs). OIG audits and surveys at ORD laboratories in 1992 and prior years disclosed serious management problems related to contracts and CAs.

In FY 1990, ORD recognized its management of extramural resources as a material internal control weakness in the Agency's annual FMFIA report to the President. However, the OIG had already reported[1] major deficiencies in ORD's procurement process and management of extramural resources in 1983, seven years earlier. In 1986, the OIG further reported contracting deficiencies at the Environmental Monitoring Systems Laboratory (EMSL) in Las Vegas.

In 1992, following the Agency's identification of extramural resource management as a material weakness, the OIG reported serious management problems related to the CSC contract activities[2] at ORD Laboratories in Research Triangle Park, North Carolina; Gulf Breeze, Florida; and Corvallis, Oregon. Contract management problems were also reported by OIG at ORD's Duluth, Minnesota laboratory. Because of the severity of the deficiencies identified in the management and use of certain ORD contracts, contract activities, and other extramural agreements, the OIG in 1992 initiated joint audit/investigative surveys at several ORD laboratories to assess the full extent of these problems.

A subsequent OIG survey at the Environmental Research Laboratory - Athens, Georgia (ERL-A) identified problems with the laboratory's solicitation of contracts and other extramural

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[1] Audit Report No. E1gB2-11-0019-30828, "Review of the Office of Research and Development's Extramural Research Activities," issued March 31, 1983.

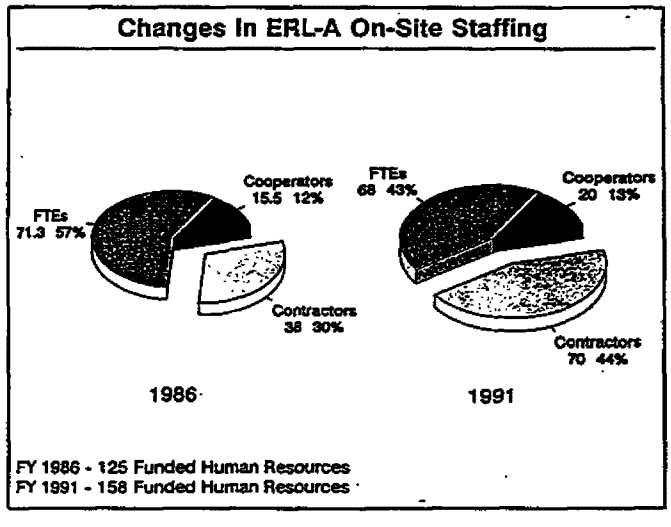
[2] OIG Report "EPA Management of Computer Sciences Corporation Contract Activities, " Audit Report No. E1NME1-04-0169-2100295, issued March 31, 1992.

agreements and its overall management and control of extramural resources. As a result of the survey, the OIG initiated an audit of ERL-A and related activities at the Office of Administration and Resources Management's (OARM's) Contract Management Division (CMD), Cincinnati, Ohio, and Grants Administration Division (GAD), Washington, D.C. The primary objective of the review was to determine if ERL-A, in coordination with CMD and GAD, properly used, administered, and controlled extramural funds to obtain services under contracts, CAs, or IAGs in compliance with applicable laws, regulations, and Agency directives.

BACKGROUND

ORD's mission is to provide high quality, timely scientific and technical information, products and assistance in support of Agency programs and goals. The Agency's research program is conducted through twelve environmental laboratories across the country employing about 1,900 scientific and administrative staff, with an annual operating budget of about $450 million. ORD's overall planning process engenders an applied research and development program focused on answering key scientific and technical questions as a basis for EPA's programmatic and regulatory decision-making. Short-term scientific and technical studies support immediate regulatory and enforcement decisions while a longer-term core research program extends the knowledge base of environmental science and anticipates environmental problems.

To accomplish the mission with strictly imposed federal employment ceilings, ERL-A and other ORD laboratories have had to increase their dependency on extramural level-of-effort (LOE) contracts, grants, CAs, and IAGs to conduct or supplement much of their research. ERL-A's increased reliance on extramural support is illustrated by the pie charts. Between FYs 1986 and 1991 contractor staff at ERL-A increased from 38 (30 percent of total



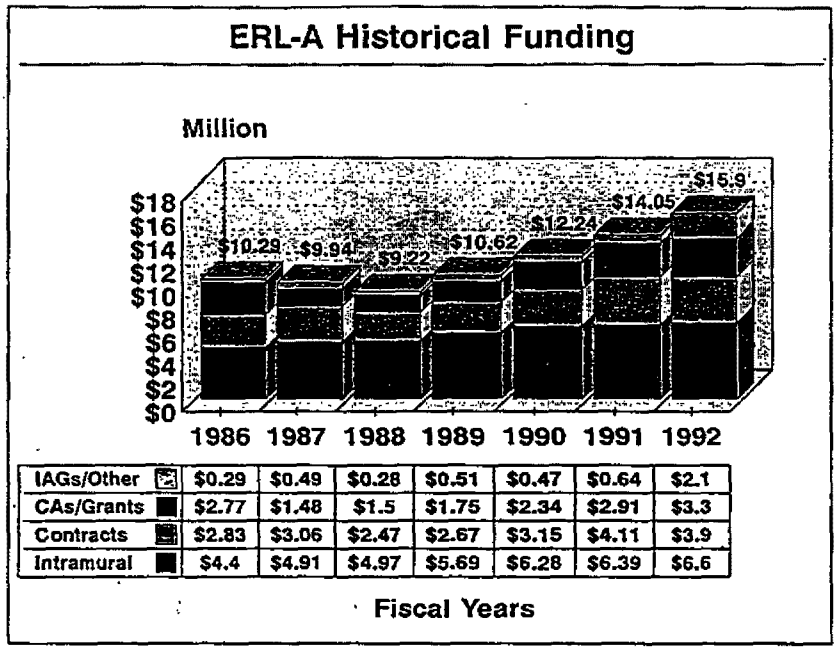
ERL-A staff) to 70 (44 percent of total staff).

In a memorandum, dated November 9, 1990, the Director of the Office of Environmental Processes and Effects Research (OEPER) explained:

> The use of on-site contractors has become a major expense item throughout ORD. In certain instances, expenditures for on-site services (using contracts, cooperative agreements, or interagency agreements) exceeds sixty percent of a laboratory's R&D budget. On-site non-federal personnel have become a valuable and necessary adjunct to our research program.

ERL-A's FY 1991 budget totaled $14.05 million. Of that, $7.7 million (54.8 percent) was appropriated for extramural research under contracts ($4.11 million), CAs ($2.91 million), and IAGs/other ($640,000). This included agreements with 5 contractors valued at approximately $4 million which provided 70 full-time contractor employees for laboratory support. Twenty other on-site personnel were provided under CAs and the Senior Environmental Employee (SEE) Program. Contractors, cooperators, and SEE personnel represented about 57 percent of ERL-A's available human resources, providing technical, scientific, and administrative support. In 1992, ERL-A's extramural resources increased to 58.5 percent of its total budget ($9.3 million of $15.9 million total) with a 52 percent increase in funding for CAs and IAGs ($3.55 million to $5.4 million). This increase in extramural agreements occurred primarily in funding for IAGs/other which increased 228 percent, from $640,000 in 1991 to $2.1 million in 1992.

The following chart illustrates increases in contract, as well as total funding between 1986 and 1992.



With this level of dependency on extramural support, strong management controls were necessary to offset inherent contracting risks and the potential for fraud, waste, and abuse of federal resources. However, Agency managers either did not establish or properly implement the control systems needed to adequately protect against such risks. At ERL-A the priority of good contract management and control was lost among the high-priority scientific endeavors emphasized by research-oriented personnel.

SCOPE AND METHODOLOGY

The audit primarily focused on the procurement, use, and management of laboratory support services through contracts and CAs. We also reviewed ERL-A's use of IAGs. During the audit, we judgmentally selected and performed detailed reviews of three on-site support contracts and their predecessor contracts, eleven active CAs, and six IAGs (chart below shows audit universes and samples).[3] Predecessor contracts and other extramural agreements were also selectively reviewed when considered necessary to fully develop conditions identified during our audit and to establish a

[3] See Appendix III for contracts, CAs, and IAGs reviewed.

historical perspective regarding the award of current contracts and other extramural agreements.

AUDIT UNIVERSES AND RELATED SAMPLES

Audit Area	*Universe (08/92)*	*Max. Value (Millions)*	*Sample*	*Max. Value (Millions)*
Contracts[4]	*4*	*$30.8*	*3*	*$22.9*
CAs	*27*	*$14.2*	*11*	*$11.15*
IAGs	*17*	*$3.09*	*6*	*$1.3*

The audit fieldwork was performed from May 1992 through December 1992 primarily at ERL-A, CMD, and GAD.

As previously stated, the overall audit objective was to determine if ERL-A, in coordination with CMD and GAD, properly administered and controlled extramural funds appropriated to obtain services under contracts, CAs, or IAGs in compliance with applicable laws, regulations, and Agency directives. Specific objectives were to:

- Evaluate management controls over contracts, CAs, and IAGs to assess their adequacy in:

  1) protecting the Agency from fraud, waste, and abuse;

  2) ensuring compliance with applicable laws, regulations, and Agency directives related to management of extramural contracts and agreements; and

  3) ensuring compliance with contract terms and the quality of contractor performance.

[4] Contract universe limited to on-site/near-site technical support contracts. Predecessor contracts totalling $8.7 million were subjected to a limited review but are not reflected in these contract totals. Sample included all ERL-A technical support contracts not previously audited (Computer Sciences Corporation Contract).

- Assess whether management had complied with applicable laws, regulations, and directives when soliciting and procuring contracts and other extramural services.

- Determine if ERL-A used its contracts and other extramural agreements as Congress, OMB, and EPA intended to support the Agency's research mission.

Audit Survey and Identification of Previously Reported Issues

During December 1991 and January 1992, CMD and ORD performed a joint review of ERL-A contract management. Their review consisted of file reviews at CMD and a subsequent site visit to ERL-A in January 1992 to review site records and discuss contract related issues. The ensuing report, issued July 14, 1992, cited contract management deficiencies related to conflicts of interest, contractor performance of inherently governmental functions, personal services indicators, and inadequate contract statements of work (SOWs) and related work assignments (WAs). Our survey of ERL-A also revealed strong indications of potential abuse in contracting for services and in contract administration and oversight.

Because of on-going or proposed Agency actions in response to recent OIG audits,[5] as well as actions proposed by EPA's Standing Committee on Contracts Management,[6] we concluded that issues identified during the ERL-A survey such as prohibited personal services indicators, contractor performance of inherently governmental functions, conflicts of interest, inadequate invoice review, inadequate SOWs/WAs, and other previously reported contract management problems did not warrant further audit effort. These issues were included in a Special Review report,[7] issued November 30, 1992, to the Assistant Administrator for Research and Development. This report was issued under

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[5] These reports include EPA's Management of Computer Sciences Corporation Contract Activities, Audit No. EINME1-04-0169-21000295 (issued March 31, 1992) and Contracting Activities at Environmental Research Laboratory - Duluth, Audit No. E1JBF1-05-0175-2100443 (issued July 7, 1992).

[6] CONTRACTS MANAGEMENT AT EPA: Managing Our Mission, Staff Report of the Standing Committee on Contracts Management, June 1992.

[7] Survey Report - ORD Environmental Research Laboratory, Athens, GA, Report No. E1XMG2-04-0102-3400007, November 30, 1992.

provisions of OIG Manual 150 for limited scope reviews. Since these issues were not fully developed through a detailed audit, the work was not performed in accordance with governmental auditing standards. Our intent was to identify and report the existence of these problems to top ORD management for immediate action or for inclusion in on-going Agency corrective actions in these areas.

Audit of Procurement, Use, and Management of Contracts

To assess ERL-A's overall use of contracts; the contract award process; and general contract management and oversight, we limited our review to two contractors[8] that provided on-site services to ERL-A under three separate contracts. This included two American Scientific International (AScI) contracts [68-C0-0054 and 68-04-0012] and one Technology Applications, Inc. (TAI) contract [68-C1-0024]. Also, where considered necessary, we reviewed predecessor contracts and related transactions to assess long-term ERL-A operations and to fully develop the deficiencies noted. We also visited CMD to review related contract files and determine CMD's role in ERL-A's contracting decisions.

The contract audit fieldwork involved both interviews with key Lab personnel and file reviews. We interviewed laboratory management, project officers (POs), work assignment managers (WAMs), and contractor\cooperator employees, including site managers. We also reviewed official records in the possession of POs and WAMs, and additional documentation provided by ERL-A management, contractors, and cooperators. At CMD, we talked with the contracting officers (COs) and contract specialists involved in the contracts sampled. The audit fieldwork performed allowed us sufficient insight into ERL-A operations, as related to extramural contracts, for us to identify and substantively document specific problems as related to the lab's solicitation, award, use, management, and oversight of the contracts sampled.

Audit of Procurement, Use, and Management of CAs and IAGs

To assess the solicitation, award process, and ERL-A's overall use, management, and oversight of CAs and IAGs, we limited our review to 11 CAs and 6 IAGs. The sample was selected judgmentally based on information obtained during an initial file

[8] We reviewed AScI (formally American Scientific International, Inc.), and Technology Applications, Inc. Computer Sciences Corporation also provided on-site support to ERL-A but was not included because of recent OIG audit coverage.

review of all current CAs and IAGs. We primarily selected those agreements which: (1) provided ERL-A on-site services; (2) were awarded to institutions where key laboratory management had close relationships; (3) purchased large amounts of equipment; (4) provided for an inordinate amount of travel; (5) had large amounts budgeted for subcontracts or consultants; or (6) authorized other costs which appeared questionable.

Our general methodology for reviewing each CA and IAG in our sample was to: (1) conduct an initial interview with each PO and obtain files; (2) perform in-depth reviews of ERL-A and PO files; and (3) conduct follow-up interviews with POs, where necessary. If co-POs or sub-POs were assigned by the PO to oversee individual subprojects/tasks under the agreement (i.e., the UGA agreement), we also interviewed a sample of those individuals and reviewed any applicable files in their possession. The purpose of this intensive review was to gain an overall understanding of the solicitation, award, use, and management of each agreement including an evaluation of related internal controls. Since UGA was co-located with ERL-A, additional audit fieldwork was performed at the University. We conducted interviews with university Principal Investigators (PI) and reviewed the PI and university records/files provided. Because of the distant locations of other universities and government agencies with CAs or IAGs in our sample, we did not conduct in-depth interviews with their PIs or review related files.

After our initial review of the sampled ERL-A CAs and IAGs, we visited GAD to review related files and determine its role in ERL-A's assistance decisions. At GAD, we interviewed award officials and grants specialists involved in the CAs and IAGs reviewed. The audit fieldwork performed allowed us sufficient insight into ERL-A operations, as related to CAs, for us to identify and substantively document specific problems as related to the lab's solicitation, award, use, management, and oversight of the various agreements. Our review of the six IAGs was primarily limited to their use by ERL-A.

The audit was conducted in accordance with Government Auditing Standards (1988 revision) issued by the Comptroller General of the United States. Our audit included tests of management and related FMFIA controls, policies, and procedures specifically related to the audit objectives. The findings in the report include material control weaknesses identified during the audit and our recommendations to correct the weaknesses, where appropriate.

Certain data used in this report was extracted from EPA's Contract Information System (CIS). No audit tests were performed to evaluate the adequacy of manual or automated controls for CIS or the validity of the data maintained by this system. Therefore, we cannot and do not attest to the accuracy or integrity of the CIS data used in this report.

During the audit, two other issues were identified outside the scope of extramural resources which, in our opinion, warranted further audit effort. These issues related to (1) the potential misuse of Salary and Expense (S&E) and Superfund appropriated monies to acquire an office building and (2) improper travel expenditures. No other issues came to our attention as a result of specified audit procedures which we believed were sufficiently material to warrant further audit effort.

Our findings were discussed with personnel during audit fieldwork and comments were obtained from the Environmental Research Laboratory at Athens. We also briefed officials from the Office of Research and Development and the Office of Acquisition Management on our findings. The draft report was provided to the Acting Assistant Administrator for Research and Development and the Assistant Administrator for Administration and Resources Management for comment. Major comments to the draft report from the Office of Acquisition Management, the Grants Administration Division, and the Office of Research and Development have been incorporated into the appropriate report chapters. Agency comments on recommendations and the OIG's evaluation are detailed in Appendix I.

SCOPE LIMITATIONS AND IMPEDIMENTS

During the audit, we encountered several impediments to the accomplishment of our audit objectives. These impediments are detailed in Chapter 7 of this report and summarized below.

ERL-A file documentation for the existing contracts and related PO files appeared "sanitized" (i.e., cleared of all but official finalized documents). Documents such as correspondence, telephone memos, and other routine records of day-to-day management were missing. ERL-A managers and staff provided contradictory and often incorrect information. As the audit progressed, it became evident that managers and staff had been previously briefed as to the issues under audit and they, in turn, provided "textbook" answers to our questions. In many instances, this information conflicted with file evidence obtained and with other interviews. In addition, ERL-A staff did not fully disclose all of the information available to them. We

were provided only documentation that we specifically requested and answers to questions as specifically asked. More than once, we became aware of an existing condition or documentation through interviews with cooperator or contractor personnel that had not been disclosed by Agency personnel but whose existence was later confirmed by EPA staff.

These impediments necessitated additional record reviews and interviews by assigned auditors which would not have been necessary if full and truthful disclosure had been made when questions were first asked. As a result of this situation, audit fieldwork was significantly delayed. Because of the impediments encountered during this review, either inadvertently or intentionally, we are not confident that we have received all information pertinent to our audit objectives.

PRIOR AUDIT COVERAGE

Because of the substantial increase in the use of service contracts Government-wide, primarily due to increasing agency workloads and limited federal staffs, Congress and the Office of Management and Budget (OMB) have expressed concern over the use and control of extramural resources. Strong management controls are required to ensure that government resources are properly used and adequately protected against fraud, waste, and abuse.

In response to the concerns of Congress and OMB, the EPA Office of Inspector General (OIG) and the General Accounting Office (GAO) have compiled a long list of audits and special reviews which have repeatedly demonstrated problems in the way EPA Offices manage and control contracts and other extramural agreements. A 1983 OIG audit (Audit No. E1gB2-11-0019-30828) of ORD extramural activities under contracts, cooperative agreements, and interagency agreements identified some of the same problems discussed in this report. In addition to OIG audits of Agency contracting issues, the General Accounting Office (GAO) has issued several audit reports and given Congressional testimony concerning problems with EPA's management of consulting and management support service contracts. Although none of these reports specifically involved ORD contract activities, many of the conditions reported were similar or relevant to those OIG has identified in this and previous OIG special reviews and audits. Specifically:

- EPA's extensive use of support service contracts to perform critical agency functions and augment insufficient EPA staff.

- Potential performance of inherently governmental functions by contractors.

- Excessive, improper use of contract consolidations and modifications in lieu of open solicitation and competition for services.

- Inadequate contract SOWs, monitoring, and quality assurance criteria to evaluate contractor performance.

- Contractor conflicts of interest (COIs).

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CHAPTER 2

EPA'S MANAGEMENT CONTROL SYSTEMS DID NOT DETECT OR PRECLUDE ERL-A'S CONSISTENT ABUSES AND MISMANAGEMENT OF EXTRAMURAL RESOURCES

Our review of ERL-A's use and management of extramural resources involving the award of $44 million in contracts, CAs, and IAGs revealed frequent avoidance or noncompliance with statutes, regulations, policies and guidance that governed the acquisition, use, and management of contracts and assistance agreements (see Chapters 3 and 4). Questionable award and/or use of extramural resources were found in all 5 contracts, 11 CAs, and 6 IAGs reviewed. ERL-A's questionable actions were initially encouraged by the lack of intramural resources, including the FTEs (federal staff) needed to accomplish the laboratory's increasing research missions. Over a long period of growing extramural support but limited intramural funding and decreased EPA staff, ERL-A's activities evolved into a sequence of questionable awards and uses of extramural funds. Inadequate oversight by CMD-Cincinnati, GAD, and ORD, all contributed to ERL-A's misuse and abuse of extramural resources. A lack of written guidance and conflicting, incorrect guidance from these same three headquarters' elements, contributed to ERL-A's confusion as to the proper use of extramural support and assistance mechanisms. Overall, the management control systems needed to provide reasonable assurance that ERL-A's use and management of extramural resources was carried out in accordance with applicable statute, regulation, and EPA policy were either not established or not working. As a result, procurement and assistance laws were abused and the overall use and management of extramural resources was not adequately managed and controlled.

BACKGROUND

Extramural Management Systems

Management oversight and controls over extramural activities at ORD laboratories is vested in three primary EPA Headquarters components: ORD, CMD, and GAD.[1] ORD has direct management responsibility for all of ERL-A's operations while CMD and GAD share responsibility with ORD for oversight of contracts and assistance agreements, respectively. Under Section 2560 of EPA's

[1] Internal Control Guidance for Managers and Coordinators, 1988, Addendum 3 - Assessment Unit Listing for EPA.

Resource Management Directive - Internal Control, primary organizations (i.e., ORD, CMD, GAD) have the responsibility to develop and maintain effective systems of internal control over their program operations and administrative functions. In addition, these organizations have the responsibility to convey, in writing, to employees at each level of management their internal control responsibilities and expected performance. Primary organizations are also required to evaluate internal control systems on a continuing basis and ensure that those systems are adequately documented and followed.

Management Accountability for ERL-A's Pattern of Abuse

ORD, CMD, and GAD management and control systems were substantially deficient and failed to provide reasonable assurance that ERL-A complied with the requirements and intent of applicable statutes, regulations, and EPA policies in its acquisition/award, use, and management of contracts and other extramural agreements. Since ORD, CMD, and GAD had oversight responsibilities for ERL-A's extramural activities, these primary organizations must share accountability for the deficiencies presented in this report. While we did not conduct detailed reviews of ORD, GAD, or CMD organizational internal control processes and operations, we did identify specific management control weaknesses in their respective operations. As evidenced below and in the following chapters of this report, existing management/internal control systems of ORD, CMD, and GAD either did not identify or, if identified, did not prevent ERL-A's abuse of extramural resources.

INSUFFICIENT INTRAMURAL FUNDING AND EPA STAFF

From 1986 to 1991, EPA staff at ERL-A decreased 4.6 percent while the laboratory's research responsibilities more than doubled. During this same period, on-site contractor and cooperator staff at ERL-A increased over 113 percent. With decreasing staff and increasing workload, ERL-A began a pattern of avoidance and noncompliance with statutory and regulatory requirements and the apparent misuse of extramural resources to supplement its under-staffed and under-funded intramural operations. Identified abuses ranged from improper use of contractors and cooperators as substitute federal staff to perform critical laboratory functions, to the use of a CA funded with R&D monies for the development of an ERL-A on-site day-care center, to the apparent exchange of extramural funds through IAGs with another federal agency to supplement FTE intramural travel funds. Constraints on

intramural funding thus led to innovative, albeit questionable, use of extramural resources.

GAD DID NOT PREVENT OR DETECT IMPROPER USE OF COOPERATIVE AND INTERAGENCY AGREEMENTS

Our review of 11 CAs and 6 IAGs awarded and/or managed by ERL-A disclosed that ERL-A managers and scientists circumvented statutory requirements, regulations and Agency procedures and improperly used less restrictive CAs and IAGs in lieu of more controlled contracts to obtain goods and services. The misuse of CAs was prompted by: (1) lack of federal employees (FTEs) and related intramural funding available to ERL-A; (2) ERL-A's determination to complete assigned tasks by any means available; and (3) a management culture which encouraged the questionable use of extramural funds. ERL-A's misuse of CAs resulted from a lack of controls at all management levels over the resources used to fund extramural research; however, GAD is principally responsible for oversight of assistance agreements. Therefore, inadequate GAD guidance and oversight contributed substantially to the improper award of CAs and IAGs.

According to the Assistance Administration Manual, Chapter 15, GAD's pre-award responsibilities for assistance agreements included the pre-award administrative and legal review which involved reviews of the scope of work, statutory authority, budget items, and the quality assurance (QA) narrative statement. However, our limited review of GAD operations disclosed a relatively superficial review was performed of assistance agreement awards. In addition, GAD had not established adequate policies and procedures to guide the assistance award and management processes and did not provide sufficient pre-award review to preclude ERL-A's abuses of CAs and IAGs. Details of ERL-A's misuse of CAs and IAGs are included in Chapter 3 of this report and are briefly discussed below.

Examples of ERL-A's misuse of CAs included: (1) use of a near-site university to provide on-site laboratory personnel for direct support of ERL-A scientists and their research projects, (2) CA supplement which allowed a cooperator staff to modify a model for the direct benefit of ERL-A and use by one of ERL-A's off-site contractors, (3) funding PhD attainment for an ERL-A employee, (4) a CA sub-project to develop an operating plan for the ERL-A's on-site child-care center, (5) the payment of a UGA cooperator "in absentia", and (6) extensive foreign travel for academics which directly benefitted ERL-A initiatives. IAGs were

used inappropriately to: (1) exchange extramural funds with another federal agency to supplement EPA travel, and (2) fund a research project with a foreign government without statutory authority.

If GAD had properly fulfilled its basic oversight and management responsibilities to delineate the acceptable use of CAs, guide the competitive CA process, and properly ensure effective CA management, the problems identified above and discussed in Chapter 3 may have been precluded.

Inadequate GAD Pre-Award Oversight and Guidance Perpetuated Confusion Over Use of Extramural Assistance Agreements Versus Contracts and Contributed to ERL-A's Noncompliance With Applicable Statutes

GAD had not issued effective guidance on the criteria for selecting and using extramural assistance agreements. The only written guidance issued by OARM/GAD was merely a restatement of statutory provisions in EPA Order 1000.19 and in the Agency's Assistance Administration Manual. However, this guidance did not adequately address the appropriate use of assistance agreements under provisions of the 1977 FGCA Act versus procurement through contracts (see Chapter 3 and later sections of this Chapter). This determination was left to individual program offices. ORD, in turn, left the decision to contract or award a CA to each individual laboratory.

Once a laboratory selected the extramural assistance mechanism, there was virtually no review of that decision by ORD or GAD. ORD had reviewed only 2 of the 27 active CAs awarded and/or managed by ERL-A. Our review of GAD files and discussions with GAD managers and staff disclosed that its pre-award administrative review of proposed CAs was little more than a checklist of required documents. GAD files contained very few contacts with ERL-A POs or managers. There was no evidence of any discussions or independent review surrounding the purpose or propriety of specific proposed assistance agreements. In fact, GAD officials exhibited a "hands-off" approach toward its management and oversight responsibilities and compliance with its few control requirements. This approach is discussed further in the section on mismanagement of CAs below.

As a result of this deficient oversight and guidance, contracts, CAs, and IAGs were used by ERL-A without consideration of which mechanism was most appropriate. In making their decision about what extramural instrument to use, ERL-A managers did not use the

criteria of the law, established regulations, or Agency or ORD guidance. Instead the decision to use a contract, CA, or IAG was guided by time considerations, the preferences of the ERL-A or university principal investigators and/or other ERL-A managers, headquarters allocations, and administrative convenience.

It also became evident that without proper guidance ERL-A managers did not understand the distinction between using contracts, CAs, and grants. Twice during interviews, the ERL-A director explained the difference between contracts and cooperative agreements as the type and level of anticipated interaction between contractors/cooperators and federal employees. The amount of collaboration between federal employees and cooperators is the actual criteria that should be used to determine whether an assistance agreement is awarded as a CA or grant. The anticipated federal participation does not enter into the decision to contract or award an assistance (cooperative agreement or grant) agreement. When ERL-A POs were asked why they used CAs instead of contracts in obvious cases of direct benefit, the POs defended the use of CAs by citing mutual benefit to the laboratory and the university as the justification. However, Senate Report 97-180, dated August 13, 1981, rejected relative benefit as a factor in determining whether to contract or award an assistance agreement. The Senate Report stated that the principal purpose of the transaction (procurement or assistance) was the only legitimate decision criteria.

LACK OF COMPETITION IN EXTRAMURAL AWARDS NOT ADDRESSED BY GAD, CMD, OR ORD

In order to obtain favored contractors and cooperators, ERL-A did not competitively award most of its contracts or CAs. For those few contracts and CAs awarded competitively, there were no controls in place to assure that the proposal review process was fair and equitable. The noncompetitive environment at the laboratory existed, in part, because of the failure of ORD, GAD, and CMD to effectively promote and encourage competition at ERL-A. GAD did not develop policies to encourage the competition of CAs and CMD did not insist that ERL-A comply with competitive requirements for contracting. Although ORD policy stated that competitive award of extramural instruments helped assure the best research, ORD delegated broad discretionary authority to its laboratory directors to decide whether or not to compete extramural awards and relied on GAD and CMD to provide oversight for the award and management of extramural contracts and agreements. Further, ORD did not take corrective action to end

the pervasive influence of the prospective PO over the evaluation of CA proposals and did not provide effective oversight of the proposal review process. These last deficiencies were previously reported in OIG Audit Report No. E1gB2-11-0019-30828, entitled "Review of the Office of Research and Development's Extramural Research Activities," issued March 28, 1983.

GAD Did Not Develop Policies To Encourage Competitive Award of CAs and IAGs

GAD is responsible for Agency-wide guidance on competition in extramural agreements. However, none has been established. GAD managers stated that the FGCA Act encourages competition, but does not require it. GAD managers further stated that competition was a programmatic decision and ORD had established some competition guidelines. However, ORD officials denied any responsibility for guidance on extramural competitive awards. An ORD official stated that GAD was the office charged with this responsibility and ORD only began promulgating such guidance because GAD had failed to do so.

In the absence of specific requirements for competition, ERL-A did not encourage the competitive award of CAs as emphasized by the FGCA Act. Of the 27 active ERL-A CAs having a maximum potential value of $14.2 million, 17 CAs totalling $10 million were awarded noncompetitively despite the FGCA Act provision encouraging competition and ORD Headquarters policies that competing CAs helps assure the best research available. ERL-A used its discretionary authority to award noncompetitive agreements to individuals/institutions that its scientists believed to be the best qualified to perform the research needed. Several of the noncompetitive awards were to current employers of former ERL employees and on-site cooperators and to alma maters or former employers of laboratory management. These noncompetitive awards created the appearance of favoritism in the award process. Details of problems with ERL-A's noncompetitive awards are included in Chapter 3 of this report.

CMD Permitted ERL-A To Manipulate Procurements to Retain Favored Contractors

ERL-A was able to abuse the contracting process to retain favored contractors and their employees and then utilized these same contracts to perform prohibited contracting activities. Although CMD identified questionable contracting practices at ERL-A (i.e., AScI contract splitting, personal services, directed subcontracting, etc.), CMD staff still permitted ERL-A contract

managers to circumvent contract regulations to retain incumbent contractors without going through the competitive process. CMD staff stated that due to limited staff they were not able to closely scrutinize contract activities at ERL-A and that they primarily acted as a service provider to the EPA program offices. However, CMD, through its contracting officers, is responsible under FAR 1.602-2 for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationships. However, over a period of nine years and with the apparent awareness of CMD, ERL-A managers manipulated 8(a) contracting requirements to avoid competition and retain the incumbent laboratory support contractors. ERL-A abuses of the 8(a) set-aside program are presented in Chapter 4 and some examples are presented below.

For example, ERL-A requested a large modification (a $2.4 million/200 percent increase over original contract value and 20-month contract extension) to the TAI on-site contract just before the 8(a) firm graduated from the program. A CMD legal review questioned the propriety of extending a contract when a firm was about to graduate from the 8(a) program. However, according to OAM, OGC signed the file to affirm legal sufficiency of the contract and made the comment for CMD's consideration only. Despite this concern, CMD forwarded the request to the Small Business Administration (SBA). SBA approved the extension of the TAI contract from a three to a five-year contract one day before the firm graduated from the 8(a) program. CMD subsequently approved this large contract modification, which significantly changed the scope of work of an on-site 8(a) contract, without requiring competition. ERL-A subsequently removed this same contract from the 8(a) program when the incumbent contractor graduated and was no longer eligible for an 8(a) set-aside.

Similarly, another 8(a) on-site support contract with AScI was split into two sole-source 8(a) contracts, one with obviously underestimated costs, to avoid the $3 million 8(a) competitive threshold which would require a competitive procurement. ERL-A split its on-site support contract into an off-site and on-site 8(a) sole-source procurement with AScI. However, the off-site contract was actually near site with the same contractor site manager and SOW as the on-site contract. Both contracts were being processed simultaneously within CMD and awarded by the same CO. CMD knew that ERL-A had initially submitted a $4.9 million request which was later reduced below $3 million because ERL-A indicated a reduction in anticipated work. CMD staff were also

aware that ERL-A subsequently certified that it had sufficient work to support two contracts with a total estimated potential value of $5.9 million. Although the contract files and interviews showed that CMD staff questioned the appropriateness of two sole-source procurements with the same contractor and showed concern over the off-site proposal and the potential for a split procurement, the CO awarded the on-site contract on September 25, 1990. The off-site contract was awarded in March 1991 even though CMD knew that the site manager was the same, the SOW was the same as the on-site contract, and the off-site work would actually be performed near site.

Our review showed that CMD did review and sometimes question ERL-A's contract actions; however, ERL-A's requested contracts and modifications were always approved by CMD with only minor changes. While CMD's actions in these cases may have been in keeping with its perceived role as a service organization to ERL-A, CMD was not fulfilling its primary obligation and responsibility to ensure compliance with federal contracting laws and regulations and to safeguard the interests and contract resources of the federal government.

ORD Did Not Provide Oversight To Ensure Fair and Equitable Awards of CAs

Although the purpose of the CA proposal review process was to ensure the quality of research proposals, ORD did not have sufficient controls over this process to ensure that the goal of awarding CAs to the best institutions to support the most productive research was obtained. Even in competitive CA awards, the proposal review process and ultimately the fairness and openness of the competition was also questionable. We identified potential review panel COIs for almost every CA award in our sample, both competitive and noncompetitive. Noncompetitive CA awards were made to employers of former ERL-A employees and on-site coordinators or to former alma maters or employers of laboratory management which created the appearance of favoritism. In addition, none of the review panels for competitive CAs included ORD Headquarters staff as required by ORD procedures and ORD Headquarters never questioned its exclusion from the review panels. Further, ORD did not take corrective action to eliminate the previously reported[2] pervasive influence of the prospective

[2] OIG audit "Review of the Office of Research and Development's Extramural Research Activities," Audit No. E1gB2-11-0019-30828, issued March 31, 1983.

PO over the review process. Prospective POs were permitted to select review panel members and often chaired the panel which recommended proposals for CA award. This problem is similar to problems identified in prior OIG audits relative to contract POs, who participated and/or led technical evaluation and source selection panels for contracts they currently managed. This continuing deficiency in the proposal review process also represented a significant control weakness.

Although an ORD manager told us that ORD did not want proposal review panels to be a "good old boy network," the organization did nothing to prevent this from happening. ORD did not even enforce its own procedures when they obviously were disregarded by laboratory management (i.e., exclusion of ORD staff from review panels). While we did not identify any specific conflicts of interest, just the appearance of conflict can be damaging. Potential COIs can lead to a situation where CA funds are not effectively utilized to obtain the best research at the least cost to the government. In addition, lack of competition and potential favoritism in the CA award process could subject EPA to criticism and protests and erode public trust in EPA research.

LACK OF ORD OVERSIGHT AND CONFLICTING GUIDANCE SENT MIXED MESSAGES TO ERL-A ON PROPER USE OF EXTRAMURAL RESOURCES

Prior to 1992, ORD[3] performed very limited oversight of ERL-A extramural activities, delegated broad discretionary authority to its laboratory directors, and relied on GAD and CMD for primary oversight and guidance for ERL-A extramural activities. In 1992 ORD began to strengthen its oversight and control of extramural resources and issued guidance, albeit conflicting guidance, on the award and use of CAs. ORD's failure to timely implement strong extramural resource management controls is especially significant, considering the high degree of reliance that ERL-A and other ORD laboratories have placed on extramural resources to accomplish their mission since the early 1980's and the high degree of vulnerability of extramural resources to fraud, waste and mismanagement.

[3] ORD's Office of Environmental Processes and Effects Research (OEPER) has direct oversight responsibility for ERL-A operations; however, most of the guidance cited was issued by the Assistant Administrator for Research and Development.

ORD Needed to Strengthen Its Oversight Role

ORD has taken recent actions to identify extramural management weaknesses, issue guidance, and strengthen controls over laboratory use of extramural resources. In the 1990 FMFIA report, ORD documented extramural management as a material weakness. However, at the time of our review in early 1992, internal controls had not been effectively established to identify or prevent ERL-A's misuse and abuse of extramural resources. Prior to 1990, when most of the questionable actions cited in this report occurred, few, if any, controls were documented or established by ORD for extramural resource management. Although GAD is primarily responsible (in coordination with ORD) for guidance and oversight of assistance agreements, definitive guidance from GAD on the use of assistance agreements was practically nonexistent[4] before ORD took the initiative and issued interim guidance in October 1992. Also, documents in ERL-A files indicated that ORD Headquarters during this earlier period failed, on occasion, to comply with its own extramural policies. ERL-A staff perceived tremendous pressure from ORD to complete many time critical research projects with inadequate in-house resources. Such perceived pressure, coupled with inadequate ORD controls and oversight, may have fostered a laboratory environment which encouraged the misuse of extramural funding to supplement deficient federal staff and related administrative support.

In January 1992, after the OIG's identification of serious contract management deficiencies at ORD's Duluth laboratory,[5] ORD and CMD performed a review of ERL-A's on-site support contracts. This was the first ever systematic review conducted by ORD of ERL-A's management of extramural resources. ERL-A managers told us that tremendous pressures existed at the laboratory to accomplish the numerous research projects assigned by ORD. As discussed in Chapter 1, the lab's responsibilities have increased significantly while its EPA workforce has remained stable or decreased. In the absence of ORD oversight of ERL-A's extramural activities, ERL-A managers, under perceived pressure to complete

[4] EPA's Assistance Administration Manual, which outlined broad policies and responsibilities, was the only guidance on assistance agreements prior to ORD's October 1992 policy issuance.

[5] OIG Audit Report No. E1JBF1-05-0175-2100443, Contracting Activities at Environmental Research Laboratory Duluth, issued July 7, 1992.

critical research, chose expediency over propriety and improperly used extramural resources in the form of contracts, CAs, and IAGs to supplement federal staff.

Although, as previously stated, GAD had weak controls and inadequate oversight over assistance agreements, we also found that ORD had few controls over the laboratory utilization of CAs and IAGs. At the time of our audit, ORD policies and procedures did not provide for ORD Headquarters oversight or review for most CAs awarded by laboratories because laboratory directors were the decision officials for all noncompetitive CAs under $250,000 and all competitive CAs under $1 million.[6] At ERL-A, for example, the lab director was the decision official for all but 2 of the 11 CAs in our sample and of ERL-A's total 27 active CAs, only 2 met the requirements for an ORD review. ERL-A management indicated that decision memorandums for all CAs were forwarded to ORD Headquarters. However, ORD/OEPER staff informed us that occasionally ORD Headquarters did receive copies of decision memorandums from laboratories for noncompetitive CAs under the $250,000 threshold, but it was not required and they performed no review or analysis of the CA proposals when the laboratory director was the decision official. These decision memorandums were merely logged in and filed away. As a result of the lack of Headquarters controls and/or guidance, ERL-A managers often made what they referred to as "management calls." These "calls" frequently resulted in inappropriate contract and assistance agreement activities.

Our review of active CAs administered by ERL-A disclosed one case where ORD/OEPER failed to comply with its own policies and procedures in a 1989 CA award to the University of New Hampshire (UNH). Despite total project costs of almost $1 million, the UNH CA was awarded by ORD noncompetitively with no justification in the decision memorandum as required by ORD's procedures. This noncompetitive award also disregarded ORD's policy of encouraging competition and awarding CAs to the best institutions to support the most productive research. In addition, at least one contractor employee was permitted to review this CA proposal, an inappropriate action in this situation because there was potential for competition between the contractor and the

[6] ORD directive, entitled "COOPERATIVE RELATIONSHIPS, Interim Guidance, issued October 1, 1992, reduced laboratory director approval of noncompetitive CA awards to $50,000 or less; however, required ORD approval for competitive CA awards was raised to $5 million.

cooperator (see Chapter 3). Although originally awarded by ORD, responsibility for administering the UNH CA was subsequently transferred to ERL-A.

Conflicts Between ORD Policy and Federal Statutes Demonstrated ORD-wide Confusion Over Proper Use of CAs and Contracts

On at least one occasion ORD issued interim policy related to the use of CAs which contradicted provisions of the 1977 Federal Grants and Cooperative Agreements (FGCA) Act and the intent of Congress expressed in numerous congressional reports. Although this guidance was issued subsequent to most of the abuses cited in this report, such incorrect, conflicting guidance from ORD's top management is indicative of the confusion found at ERL-A on the proper award and use of CAs (see Chapter 3). This same incorrect guidance was used by ORD as a basis for shifting extramural resources from more controlled, restrictive (and recently criticized) on-site laboratory support contracts to less restrictive CAs.

ORD Headquarters Mandated Increased Use of CAs and Issued Incorrect Guidance on the Use of CAs

Recent guidance from ORD, partly in response to OIG audits of the CSC contract and ORD's Duluth laboratory, indicated that ORD's response to criticism of its contracts management was to transfer its extramural funding from contracts to other, less visible, less restrictive extramural instruments - CAs. A March 16, 1992 memorandum from the Assistant Administrator (AA) for Research and Development stated that he was planning to significantly increase the total allocation of extramural resources to competitive, off-site cooperative research agreements. The AA directed that by the end of FY 1993, 35 percent of the dollars currently devoted to LOE contracts and CAs, particularly those providing direct support to the in-house research program, be allocated to increased awards of competitive CAs and competitive completion form (cost reimbursable) contracts. This emphasis on increased extramural funding for agreements is reflected in ERL-A's 1992 budget which included a 52 percent increase in funding for CAs and IAGs over their 1991 budget versus a 6 percent decrease in contract funding from 1991 levels.

During the audit, several ERL-A staff told us that ORD Headquarters, in past years, had directed the laboratory to increase its use of contractors to accomplish laboratory tasks. ERL-A POs told us that they used available resources for on-site support contracts as ORD directed to accomplish the laboratories

tasks. Now, they were being criticized for doing what they were directed to do and being pushed in a new direction. One PO told us that ORD's immediate response to recent OIG audits of contracts, de-emphasizing contracts and emphasizing CAs, only served to "put a cosmetic patch over the top" of problems which have developed over the past ten years. This PO believed that to arbitrarily cutoff contracts and increase CA support was not the best or proper solution.

The AA, in his March 16, 1992 memorandum, justified the shift in extramural emphasis by stating that increased relationships with the academic community would accomplish the best science possible at a reasonable cost. However, assistance agreements do not require bids or cost/price analysis as required for contracts; therefore, use of CAs would not necessarily ensure "a reasonable cost" in comparison to contracts. In addition, the AA's memorandum did not address the very different uses of contracts and CAs which are defined by the 1977 statute. The ORD directive merely provided another arbitrary parameter within which ERL-A and the other ORD laboratories would be required to operate.

A second ORD directive on the management of extramural resources, entitled "COOPERATIVE RELATIONSHIPS, Interim Guidance," was issued on October 1, 1992, by the AA for Research and Development. The directive used the premise that ORD research benefitted the general public as support for the use of CAs for research that also "incidentally" benefitted the Agency. The directive stated:

> ORD is authorized under various statutes to conduct research and development in different areas of environmental science. It is ORD's policy that the primary purpose of such research is to "carry out a public purpose of support or stimulation" as stated in 31 U.S.C. 6305. Such research is thus appropriate for assistance agreements, recognizing that the results of such research may incidentally be of direct benefit to the Government.

In our opinion, ORD misinterpreted the FGCA Act. This directive implies that all ORD research is for "a public purpose of stimulation and support" as required by the FGCA Act for use of assistance agreements and; therefore, CAs can be used in direct support of ORD research projects. All funds expended by EPA, whether for CAs, contracts, or any other purpose, should serve "a public purpose" and benefit the general public. Therefore, public benefit is not an acceptable distinction between use of

contracts and assistance agreements. As discussed above, Congressional intent, as documented in Senate Report 97-180, dated August 13, 1981, was that the principal purpose of entering into a transaction was the only legitimate criterion in deciding whether to use a contract or an assistance agreement. Congress specifically rejected the argument of relative benefit to justify transactions under a CA instead of a contract. Our review of the RFPs and/or decision memorandums in our CA sample showed that the primary purpose of most CAs was not to provide assistance or stimulation to the recipients, but rather to provide direct support to ERL-A/ORD research and modeling projects.

The October 1992 ORD directive further established several different categories of CAs. According to the guidance, Research Program Support Agreements (RPSA) were determined appropriate for the direct support of ORD's environmental research and development activities. The scope of each RPSA would normally be focused on one or several closely related major activities to be accomplished in a defined time frame such as support of scientific symposia. Laboratories would be authorized to spend up to 10 percent of their extramural budget for RPSAs. The guidance counseled that RSPAs could not be used to acquire goods or services for the direct benefit of EPA. However, it was unclear how this type of agreement would be providing assistance to recipients as required under FGCA Act and how an agreement to support ORD research activities could preclude the obtaining of services that directly benefitted EPA. The RSPA appears to authorize misuse of CAs by ORD units.

The AA for Administration and Resources Management (OARM) in a memorandum, dated December 2, 1992, entitled "When to Use Contracts and Cooperative Agreements and Grants," supports our conclusion that projects which provide property or services for the direct benefit or use of the Agency requires the contract mechanism. The guidance specifically identified projects which produce specific information that will be directly incorporated into Agency technical, policy, or regulatory decisions as activities that cannot be funded through assistance agreements. The October 1992 ORD directive cited above does not appear to be in compliance with OARM's guidance.

ERL-A Response to the Reduction of On-Site Technical Support Contracts

As discussed above, ORD Headquarters on March 16, 1992 directed a 35 percent reallocation of extramural funds from on-site LOE contracts to off-site competitive contracts and CAs. As a

result, ERL-A faced the eventual loss of long-term incumbent contractor employees. The laboratory's initial response was to develop a contingency plan to move these employees onto other, more acceptable contracts, or CAs with nearby universities.

ERL-A files contained a March 1992 draft contingency plan that discussed strategies the laboratory could use to meet the anticipated 50 percent reduction (later reduced to 35 percent) in on-site LOE technical support dollars as proposed by ORD and still retain the incumbent on-site contractor staff. The plan contained lists of the "on-board" contractor employees along with notations as to how they could be retained. The strategies included: moving the employees to superfund tasks or to a new "off-site" contract; transferring them to an on-site computer support contract; moving one employee to an IAG with USDA; and moving the "PhD, post-doc types" to CAs at the University of Georgia, Clemson University, National Research Council, and/or Clark-Atlanta University. A note attached to the contingency plan from the laboratory director stated, "It seems to me that we may be able to absorb this cut with still having about the same technical support." While the ORD policy of moving contract dollars to competitive off-site CAs and competitive completion form contracts would be accomplished on paper, the status quo at ERL-A would be maintained. As ERL-A's contingency plan demonstrates ORD's decision to make an arbitrary re-allocation of extramural resources to correct past contracting deficiencies produced arbitrary results. As mandated by the 1977 FGCA Act, deciding between a contract and an assistance agreement should be based on the primary purpose of the transaction not an arbitrary decision on allocation of funds.

Poor Planning and Delays in Funding Sometimes Precluded the Use of the Proper Extramural Mechanism

ORD's 1990 Resource Utilization Workgroup notes, previously cited, documented concerns with the ability of laboratories to responsibly plan in advance for the quantity, type and timing of resources. The consensus of the group was that delays of resources coming to the laboratories caused considerable problems and wasted administrative effort. Also, the group concluded that year-end redistributions of funding usually came too late to responsibly and effectively spend the resource. As a result, the appropriate extramural agreements could not always be used because CMD and GAD deadlines for submission of contract or assistance proposals were already passed.

The ERL-A director, as well as several ERL-A CA and IAG POs, and PIs at UGA and other universities specifically mentioned that funding delays had an adverse effect on managing extramural resources. As an example, the laboratory director told us of a two year wait for SERDP (Strategic Environmental Research and Development Program) funds from the Department of Defense (DOD). The funds were finally received late in FY 1992. Although the timeframe for submitting contract proposals to CMD had already expired, it was not too late to process a noncompetitive CA through GAD. After our discussions with GAD officials concerning their oversight of assistance agreements, ERL-A submitted a $3 million noncompetitive CA to GAD for SERDP, but it was not approved. GAD determined that the scope of work was procurement not assistance and that a contract would be the appropriate mechanism. Since it was too late to process a contract, the laboratory lost the SERDP funding.

MISMANAGEMENT OF EXTRAMURAL RESOURCES NOT PRECLUDED BY GAD, CMD, OR ORD

GAD, CMD, and ORD did not have adequate controls to ensure that ERL-A effectively managed contracts and other extramural agreements and ensured compliance with the terms of extramural agreements and proper expenditure of funds. As a result, neither GAD, CMD, or ORD detected or prevented the major deficiencies in ERL-A's management of extramural resources reported in Chapters 3 and 4. GAD and CMD's inadequate review and approval of ERL-A's improper use of extramural resources in essence condoned ERL-A's mismanagement of extramural agreements. Also, GAD's failure to implement or enforce its limited controls over CAs did not encourage proper management of assistance agreements by program managers.

GAD Did Not to Provide Oversight and Guidance For CA Management

GAD did not provide oversight in compliance with its responsibilities as delineated in EPA's Assistance Administration Manual contributed to ERL-A's mismanagement of extramural agreements. GAD is the Agency's expert on the award and administration of CAs, grants, and IAGs. In addition, GAD is the "Award Official" or final approval authority for all ORD assistance agreements. Without proper and definitive guidance and oversight by GAD, there can be no effective system of controls over Agency resources dedicated to assistance agreements.

According to the Assistance Administration Manual, GAD's responsibilities for assistance awards included: (1) assurance that all technical, legal, and administrative evaluations have been made and that the application is awardable, and (2) assurance that the proposed agreements meet the requirements of applicable legislation, regulations, and program guidance. Also, according to the Manual, GAD's responsibilities for post-award administration of assistance agreements included: (1) evaluation of recipient management systems, and (2) financial review of recipient activities. GAD's post-award oversight mechanisms included transmitting copies of Financial Status Reports (FSRs) to POs for use in PO reviews of recipient activities and receiving trip reports for PO site visits which may identify recipient problems or problems with PO management. Finally, GAD is responsible for overall Agency guidance on administration of assistance agreements.

Despite these numerous oversight responsibilities, GAD grant specialists, due to their heavy workloads, were unable to answer even our basic questions related to ERL-A CAs we reviewed. GAD's review of proposed CAs was primarily a "paper process" to verify that all required documents had been completed. There was no evidence of any substantive review of the merits or propriety of the proposed awards or their compliance with laws, regulations, and Agency policies. One specialist explained that she was responsible for 150 CAs. With this workload, we calculated that she could only devote, approximately, 1.5 work days to each CA which offered little time for oversight. As a result, GAD specialists had virtually no contact with POs during the performance of CA projects.

GAD managers stated that POs did not need to contact GAD except at closeout of a CA or grant. In addition, GAD did not require trip reports from POs' site visits and did not send copies of FSRs for POs to review even though these control/oversight mechanisms are required in their Assistance Administration Manual. In addition, there was an overall lack of documentation of any management/oversight of the CAs by GAD.

There were few written policies and procedures on the administration of CAs by POs other than the Assistance Administration Manual which was provided only to the ERL-A extramural coordinator, not to the lab POs. GAD also did not make training mandatory for CA and IAG POs. GAD managers stated that CA POs were not required, only encouraged, to take project officer training. GAD managers indicated that almost three hundred POs had taken the assistance PO training in 1992 under a

voluntary system. However, even with training, inexperienced POs require close oversight and management which has not been provided by ERL-A or GAD. GAD and ERL-A managers must remember that POs were trained as scientists not administrators and a two or three day training course will not make them effective, stand-alone managers of millions of dollars in assistance agreements. Under such inadequate oversight and management by GAD, it is not surprising that ERL-A POs were not adequately and effectively overseeing their extramural agreements.

Perhaps the most serious example of GAD's lack of controls over CAs was the disconnect between the technical monitoring that was done by ERL-A POs and the financial management responsibilities of GAD (see details in Chapter 3). Because of GADs disregard for its own financial management/control requirements, ERL-A POs could not oversee the financial status of CA research projects. Even though GAD's Assistance Administration Manual required that FSRs be provided to POs, GAD did not comply with this requirement and POs did not receive any cooperator financial reports. Since POs monitor the progress of CA projects and have direct contact with the cooperator, they are the only individuals who could effectively monitor cooperator use of federal funds. Because GAD had not complied with its own requirements and emphasized financial management, ERL-A POs told us they had no financial management responsibilities for their assigned CAs. Without PO involvement in financial as well as technical oversight of CAs, EPA has no effective system for assuring that CA funds and other resources are appropriately used and safeguarded against waste and abuse.

If GAD had fulfilled even its basic responsibilities and taken the initiative to better oversee CA administration, some of the problems described in this chapter and Chapter 3 may have been prevented.

Lack of CMD Oversight Permitted ERL-A's Post-Award Misuse of Contracts

Our audit disclosed that ERL-A improperly used contractor resources to supplement its own in-house resource needs while CMD performed minimal post-award oversight of ERL-A's contract operations. At the time of our audit, CMD did not have adequate controls in place to prevent this misuse. During 1992, CMD, joined with ORD to perform an on-site review of ERL-A's contract management activities. CMD and ORD found many of the contract management problems we cited in our survey report (Report No.E1XMG2-04-0102-3400007, issued November 30, 1992) and in this

audit report. However, this was CMD's first ever on-site review of ERL-A contract activities and such reviews have not been established as a continuing oversight/control technique by CMD.

Examples of post-award contract management problems identified during our survey and audit are summarized below. Details of these problems are included in Chapter 4.

ERL-A's AScI and TAI contracts and related WAs contained broad SOWs with undefined deliverables resulting in indefinite *contractor operations. ERL-A management misused these contracts* by personally directing the activities of contract employees to enhance ERL-A research rather than adhere to a contractual relationship. The lack of an arms-length contractual relationship resulted in: (1) directed subcontracting; (2) personal service relationships; (3) contractors being involved in critical, if not inherently governmental functions; (4) inadequate work assignments and statements of work (SOWs); and (5) inadequate review and acceptance of contract charges. This increased ERL-A's vulnerability to fraud, waste, abuse, related conflict-of-interest situations, and a potential loss of the Agency expertise in critical functions. In addition, ERL-A's close relationship with on-site contractors and their employees provided the incumbent contractor resident expertise in certain research projects which significantly increased their value to ERL-A. This created a potential contractor monopoly which precluded or at a minimum inhibited future "open" competition for on-site contract support.

CONCLUSION

Over the past 7 years, an ERL-A culture was allowed to develop that encouraged the misuse and abuse of extramural resources. With limited intramural funding, the success and stature of the laboratory and individual scientists in the research community was directly proportional to your slice of the extramural pie. Extramural support provided great flexibility in the ability of ERL-A programs to directly hire specific individuals and experts. ERL-A could also obtain other FTE-type support from contracts and assistance agreements because extramural activities were not subject to the same level of scrutiny as intramural funding. ERL-A staff repeatedly argued that "quality science" was the primary motivation to ERL-A's actions, either within or around established systems, to accomplish its primary goal - the research mission. However, the mission was not sufficient justification for avoiding and circumventing statutes,

regulations, policies and guidance that governed the acquisition, use, and management of extramural contracts and agreements. Every EPA program has a mission and those missions must be accomplished within administrative procedures established to protect the government's interests and safeguard government resources.

Effective management control systems must include adequate guidance in the form of policies and procedures to assure that internal control objectives are achieved. The ERL-A director stated there was a definite lack of clear EPA guidance regarding extramural management. She commented, "People like me are good rule followers, that is, if I know the rules." However, without specific guidance from ORD, GAD, and CMD, many of ERL-A decisions became "discretionary" decisions of ERL-A managers to promote their own interests rather than the government's interests.

The FAR provides that government business shall be conducted in a manner above reproach. FAR 3.101-1 further states:

> Transactions relating to the expenditure of public funds require the highest degree of public trust and an impeccable standard of conduct...While many Federal laws and regulations place restrictions on the actions of Government personnel, their official conduct must, in addition, be such that they would have no reluctance to make a full public disclosure of their actions.

ERL-A's extramural efforts fell far short of this standard. Aided by CMD, GAD, and ORD inaction, poor management, and weak controls, ERL-A was permitted to evade statutes, regulations, policies, and guidance in its use of extramural resources.

RECOMMENDATIONS

Recommendations to the Assistant Administrator, Research and Development

We recommend that the Assistant Administrator for Research and Development evaluate its management controls, CA guidance, and resource allocations related to ERL-A's use and management of extramural resources. Specifically, the Assistant Administrator should:

- Review all ORD guidance related to CAs, in coordination with OGC and GAD, to determine whether applicable guidance fully

complies with the intent and statutory provisions of the 1977 FGCA Act, as amended. Obtain a formal written OGC opinion as to compliance of current ORD policies with the intent and provisions of the 1977 FGCA Act.

- Instruct ERL-A management to refrain from its pattern of circumvention and noncompliance with laws, regulations, and Agency policies related to extramural and intramural resources.

- Continue to promulgate and refine CA guidance to laboratories which encourages or requires competitive awards and improves ORD oversight and control of laboratory management of assistance agreements.[7]

- Evaluate and strengthen ORD's oversight and controls over ERL-A's contract management activities and encourage full and open competition in laboratory contacts as intended by the Competition In Contracting Act of 1984.

In addition, the Assistant Administrator for Research and Development should require the:

Director, Environmental Processes and Effects Research to:

- Evaluate ERL-A's staffing needs and, if appropriate, request through the budget process additional FTE positions for ERL-A's resource/contract management functions, as well as mission critical research projects. With the approval of EPA's Comptroller and OMB, this may be accomplished through conversion of extramural funds to intramural FTE support. Such FTE increases could preclude continuing personal services relationships with contractor staff, prevent contractor performance of inherently governmental functions, and improve contractor and cooperator oversight.

- Establish periodic, recurring on-site reviews of laboratory management of contracts and assistance agreements to be performed jointly with CMD and GAD, respectively.

[7] ORD issued interim and draft guidance documents during our audit which encouraged competitive CA awards, elevated approval level for noncompetitive CA awards, and strengthened some oversight and management controls for laboratory programs.

- Evaluate the planning, timing, and funding processes for research projects which may preclude laboratory selection of the best and appropriate extramural mechanism.

- Eliminate arbitrary allocations of extramural resources which may preclude ERL-A from using the appropriate extramural mechanism.

Recommendations to the Assistant Administrator, Administration and Resources Management

We recommend that the Assistant Administrator for Administration and Resources Management establish proper management controls over ERL-A contracts, cooperative agreements, and interagency agreements. Specifically, the Assistant Administrator should require the:

Director, Grants Administration Division to:

- Update, clarify, and communicate definitive written policies and procedures on the award and administration of assistance agreements, to include the specific eligible purposes of assistance agreements under the 1977 FGCA Act, and provide this guidance to ERL-A managers and POs, as well as to POs EPA-wide.

- Establish Agency-wide policy on competition in award of assistance agreements that complies with the intent of the 1977 FGCA Act.

- Strengthen oversight and review of proposed CAs and IAGs to ensure their compliance with applicable laws, regulations, and Agency policies before official approval of these assistance agreements.

- Provide increased oversight of PO and recipient management, both technical and financial, to ensure proper PO compliance with their oversight responsibilities and to ensure recipient compliance with terms of their agreements. In addition, GAD should aggressively enforce its requirements on program operations and ensure that it is complying with its own requirements to include obtaining PO trip reports and submitting FSRs to POs for review.

- Review the adequacy and applicability of current PO training and require such training for all CA and IAG POs.

- Utilize the database of all current IAG and CA POs for consultation, when needed, and to ensure they are provided written guidance and training materials, in a timely manner.

- Evaluate the qualifications of all POs designated by program offices and ensure the individuals have the proper training and experience required. A certification program for CA and IAG POs, similar to the certification of contract POs is recommended.

- Establish jointly with ORD, periodic/cyclical on-site reviews of laboratory management of assistance agreements.

Director, Office of Acquisition Management (OAM), and Director, Contract Management Division - Cincinnati to:

- Strengthen CMD's contract review process to ensure that contract proposals are thoroughly reviewed and that all questionable actions are quickly resolved. Any procurement requests for sole-source contracts, including noncompetitive 8(a) contract proposals, should be closely scrutinized as to need for sole-source contracts and contract cost estimation to avoid competitive thresholds.

- Instruct COs to immediately notify CMD's director of any potential violation of contract laws and regulations or any unsound contract management practices identified. Also, ensure that the director of CMD expeditiously resolves any potential violations or unsound practices.

- Emphasize to COs that their primary obligation is to ensure compliance with contract laws and regulations and to protect the interests of the government while at the same time providing timely service to programs. Establish controls to ensure that COs consistently comply with contract laws, regulations, Agency policy and sound contract management practices in all of their contract actions.

- Examine CMD's or EPA's competitive contracting process and streamline where possible to eliminate unnecessary administrative burden, delays, and incumbent bias (i.e., personnel commitments) and to overcome program management's resistance to competitive process awards.

- Establish jointly with ORD, periodic/cyclical on-site reviews of laboratory management of contacts

AGENCY RESPONSE AND OIG EVALUATION OF AGENCY COMMENTS

ORD Response

ORD expressed no disagreement with the findings and recommendations presented in Chapter 2. ORD suggested changes to Chapter 2 and Chapter 3 to clarify our background information and interpretation of the 1977 FGCA Act and related legislative history. These changes were primarily incorporated into the initial Background section of Chapter 2.

ORD included planned corrective actions for each recommendation and milestone dates for completion of these actions. ORD's response to the recommendations was acceptable for resolution of recommendations addressed to ORD in Chapter 2. ORD's specific comments to Chapter 2 recommendations are included in Appendix I.

GAD Response

GAD expressed concerns that the audit report overstated the FGCA Act requirements regarding the proper utilization of CAs versus contracts. Therefore, we modified certain statements in Chapters 2 and 3 based on suggested revisions by ORD Headquarters to resolve concerns expressed by both GAD and ORD.

GAD stated that they had issued numerous policies on CA administration and that the report was incorrect in stating that there was a lack of policy or inadequate guidance from GAD. However, during the audit we requested all of GAD's guidance on CAs and only received the Assistance Administration Manual and EPA Order 1000.19, issued 1979. GAD's response states that current guidance or policy does need supplementing which indicates, based on what we found, that current guidance is at least inadequate. Therefore, we have changed "lack of" policy to "inadequate" guidance or policy in the report.

GAD generally agreed with Chapter 2's recommendations to the GAD director and the response included planned or initiated actions for some recommendations. GAD's comments and OIG's evaluation on Chapter 2's recommendations are detailed in Appendix I. GAD's complete response to Chapter 2 and OIG's evaluation is available on request.

OAM Response

Disagreements expressed by OAM essentially deal with findings on the award of repetitive TAI contracts at ERL-A. Specifically,

OAM was concerned that the report implied that EPA programs should not provide general support for the 8(a) program. In addition, OAM believed that it had encouraged competition and developed procedures to enhance the proposal review process. Also, OAM appears to take the position that the TAI competitive procurement was not restrictive and did not favor the incumbent.

The contract findings in Chapter 4 relate only to the AScI and TAI contracts which provided on-site support at ERL-A and presents information only on CMD's activities as it relates to these two contractors. The report does not question the value of the 8(a) program in developing disadvantaged business and the importance it plays in EPA's overall contracting scheme. Neither does the report question the need for sole-source procurements early in the life of an 8(a) firm to shelter emerging firms and give it a start in the marketplace. However, we do recognize that the overall goal of the 8(a) program is to promote the development of small business concerns owned and controlled by socially and economically disadvantaged individuals so that such firms can compete on an equal basis in the American economy. From our review of 8(a) contracting at ERL-A, we could only conclude that the goal of the Small Business Act's 8(a) program was not the laboratory's main interest in the program. Also, based on our review of the 8(a) statute and related legislative history of the 1988 amendment of the Act, we could not conclude that repetitive sole-source procurements to the same contractor, during the entire time it qualified under the 8(a) program, would accomplish the prime objective of the Act which was to "promote the development" of 8(a) firms. The Act was amended in 1988 because firms were graduating from the program and then could not survive in the competitive environment. From our review, we could only conclude that Congress under CICA and the Small Business Act intended that competition be part of the 8(a) program.

We do not dispute OAM's claim that CMD does encourage competition. We did not audit CMD's overall competitive award efforts. We only examined competition for contract awards at ERL-A and found it lacking. Therefore, we questioned the judgement used by CMD in allowing the repetitive sole-source 8(a) awards which spanned an 11 year period to a contractor (TAI) who had obtained a competitive position at ERL-A, and the splitting of another 8(a) contractor's procurement with the intent of avoiding competition requirements.

OAM generally agreed with Chapter 2's recommendations. OAM's response included planned or initiated actions for some

recommendations. OAM's comments and OIG's evaluation on Chapter 2's recommendations are detailed in Appendix I. OAM's complete response to Chapter 2 and OIG's evaluation is available on request.

CHAPTER 3

MISUSE AND MISMANAGEMENT OF COOPERATIVE AND INTERAGENCY AGREEMENTS

Our review of 11 CAs ($11.15 million maximum value) and 6 IAGs ($1.3 million maximum value)[1] disclosed that in all 17 extramural agreements, ERL-A managers: (1) improperly used less restrictive CAs and IAGs to procure goods and services in lieu of the more controlled contracting process, (2) did not encourage the competitive award of CAs, (3) exhibited apparent favoritism in noncompetitive CA awards, and (4) did not effectively manage CAs to assure compliance with terms of extramural agreements or that government assets were safeguarded against waste or abuse. ERL-A staff apparently sacrificed adherence to statutory requirements and ORD policies and procedures to supplement inadequate intramural resources. In addition, ERL-A seemed unaware of the proper criteria for determining the use of CAs versus contracts. As discussed in Chapter 2, inadequate and inconsistent guidance from GAD and ORD Headquarters contributed to ERL-A's confusion over the proper use and selection of extramural agreements. Further, ORD and GAD oversight of ERL-A operations was insufficient to prevent misuse and mismanagement of extramural resources by ERL-A. ERL-A's misuse and mismanagement of extramural agreements resulted in a lack of assurance that the research performed under these agreements was properly overseen and that government resources were adequately controlled and effectively utilized.

Several deficiencies related to ORD's CA award and management processes had been previously identified by a 1983 OIG audit of ORD's CA program.[2] Nine years later these problems remained uncorrected at ERL-A. Based on our review at ERL-A, corrective action taken on the prior audit was both inadequate and ineffective because ORD issued faulty guidance, ERL-A ignored some of the controls instituted by ORD and ORD failed to oversee and ensure proper implementation by its laboratories.

MISUSE OF COOPERATIVE AGREEMENTS

In all 11 CAs reviewed, ERL-A circumvented statutory requirements by improperly using less restrictive CAs in lieu of more

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[1] ERL-A CAs and IAGs included in our sample, along with award dates and potential values, are shown in Appendix III.

[2] Audit Report No. E1gB2-11-0019-30828, "Review of the Office of Research and Development's Extramural Research Activities", issued March 31, 1983.

controlled contracts to obtain goods and services for the direct benefit of ERL-A and/or EPA. ERL-A also apparently misused CAs: (1) to fund PhD attainment for an ERL-A employee, (2) to fund a CA sub-project to develop an operating plan for ERL-A's child-care center, (3) to make payments to a UGA cooperator "in absentia", and (4) by not fully disclosing extensive foreign travel for academics in support of ERL-A initiatives.

As previously discussed in Chapter 2 of this report, the misuse of CAs was directly related to ERL-A's lack of full-time equivalents (FTEs/federal employees) and related intramural funding, their determination to complete their assigned tasks by any means available, and a management culture which encouraged the innovative, albeit questionable, use of extramural funds. Misuse of CAs resulted in a lack of controls over the research performed and the resources used. Such abuses of CAs were condoned/encouraged by ORD Headquarters and were not prevented by ORD or GAD controls over CA use and approval (See Chapter 2).

Background

Authorizing Statute and Related Congressional Intent

Public Law 95-224, the Federal Grant and Cooperative Agreement (FGCA) Act of 1977, intended to eliminate ineffectiveness and waste resulting from confusion over the definition and purposes of the legal instruments used to carry out transactions between federal and non-federal entities. The FGCA Act established government-wide criteria for selection of the appropriate class of legal instrument, e.g., contracts, grants, and CAs. The Act required that the choice and use of these legal instruments reflect the principle purpose and type of relationship expected between the Federal and non-federal parties.

The current codification of the Act, 31 U.S.C. 6305, identifies the following basic relationships found in transactions between federal agencies and recipients of contracts, grants, or CAs:

Instrument	Relationship
Contract	The principal purpose of the relationship is to acquire by purchase, lease, or barter, property or services for the direct benefit or use of the Federal government. This is Federal purchase for Federal or third-party use.
Cooperative Agreement	The principal purpose of the relationship is to transfer money, property, services, or anything of value to the recipient to accomplish a public

purpose of support or stimulation; there will be substantial involvement between the Federal agency and the recipient during performance of the activity, establishing the agency as a "partner" during performance. Agency "control" as might be typical during a contract is not anticipated.

Grant — The principal purpose of the relationship is to transfer money, property, services, or anything of value to the recipient in order to accomplish a public purpose of support or stimulation; there will be no substantial involvement between the Federal agency and the recipient during performance of the activity. Normal grant monitoring would not ordinarily be considered as substantial involvement. The Federal agency is a "patron" of the grantee.

The 1977 Act recognized that within an authorized assistance program, different transactions involving procurement contracts or assistance (i.e. stimulation or support) could occur. However, Congress expressed concern that assistance agreements were being overused and wanted to assure that the choice of instrument (i.e., contract v. CA or grant) was considered carefully. Congress intended that the government's principal purpose in using the extramural funding would determine the proper mechanism. When the purpose was to provide direct research products for the use of the federal government, a contract was the proper mechanism. When the purpose of the transaction was to provide assistance to accomplish a public purpose of support or stimulation, a CA or grant would be the appropriate mechanism. Therefore, in the selection of a procurement or assistance instrument, the Act called on executive agencies to make a judgmental determination on the principal purpose of each individual transaction.

As previously stated, the FGCA Act's legislative history shows the Act resulted from Congressional concerns over the misuse of assistance agreements. Senate Report No. 95-449, dated September 22, 1977, from the Governmental Affairs Committee on the 1977 Act stated that:

> ... the objective of this added flexibility [authority to either employ contracts, grants, or cooperative agreements] is to require the agencies to make conscious decisions on whether a particular transaction or class of transactions is in fact a procurement transaction for the direct benefit of the government or whether it is an assistance transaction serving non-

> Federal public purposes [emphasis added]. The discipline of this choice will tend to prevent the use of grants [and cooperative agreements] to avoid competition.

The Senate Report specifically addressed research projects and the use of CAs versus contracts:

> When research is for the direct benefit of the government, it should be competed under procurement rules...The benefits derived through open competition and improved control are expected to offset any inconvenience that may result from the increased use of contracts.

This report also included a quote from the previous Grants Act reports which commented on research performed by educational organizations:

> Where the Government desires to engage the services of an educational or nonprofit organization for the conduct of a specific piece of research directed toward a specific problem, the use of the contract form is obviously in order.

In addition, Senate Report No. 97-180, dated August 13, 1981, related to hearings on amendments to the FGCA Act, stated:

> Congress is making every effort to achieve economy and efficiency in the administration of Federal programs. These goals are subverted if agencies ignore the economies of competitive procurement and indiscriminately use grants [and other assistance agreements, i.e. CAs] in place of contracts....

Thus, an agency's research program could legitimately include research conducted by federal personnel, through procurement transactions (contracts), and through cooperative research performed in concert with non-federal researchers under a CA. For example, if the principal purpose of a transaction is to assist a non-federal entity in advancing the state of knowledge in an area of environmental science, then the existence of some degree of indirect benefit to EPA's mission from some aspect of the research may not negate the determination to award an assistance agreement. However, if the principal purpose of a transaction is to provide research in direct support of a specific EPA research problem or on-going research project, the use of the contract form is obviously in order.

Synopsis of CA Review and Award Process

CAs can be awarded either competitively, as encouraged under the FGCA Act, or noncompetitively under certain conditions. The awards, within certain dollar thresholds ($250,000 noncompetitive, $1 million competitive[3]) are reviewed and approved by ORD Headquarters. Only 2 of the 27 active CAs (total maximum value of $14.2 million) awarded by ERL-A had been reviewed by ORD under these thresholds. All CA awards are subject to final review and approval by GAD.

Requests for Proposals (RFPs) are issued for competitive awards. Review panels, consisting of both laboratory and external scientists, review and evaluate proposals for both competitive and noncompetitive awards. Based on these reviews, the panel chairman recommends proposals for award in "decision memorandums." Laboratory directors approve or disapprove these decision memoranda in making CA awards. Post-award CA management is usually performed by EPA POs and cooperator project managers/PIs.

CAs Improperly Used to Directly Benefit ERL-A

All of the CAs in our sample appeared to either partially or fully contribute directly to the support of ERL-A research projects. A letter from the Assistant Administrator (AA) for Administration and Resources Management, dated December 2, 1992, provided the following examples of activities that cannot be funded through assistance agreements:

- Provide technical, analytical, and application review advice for the direct benefit of EPA offices.
- Deliver computer models specifically for EPA regulatory use.
- Produce specific information that will be directly incorporated into Agency technical, policy, or regulatory decisions.

All of the CAs in our sample funded one or more of these type activities, in whole or in part, especially the last activity, related to the production of specific information for incorporation into Agency technical, policy, or regulatory

[3] ORD issued interim guidance on October 1, 1992, that lowered the threshold for noncompetitive CA awards to those exceeding $50,000 and increased required ORD approval for competitive awards to those over $5 million.

decisions. Although this guidance was issued subsequent to most of the questionable uses of CAs cited below, it only clarified already established provisions and intent of the 1977 FGCA Act and it served to illustrate ERL-A's use of CAs for direct support of its on-going research projects.

For example, ERL-A had used the UGA CA for years to provide on-site laboratory personnel for direct support to ERL-A scientists and their research projects. In addition, RFPs and decision memorandums of several of the off-site CAs in our sample indicated the importance of the research to ERL-A's or the Agency's mission and the importance of a close working relationship, including on-site cooperation. These documents evidenced the direct benefit of the research to EPA. We also had CAs where cooperators were tasked to perform work (i.e., computer modeling development) similar to those activities already being performed by ERL-A contractors.

ERL-A did not use the statutory criteria of end-consumer (EPA or public purpose), as specified in Sections 4-6 of the 1977 FGCA Act, in determining what extramural mechanism (CA or contract) to use to accomplish research objectives. The mechanism used was usually selected more on the type of entity performing the research. If the laboratory wanted the work done by a university, they automatically used a CA. ERL-A gave no consideration as to whether a contract would be more appropriate for the tasks to be performed by universities. Other factors used by ERL-A to decide whether to use a contract, CA, or IAG included: (1) time considerations (CAs require less time for award), (2) the preferences of ERL-A PIs and managers, (3) Headquarters fund allocations for contracts and CAs, and (4) administrative convenience. None of these factors relate to statutory requirements for determining the use of CAs versus contracts.

Both ERL-A's laboratory director and senior scientists demonstrated an apparent misunderstanding of the basic differentiation between CAs and contracts. The laboratory director and other ERL-A scientists explained to us that the type and level of interaction between cooperators and federal employees was the difference. However, Senate Report No. 97-180, dated August 13, 1981, related to the FGCA Act, specifically stated that this is not a criteria for deciding between contracts and assistance agreements.

> ...When choosing between procurement and assistance, the degree of anticipated involvement is of no consequence; the choice is governed solely by the principal federal purpose in the relationship. It is

> only after an agency has determined the principal purpose of a transaction that the degree of involvement by the federal government becomes a relevant inquiry.

Several ERL-A, GAD, and/or ORD staff also maintained that the research being funded benefitted the universities more than it benefitted ERL-A or EPA and that therefore the CA mechanism was appropriate. However, Senate Report No. 97-180 stated as follows:

> An assessment of relative benefit to the parties affected by a transaction needlessly complicates the task of determining whether a contract or some other instrument should be used. The Act requires no such analysis; it only requires an agency to assess the principal purpose of the federal government in entering into a transaction [assistance or procurement] - and act accordingly.

Examples of CAs used for the direct benefit of ERL-A and EPA follow:

1. UGA Cooperative Agreement Used For On-Site Support

On-Site Support: Under the $5.2 million UGA CA, awarded non-competitively on September 30, 1991, at least 14 UGA employees worked on-site at ERL-A in 1992. These on-site cooperators either directly supported ERL-A scientists with their research or provided administrative support to ERL-A staff. Two of the on-site UGA employees performed secretarial tasks for ERL-A staff. The remaining 12 UGA employees consisted of 7 post-docs, 2 graduate research assistants, 1 research technician, and 2 student assistants. The original UGA CA proposal included five projects with numerous sub-projects. Most of the on-site UGA employees worked under projects (total budget $1.3 million) on which the UGA project manager was named PI. Since the UGA project manager had no expertise or involvement in the research being performed by these UGA employees and had no contact with the on-site UGA employees, we could only conclude these employees were being used by ERL-A to directly support its own research.

EPA's Assistance Administration Manual, Chapter 44, Section 5b, warns CA POs not to attempt to direct or supervise cooperator employees. The ERL-A laboratory director was the PO for this CA. The designation of the UGA Project Manager as the PI on sub-projects in which he had no expertise or involvement was an obvious ruse by ERL-A to obtain additional support staff for its own research.

ERL-A's most flagrant abuse of the UGA CA to supplement ERL-A staff was the use of UGA employees as secretaries. A UGA employee located at ERL-A served as a Senior Administrative Secretary for the Assessment Branch from April 1991 through June 1992. In this position she told us she basically served as the "office manager." The employee stated that she was told in June that she could no longer perform the duties of this position because it would be "personal services." Her duties were then limited to providing support to the UGA post docs located at ERL-A. Due to lack of work, her position was terminated in September 1992. Secretarial support for the Assessment Branch is currently being provided by a full-time National Council of Senior Citizens (SEE) employee.

Another UGA employee, who currently serves as the UGA Coordinator and works on-site at ERL-A, also performed secretarial duties. This employee's desk was adjacent to the laboratory director's office. During the audit fieldwork, auditors worked with her for two days to obtain CA files before they were informed that she was not an EPA employee. Although the current on-site coordinator's position is a full-time job, it was previously only a part-time position.

This UGA coordinator stated that besides her coordinator duties, she "obviously" answered the telephone. In addition, she said that on a rare occasion she did typing. However, our review disclosed that her role in ERL-A activities was more encompassing than she had described. For example, a memo to ERL-A employees in the Global Change Program directed them to notify the UGA coordinator if they were unable to attend an upcoming meeting. We also observed that almost every time we called the laboratory director's office, the UGA coordinator answered the phone. In addition, there were several occasions when the laboratory director's secretary was not in the office and the UGA coordinator apparently filled in for her.

On several occasions during the audit we were informed by ERL-A management that the purpose of a CA was to provide for collaborative research between scientists at ERL-A and scientists at colleges and universities. Secretarial support for ERL-A staff is not an appropriate use of R&D funds or of cooperator employees. Subsequent to our briefing of the ERL-A laboratory director on our concerns related to the use of UGA employees, we learned that the UGA coordinator was no longer located in the laboratory director's office. Also, she now splits her time between an office at ERL-A and an office at UGA.

Lack of UGA Input: There was also a lack of UGA PI input into much of the research performed on-site by UGA employees. ERL-A

sub-POs wrote or assisted in writing many of the sub-project proposals and supervised/directed the research under some of the sub-projects.

For instance, until questions arose during our audit survey, the UGA Project Manager/PI was unaware that he was listed as the UGA PI on several of the sub-projects pertaining to on-site UGA personnel. Regarding his designation as the PI on these projects, he stated, "I said [during the audit survey] it was totally inappropriate. I don't know how this came about. I can't contribute to this kind of science." He said that he had not contributed at all to the sub-projects on which he was listed as the PI. According to the Project Manager, ERL-A has an undue level of influence on the packaging of the CA and UGA received no benefit or added value from these sub-projects. He added that this is not what a cooperative agreement is about.

Two letters from UGA PIs were very critical of ERL-A's management of the CA and the restriction of their input into project activities. Although these letters were either addressed to or copied to the ERL-A PO/laboratory director, they were not provided by ERL-A when we requested all UGA correspondence files. We only learned of these letters from our review of UGA's files and ERL-A sub-PO files related to the CA.

According to a July 1992 letter from one UGA PI to the UGA Project Manager, $40,029 of the budget for his sub-project was designated as "off-campus" funds and would be used on a project that the ERL-A sub-PO and an ERL-A co-worker were conducting. The remaining $5,468 was allocated as "on-campus" funds. In commenting on ERL-A's practice of listing UGA faculty as PIs in sub-project proposals without informing them, the PI wrote:

> I have felt all along this was little more than a vaguely veiled way of the local EPA laboratory getting more funds for their own research by pretending to fund investigators at the University.

The PI concluded this letter by stating:

> I propose that the proper way to proceed is to reduce my research award to $5,468 and to fund [sub-PO's] EPA work independently. Since the remainder is EPA money being used to fund EPA investigators, I see no justification for the University being involved at all.

Although the ERL-A sub-PO initially informed us that the UGA PI was incorrect about the funding, we obtained a memorandum from the sub-PO to the PI, dated June 1992, which contained the budget

information as described by the UGA PI in his letter. The sub-PO memorandum further stated:

> I regret that recent EPA-HQ mandated constraints on our non-competitive cooperative agreements with UGA greatly limited the on-campus component. The remainder are funds that were designated as "off-campus" by our program manager and EPA HQ. These funds are being used to support the work here by [ERL-A employee] and myself plus to provide funds for the seminar series.

Another UGA PI wrote letters to the UGA Project Manager in January 1992 and to the ERL-A PO (laboratory director) in February 1992, in which she expressed concerns about ERL-A's management of the UGA CA. The UGA PI explained in her letter to the EPA PO (laboratory director) that she was contacted by an ERL-A scientist in Spring 1991 to discuss a potential cooperative research project. She heard nothing else until she was told by UGA's Office of Sponsored Programs in January 1992 that some money had been put into her CA account. Her February 1992 letter to the laboratory director (PO) further stated:

> ...I received a call from the Institute of Ecology saying that [a UGA research technician] was over there wanting them to sign his personnel forms because he was my employee, and they had no idea which grant he was supposed to be on...

According to the letter, the UGA PI went over to ERL-A to discuss this situation with the co-PO and sub-PO and:

> ...[The ERL-A co-PO] explained that he had put some fiscal 1991 money into this subproject to support [the UGA research technician]. He also explained that he originally hired [the UGA research technician] on a UGA project because he personally needed some technical help in his laboratory, and [the UGA research technician] worked for him....I told [the co-PO] that my name was on this project, and I felt that I needed to be involved in this research....

The UGA PI's letter also stated:

> For most of the 15 years I have been at UGA, I have been involved in collaborative research projects. I would very much like to work with the scientists at EPA on this global change project, but it needs to be done as collaborative research usually is done: principal investigators meet, discuss, plan the research, go over

> the budgets, agree on personnel to be hired and their work assignment, design experiments, discuss the data, and review the resultant manuscript. I hope that is also how the EPA views these collaborative projects. If it is not, then I need to know that.

The UGA PI concluded the letter by urging the ERL-A PO to schedule a previously proposed UGA Cooperators meeting.

> ...At the meeting I would like to have clarified (1) What is expected from this project, where it's to be done, and when it is due; (2) a budget stating how much money will be available to do the work; (3) who is working on this project, for what faction of his/her time, and who is that person's supervisor; and (4) if equipment is to be purchased, who has the responsibility for purchasing, operating and maintaining that equipment, and where does it remain at the end of the project? I hope you find this a reasonable request - it is the way I have become accustomed to doing collaborative research. I think other cooperators share my concern and would also like to have this information clarified.

A subsequent meeting between the ERL-A laboratory director and these UGA PIs was conducted in April 1992. Both of the UGA PIs told us that many of the problems cited in their letters had since been resolved. However, we find it disturbing that these problems ever existed. Also disturbing is the failure of ERL-A staff to provide these letters to us when we initially requested UGA CA correspondence files.

Day-Care Center Development: According to a documented proposal, ERL-A planned a $30,000 sub-project under the UGA CA for development of an operating plan for ERL-A's planned, on-site day-care center, an unallowable use of R&D funds. Such use of R&D funds is not specified in current EPA/ORD policy and potentially represents a violation of the Agency's 1992 R&D Appropriation Act which states the purpose of R&D funds were:

> For research and development activities, including procurement of laboratory equipment, supplies, and other operating expenses in support of research and development.... [emphasis added]

Senate Committee Report 102-107 on EPA's 1992 appropriations defines R&D operating expenses as follows:

> ...operating expenses, such as laboratory support, supplies and materials, operation and maintenance of facilities, equipment, automated data processing, human resource development, and printing and reproduction.

Provisions in 40 U.S.C. 490b authorize the use of federal facilities and equipment for the operation of day-care centers as long as it is for the direct benefit of federal employees. According to Senate Report 102-107 and House Report 102-94, EPA's 1992 S&E appropriation was to cover all EPA personnel and administrative costs (to include federal employee benefits) associated with EPA's program operations. Therefore, only S&E funds could have been properly justified for such a direct benefit to ERL-A employees.

When questioned regarding this proposal, the PO (the laboratory director) stated that UGA's role was to develop a curriculum for an early childhood environmental education program. However, testimonial and documented evidence obtained during the audit indicated that the PO (laboratory director) knew or should have known that the documented proposal was for a day-care operating plan.

The ERL-A sub-PO and the UGA PI initially informed us that UGA's role was to develop an operating plan for the day-care center. When asked specifically if any curriculum development would be done during the current phase, the UGA PI replied no. In June 1992, UGA submitted a "working copy" of the proposal to ERL-A, which was for development of an operating plan for an ERL-A day-care center. There was no curriculum development task in this draft proposal. File documentation showed that the PO (laboratory director) reviewed UGA's "working copy" of the proposal in June 1992. The laboratory director stated in a transmittal slip attached to the draft proposal that it was a "good job so far... You need to work w/them in improving/revising this plan..." The files also contained a copy of the budget for a proposed Phase II, which included an estimated cost for the director of the day-care center. The Phase II budget stated that this cost was "included to provide information if ERL-A chose to have the director's salary come out of UGA's budget." There was a note on the budget from the PO (laboratory director) to the UGA Coordinator, which documented that the PO had seen this Phase II budget.

Subsequent to our review and questions regarding the day-care center sub-project, the PO (laboratory director) had a meeting

with the sub-PO and the UGA PI to make sure everyone understood that UGA's role was to be curriculum development for the day-care center. After this meeting, the UGA PI said that UGA's role had changed. She said that UGA would now be developing a curriculum to be used which had an environmental focus and that they had until March 1993 to complete this task.

Although ORD policy includes environmental education as a proper use of CA R&D funds, we continue to question the use of $30,000 of scarce federal resources for development of a day-care center curriculum, especially for ERL-A on-site child care - a direct benefit to EPA employees. We do not believe this qualifies as environmental education within the intent of ORD policy. We could not conclude that the use of R&D funds for such a purpose furthered, enhanced, or promoted environmental research as intended by Congress in appropriating these funds.

ORD/GAD Oversight: In 1991 ORD and GAD reviewed and approved the UGA CA despite reviewer comments on the proposal that documented the CA's direct benefit to ERL-A's on-site research and ERL-A's intent to use the CA for direct support.

In the ERL-A review of the original $5.2 million UGA CA proposal, an ERL-A in-house reviewer commented that this proposal provides "an obvious direct benefit to the ERL-A in-house research." The ERL-A in-house reviewer also said that "the primary strength of this proposal lies in the obvious synergism that can be developed between the UGA and ERL-A."

Because the UGA CA proposal exceeded ORD's maximum value threshold for noncompetitive CA awards, the UGA proposal was subject to review and approval by ORD Headquarters. ORD's approval of the CA despite the obvious direct benefit to ERL-A's research (a contradiction of provisions in the FGCA Act) is indicative of weak or inadequate internal controls or ORD's misunderstanding of the requirements of the 1977 Act and related legislative history. In addition, GAD subsequently submitted final approval for the UGA CA although our interviews with GAD staff indicated they were well aware that direct EPA benefit was not an eligible purpose for a CA. The weaknesses in ORD and GAD's oversight of CA awards and uses are discussed in detail in Chapter 2.

2. ERL-A Also Directly Benefitted From Off-site CAs

The University of Rhode Island (URI) CA (maximum value of $389,375) is an example of an off-site CA which directly benefitted ERL-A initiatives. The CA was competitively awarded in September 1990. The requirements of the RFP were changed to

better fit EPA's research priorities. The RFP and decision memorandum for award of the CA both contained statements emphasizing the importance of the work to ERL-A's and the Agency's mission. File correspondence also documented attempts by the PO to direct the PI's research into areas important to ERL-A.

The original CA RFP stated that the proposed research could include research on sulfur cycle and/or carbon cycle gases as relates to global climate change. However, the URI proposal received a higher review score and was awarded the CA because URI researchers stressed a carbon gas as its primary research agenda, a factor the decision memorandum stated was quite important, as it was consistent with EPA's current research priorities. According to the PO, between the time the RFP was issued and the full proposals were reviewed, the OEPER Director decided to de-emphasize sulfur and focus on carbon cycle gases in EPA's research.

The RFP for this CA emphasized the coordination of the research with the ERL-A's in-house research:

> Proposed investigations will be coordinated with ERL-Athens' and ERL-Narragansett's inhouse research programs pertaining to process model development and testing, necessitating a close working relationship between the performing organization and these laboratories... Proposers should therefore be able to meet periodically at selected sites and at the EPA laboratories as needed.

The decision memorandum also stressed the importance of the CA data to the Agency's planning and policy-making function.

> Results of these investigations will enhance the abilities of the Office of Policy, Planning, and Evaluation in efforts to extrapolate and model Global Climate Changes....This information will not only fill data gaps in global climate models, but it is expected to provide the foundation for development of appropriate mitigation practices and management strategies related to marine systems.

Communication between the PO and PI showed on several occasions the PO's attempt to direct the PI's on-going research towards

EPA's changing priorities. For example, in February 1991 correspondence to the URI PI, the ERL-A PO wrote:

> As you know, there has been a change in direction in the EPA research program on global climate change. Our process and effects work is now focusing on the carbon cycle. We have been told to de-emphasize research on the sulfur and nitrogen gases, especially the former...I encourage you to structure your upcoming research to emphasize CO2, methane and various other species and factors that influence their sources and sinks...

June 1992 correspondence from URI staff provided additional evidence of ERL-A direction of URI's research. A URI letter requesting CA budget modifications stated:

> The budget modifications requested are the direct and indirect results of decisions by EPA. First, EPA requested, part way through the first year, that we eliminate efforts on sulfur compounds and increase our emphasis on carbon. We therefore eliminated [name deleted] subcontract for this work and shifted the funds ($29,295) to cover the personnel and equipment needed to enhance the sampling and modelling of carbon dynamics...

In addition, a letter to the ERL-A PO from URI Co-PI stated:

> ...In our discussions you suggested that EPA management is more interested in being able to determine RITG fluxes and their large scale patterns, rather than focus on specific process studies at this stage. We are prepared to consider some mid-course changes in this project, if they do not compromise our ability to bring the work done to date to successful completion.
>
> ... Over the next couple of weeks we would like to discuss further our future plans with you, and find ways how this work can best meet EPA's needs [emphasis added].

RFPs and decision memoranda for other ERL-A CAs, especially those in the Global Change Program, contain language and objectives similar to the URI CA provisions. This indicated the research to be performed represented a direct benefit to ERL-A/EPA and the data collected would be assimilated into Agency technical, policy, or regulatory decisions. In addition, much of the work under these CAs involved data collection tasks, which have been

performed by contractors in other EPA programs (i.e., the EMAP program) and may have been more appropriately performed under contracts for these projects.

Sub-contract Inappropriately Awarded as a Supplement to the CSU CA

A May 1992 supplement of $50,000 to the Colorado State University (CSU) CA was improperly used in lieu of subcontract support for an ERL-A off-site contractor. According to correspondence from the CSU PI to the ERL-A PO, the purpose of the work was to modify a computer model for use by one of ERL-A's off-site contractors. The PI's letter stated:

> ...We have been in contact with [the contractor's president] and he is in agreement with what is contained in the [CA] supplement document. We are confident that we will be able to deliver the agreed upon products...

In a revised workplan for WA 13(I), dated October 1, 1991, the contractor, indicated that a sub-contract would be the appropriate mechanism for this work. The workplan stated:

> ...if the CENTURY model is chosen as the primary tool for evaluating greenhouse gas emissions and soil carbon dynamics, the assistance of researchers from Colorado State University may be needed. If this situation arises, we will discuss it with the EPA Technical Monitor and submit a request for either additional or alternative subcontract support.

The ERL-A PO indicated that the funds used for the CSU CA supplement had originally been set aside for a subcontract. However, the University preferred doing the work as a supplement to the CA and this was also easier for ERL-A to do administratively. He added that the $50,000 supplement was very small in comparison to the total project costs of $900,000. When asked if the modeling work was a direct benefit to EPA, he replied that the work mutually benefitted EPA and the university.

The CSU supplement was a clear example of an inappropriate use of a CA when a contract would have been more appropriate. Again, the justifications of mutual benefit and administrative convenience are not in accord with the FGCA Act and congressional intent.

University of British Columbia (UBC) CA Used to Fund Foreign Travel For Academics

The CA decision memorandum indicated that one of the primary purposes of the CA was to fund foreign travel to meet ERL-A commitments/on-going tasks (a direct benefit to ERL-A) under bilateral agreements with China and the Soviet Union rather than to provide assistance to UBC's research proposal. The UBC CA, awarded May 31, 1990 (maximum value of $247,916), budgeted 71 percent or $175,847 of project funds to this international travel and only 29 percent or $72,069 for personnel and supplies to carry out the actual UBC research described in the CA proposal. UBC's research proposal related specifically to the affects of toxic substances/chemicals on aquatic areas and fish in particular; however, documentation obtained during the audit indicated that the international travel related to a broad range of research activities, some of which was principally unrelated to the UBC research project (i.e., Global Climate Change Research Program, Office of International Activities tasks). For instance, the CA decision memorandum, dated February 23, 1990, listed one of the international meetings funded by the CA as "International Symposium on the Effects of Climate Change on Biogenic Emissions of Trace Gases" to be held in Beijing, China in May 1991. Over $42,000 was budgeted in the CA for 10 U.S. scientists, 3 European scientists, and 3 South American scientists to attend this symposium. This budget apparently did not include the UBC PI who is Canadian.

In addition, the project budgets did not identify any travel funds for the UBC PI to attend these international meetings. The only travel budgeted for the UBC PI was $800 for two trips to Bozeman, Montana[4] and $800 for two trips to Athens, Georgia. The decision memorandum did indicate that the UBC PI would be involved with one international symposium, "International Symposium on Fish Physiology, Toxicology, and Water Quality Management" to be held in Sacramento, California. The other international trips, which related to global climate change and the US/USSR exchange programs, appeared to have no direct correlation to UBC's research project.

When asked about the large travel budget, the PO (the laboratory director) replied that it was common practice to have international science meetings funded through CAs. She said that these meetings were the best way to present the results of the research.

[4] UBC research proposal represented a collaborative effort with on-going research at MSU, Bozeman, Montana.

In describing the relationship of this project to the EPA's mission, the UBC CA decision memorandum definitely stated that the CA projects would directly support on-going research projects/tasks at ERL-A, OPTS, OPPE, OAR, and OIA:

> The proposed work is important to the achievement of EPA program objectives, with immediate application of results to the Ecological Risk Assessment Research Program in support of the Office of Pesticides and Toxic Substances [OPTS] and the Global Climate Change Research Program in support of the Office of Policy, Planning and Evaluation [OPPE] and the Office of Air and Radiation [OAR]. The international collaborative research activities and symposia are also in support of the Office of International Activities [OIA] and meet Laboratory [ERL-A] commitments to bilateral agreements....

In addition to the stated direct benefit to EPA, we question the addition of a large foreign travel budget to a relatively small research budget which obscures the actual function of the CA. If meetings are to be funded in this manner, the travel should be directly related to the research proposed and this relationship should be documented in the proposal and decision memorandum. Further, separate CAs may be needed to fund such large travel budgets in order to establish proper oversight and control of this activity. Separate CAs for this purpose would clearly identify the CA function and total amount of CA funds being used for international travel to Agency managers with oversight responsibility.

Egyptian CAs Misused in an Attempt to Return Former UGA Cooperators to ERL-A

ERL-A misused both the UGA and two Egyptian CAs in this case. ERL-A file documentation and the chronology of events indicated that in September 1989 ERL-A awarded CAs to Mansoura and Menoufia Universities in Egypt for the primary purpose of bringing back to ERL-A the two PIs at these Universities as direct on-site support for on-going ERL-A research projects. These PIs had previously worked at ERL-A as post-docs under the UGA CA. The PO stated that one of the Egyptian PI had not finished research he had started for the PO as an on-site UGA employee and he needed him back at ERL-A to finish this work. The maximum potential value of the two CAs was $248,750 and $262,500, respectively. However, the funding of the CAs was apparently dependent on the return of the PIs to ERL-A because the PIs did not return to ERL-A and the CA funding was never increased beyond the initial award of $10,000 each.

The Egyptian CA proposals were developed while the future PIs were still working as UGA post-docs at the Athens Laboratory. The ERL-A PO stated that he would not have permitted the Egyptian PIs to write the proposals while they were working at ERL-A under the UGA CA. However, April 1988 correspondence from the ERL-A PO to the Menoufia University President stated that "We are working with [the future Menoufia PI] in writing the cooperative agreement." In addition, it appeared the Mansoura PI was still working at ERL-A in 1989 when the CA was negotiated and approved.

The ORD International Activities Project Form for both CAs indicated that ERL-A intended to bring both Egyptian PIs back to ERL-A for six months each. ERL-A staff began requesting the Menoufia PI's return to ERL-A in April 1988, before he had even left Athens. These requests were repeated in correspondence dated in June and August 1988, again in November 1989 after the CA to Menoufia was awarded, and twice in May 1990.

A May 2, 1990 letter from the ERL-A PO to the PI stated:

> It is time to make arrangements for your return to the Athens Laboratory as we had discussed. We can pay your salary while you are here but we cannot pay your travel expense to and from the Athens Laboratory. I would like you to come as soon as possible for 3 to 6 months. We hope to have more money in the cooperative agreement and we need to do planning and preliminary work so you can get started on the research.

May 22, 1990 correspondence from the ERL-A PO to the Menoufia PI stated that he had sent letters to the university president and department head requesting that the PI spend 3-6 months at the Athens laboratory starting on or around July 1, 1990. The PO also stated:

> I feel that it is important for you to spend this time in the Athens Laboratory to assist me in obtaining additional funding and designing the experiments that need to be carried out in EGYPT on this project. If there is anything else I can do to insure your visit, please let me know right away.

Another questionable aspect of the Egyptian CAs are two trips to Egypt by the PO and his branch chief with air fare and lodging paid for by the Egyptian universities. One purpose of these trips, made in March 1988 and January 1992, was to negotiate the CAs, to monitor their progress, and to obtain additional funding for them. Federal employees are not permitted to use CA funds

for travel. Although the travel plans for the ERL-A employees stated that the funds were not coming from the CAs, this appeared to be only a technicality. In actuality, ERL-A provided funding to the Egyptian universities and they paid for EPA travel. Our review of ERL-A operations indicated that it was not an uncommon practice for ORD employees to have their travel paid for by other organizations and countries.

Based on the events and documentation described above, we concluded that ERL-A awarded the Egyptian CAs and expended $20,000 under these CAs for the purpose of returning the Egyptian PIs, both former UGA CA employees, to ERL-A as on-site support - a direct benefit to ERL-A. However, the PIs never returned to Athens and the CAs were permitted to expire without additional funding. According to ERL-A files and PO comments, ERL-A never received a QA Plan, progress reports, or any data under these CAs. The only apparent benefit to the laboratory was two trips to Egypt for two ERL-A scientists, with the air fare and lodging paid by the Egyptian universities.

Further, in 1987 and 1988, ERL-A clearly directed and supervised the work of the future Menoufia PI when he was a post doc at ERL-A under the UGA CA. The University was so unaware of the Egyptian cooperator's activities that they continued to carry him on their payroll for several months after he had returned to Egypt. ERL-A file documentation shows that ERL-A staff were aware that the Egyptian post-doc was being paid "in absentia."

The future Menoufia PI apparently returned to Menoufia University in June 1988, but remained on the UGA payroll until October 21, 1988. An August 1988 letter from the ERL-A Branch Chief to the future PI in Egypt stated, "While you are indeed a valued employee, we cannot continue to pay you in absentia much longer." UGA staff told us that they were unaware that the Egyptian employee had returned to Egypt before October 1988.

Montana State University (MSU) CA Used to Fund Attainment of an Advanced Degree by a ERL-A Employee

In August 1989, ERL-A awarded a noncompetitive CA (maximum potential value of $279,234) to MSU. One of the primary purposes of the CA was to provide funding of Phd attainment for an ERL-A employee through an IPA. This ERL-A employee actually wrote the MSU proposal and decision memorandum for the CA. The research involved appeared to be only a means to justify the funding of the employee's Phd degree. The ERL-A PO later confirmed to us that one of the primary purposes of the CA was to fund the ERL-A employee's education. Before the IPA and CA were approved, a long-term training request submitted by ERL-A for this employee

had been disapproved. This employee had chosen MSU (the laboratory director's former employer) as the university for his training and subsequent IPA assignment.

The ERL-A employee applied for long-term training at MSU in October 1988. The purpose of the advanced academic training was to enhance the employee's background in chemistry for application in the area of mass spectrometry at an estimated cost of $27,420. According to the employee this request was not approved; however, ERL-A continued to pursue other means of providing this training to the employee. In April 1989 he was accepted into the PhD program at MSU. At this point ERL-A began working on both an IPA for the employee to MSU and a CA with MSU to cover the costs of the IPA. The IPA was reviewed by ORD Headquarters and approved by the Acting AA for ORD on August 30, 1989. ERL-A's letter to ORD transmitting the IPA for approval also informed ORD that a CA was being awarded to MSU to help defray the cost of the IPA. There is no evidence that ORD Headquarters ever questioned the IPA, CA, or the basic purpose for these agreements. The MSU CA was awarded on August 24, 1989.

The terms of the IPA agreement made MSU responsible for 51 percent of the ERL-A employee's salary and EPA responsible for 49 percent. The IPA agreement did not state or indicate that MSU's share of the IPA cost would also be paid by EPA through the MSU CA. When we asked a GAD official if this was misleading, the official replied, "It is misleading." She added that it was allowable to fund an IPA through a CA. However, according to GAD guidance CA funds cannot be used to train EPA staff.

Although the laboratory director and other ERL-A staff knew that the purpose of the IPA assignment was for the ERL-A employee to receive his PhD degree/training, the IPA Assignment Agreement did not mention the degree or the training as required by the IPA Policy and Procedures Manual, dated April 3, 1989. The training was not mentioned in the decision memorandum for the CA either. According to the EPA's Assistance Administration Manual, Chapter 1, Appendix 1-G, CAs are not to be used to provide training for EPA employees. In addition, R&D appropriations have consistently restricted the use of R&D funds to the direct support of R&D activities. Congressional appropriations reports consistently specify that S&E appropriated funds will be used for Federal employee pay, benefits, and training. Therefore, CAs funded with R&D monies can not legally be used to fund training of a Federal employee.

The training/PhD degree was provided to this employee for an estimated total cost of $200,000 with no commitment of the employee to 3 years of federal service for each year of training

as required when training funds are used. The CA funding included 51% of the employee's salary and fringe benefits which the IPA stipulated would be paid by MSU. The laboratory director said that she had consulted with ORD about the ERL-A employee getting his degree while on an IPA at a university. She stated, "We were told that no policy exists. It was a management call and I called it this way." However, the Assistance Administration Manual, Chapter 1, does provide that CA funds may not be used to train federal employees. When questioned about the high cost to the taxpayers for the employee's PhD degree, the laboratory director responded that "$100,000 per paper [employee's dissertation and PI's report] was really not a bad deal."

A negative review of the CA proposal by one extramural reviewer was not included in the CA decision memorandum which was written by the employee receiving the IPA. According to a memorandum from the IPA employee to the ERL-A laboratory director, he did not use the review because it came in one week after the deadline and he already had the decision memorandum written. The extramural reviewer had rated the MSU proposal as "fair" and suggested "declination in present form." The reviewer stated in her opinion the proposal was weak in the presentation of the experimental design and that the approach "lacks coherency" and was "superficial." She also stated that neither of the MSU PIs seemed to have a strong background in mass spectrometry and suggested that another mass spectrometrist at MSU be included on the CA.

In addition, the noncompetitive award of the MSU CA was based upon unsupported or questionable justifications. The decision memorandum, dated July 17, 1989, stated that the noncompetitive award was based on the original ideas of MSU personnel, MSU's excellent facilities, and on the immediacy of the technical information needs of two other EPA Offices. None of these conditions were supported by file documentation or justifications as specified in ORD guidance on CA awards, dated November 1983. In fact, the subject ERL-A employee wrote the CA proposal. Therefore, MSU did not submit a unique proposal for which it would be unethical to solicit as stated in ORD guidance. There was no proof in the files that MSU had any better, unique, or one-of-kind facilities than other institutions and the immediacy of the need for the research is in doubt since over three years elapsed with no publication of technical information by either the employee or the MSU PI.

In conclusion, the MSU CA was questionably awarded noncompetitively in order to fund an IPA assignment of an ERL-A employee, primarily for advanced academic training and degree

attainment. The fact that the CA covered MSU's share of the IPA assignment was misleading. In addition, we question the appropriateness of the person who was getting the IPA writing the CA decision memorandum and specifically, deciding to exclude a negative review of the proposal in the decision memorandum. We do not believe that funding a PhD for an ERL-A employee through a CA is an appropriate use of assistance agreements.

University of New Hampshire (UNH) Supplement Improperly Awarded as a CA In Lieu of a Grant

ORD improperly awarded a $250,000 supplement to the UNH CA in September 1991 that did not include substantial involvement by EPA as required for CA awards. The proper mechanism was a grant. According to the PO, one purpose of the UNH CA was to support international work through the International Geosphere/Biosphere Program (IGBP). The PO informed us that the UNH PI is the chairman of the IGBP committee on Global Analysis, Interpretation, and Modeling (GAIM), which is supported by the supplement to the CA.

There was no evidence in ERL-A documentation of substantial involvement by EPA in the GAIM supplement as is required to justify a CA in lieu of a grant. According to the PO, there is little EPA oversight of the committee's activities for political reasons. He said that the committee is sensitive to potential EPA influence on the committee. As a result, EPA does not exercise any approval authority over who is on the committee. According to the CA supplement decision memorandum, the Director of OEPER ordered the addition of the GAIM project to the CA. The GAIM supplement was apparently added to the UNH CA for the administrative convenience of ORD. Although this CA supplement is probably the only example of real assistance we found in our review, it should have been awarded as a separate grant because EPA did not have substantial involvement in the work performed.

INAPPROPRIATE USES OF IAGs

Our limited review of six ERL-A IAGs disclosed abuses in all six agreements similar to the misuses related to CAs. To achieve ERL-A's objectives with limited intramural resources (i.e., S&E funds), IAGs were used to change extramural R&D funds into travel funds for FTEs, to award research funds to a foreign country without statutory authorization, and to inappropriately provide contractor staff for a joint project with the Air Force in violation of FAR and IAG requirements. Internal control systems at ERL-A, ORD, and GAD did not detect or preclude these abuses (See Chapters 2 and 6). As a result, management oversight was

limited, effective use of Agency resources was questionable, laboratory initiatives were canceled without completion, and FAR and Agency regulations/requirements were circumvented. Also, unauthorized reprogramming of funds between appropriations (extramural to intramural) may have occurred through exchange of extramural funds with another agency. As stated in Chapter 2, ERL-A's management culture encouraged circumvention of regulations and procedures and questionable uses of extramural resources.

NASA IAGs Circumvented FTE Travel Restrictions

Two pairs of ERL-A IAGs (maximum value of $520,000) with NASA appear to exchange extramural funds on related projects for use by NASA and ERL-A employees for travel expenses. The net effect was to re-program extramural funds, without authorization, into FTE travel dollars for both agencies and circumvent Agency travel ceilings for FTEs. Although one of the ERL-A POs involved stated that the laboratory did not intend to circumvent any appropriation or fund restrictions, the fact that another ERL-A PO also exchanged travel funds through an IAG with another NASA PO indicated recurring misuse and circumvention of regulations.

All four of the NASA IAGs we reviewed are related to the Global Climate Change Program and their scopes of work appear to be related. One pair was a funds-in IAG (IAG No. RW80935320) in which ERL-A has or will receive up to $45,000 [5] in NASA funds for FTE travel over the first year of the three year IAG performance period and a funds-out IAG (IAG No. DW80935084) in which ERL-A paid or will pay out up to $41,000 in extramural funds the first year exclusively for NASA travel costs. The total maximum value of the funds-out IAG prepared by ERL-A was $100,000. We could not determine the maximum value of the funds-in IAG prepared by NASA for the three year performance period. The NASA PO on this pair of IAGs was a former EPA/ORD employee. This pair of funds-in and funds-out IAGs also had the same EPA and NASA POs.

The other pair of NASA IAGs was an even swap between the two agencies - a funds-in IAG (IAG No. RW80935444) and a funds-out IAG (IAG No. DW80935165), both budgeted $35,000 exclusively for travel the first year. The funds-out IAG prepared by ERL-A had

[5] The first year, authorized dollar amounts for funds-in IAGs prepared by NASA include in-kind labor costs, as well as reimbursable travel costs. Therefore, the maximum first year value of the funds-in IAGs shown in Appendix III will be greater than the travel dollars shown above. EPA will be reimbursed only for travel costs.

maximum value of $200,000 over the IAG's performance period. We do not know the maximum value of the funds-in IAG prepared by NASA. As with the previous pair of NASA IAGs, these IAGs had the same EPA and NASA POs.

According to the EPA Resource Planning and Budgeting Manual, Chapter 4, dated February 1, 1985, EPA allowance holders have a travel ceiling which sets a maximum for FTE travel. The manual also provides that funds transfers affecting the travel object class require an approved change request and the issuance of a new Advice of Allowance before any funds may be committed or obligated based on the reprogramming.

Resources Management Directives state that Advices of Allowance are the Agency's principal mechanism for controlling funds and ensuring that allowance holders are allocating resources according to EPA's Operating Plan. However, the NASA IAGs represent more than a reprogramming or budget circumvention within the S&E intramural appropriation but a potential unauthorized transfer between separate appropriations, R&D extramural and S&E intramural, which may violate or at least circumvent appropriation restrictions.

The IAG Compendium also specifically states that IAGs may not be used to circumvent travel ceilings; however, it appears that this exchange of IAGs enables ERL-A and the NASA offices to indirectly re-program their extramural funds, without authorization, into travel money for FTEs and, thereby, circumvent travel ceilings for federal employees. The first fiscal year budgets for all four NASA IAGs show that, ERL-A intended to send $76,000 in extramural funds budgeted for travel to NASA and would receive in return $80,000 in travel dollars for their scientists.

An ERL-A PO for one pair of NASA IAGs replied that the Economy Act of 1932 provided for IAGs to allow government agencies to interact more effectively. The PO stated that current IAGs are only for the exchange of travel monies because of the current planning activities for BOREAS (Boreal Ecosystems Atmosphere Study). He added that as the project progresses, other funds will be needed for equipment, etc. However, according to the IAG Compendium, the Economy Act cited by the PO allows agencies with greater capabilities to provide related services or procure specialized materials for other agencies with less experience. The exchange of funds by two federal agencies for travel costs alone does not seem remotely related to this criteria.

The other ERL-A PO explained the exchange of IAGs by saying that not all of the money on his NASA IAGs was used for travel. Some of the funds ERL-A received were used for supplies and equipment.

However, according to file documentation, these IAG funds were only recently re-categorized (August 1992) from travel to equipment after our discussions with ORD and GAD officials about our concerns with these IAGs. The ERL-A PO further said that EPA scientists were under pressure to minimize research activities that overlapped other agencies' efforts. The PO felt that the cost savings they achieved outweighed any apparent improprieties. The funds were for a specific targeted project, it was a one-time situation requiring funds above the ERL-A appropriation, and the amount of money involved was small.

Correspondence in one of the PO's files shows that the funds-in and funds-out IAGs were developed concurrently with NASA and were dependent on each other. The NASA PO wrote to the EPA PO in December 1990, stating, "A draft of what tasks for you to do might look like, with the idea that you would ask us to do something similar." Then, in February 1991 he wrote:

> I've changed a few words in the Scope of Work that I originally drafted (what EPA does for NASA), made one addition in your Task 1 and rewrote your Task 2 (what NASA will do for EPA) fairly substantially to reduce any potential duplication.

This memo also indicated that similar IAG exchanges had occurred between other NASA and EPA offices.

A GAD Branch Chief was asked about the appropriateness of EPA swapping IAGS with another Agency for travel. She replied that, "I would get an OGC opinion on that real quick...That's sneaky. I would question that." She said the effect would be that agencies would be supplementing each other's travel. According to this GAD Branch Chief, a laboratory can't have a "travel grant," the Agency is not in that business. She said that a GAD specialist reviewing IAGs should ask questions if there is only one IAG line item and that line item is for travel. However, the GAD employee stated that for her office to have caught this "swap-out", the IAGs would have had to come in at the same time and been assigned to the same specialist. She added: "The program offices see the IAG as a free-wheeling deal."

Although the first year dollar amounts involved in this exchange of IAGs between NASA and ERL-A for FTE travel were relatively small, the three year funds-out for EPA could be $300,000. In addition, this situation revealed a high potential for misuse which was not prevented by the internal control systems of ERL-A, ORD, or GAD.

ERL-A Improperly Initiated an IAG to Venezuela Without Proper Statutory Authority

On September 1, 1990, ERL-A initiated an IAG (maximum value of $401,250) directly to the Instituto Venezolano de Investigaciones Cientificas (IVIC) in Venezuela although the IAG Compendium states that IAGs with foreign countries are not authorized. GAD erroneously approved the original award of the IAG with IVIC in 1990 and the first amendment which increased funding in 1992. GAD refused to approve a continuation of the IAG at the end of FY 1992. Because of the improper award of this IAG, the almost $200,000 funded to date under this agreement was lost because the project/research will apparently not be completed.

According to the IAG Policy and Procedures Compendium "No element of EPA is authorized to enter into an IAG with any foreign organization." The Compendium further states that the proper procedure requires EPA to enter into an IAG with the Department of State instead, unless an exception is made by the Office of International Activities (OIA). We found no such exception in the IAG files.

The IAG files did contain a Clearance of Foreign Research Award which was signed by EPA officials but was not signed by the State Department. Further, the Clearance form was a request for the approval of an award of a foreign grant or contract, not an IAG. A record of communication in the IAG files between the ERL-A laboratory director and OIA also referred to expediting the State Department Clearance for a Venezuelan cooperative agreement.

A record of communication, dated September 28, 1992, documented a telephone conversation in which ERL-A's Extramural Assistant was told by OGC that agreements with foreign governments would have to be a grant or CA. This was confirmed in a memorandum from the Acting Chief of the Grants Information and Analysis Branch (GIAB) to ERL-A, dated October 8, 1992, in which OGC had advised that "the authority to transfer funds directly from EPA to foreign governments or international organizations through an IAG is not permitted since the authority for IAGs under the Economy Act or the cooperative statutes is limited to agreements between federal agencies."

The PO stated that they had discussed awarding a CA to Venezuela. However, since the agreement was with a Venezuelan federal laboratory in Venezuela, an IAG seemed more appropriate. He said that CAs have primarily been used for universities and private institutions. Awarding the agreement as an IAG instead of a CA was a "judgement call" according to the PO. He also commented that it is really more tedious to do an IAG than a CA because an

IAG must be re-submitted every year. This statement conflicted with statements made by GAD officials who said that programs and laboratories liked to use IAGs because they were easier to award than CAs.

In August 1992, GAD officials stated that they had been refusing to approve foreign IAGs since July 1992. A GAD manager said that she was not signing anymore foreign IAGs without a written memo from OGC citing the statutory authority. She said that she could not reconcile in her own mind how to do an IAG with a foreign country. GAD is currently considering awarding an IAG to the State Department as required by the IAG Compendium instead of awarding IAGs directly to foreign countries.

A GAD manager said that programs like to award IAGs in lieu of CAs to foreign countries because it's less work. IAGs require only a decision memorandum, no proposals, no competition, no applications, and no reviews are necessary. She said that the programs like to use IAGs because "It's a shortcut." She added that GIAB mentioned to the OIA that foreign IAGs might not be allowable and that they were being used as a shortcut in some cases. She said they "hit the roof" and said that they were sure this was not the intention.

The ERL-A PO was disturbed that the Venezuelan IAG was not renewed when the project was two thirds complete, most of the equipment was already bought, and the researchers were in the middle of time-dated fieldwork. He stated that the laboratory was not informed until September 28, 1992 that the Venezuelan IAG would not be funded. Up to that point ERL-A thought that the new policy prohibiting foreign IAGs would only apply to new IAGs, but that those already in place would be renewed. The EPA PO explained that the Venezuelan PO for the IAG was a very well-known scientist and any "glitch" in his project could be very embarrassing. He added EPA has been criticized for starting projects and not completely funding the research and that stopping this work in the middle of the project would be another example of the Agency not meeting its commitments.

According to the PO, prior to the IAG award, ERL-A gave some consideration to funding this research as a cooperative agreement. However, upon examination of the Venezuelan IAG, we concluded that the appropriate mechanism for this project would have been a contract because the field studies and data gathered would have directly benefitted ERL-A. The decision memorandum stated that the information gathered would be used to "fill data gaps in global climate models of tropical fluxes of trace gases" and that the "direct client" of the project was EPA.

Although the IAG provided IVIC with $144,000 in equipment (four wheel drive vehicles, laboratory equipment, etc.) and CAs with foreign countries are permitted, the primary purpose of the agreement was to benefit ERL-A research. Therefore, it would have been more appropriately awarded as a contract. In addition, although we believe GAD acted appropriately in refusing to approve the continuation of this IAG, the IAG was in place for two years before this corrective action was taken. As a result, almost $200,000 of funds were expended to date and the project was left incomplete.

ERL-A Noncomplied With FAR and IAG Requirements In Providing Contractors to the Air Force Under the Tyndall AFB IAG

EPA improperly supplied contract employees to the Air Force under the Tyndall Air Force Base (AFB) IAG (awarded May 25, 1990) by disguising the contractor charges as FTE personnel in the IAG budget. As a result, FAR requirements for identifying contractor use and approval of a sole-source justification were circumvented. In addition, a university researcher (and former ERL-A on-site cooperator) specifically requested by Tyndall AFB was hired as a consultant under ERL-A's on-site TAI contract resulting in apparent directed subcontracting.

The budget included in the research proposal submitted by ERL-A to Tyndall AFB showed almost ninety percent ($335,400) of the $389,000 in funds ERL-A would receive from Tyndall were for personnel. Neither the research proposal/budget nor the IAG included funds allocated for procurement/assistance. In fact, IAG Form 1610-1 specifically asks if funds will be used on extramural agreements and ERL-A responded "no". However, we found that funds designated in the IAG award and amendment as EPA personnel costs were actually expended on the TAI contract and two CAs.

The ERL-A Chemistry Branch Chief and the ERL-A PO both stated that IAG funds were spent on the TAI contract but that none of the funds were being used on the UGA cooperative agreement. However, the May 1991 Report of Reimbursable Services Rendered showed that funds were expended under CAs with both the National Academy of Science and the University of Georgia.

According to the Interagency Agreement Policy and Procedures Compendium, if contractors will be used, the name of the contractor, the contract amount, and the percentage, if any, to

be funded by EPA should be identified on EPA form 1610-1. The Compendium also states:

> When using another agency's funds for a contract, consider the FAR (see Chapter 3 - FAR) and obtain PCMD approval of Sole Source justification...If grants or cooperative agreements will be used, determine recipient, award amount, and subproject amount, if known (identify on EPA form 1610-1) and determine if both agencies have required statutory authority for assistance...

By failing to disclose that a contractor would be used, ERL-A evaded FAR requirements, including those for competition or approval of sole-source justification.

In addition, ERL-A cited the Economy Act as authorization for the reimbursable IAG with Tyndall. However, this Act does not authorize IAGs which use funds under assistance awards. According to the Compendium, the Economy Act does not provide authority where a receiving agency would award an assistance agreement. The IAG Compendium also states:

> In cases where an interagency agreement would involve the use of a grant or cooperative agreement by the receiving agency, independent program authority outside of the Economy Act must be established. If independent program authority exists, an IAG may be executed provided both the receiving and providing agencies have comparable assistance award authority.

Since the Tyndall IAG only cited the Economy Act as authorization, ERL-A was not authorized to utilize assistance agreements under it. According to the Report of Reimbursable Services Rendered for this IAG, however, at least $57,500 was expended for CAs under this IAG.

File documentation further showed that Tyndall AFB initially wanted a CA awarded to a northern university under the IAG because of their past association with a researcher at that university. The original research proposal ERL-A sent to the Tyndall PO in June 1989 included tasks and dollars to fund the CA. However, the IAG award did not include funds for a CA with the university and most of the funds budgeted for the CA in the original proposal were moved to the personnel budget item. Inter-office correspondence to the ERL-A laboratory director from the Chemistry Branch Chief asked, "Is there any way we can get money to [the university researcher] (30K) besides thru a CA?" Apparently ERL-A decided against the CA approach because the

researcher was subsequently hired as a consultant under the TAI on-site contract - apparent directed subcontracting.

In conclusion, ERL-A misstated how the funds received from Tyndall AFB under this IAG would be used, disguising the fact that the work would be performed by contractors and cooperators and not FTEs. Further, there was no GAD oversight to match IAG expenditures to the IAG budget which would have disclosed that contractors were being used to do the work instead of federal personnel. Inadequate controls resulted in several hundred thousand dollars worth of Air Force work being assigned to TAI without any competitive bidding or approval of sole-source justification. In addition, the hiring of the university researcher requested by the Air Force as a consultant under the TAI contract indicated ERL-A may have accommodated directed sub-contracting by the Air Force.

Decision Memorandums Improperly Prepared

The IAG Compendium requires specific information be included in an IAG decision memorandum. This includes EPA authority for entering into the agreement, a summary of alternatives considered other than the IAG, and a rationale and justification for selecting the proposed agency. None of this information was included in any of the decision memorandums for the six IAGS we reviewed. In addition, the ERL-A PO for two of the IAGs wrote and signed the decision memorandum and recommended approval of the IAGs with himself as PO. The fact that the decision memos were incomplete and two of them were inappropriately prepared by the prospective PO is indicative of a lack of controls over the IAG awards, both at ERL-A and at GAD (see Chapter 2). Deficient controls and/or the failure to implement controls apparently led to the misuses of IAGs detailed in this section. Weaknesses in ORD, GAD, and ERL-A's internal control processes are discussed in more detail in Chapter 6.

Because IAGs do not require competition, proposals, applications, or reviews they are even more vulnerable to misuse than other extramural instruments. Despite this high level of vulnerability, ORD and GAD did not implement adequate controls to prevent the misuse of IAGs by ERL-A. ERL-A scientists and managers appeared to be virtually unchecked in their use of IAGs - re-programming extramural funds into FTE travel dollars, awarding an IAG to a foreign country without statutory authorization, and falsely budgeting funds as FTE personnel expenditures when they were used to fund contractor and cooperator employees.

During a discussion with ORD Headquarters management in January 1993, several ORD officials indicated that uses of CAs and IAGs that we were citing as misuses may not violate any laws or regulations. For example, the NASA IAGs, which exchanged extramural funds between agencies to supplement intramural travel of FTEs, was one of the cases cited by these officials. ORD officials indicated they had requested an OGC opinion on this use of IAGs.

Although these officials may be correct that no laws or specific regulations were broken, ethical and internal control questions still remain. The circumvention of budget and funding controls established by Congress and the Agency through separate appropriations for extramural and intramural activities should not be encouraged or condoned regardless of the existence or non-existence of specific appropriation or regulatory restrictions. This policy would be ethically unsound and, in the case of the NASA IAGs, could result in substantial bypasses of fund controls the Agency currently has in place. If ORD Headquarters informs its field units that such practices are "okay", laboratories may be encouraged to become even more creative in their approaches to supplementing their intramural resources. Such encouragement without stringent controls (which do not currently exist) over these creative funding mechanisms, may result in laboratories violating laws and regulations far more serious than currently contemplated.

RECOMMENDATIONS - USE OF EXTRAMURAL AGREEMENTS

Recommendations to the Assistant Administrator, Administration and Resources Management

We recommend that the Assistant Administrator for Administration and Resources Management ensure significant improvements are made in ERL-A's extramural agreement award and management to comply with applicable statutes, regulations, and policies, and to safeguard Agency assets against waste or abuse. Specifically, the Assistant Administrator should require the:

Director, Grants Administration Division to:

- Provide guidance to ORD managers and CA POs on the differences between acquisition and assistance and appropriate uses of contracts and assistance agreements with illustrations and definitive examples.

- Assist ORD in preparing guidance on the proper uses of R&D funds as relates to the specific types of activities that are eligible for funding under CAs.

- Assign responsibility for ERL-A extramural agreements to one grants specialist to improve controls over extramural resources through increased familiarity with laboratory operations/staff. Currently, ERL-A agreements are assigned systematically to whichever specialist can take another case. Therefore, ERL-A's agreements are scattered among many specialists with no one person seeing the whole picture of ERL-A agreement awards. If one specialist had seen all of the NASA IAGs for exchange of extramural funds for FTE travel, the GAD specialist may have detected the improper use and disapproved the agreements.

- Provide guidance to POs that prohibit the use of IAGs for the purpose of reprogramming appropriated funds and awarding research funds to foreign countries unless proper approval or statutory authority is obtained.

Recommendations to the Assistant Administrator, Research and Development

We recommend that the Assistant Administrator for Research and Development:

- In collaboration with GAD and the Comptroller, promulgate definitive guidance on the proper uses of R&D funds under CAs, especially those uses related to ambiguous project areas such as curriculum development. Prohibit the use of R&D funds, either directly or indirectly, for the direct benefit of federal employees.

- Receive and review all CA RFPs and decision memorandums to assure that the purpose of the agreement is to provide assistance and not directly benefit or support ERL-A/ORD research projects.

- Develop a policy which clearly states how graduate academic training and/or advanced degrees for EPA employees will be funded, either through IPAs or established Agency training programs. Require commitment of 3 years of federal service for every 1 year of training received whether training is funded through IPAs or regular training funds. Prohibit the funding of federal employee training under CAs in accordance with requirements of the Assistance Administration Manual.

- Develop a policy on the funding of foreign travel under CAs which will result in improved ORD controls over any foreign

travel funded by EPA, including full disclosure to Congress of total expenditures for foreign travel by FTEs, contractors, and cooperators/non-federal persons (academics) under such agreements.

- Remind the ERL-A director that directed and sole-source contracting through IAGs is prohibited without proper approval and that use of extramural agreements under IAGs should be clearly disclosed on the IAG application in accordance with the IAG Compendium. In addition, instruct the ERL-A director that currently no authority exists under the Economy Act for use of CAs under IAGs.

- Determine, with assistance from OGC, if any unauthorized reprogramming of R&D funds to S&E funds occurred under the NASA IAGs. Also, obtain a formal, written OGC opinion as to whether R&D appropriations can be used under a CA or IPA for the direct benefit, compensation, or training/travel expenses of a federal employee.

Director, Environmental Research Laboratory - Athens to:

- Provide to all POs all Agency policy and procedural guidance necessary to effectively manage their extramural agreements through the pre-award and post-award phases.

- Require ERL-A managers to review all current and future CA RFPs and decision memorandums to assure that the primary purpose of the agreement is to provide assistance and not to procure goods and services which directly benefit ERL-A or ORD and that decision memorandums for all extramural agreements have all of the required elements. Terminate funding of those current CA projects or subprojects that directly benefit or support ERL-A or that violate laws, regulations or Agency policies. Award contracts if there is a need for continuance of these CA projects.

- Where appropriate, immediately move all UGA and other cooperator employees off-site to preclude direct supervision of cooperators by ERL-A staff and remove inappropriate direct benefit to ERL-A under the UGA CA.

- Clearly identify in all CAs the primary function of the CA. Large travel or equipment budgets should not be added as an addendum to relatively small research budgets to obscure the actual function of the CA.

- Provide all ERL-A employees with equal access to IPA training opportunities. In addition, provide full disclosure

of all sources of funding in IPA applications and cease utilizing CAs to fund IPAs for academic training of FTEs.

- Prohibit ERL-A POs, scientists, and on-site cooperators from preparing or assisting in preparation of proposals and/or decision memorandums for CAs in which they will benefit or act in a PO capacity.

- Establish policies which allow cooperators the maximum involvement and control possible in their research projects.

- Review and terminate IAGs with NASA that are being used to fund FTE travel and circumvent Agency fund controls.

- Require and ensure proper documentation of authority, rationale, and justifications in IAG decision memorandums and preclude prospective POs from preparing IAG decision memorandums.

ERL-A'S COOPERATIVE AGREEMENT AWARDS LACKED COMPETITION

ERL-A did not encourage the competitive award of CAs as emphasized by the FGCA Act and did not have sufficient controls in place to assure that the proposal review process for competitive and noncompetitive awards was fair and equitable. Almost 63 percent of ERL-A's 27 active CAs, comprising over $10 million of ERL-A's $14.2 million in CA funding, were awarded without competition. ERL-A maintained, in many instances, it knew the institutions and individuals best qualified to perform the research assistance needed and used its discretionary authority to award noncompetitive agreements to these individuals/institutions. In fact, all seven of the noncompetitive awards in our sample of 11 CAs were to current employers of former ERL employees and on-site cooperators and to alma maters or former employers of laboratory management. These non-competitive awards created the appearance of favoritism in the CA award process. The fairness and openness of the competition in ERL-A's competitive CA awards is also questionable. We reviewed five of the CAs which were awarded competitively and, in every case, identified potential review panel conflicts of interest (COIs) which may have compromised the free and open competition in the CA awards. None of the review panels for competitive awards in our sample included ORD Headquarters staff as required by ORD procedures. Potential COIs also existed for review panels involved in many of the noncompetitive awards. As a result, CA funds may not be effectively utilized to obtain the best research at the least cost to the government. In addition, lack of competition and the appearance of favoritism in the CA award process could subject EPA to criticism and protests and erode public trust in EPA research.

Background

One of the major purposes of the FGCA Act of 1977 was to maximize competition in the award of contracts and encourage competition, where deemed appropriate, in the award of grants and CAs. An ORD Policy on the Use of Cooperative Agreements, issued in January 1983, stated that ORD's policy was to: (1) assure that the appropriate extramural mechanism is used, (2) assure maximum use of competition, and (3) seek new, well qualified sources of research. It required that all CAs having a total project cost of $100,000 or greater be awarded competitively.

However, revised ORD guidance on competitive CA procedures, dated November 2, 1983, eliminated the requirement for mandatory competition of new CAs valued at $100,000 or more and gave laboratory directors the discretion to decide when to compete

CAs. The concurrence of the AA for Research and Development was required for all award decisions when the total EPA cost was over $250,000. In addition, the decision to award a CA noncompetitively was required to be justified in a memorandum that is included in the project file. A revised ORD delegation of authority issued in November 1984 gave laboratory directors approval authority for competitive CA awards up to $1 million. Approval authority for noncompetitive awards remained at $250,000 total EPA cost[6].

The November 1983 guidance also gave examples of situations that would substantiate/justify a noncompetitive process. This included: (1) the recipient submitted a unique concept or approach and it would be unethical for ORD to advertise for applicants to use this approach, (2) the unique capabilities of the recipient have placed it in a pre-eminent position, (3) the recipient has personnel who are considered the foremost experts in fields necessary to perform the work, (4) the recipient has facilities, equipment or data which is specialized, vital to the effort, and which no one else can provide, or (5) an urgent situation exists where no other source could provide the research in the time allowed.

Chapter 3 of the ORD Policy and Procedures Manual addresses procedures for evaluating applications for both competitive and noncompetitive CAs. Both types of CAs must be technically reviewed by a panel of both in-house and extramural reviewers. Competitive CAs must be advertised widely using all available means. Pre-proposals are usually requested and rated and full proposals are then requested from the highest rated pre-proposals. According to the Procedures Manual, the review team should be comprised of one person from ORD headquarters, one person from the ORD laboratory, and at least two extramural reviewers. The laboratory director then makes the final selection for award from the top three proposals and a decision memorandum is prepared.

The ERL-A issued a Laboratory Operating Procedure (LOP) for Competitive Cooperative Agreements in April 1987 and one for

[6] AA for ORD issued "COOPERATIVE RELATIONSHIPS, Interim Guidance," on October 1, 1992. This guidance reduced laboratory director approval of noncompetitive CA awards to $50,000 or less; however, required ORD approval of competitive awards was increased to $5 million.

Non-Competitive Cooperative Agreements in July 1991. Both LOPs state:

> To help assure that cooperative agreements support the best research available, ERL-A generally expects that cooperative agreements will be awarded on a competitive basis; the non-competitive award of a cooperative agreement must be justified by unusual or urgent circumstances and approved by the Director.

The Athens Competitive CA LOP also stated that one member of the review panel will be selected by Headquarters and provides that four extramural reviewers are required if the amount of the projected agreement exceeds $250,000. It notes that no current Project Managers for cooperators will be panel members.

Most CAs at the ERL-A Laboratory Are Not Competed

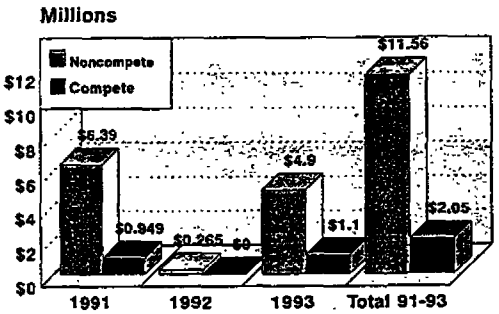
Although the 1977 FGCA Act did not require that CAs be competed, it specified that competition be encouraged. However, despite this provision of the FGCA Act and ORD Headquarter and ERL-A policies that competing CAs helps assure the best research available, ERL-A awarded only about one third of its CAs competitively.

Of the 27 active CAs at ERL-A in July 1992, 10 were procured competitively and 17 (63 percent) were noncompetitive. Ten of the 17 noncompetitive CA awards (59 percent) were just under the $250,000 EPA cost limit necessary to avoid Headquarters approval of a noncompetitive award. For example, three awards to Clemson University at $249,000 to $250,000 each (total $749,850) had project start dates within about a two week period in 1991. The dollar value for the competitive CAs was approximately $4.2 million, while the noncompetitive CAs were over twice that at $10 million - over 70 percent of current CA funding. The laboratory's two largest CAs, the University of Georgia and the University of New Hampshire, were awarded noncompetitively. The University of New Hampshire CA was awarded by ORD Headquarters. Many of the extramural funds available for award went to institutions or individuals to which ERL-A managers or scientists had a past or current association, leading to the appearance of favoritism.

Information was requested and provided by ERL-A on the proposed CA funding packages sent to Washington for approval at the end of FY 1992. We found that 11 of the 16 new proposed CAs (69 percent) were noncompetitive. After our audit fieldwork was completed and apparently as a result of IG concerns, ORD has informed us that of the 9 CAs actually awarded to date, 7 of them

were competitive. The ERL-A lab director has informed us that 14 of the planned 18 new CAs for FY 93 are or will be competitive.

Competitive Versus Noncompetitive Awards



	1991	1992	1993	Total 91-93
Noncompete	$6.39	$0.265	$4.9	$11.56
Compete	$0.949	$0	$1.1	$2.05

Fiscal Years

Proposed Awards Shown for 1993.

The chart at right shows the dominance of noncompetitive awards for 1991 and 1992 and the proposed awards for 1993. The value of the 5 proposed, competitively awarded CAs was only $1.1 million versus almost $4.9 million (81.7 percent of proposed CA funding) for the noncompetitive CA proposals. The new proposed noncompetitive CAs included one for $3 million with Georgia Tech which GAD Headquarters subsequently disapproved. EPA's OGC concluded in its review of the proposed Georgia Tech CA, "assistance was not the appropriate funding mechanism to use since the proposed work appears to primarily benefit EPA."

Appearance of Favoritism in Noncompetitive Awards

Many of the ERL-A's noncompetitive CA awards gave at least the appearance of favoritism. ERL-A has awarded noncompetitive CAs to former ERL-A employees, former UGA employees who worked at ERL-A, and universities with which ERL-A employees have close ties (former employers, alma maters). In at least three of these cases (Mansoura, Menoufia, and Montana State), critical reviews of the noncompetitive CA proposal were excluded from the decision memorandum and/or the funding package documents.

Relationships between cooperators and ORD/ERL staff related to our 11 sample CAs and one non-sample CA disclosed during the audit are presented below:

Cooperator Institutions (Type Award) 1/	Relationship With ORD/ERL-A
Alaska (C)	*No Known Relationship.*
British Columbia (NC)	*UBC PI Co-Published With ERL-A Director In 1988.*
Clemson (C)	*Review Panel Chairman - UGA Adjunct Professor. UGA Has Large Subcontract Under Clemson CA.*
Colorado State (C)	*Former Employer - ERL-A Director. (Part-time, 1975-77)* *CSU PI - Former ERL-A Employee (1979 -1981). (GS-7 Graduate Student - part-time)*
Georgia (NC)	*Near-Site University Provides On-Site Support To ERL-A PIs.* *ERL-A Staff On UGA Adjunct Faculty.*
Mansoura (NC)	*Mansoura PI - Former On-Site Cooperator Under UGA CA.*
Menoufia (NC)	*Menoufia PI - Former On-Site Cooperator Under UGA CA.*
Montana State (NC)	*Former Employer - ERL-A Director.*
New Hampshire (NC)	*Alma Mater - ERL-A Director. (Awarded by ORD Headquarters)*
Rhode Island (C)	*Near-Site University For Narragansett ERL-N.*
Marine Biology (C)	*No Known Relationship.*
Purdue 2/ (NC)	*Purdue PI - Former ERL-A Employee.*

1/ NC = Noncompetitive Award. 2/ Nonsample CA.
C = Competitive Award.

The award of the CAs to Mansoura and Menoufia Universities in Egypt is an illustration of both how ERL-A improperly used noncompetitive CA awards and the problems with the proposal review process discussed in this chapter. The prospective PO for the Egyptian CAs provided the laboratory director with a list of potential external reviewers and recommended that the reviewers selected review both proposals since they were so similar. The four external reviewers, whose reviews were included in the ERL-A files, all came from this list.

One of the external reviewers was apparently a close colleague of the PO. They worked together in the same laboratory in 1988. Another reviewer that the PO recommended was also a colleague. During June and July 1989, when reviews of the Egyptian proposals were being requested, this reviewer and the PO were working together to arrange an IAG between ERL-A and the Air Force. When the IAG was approved, the external reviewer became the Air Force PO. Unfortunately, the Air Force reviewer was on vacation when the Egyptian proposals reached his office and his supervisor reviewed the proposals instead and recommended that they not be funded. This was the only review performed by an external reviewer not personally selected by the prospective ERL-A PO. One other external reviewer also recommended that the CAs not be funded in their present form.

However, only the two external reviews with positive comments were included in the funding package and cited in the decision memorandums for the CA awards. An external review which questioned whether the fieldwork should be done in Egypt and another review which recommended that the proposed work not be funded in its present form were not included. Instead, the decision memorandum stated, "There were no contrary reviews."

Two reasons given in the decision memorandum to justify the noncompetitive awards were that: (1) Egypt offers an ideal environment for the field studies due the widespread and sometimes poorly controlled use of pesticides in the country, and (2) both PIs had received training at ERL-A and had expertise in fate processes of organic pollutants. However, the appropriateness of the Egyptian fieldwork location and the expertise/experience of the PIs were both questioned by external reviewers.

We found other examples of potential favoritism in noncompetitive CA awards including the CA award to Montana State University previously discussed in this chapter. Because of the increased vulnerability for abuse, ERL-A managers should exercise stringent controls over noncompetitive CA awards to ensure fair and

equitable treatment and effective use of Agency resources. The justifications for noncompetitive awards in decision memorandums should comply with ORD guidance and special efforts should be made to assure that CAs are reviewed by scientists who are both knowledgeable of the planned research and without close ties to the prospective PO or other ERL-A staff. In cases where the applicant has close ties to ERL-A, consideration should be given to awarding the CA competitively to avoid the appearance of favoritism.

Large Noncompetitive CA Awarded to UGA

ERL-A awarded the $5.2 million UGA CA noncompetitively, avoiding the contract procurement process and ensuring that the laboratory would continue to have UGA on-site support through the CA as previously discussed. This CA was awarded noncompetitively despite the reservations of the OEPER Director and despite external reviewers' comments concerning the difficulty of reviewing the proposal due to its great diversity and size. As a result of these problems, the CA was scheduled to be terminated in March 1993 instead of October 1994 as specified in the CA and the work is planned to be re-competed as at least three separate CAs. However, documentation in ERL-A files indicated that the laboratory anticipated that UGA would win at least one of the awards which raised questions about how fair and open this competition will be.

The decision memorandum for the September 1991 UGA CA stated four primary reasons for a noncompetitive award: (1) the proximity of the UGA and the complementary nature of UGA's and ERL-A's expertise and interests, (2) the immediate need for technical information for certain program offices and ERL-A's responsibility to provide technical assistance to Regions and States, (3) many of the ideas in the proposal are original with UGA personnel, and (4) close ties with UGA will enable ERL-A to capitalize on the University's unique expertise.

Although one justification for noncompetitive award in the decision memorandum referred to UGA's unique expertise, one subproject's sole-source justification was based on an ERL-A PI's previous research in the area. In addition, the decision memorandum stated that many of the ideas in the proposal were original with UGA personnel. However, ERL-A staff either wrote or assisted in writing at least eleven subproject proposals.

A February 1992 memorandum indicated that OEPER's Director was concerned about the extent and degree of integration of the laboratory and the University research activity called for in the CA's Research Plan. According to the OEPER Director, "The

Research Plan reads as if the University is proposing an extension to the Laboratory itself." However, he conditionally approved and funded the Research Plan for the UGA CA because time did not allow competition to take place without projects and employees being terminated.

Although the OEPER Director initially believed that a peer review would sort out the problems with the CA, the December 1991 Research Plan apparently changed his mind. He questioned "the degree of independence we must observe with respect to on-site cooperative agreement research." The OEPER Director decided to fund the UGA CA only through March 1993 with no new projects to be started during the interim. During this period the laboratory is to develop requests for pre-proposals (RFPs) for the research areas covered in the current UGA CA.

ERL-A file documentation, dated May 1992, outlined guidelines for the UGA recompete and indicated there would be four RFPs.

> Assume UGA may bid on all 4 RFPs, but desire that they win #1, which may carry at least 1/3 of the budget. SPARC should cinch UGA for #1 [emphasis added]. This #1 should be managed thru (the UGA Program Manager's) office. Other Universities should win enough of 2, 3 and 4 to assure that UGA is reduced by the required 39% from FY '91.

The quote above shows that it was ERL-A's intention to manipulate the recompete of the UGA CA. The plan to include the SPARC (SPARC Performs Automated Reasoning in Chemistry) project in RFP #1, which will have the largest budget, to "cinch" it for UGA suggests that the climate of evasion and circumvention of statutes and regulations at ERL-A remains unchanged. A change from a noncompetitive award to a biased competitive award is not proper corrective action.

ORD Awarded the University of New Hampshire (UNH) a Noncompetitive CA Without Required Justification

Despite total costs of almost $1 million, the UNH CA was awarded noncompetitively in 1989 by ORD Headquarters without justifications documented in the original decision memorandums as required by ORD procedures. PO responsibilities for this CA were transferred to an ERL-A PO in October 1990. A supplemental CA award of almost $900,000 was made in September 1991, also noncompetitively. The decision memorandum justified this noncompetitive CA supplement because: (1) UNH is already working on a similar deforestation project for NASA in Brazil, and (2) the UNH PI was selected by peers to chair the GAIM core project.

Although the PO for the CA was at ERL-A, the supplemental award to increase the CA scope of work was approved by ORD Headquarters.

Reviewers were very critical of the original UNH proposal. Some of the reviewers expressed concerns about the breadth of the proposal given the staff and resources at UNH and suggested reducing the scope of the research. The PO believes that the negative comments by the staff at another EPA laboratory were probably a reflection of the fact that they wanted to do similar work. When discussing the negative reviews of the proposal, the PO mentioned that one of the reviewers was a contractor and probably should not have been commenting on the proposal.

ERL-A incorrectly categorized the original UNH CA as competitive, which distorted the ratio of competitive to noncompetitive CAs for the laboratory. The original decision memorandum did not document any competition and the PO stated that probably meant there was none. The ERL-A extramural coordinator called the UNH PI who informed her that the award had been competitive. However, an OEPER staff member subsequently confirmed on August 31, 1992, that he had researched the original CA files and concluded that the CA had not been competitive.

By awarding a total $2 million noncompetitive CA to UNH, ORD Headquarters disregarded its own procedures requiring justification of noncompetitive awards. The justification procedures were instituted by ORD to ensure that CA awards were made "to the best institutions to support the most productive research." We also believe that it was inappropriate for contractor employees to review CA proposals, especially where there was potential competition between a contractor and a cooperator.

Lack of Controls Over the Proposal Review Process - Previously Identified Problems Remain Uncorrected.

ORD's laboratories rely heavily on the proposal review process to ensure the quality of research proposed by CA applicants for both noncompetitive and competitive CAs. However, the process lacked sufficient controls to ensure that ORD's goal of awarding CAs to the best institutions to support the most productive research was obtained. The widespread potential COIs of review panel members and other irregularities in the proposal review process increased the potential for favoritism in the award of both competitive and noncompetitive CAs. The pervasive influence of the prospective PO over the review process also represented a significant control weakness.

Audits by the General Accounting Office (GAO) in October 1980[7] and EPA's OIG in March 1983[8] both reported that prospective POs had undue control of the grant/CA review and selection process. The OIG audit recommended that the Acting AA for Research and Development fully enforce existing CA procedures or develop new procedures to ensure that POs are removed from selecting external reviewers, preparing in-house reviews, and preparing decision memorandums covering CA applications with which they have been involved. ORD senior management responded that they agreed with these recommendations and had either already taken action or planned to fully implement them.

Despite the ORD assurances that corrective action would be taken, however, the ERL-A lab director brought to our attention that the ORD Policies and Procedures Manual, issued in 1986, states that the prospective PO will prepare the decision memorandum. As a result, our review found that ERL-A's prospective CA POs, on a routine basis, still recommended review panel members, performed in-house reviews for competitive CAs, and sometimes wrote decision memorandums for signature by a branch chief. In addition, one of the controls established by ORD to correct this problem was consistently ignored by ERL-A. Subsequent to the 1983 OIG audit, ORD required that one member on each review panel for competitive CA awards be from ORD Headquarters. None of the review panels for the 5 competitive ERL-A CAs in our sample included a representative from ORD.

The existence of these deficiencies 9 years after the prior OIG audit presents substantial evidence that ORD has provided little oversight of the CA award process, especially considering that ORD Headquarters should be fully aware when laboratories continue to award CAs year after year and no ORD personnel have been selected for applicable review panels.

Many examples of continuing problems and control weaknesses in the CA proposal review process were previously discussed in this chapter.

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[7] GAO report "Promising Changes Improve EPA's Extramural Research; More Changes Needed", Audit No. GAO/CED-81-6, issued October 1980.

[8] OIG audit "Review of the Office of Research and Development's Extramural Research Activities", Audit No. E1gB2-11-0019-30828, issued March 31, 1983.

Potential Conflicts of Interest of Review Panel Members

We identified potential review panel COIs related to the award of 10 of the 11 CAs in our sample. According to ERL-A staff this was the result of the small number of knowledgeable experts available to review research proposals. Review panel members are recommended by the prospective POs and although both ORD and laboratory guidance require reviewers from ORD Headquarters on the review panels for competitive CA awards, as previously stated, none of the panels in our CA sample complied with this requirement. In referring to CA proposal reviews, an ORD manager stated, "We don't want it done by the good old boy network which tends to be the process."

Examples of potential COIs we identified were:

- Panel members were from the same schools as the researchers submitting pre-proposals/proposals or their collaborators (i.e., Clemson, CSU, Marine Biology Laboratory, URI).

- An ERL-A scientist, who served as the internal reviewer for one CA award and the panel chairman on another award, was on the adjunct faculty of UGA who had large subcontracts with both institutions under the CA proposals reviewed. He recused himself from one review, but not from the other although the same subcontract arrangement was in both proposals (i.e., Alaska, Clemson).

- Panel members had collaborated and/or published with the prospective PI, collaborator, or prospective PO (i.e. UBC, MBL, Mansoura/Menoufia).

- A reviewer who was the PI on another ERL-A CA and had his travel to a symposium in the Peoples' Republic of China paid for under the UBC CA (i.e., UGA).

- A reviewer who was recently a competitor on another ERL-A CA (i.e., Clemson).

In these cases, the COIs may not be directly with the institution who is awarded the CA, but these conflicts still taint the process.

Weak, Vague Conflict of Interest Statement

The COI statement being used by ERL-A review panels at the beginning of our audit fieldwork did not clearly define the types of relationships that could give the appearance of a COI.

Instead, the statement left the definition of what constituted a COI or the appearance of a COI to the discretion of the reviewer. It stated:

> I hereby certify that to the best of my knowledge and belief, no conflict of interest exists which may diminish my capacity to provide an impartial, technically sound, objective review of the subject proposal or otherwise result in a biased opinion or unfair competitive advantage.

After being informed by us of potential review panel COIs, the laboratory director ordered a revision of the COI statements signed by reviewers. She used as a model an old COI statement we found in ERL-A files which was more explicit about what kinds of relationships constitute a potential COI. While this is an improvement over the previous COI statement, we believe that ERL-A scientists need to be made more aware of the negative implications of this tight-knit web of reviewers, proposers, recipients, and ERL-A staff that would be both evident and questionable to any outside observer.

RECOMMENDATIONS - COMPETITION IN CA AWARDS

Recommendations to the Assistant Administrator, Research and Development

We recommend that the Assistant Administrator for Research and Development ensure significant improvements are made in assistance agreement awards that increase competition and assure a fair and equitable proposal review process. Specifically, the Assistant Administrator should require the:

Director, Office of Environmental Processes and Effects Research to:

- Ensure that ORD personnel are included on ERL-A proposal review panels for competitive CAs as required by ORD policies and procedures.

- Provide training and/or guidance to ORD and ERL-A managers and POs, in collaboration with GAD, to enhance ORD awareness of potential COIs or the appearance of COIs in the review and award of assistance agreements.

- Comply with prior audit recommendations to fully enforce existing CA procedures or develop new procedures to ensure that POs or prospective POs are removed from selecting external

reviewers, preparing in-house reviews, and preparing decision memorandums covering CA applications.

- Evaluate the justifications for ERL-A noncompetitive CA awards to ensure that they comply with ORD guidance, especially repetitive awards at or near the threshold for ORD review and approval.

- Establish for ERL-A and other ORD laboratories, stringent controls over noncompetitive awards to assure fair and equitable awards, eliminate the appearance of favoritism, and require the effective use of Agency resources.

- Emphasize to ERL-A managers ORD's goal to compete CA awards.

- Instruct ERL-A managers that favoritism in noncompetitive CA awards cannot be tolerated without clear, sound, and legal justifications for such awards.

- Require complete and accurate justifications in CA decision memorandums for noncompetitive awards including those awarded by ORD Headquarters. Review decision memorandums for all noncompetitive awards by ERL-A for inaccurate and/or unsupported justifications.

- Closely review any follow-on competitive CA awards to UGA to ensure competition procedures were unbiased and equitable.

- Require the ERL-A director to ensure that CA proposals are reviewed by scientists who are knowledgeable about the projects but who have no close ties with ERL-A or the prospective PO. If CA applicant has close ties to ERL-A, require competitive award procedures.

- Review adequacy of ORD corrective action on the prior OIG audit findings related to CA review panel COIs and the influence of the prospective PO over panel selections and panel recommendations. Ensure proper implementation of prior audit corrective actions by ORD laboratories.

MISMANAGEMENT OF COOPERATIVE AGREEMENTS

CAs were not properly managed after award to ensure compliance with agreement terms or that Agency resources were being effectively used and safeguarded by CA recipients. ERL-A either did not have or did not implement procedures to determine compliance for extramural agreements or the propriety of fund expenditures by CA recipients. Also, there was an overall lack of documentation of ERL-A's CA post-award management and oversight. In addition, a disconnect existed between the technical monitoring that was done by ERL-A POs and GAD's financial management responsibilities. As a result, ERL-A did not adequately oversee the financial status or technical progress of its CA research.

Background

The Federal Managers' Financial Integrity Act of 1982 requires that internal accounting and administrative controls be established to provide reasonable assurances that: (1) obligations and costs are in compliance with applicable law, (2) funds, property, and other assets are safeguarded against waste, loss, unauthorized use, or misappropriation, and (3) revenues and expenditures applicable to agency operations are properly recorded and accounted for to permit the preparation of accounts and reliable financial and statistical reports and to maintain accountability over the assets.

Chapter 44 of EPA's Assistance Administration Manual, entitled "Project Officer Responsibilities," advises POs that they are the recipients' main point of contact with EPA. The Chapter states that "The Project Officer has the basic charge to manage and monitor the performance of work under the terms of the assistance agreement." It also states that the PO "must monitor technical aspects of work performed and ensure that the recipient complies with the terms of the assistance agreement." The PO must provide "documentation to the Assistance Administration Unit of correspondence, meetings, phone calls, etc., that have a significant bearing on the performance of either the project or the recipient or its contractors."

Disconnect Between Technical Monitoring and Financial Management Responsibilities

The disconnect between the technical monitoring responsibilities of the CA POs and the financial management responsibilities of GAD resulted in a lack of assurances that federal funds, property and other assets were protected against fraud, waste and abuse. GAD received financial information (Financial Status Reports -

FSRs) related to CA projects which was not provided to POs, and POs should have had knowledge of technical progress on CAs which was not provided to GAD. As a result, neither GAD nor ERL-A POs had complete information on both the technical progress and expenditures under cooperative agreements that would be necessary for proper control and management of recipient activities. When questioned about oversight of expenditures under CAs, both GAD and ERL-A staff talked about trusting the universities. We do not believe "trust" fulfills the requirements of the FMFIA or represents an effective internal control over the millions of dollars in CAs awarded and managed by the ERL-A.

Inadequate Review Of Performance And Expenditures

Problems with ERL-A's management of CAs were similar to those reported in OIG's report on EPA's Management of Computer Sciences Corporation Contract (Audit No. E1NME1-04-0169-2100295), issued in March 1992, i.e., lack of sufficient oversight of recipients' performance, inadequate financial monitoring, inadequate guidance to POs, and insufficient training of POs. Because assistance agreements are not subject to the same strict FAR requirements as contracts, there are fewer controls over their award and management. As a result, CA POs have fewer tools to manage their agreements and we found that they had chosen not to use even these limited tools. POs were not receiving progress reports, FSRs and/or QA plans as required under their CAs. Also, POs were not making frequent site visits, as recommended. When they did make site visits, they usually did not perform QA audits or write up trip reports to document the results of their visits. As a result, ERL-A and GAD had no assurances that recipients met the terms of their agreements or that government assets were safeguarded from fraud, waste, and abuse.

ERL-A POs Did Not Review Financial Status Reports

GAD staff received FSRs from the CA recipients, but did not forward these to ERL-A POs, as required by the EPA's Assistance Administration Manual. POs had little or no knowledge of expenditures under their CAs because they did not request required progress reports from university PIs, which should have contained information on expenditures. Also, GAD staff did not know the progress made under CAs because they did not receive progress reports and because there was little, if any, contact between GAD specialists and the POs at ERL-A.

In 40 CFR 30.505 CA recipients are required to submit FSRs within 90 days after each budget period and within 90 days after the end of project completion or termination. According to Chapter 44, Section 5c of the Assistance Administration Manual (December

1984), the FSR must be reviewed by the Assistance Administration Unit (AAU) to assure that the recipient uses the funds properly. A copy should be sent to the PO who should then review it in relation to the recipient's progress reports and notify the AAU if there are any exceptions.

The FSRs received by GAD are only required at the end of each budget period. Since the first budget period of a CA is normally two years long, this means that the Agency has no expenditure information during the first two years of the projects. When questioned about the adequacy of this form of financial management oversight, a GAD manager replied, "The grants process is a public-trust type of relationship. We rely on the grantees to follow the regulations." GAD managers also stated that POs should make sure that the CA funds are being spent as intended. However, we found that ERL-A POs were not monitoring expenditures under CAs and the POs generally denied any responsibility for financial oversight. Some POs had little, if any, knowledge, of expenditures made under their CAs.

Although special conditions in the UGA CA required that the UGA Project Manager submit to the ERL-A PO quarterly FSRs for each subproject, the ERL-A PO (laboratory director) said that she did not receive FSRs. She stated, "I think we should get it. I think it's dumb we don't get them. We don't get them for IAGs either." She said she feels this is unfortunate because they cannot really monitor fund uses because they do not see actual expenditures. However, the PO added, "I trust the University."

Progress Reports Not Used To Monitor Agreements

All eleven of the CAs reviewed required progress reports, usually quarterly, as one of the special conditions. However, most of the ERL-A POs were not requiring or receiving them. Several of the POs stated that requiring progress reports might interfere with the progress of the research. Others spoke of receiving oral progress reports, but we found no records of communication documenting these in CA or PO files. According to a standard special condition included in CAs, the progress reports should be used by POs to monitor status, progress, problems with the project, changes in key personnel, and expenditures.

OMB Circular A-110, issued July 1976, provides that performance reports shall not be required more frequently than quarterly or less frequently than annually. Chapter 44, Section 5d, of EPA's Assistance Administration Manual advises POs to insist on high quality progress reports as well as their timely submission. Chapter 44 also states that progress reports can alert POs in advance to problems the recipient may have in meeting schedules

for completing certain work elements, whether the overall approach should be modified, and whether a deviation is needed.

Under the UGA CA, quarterly progress reports were required to be submitted to the ERL-A PO by subproject as one of the special conditions of the CA; however, no progress reports were found at ERL-A or UGA during the audit. The ERL-A PO stated that quarterly progress reports were not essential and that they tended to slow down the research progress. The UGA Project Manager stated that quarterly progress reports would really be counter-productive. In addition, most UGA CA sub-POs told us that they did not receive progress reports. However, some sub-POs stated that they received oral progress reports. As a paradox, however, some of the ERL-A on-site subprojects were providing progress reports to UGA because ERL-A was actually directing the research.

An example of how failure to require quarterly progress reports can negatively impact the management of a CA occurred under the UGA CA when there was a discrepancy found concerning tasks UGA would perform under a $30,000 subproject. According to the PO (laboratory director), UGA's task was to develop a curriculum for an early childhood environmental education program. However, both the ERL-A sub-PO and the UGA PI told us that the purpose of the subproject was for UGA to develop an operating plan for the ERL-A's planned day-care center. When we informed the laboratory director of the discrepancy between her statements and those of the sub-PO and UGA PI, she stated, "I'm surprised to hear that." If the PO had been receiving the required progress reports, she would have known of the apparent misunderstanding over UGA's subproject tasks.

When the PO for the Montana State University (MSU) CA attempted to get the required progress reports from the MSU PI, he was chastised by the laboratory director for making this request. He referred to this as getting his hand "spanked." The PO was told that it was not necessary to document things like this because it could all be handled over the phone. The PO said that he was told that one of the special conditions of the CA stated that progress reports could be oral. Although in the initial funding package request one of the special conditions included oral progress reports, the special conditions in the actual award of the CA did not include this statement.

Quality Assurance Not An Integral Part Of CA Data Collection Activities

Although ERL-A included QA audits of CAs in the list of internal control reviews they had performed between 1989 and 1991, we

found no evidence of QA audits in CA files. In addition, the ERL-A QA Officer had recommended that QA plans be submitted prior to the start of any significant fieldwork or laboratory data collection activities for four large Global Change Program CAs we reviewed. However, cooperators had not submitted the required QA plans prior to audit fieldwork. Both ERL-A and ORD officials agreed that lack of QA procedures was a problem. The ERL-A QA Officer stated that there was no way for ERL-A to monitor CA QA plans because of insufficient travel funds for field trips and an insufficient number of POs with available time to make site visits. As a result, there is a lack of assurance that the data being collected under CAs to develop national environmental policy is reliable or that all acquired data collected under these CAs are suitable for the user's intended purpose.

The responsibility for performance of QA activities was assigned to ERL-A staff. However, because of increased work loads or other priorities, ERL-A viewed QA as "collateral" duties and delegated them to contractor employees. QA reviews of CA proposals found in CA files were performed by the TAI site manager, a contractor. The TAI site manager served as the laboratory's QA Officer and performed QA reviews of extramural agreements as recently as May 1992. OIG concluded in our ERL-A survey report[9] that QA was an inherently governmental function that should not be performed by a contractor employee.

ERL-A's QA Officer/Director of Research stated that he did not feel uncomfortable with the current QA of CA field studies because the present ERL-A level of CA funding was so small. However, he stated that five years from now the Agency would be putting $200 million in CAs and IAGs and that the numbers/data generated would substantially impact policy decisions. The increased use of off-site CAs will result in an extra burden on QA/QC procedures. The QA Officer stated that QA was not one of his major functions and that he did not have "the time, the resources, or the intellect" to do QA for all extramural projects. He added that the lack of resources to adequately perform QA functions makes the Agency "vulnerable." In lieu of required QA plans and audits, the QA Officer relied upon the ability and experience of ERL-A's POs, site visits by these POs, and the fact that publications generated by the CA research go through the peer review process. They also had confidence that the universities had good QA procedures.

[9] ORD Environmental Research Laboratory, Athens, Georgia, E1XMG2-04-0102-3400007, November 30, 1992.

ERL-A POs appeared to be unconcerned about the lack of QA plans. One of the POs stated that just having a well-documented QA plan was no guarantee that proper procedures are followed. He felt that a better guarantee was the experience and good reputation of the researcher. He added that in his opinion the peer review process resulted in good controls. Another PO stated that the quality of the science was assured through journal articles, books, and other publications and databases.

When we informed the laboratory director about our concerns pertaining to the lack of QA documentation, the laboratory director stated, "I'm worried about that myself." When questioned about the accuracy of data without a QA plan, the laboratory director stated, "If they (universities) were totally lying and were clever about it, it would be hard to detect."

Based on our preliminary findings, the laboratory director took some corrective actions during the audit with respect to QA. The laboratory director stated that ERL-A had received additional end of the year travel dollars and that she sent all of the POs out to the various universities for site visits. She added that they would be performing QA audits during these visits. Laboratory Operating Procedure No. 5330-8 entitled, "Site Visits," written in September 1992, established policies and procedures for site visits made by project officers. One of the items listed to be done during the site visits is a QA audit.

Infrequent Site Visits Limited Effective Monitoring

As previously stated, ERL-A POs did not make frequent site visits to cooperator locations primarily due to the lack of travel funds. This same condition was reported in the 1983 OIG audit report and continues to be a problem nine years later. When site visits were made, POs usually did not prepare the required trip reports and never forwarded copies to GAD for inclusion in the official files, as required by the Assistance Administration Manual, Chapter 44. When questioned about the lack of trip reports in the official files, GAD managers stated that there was no requirement for trip reports. They were apparently unaware of the requirements of their Assistance Administration Manual.

OMB Circular A-110 (July 1976) states that the Federal sponsoring agency shall make site visits as frequently as practicable to review program accomplishments and management control systems and to provide such technical assistance as may be required. EPA's Assistance Administration Manual, Chapter 44, Section 5b, also emphasized the use of site visits as a tool to monitor assistance agreements. The Manual states that site visits should be used to monitor: (1) actual versus scheduled performance/accomplishments,

(2) condition of equipment/property used on, or purchased for, the project, (3) resources (personnel, equipment, facilities, etc.) charged to the project are actually used on the project, and (4) conditions that might adversely affect EPA's interest, i.e., change in the recipient's financial status, personnel problems, noncompliance with labor/civil rights laws, and/or over-extension of the facilities.

The Assistance Administration Manual, Chapter 44, further advises POs to provide constructive advice/criticism during site visits, but not to attempt to supervise either the project or the recipient's employees. In addition, POs are to prepare a trip report that highlights their findings and evaluates the quality of work being performed. Copies of the trip reports are to be provided to the Assistance Administration Unit (AAU) for inclusion in the official file, as well as documentation of any follow up actions that are taken.

Site visits are probably the POs' best tool to monitor performance and expenditures under CAs. The failure of ORD/ERL-A to provide adequate travel funds to perform site visits and the failure of the POs to effectively use these visits, when travel funds were available, weakens ERL-A's ability to assure recipients' compliance with CA terms and to ensure that federal assets are safeguarded.

Lack Of Documentation Of CA Management/Oversight In ERL-A Files

A general lack of documentation for the management/oversight of ERL-A cooperative agreements existed at ERL-A; especially for the UGA CA. ERL-A POs normally did not receive progress reports as required. When they did, they were usually oral not written. In addition, although most POs stated they telephoned PIs, there were almost no records of conversations, almost no trip reports, and very few fax documents. This lack of documentation left no audit trail, but more importantly, it left no record of either the decision-making process or of ERL-A's monitoring of activities under the extramural agreements. Lack of documentation in ERL-A CA files and ERL-A's improper records retention policy is also addressed in Chapter 6 of this report.

The deficiencies in ERL-A files were especially evident in the case of UGA, the only university where we interviewed cooperator employees and reviewed cooperator files. From these cooperator interviews and file reviews we received information that we were not given by ERL-A staff and found documentation that was not included in ERL-A files.

The ERL-A PO, most of the sub-POs, and the UGA Project Manager stated that their contacts pertaining to the UGA CA had been verbal. Both ERL-A and UGA personnel explained that the lack of documentation occurred as a result of the long-term relationship between ERL-A and UGA and because UGA was a local university. The ERL-A PO and the UGA Project Manager both stated that they had no written correspondence with each other pertaining to the CA; however, correspondence between the ERL-A PO and UGA Project Manager was later found in other files.

RECOMMENDATIONS - MANAGEMENT OF CAs

Recommendations to the Assistant Administrator, Research and Development

We recommend that the Assistant Administrator for Research and Development ensure significant improvements are made in assistance agreement management to assure compliance with agreement terms and that Agency resources are being effectively used and safeguarded against waste and abuse. Specifically, we recommend the Assistant Administrator require the:

Director, Office of Environmental Processes and Effects Research to:

- Review the adequacy of corrective action taken on the prior 1983 OIG audit finding related to infrequent and inadequate PO site visits and determine whether ORD laboratories properly implemented ORD's actions in this area.

Director, Environmental Research Laboratory - Athens to:

- Require that CA POs obtain quarterly progress reports from cooperators, in compliance with CA special conditions and Agency policies, to assist them in monitoring the status, progress, problems, and expenditures under CAs. CA special conditions should require written progress reports to document laboratory review and oversight of cooperator activities.

- Require that CA POs comply with all Lab Operating Procedures and Assistance Administration Manual requirements in the management of CAs.

- Require frequent, periodic site visits by CA POs and allocate sufficient travel resources to accomplish this critical control technique.

- Require management review of PO trip reports for CA/IAG site visits and that the reports, in particular, adequately document PO oversight of expenditures under extramural agreements.

- Remind CA POs of their financial management responsibilities as delineated in EPA's Assistance Administration Manual and request that GAD provide FSRs to POs for their use in monitoring cooperator financial transactions.

- Provide CA POs with copies of FSRs from GAD as required by the Assistance Administration Manual and that they review the FSRs and report any discrepancies to GAD.

- Require POs to maintain adequate written records to document their management and oversight of CAs, including but not limited to all ERL-A and recipient correspondence relating to the award, performance, and closeout of assistance agreements.

- Require and ensure that cooperators submit QA plans and that ERL-A staff properly perform QA audits of cooperator projects and document these audits in ERL-A files.

AGENCY RESPONSE AND OIG EVALUATION OF AGENCY COMMENTS

ORD Response

ORD generally agreed with the findings and recommendations presented in Chapter 3. Corrective actions and milestone dates for completion of these actions were sufficient to resolve all but 6 recommendations made to ORD and ERL-A management. Those recommendations that require additional information or changes regarding planned or initiated corrective actions prior to resolution are presented in Appendix I to this report.

GAD Response

GAD disagreed with certain statements in Chapter 3 regarding specific CAs and IAGs questioned. We generally disagreed with GAD's comments.

GAD agreed with our statement regarding the MSU CA that CAs can not be used to train federal employees; however, GAD indicated that an EPA employee on an IPA to a recipient organization is considered an employee of that organization and could be trained under a cooperative agreement if the training were needed to complete the project.

The employee's training under the MSU CA was not needed to complete the project as the GAD response suggests. Rather, the project was conceived in order to provide a Phd for the EPA employee.

In addition, we disagree with GAD's implication that an EPA employee on an IPA is no longer a federal employee and, therefore, can be trained using CA monies. Although an EPA employee's services have been temporarily assigned to a recipient organization, the individual, in our opinion, remains an active federal employee because the federal government still dictates the individual's level of compensation and benefits, not the recipient organization. Also, the employee continues to accrue federal retirement benefits and annual/sick leave, maintains his federal health benefits, and is required to return to the federal government, without submission of an SF-171, upon expiration of the IPA. Therefore, the individual on an IPA retains all the attributes of a federal employee except for the possible sources of funding of his compensation and benefits. In the case of the cited IPA, even MSU's contribution to the individual's salary and benefits under the IPA came from CA funds awarded by ERL-A. Therefore, EPA paid 100 percent of the IPA costs.

In addition, CAs funded from R&D appropriations cannot be used to train federal employees. R&D appropriations and related congressional reports do not authorize federal staff compensation, benefits, travel or training expenditures from R&D funds. Only the S&E appropriation and certain trust funds can be used to fund personnel costs. Therefore, if EPA employees on an IPA are still federal employees, the use of R&D funds under a CA to train these employees may constitute a violation of appropriation law.

GAD also disagreed with our conclusion that the Venezuelan IAG was awarded without proper statutory authority. According to GAD, OGC had rendered an opinion that Section 103 of the Clean Air Act authorized the issuance of IAGs and that with OIA approval, GAD had properly awarded the Venezuelan IAG under policy in effect at that time. However, OGC later ruled that Section 103 did not authorize foreign IAGs and GAD discontinued approving foreign IAGs.

GAD's response concerning the Venezuelan IAG omits critical information. The application form that GAD stated was used for this IAG, indicates the form is for approval of a "foreign grant/contract." In addition, documentation in ERL-A's files indicated that OIA was asked to assist with State Department approval of a cooperative agreement to Venezuela. The IAG

compendium at the time required an OIA exception to award an IAG directly to a foreign organization or government. We found no such exception, only OIA's apparent approval of a foreign CA. In addition, OGC had only rendered an opinion that Section 103 of the Clean Air Act authorized IAGs. OGC never stated that foreign IAGs were authorized. Later OGC clarified that foreign IAGs were not authorized under Section 103 and the IAG compendium was incorrect in allowing an OIA exception to issuance of such IAGs. Therefore, OGC's rulings support our conclusion that statutory authority never existed for the issuance of the Venezuelan IAG.

GAD's complete response to findings presented in Chapter 3 is available upon request.

GAD generally concurred with Chapter 3's recommendations to the GAD director. GAD's response to each recommendation in Chapter 3 and actions needed for resolution of each recommendation are presented in Appendix I.

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CHAPTER 4

ERL-A ABUSED CONTRACTING PROCESS TO RETAIN LONG-TERM CONTRACTORS AND AVOID FULL AND OPEN COMPETITION

In all five on-site support contracts reviewed (maximum value of $31.6 million), ERL-A abused the procurement process to retain favored contractors and their employees and then utilized these same contracts to perform prohibited contracting activities. To obtain desired contracts and related services, ERL-A either avoided or biased the competitive procurement process for all five contracts[1]. Over the last six to seven years, ERL-A avoided competition by using the 8(a) set-aside program to obtain repeated sole-source acquisitions with current contractors. By using the 8(a) non-competitive process, ERL-A prevented: (1) the interruption of on-site contractor services and the loss of contractor staff providing long-term technical/administrative support, and (2) the additional administrative burden required under a competitive procurement. After one incumbent contractor at ERL-A no longer qualified for small business 8(a) status and related sole-source awards, the contract was removed from the 8(a) set-aside program, without adequate justification, to allow the incumbent an opportunity to compete. Then, during the follow-on "full and open" competition, ERL-A biased the procurement in favor of the incumbent. In another 8(a) set-aside procurement, ERL-A split and underestimated procurement requirements and costs to avoid the 8(a) competitive threshold and justify sole-source awards. Further, ERL-A improperly used these on-site contractors to supplement its in-house human resource needs. ERL-A's substantial dependency on on-site contractors, especially long-term contractor employees, to accomplish its mission resulted in less than arms-length relationships between ERL-A and contractor staff, including prohibited personal services and favored treatment toward incumbent contractors, and ERL-A ignoring the benefits that full and open competition brings to the procurement process.

BACKGROUND

History of Growth In Contractor Support

Since 1977, ERL-A has been using on-site contractors to support its mission. Over the years, as ERL-A's research

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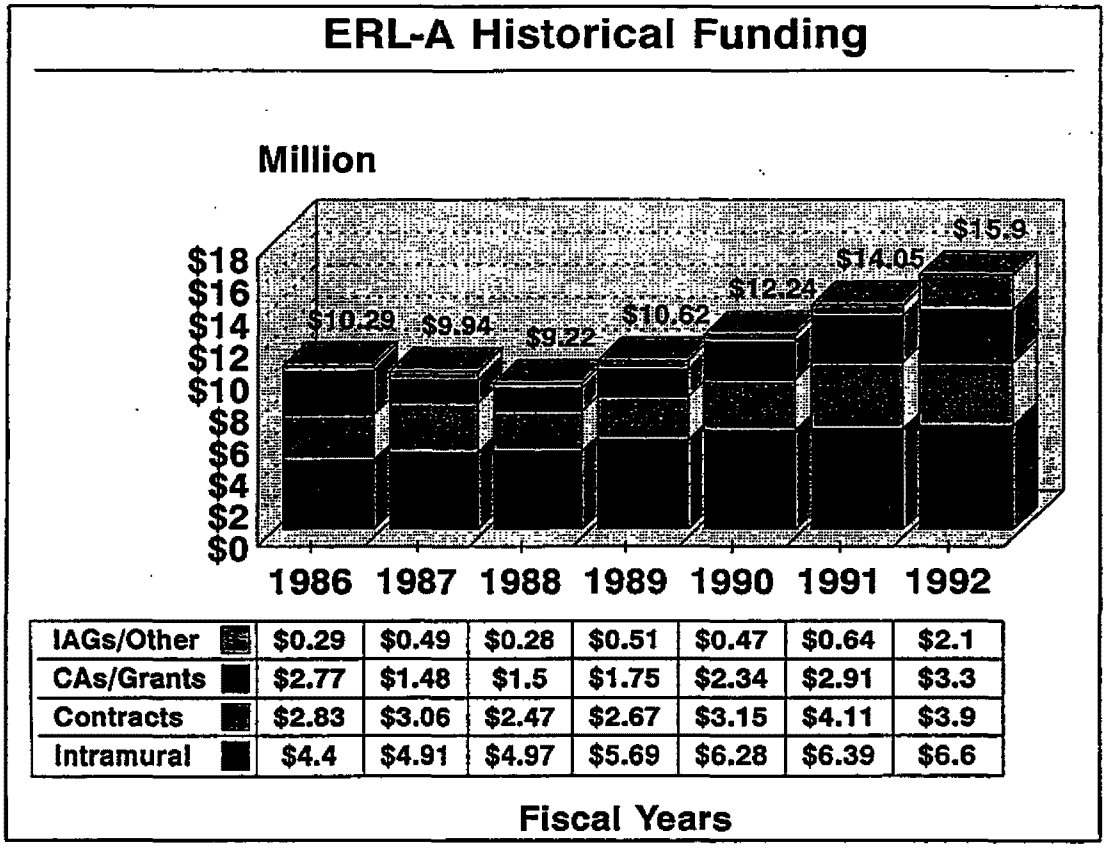
[1] Contracts include the three contracts in our sample which were subjected to indepth review and the limited review of two related predecessor contracts.

responsibilities grew from supporting two to twelve environmental laws, so did its dependency on contractors. However, while the mission grew, its S&E appropriation and FTE ceiling remained fairly stable. Growing needs for additional federal staff, equipment, and travel to support in-house research did not increase in direct proportion to the laboratories increased responsibilities. In contrast, extramural funding available for contracts, CAs, and IAGs steadily increased from $5.9 million in 1986 to $9.3 million in 1992.

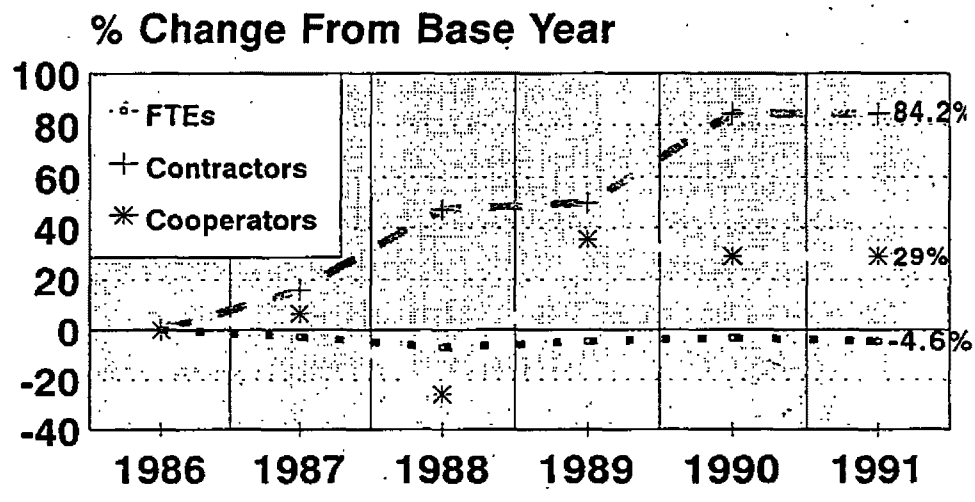


	1986	1987	1988	1989	1990	1991	1992
IAGs/Other	$0.29	$0.49	$0.28	$0.51	$0.47	$0.64	$2.1
CAs/Grants	$2.77	$1.48	$1.5	$1.75	$2.34	$2.91	$3.3
Contracts	$2.83	$3.06	$2.47	$2.67	$3.15	$4.11	$3.9
Intramural	$4.4	$4.91	$4.97	$5.69	$6.28	$6.39	$6.6

With increasing responsibilities and limited in-house resources, ORD and ERL-A, following Agency policy, turned to the private sector to augment its on-site needs for scientific, technical, and administrative support. Strictly imposed federal employment ceilings made on-site contractor support staff critical to the accomplishment of ERL-A research goals. From 1986 to 1991, on-

site contractor and cooperator support grew by 84 percent and 29 percent, respectively, as illustrated in the chart below. On-site extramural support became important in all areas of laboratory operations.

On-Site Staffing Changes/1986 to 1991



FTEs	0	-2.8	-7	-4.6	-3.2	-4.6
Contractors	0	15.8	47.4	50	84.2	84.2
Cooperators	0	6.5	-25.8	35.5	29	29

ATHENS LAB

Base Year = 1986

ERL-A utilized two methods to procure scientific, technical and administrative contract support to augment its on-site resources: (1) 8(a) set-aside program and (2) full, unrestricted competition. However, ERL-A's overwhelming choice for procuring contract assistance was the sole source, 8(a) set-asides.

Small Business Act, Section 8(a) Contracts

The purpose of Section 8(a) under the Small Business Act (15 U.S.C. 637)[2] was to promote the development of small business concerns owned and controlled by socially and economically disadvantaged individuals so that such concerns can compete on an equal basis in the American economy.

The Small Business Administration (SBA) is responsible for certifying companies as eligible 8(a) status and for monitoring contractors certified under the 8(a) program. The 8(a) program assists small and disadvantaged businesses in building the needed experience where they can successfully compete against other non-targeted businesses. Small disadvantaged businesses retain their 8(a) status for up to nine years or until they attain a certain dollar revenue threshold, whereupon they are required to graduate from the program to full and open competition for government and private sector contracts.

EPA's 8(a) Set Aside Contract Program

Under the Small Business Act, EPA and other Federal agencies are required to establish and conduct programs to increase small business enterprise participation in government procurements. Heads of federal contracting activities are responsible for effectively implementing the Small Disadvantaged Business Utilization (SDBU) Programs within their agency's activities, including achieving program goals. In 1991, EPA's goal was to award eight percent of its contracts in support of small and disadvantaged business. EPA's Office of SDBU is responsible for providing guidance and assistance to EPA contracting and program offices concerning Section 8(a) contracting.

According to the EPA Project Officer's Handbook - Chapter 3, Section 3.106-8(c), the PO has the primary responsibility for identifying suitable procurements for small business 8(a) set-asides. While the PO may recommend that a requirement be met through a set-aside, the determination to set-aside the procurement rests with the CO. The CO may reserve the entire amount (total set-aside) or a portion (partial set-aside) of a

[2] The Small Business Act was amended November 15, 1988 under the Business Opportunity Development Reform Act of 1988. Referred to in this report as the Small Business Act.

procurement for the exclusive participation of small 8(a) business concerns.

EPA programs electing to contract under an 8(a) set-aside may rely on SBA to provide the names of eligible firms or can propose one of its own. The recommendation of an 8(a) contractor for contract award may be made either by the CO or the PO after appropriate consultation with EPA's SDBU Specialist. If EPA proposes a contractor, SBA advises EPA as to whether the proposed firm is 8(a) approved. Under the 1988 amendments to the Small Business Act, when an agency proposes a specific contractor for an 8(a) procurement, SBA must honor that request. This requirement places a significant amount of responsibility on the requesting agency.[3]

The Project Officer's Handbook - Chapter 3, Section 106-8(c) states that it is EPA's policy not to seek an 8(a) set-aside contract when one or more of four conditions exist. The last of these conditions states:

> ... The contracting office can make a noncompetitive award directly to a small minority business concern, or there is a reasonable probability that an award can be won by such a small minority business concern through normal competitive procedures.

Competition In Contracting Act

The Competition in Contracting Act (CICA) of 1984 (Public Law 98-369) requires that, with certain limited exceptions, an executive agency shall obtain full and open competition in conducting a procurement for property or services. Under the Act, there are seven exceptions which would permit the award of contracts under procedures other than full and open competition. Small and disadvantaged business set-asides were not specifically listed as an exception for awarding sole-source procurements under the CICA. The Act makes specific reference to competition and small and disadvantaged businesses stating:

[3] GAO Report SMALL BUSINESS: Problems in Restructuring SBA's Minority Business Development Program, GAO/RCED-92-68, addresses problems SBA encountered in meeting geographical goals when it must accept contractors recommended by Agencies.

> In fulfilling the statutory requirements relating to small business concerns and socially and economically disadvantaged small business concerns, an executive agency shall use competitive procedures but may restrict a solicitation to allow only such business concerns to compete.

However, FAR 6.302 specifically authorizes the Small Business Act, Section 8(a) program for other than full and open competition in awarding 8(a) contracts. This allowed for sole source, as well as competitive acquisitions, under the 8(a) program.

1988 Amendments to Small Business Act

The 1988 amendments to the Small Business Act,[4] resulted in the revision of FAR 19.805-1 (effective October 1, 1989) to require competition for all 8(a) set-aside procurements if:

> (1) There is a reasonable expectation that at least two eligible and responsible 8(a) firms will submit offers and that award can be made at a fair market price; and
>
> (2) The anticipated award price of the contract, including options, will exceed $5 million for manufacturing acquisitions and $3 million for all others.

ERL-A UTILIZED PROCUREMENTS TO RETAIN FAVORED CONTRACTORS

Over the last six to seven years, ERL-A officials utilized the SBA's Section 8(a) set-aside program to award $16 million in sole-source contracts to long-term on-site contractors and then biased a $16.8 million competitive procurement to retain the favored contractor after the company was no longer eligible for 8(a) sole-source awards. Specifically, ERL-A: (1) exploited its 8(a) sole-source contracting authorities to further on-site resource capabilities under the Technology Applications Incorporated (TAI) contract without competition which included a

[4] Business Opportunity Development Reform Act of 1988, Public Law 100-656, November 15, 1988.

contractor promoted modification that expanded the scope and significantly increased the value of the sole-source contract one day before the contractor's 8(a) eligibility expired; (2) requested, after TAI graduated from the 8(a) program, that the contract no longer be designated as an 8(a) set-aside to allow the incumbent to compete for the business; and (3) then biased the subsequent competitive procurement in favor of TAI. In 8(a) sole-source awards to American Scientific International (AScI), ERL-A intentionally split a request for contract and underestimated the cost of one of the resulting contracts to avoid the $3 million competitive threshold established under the 1988 amendments to the Small Business Act. In our opinion, these actions demonstrated ERL-A's favored treatment of incumbent contractors and its willingness to avoid and, if necessary, to impede competition in order to retain these long-term contractors.

Background

Since 1982, ERL-A awarded four scientific and technical support contracts to TAI and three to AScI, totaling about $31.7 million. Six of these seven contracts, totaling about $16 million, were awarded as 8(a) sole-source contracts. The remaining contract was classified as an "unrestricted competitive" award, valued at $16.9 million, to TAI after TAI's 8(a) eligibility expired.

ERL-A ON-SITE TECHNICAL SUPPORT CONTRACTS SINCE 1982
FOR CONTRACTORS IN OUR SAMPLE

Contractor Contract #	Type	Award Date	Expired	Amount (MPV)	Staff Years
TAI 68-03-3154	*8(a) Sole Source*	*10/01/82*	*09/30/83*	*$332,283*	*8*
TAI [5] 68-03-3198	*8(a) Sole Source*	*10/01/83*	*05/04/86*	*$859,000*	*6*
TAI 68-03-3351	*8(a) Sole Source*	*05/05/86*	*04/30/91*	*$6,564,577[6]*	*31*
TAI 68-C1-0024	*Competitive*	*05/09/91*	*09/30/95*	*$16,833,253*	*53[7]*
AScI 68-03-3551	*8(a) Sole Source*	*09/30/87*	*09/30/90*	*$2,164,193*	*24*
AScI [8] [9] 68-C0-0054	*8(a) Sole Source*	*09/25/90*	*09/30/93*	*$3,291,044*	*26*
AScI 68-C1-0012	*8(a) Sole Source*	*03/21/91*	*09/30/92*	*$2,734,210*	*10*

[5] Originally a 5-year contract (2 base/3 option years) with maximum potential value (MPV) of about $1.89 million. However, last two option years not exercised in order to award follow-on contract 68-03-3351.

[6] Original estimate was $1.2 million for contract 68-03-3351, but modifications increased contract value to over $6.6 million and extended performance period to 5 years.

[7] Estimated contractor staffing level by the fourth option period of the contract.

[8] Last option period not exercised. Contract allowed to lapse on September 30, 1992.

[9] AScI contracts 68-C0-0054 and 68-C1-0012 essentially split the SOW for predecessor contract 68-03-3551 into on-site and near-site contracts with significant increase in staff years from 24 to 36.

As shown above, TAI on-site support has grown from 8 staff years in 1982 to a potential 53 staff years under the current TAI contract. AScI contract staff years increased from 24 in 1990 to 36 in 1991. Over the life of these contracts, ERL-A became increasingly dependent on TAI and AScI to provide on-site support services. This dependence created a virtual contractor monopoly which evolved into a prohibited personal services relationship between ERL-A and its on-site contractors. Contractor employees became immersed into ERL-A's day-to-day operations and were treated like any other federal resource. This prohibited relationship resulted in contractor performance of inherently governmental functions (IGFs) and increased ERL-A's vulnerability as contractor staff became more essential to critical laboratory operations.

ERL-A Initiated Repetitive Sole-Source Contracts To TAI In Lieu of Competition

ERL-A disregarded the overall goals of the Small Business Act and abused its authorities to maintain and further its on-site resource capabilities with a minimum of administrative burden. Between October 1982 and May 1991, ERL-A initiated three 8(a) sole-source contracts to TAI. Under 8(a) sole-source contracts, TAI's presence at the laboratory grew from 6 employees supporting one branch to 31 employees supporting all four branches. Most of this growth occurred under TAI's third sole-source contract (68-03-3351) which was significantly modified both in amount ($3.7 million - 143 percent of original contract estimate) and scope near the end of TAI's 8(a) eligibility. As long as TAI was an 8(a) contractor, ERL-A used the 8(a) umbrella to sanction sole-source procurements. Even after TAI had gained a competitive position and a reasonable probability existed that TAI could win an ERL-A award through normal competitive procedures, ERL-A elected not to compete.

ERL-A's initial support of the 8(a) set-aside program was encouraged by ORD and CMD. The first two contracts awarded to TAI and ERL-A's management of those contracts were in basic compliance with the intent of the Small Business Act. However, as ERL-A responsibilities increased, annual intramural funding and authorized staffing levels remained relatively the same while extramural funding steadily increased. ERL-A's dependency on the extramural funding grew as contractor support extended into all operations of the laboratory. One manager explained that as ERL-A became increasingly dependent on contract support: "Everyone wanted a piece of the [extramural] pie." ERL-A staff fought for

extramural resources as the only available means of task accomplishment.

The four TAI on-site contracts discussed below demonstrate the development of ERL-A's dependency on contractors to augment its intramural resource and FTE deficit. While ERL-A's management of the first two TAI contracts were generally in compliance with the intent of the Small Business Act, they offer a historical perspective on TAI's growth at ERL-A. ERL-A's 1985 reorganization, commensurate with increases in extramural funding and related increases in TAI's contract, was the beginning of ERL-A's dependency and resulting favoritism for the contractor. This was clearly evidenced in ERL-A's procurement and management of the third and fourth TAI contracts.

Contract No. 68-03-3154, Awarded October 1, 1982: TAI's first sole-source 8(a) contract at ERL-A (68-03-3154) was a one-year level-of-effort (LOE) contract. When this contract was awarded, TAI had already been in business approximately 5 years and had contracts with other Federal agencies. The purpose of the ERL-A contract was to support the Biology Branch in chemical and biological analyses for a project called Aquatic Ecosystem Simulator (AEcoS). This initial TAI contract succeeded a contract ERL-A had with Bionetics Corporation[10] and was awarded as part of the Agency's commitment to support small and disadvantaged business.

The original procurement request rationale showed that contract 68-03-3154 was originally intended to be competitively bid and that the period of performance was planned at 36 months. However, a PO file memorandum dated March 23, 1982 documented that Washington had highly recommended the use of an 8(a) firm. The memorandum further documented that all or some of the employees working under the existing Bionetics contract could be hired by the new firm at ERL-A's recommendation. The PO concluded:

> I believe the success of a contract does not depend on the company that operates it but rather on the people who work here under the contract, and we have a large input into the selection of these people [emphasis added].

[10] Bionetics Corporation performed on-site support at ERL-A from March 1980 to September 1982 under contract 68-03-2926.

Since ERL-A would have direct input into the selection of the contractor staff, changing contractors was no longer viewed as much of a problem. The PO also concluded in the March 1982 memorandum that ERL-A would have little risk because if the company did not operate up to ERL-A's expectations, it would be easy to terminate the contract. Another advantage, as described by the PO, was that under the existing statute TAI would remain 8(a) eligible for five years with a possible two-year extension. This would provide ERL-A an opportunity to award repetitive follow-on sole-source procurements to TAI and at the same time eliminate the more "time consuming competitive process."

ERL-A subsequently submitted a request for an 8(a) set-aside with TAI. In a June 1, 1982 letter to CMD, the PO stated that TAI's proposal included the resumes of all but one of the individuals who had been working under the Bionetics contract. However, TAI's proposed cost for the first year was about $100,000 higher than that being paid to Bionetics. ERL-A files documented that on June 29, 1982 the PO petitioned CMD to reconsider and allow the laboratory to compete the on-site procurement. The PO argued that it would be in the "worst interest of the government" to pay a higher cost to contract with an 8(a) contractor considering the Lab's budget constraints. The PO claimed that there were other available firms with much lower overhead and G&A rates and requested that, instead of an 8(a) set-aside with TAI, CMD extend the Bionetics contract into FY 83 to accommodate budget constraints and to allow a competitive follow-on. However, ERL-A apparently agreed to a one-year contract with TAI despite the higher cost. Because the FY 83 cost of the TAI contract exceeded the available resources, ERL-A decreased the scope of the contract to approximate its budgeted resources. The award of this 8(a) sole-source contract to TAI demonstrates an EPA weakness in controlling contractor costs. Although this contract award contributed to EPA's goals for 8(a) contracts, ERL-A actually suffered because it paid a higher cost for the same employees for less work.

Contract No. 68-03-3198, Awarded October 1, 1983: This was TAI's second 8(a) sole-source contract. The PO said that ERL-A retained TAI for the second contract because they were pleased with TAI's work and TAI had been very accommodating to ERL-A. Therefore, on October 1, 1983, TAI was awarded a new five-year contract having a two-year base period and three one-year options. The contract's initial estimated value was $1,889,999. During our review of contract files, no evidence was found that competing this procurement was ever discussed by ERL-A or CMD.

Before the first option on contract 68-03-3198 was exercised, ERL-A went through a reorganization which necessitated an expansion of the contract. Contract support was expanded to the Director's Office, Program Operations Office, and the four research branches. Indirect research support would include graphic services, consulting services, typing services for reports, manuscripts, and setup of symposia, conferences, peer reviews, and meetings. Because of the numerous changes to the contract scope, ERL-A decided not to exercise the contract options under 68-03-3198 and instead awarded a third sole-source contract to TAI with a greatly expanded scope. However, until the new contract could be procured, ERL-A, through CMD, modified 68-03-3198 (modification 11, dated December 11, 1984) to compensate for the expanded scope.

Contract No. 68-03-3351, Awarded May 5, 1986: This contract was TAI's third straight 8(a) sole-source award. ERL-A's procurement proposal to CMD on May 13, 1985 requested a noncompetitive 8(a) contract for the period May 5, 1986 to September 30, 1989 for an estimated cost of $2.6 million. By the expiration of this contract, the value increased through modifications over two and one-half times ($6.55 million) the original $2.6 million estimate, the number of contract employees increased over 100 percent, and the period of performance was extended by 2 years to a 5 year performance period. ERL-A's justification for its third noncompetitive procurement (68-03-3351) was that the contract would be awarded to a firm [TAI] pursuant to Section 8(a) of the Small Business Act. In the proposal, ERL-A attempted to further justify the sole-source procurement as follows:

> The information to be developed or the resources to be provided by the contract are not available in EPA or from other sources. Existing contractual mechanisms are inadequate in scope to address the breadth of support to be secured under the proposed contract [emphasis added].

This justification appeared to fit one of the seven exceptions outlined in the CICA for awarding contracts under procedures other than competitive. Specifically, the Act states that an executive agency may use procedures other than competitive procedures when "the property or services needed by the executive agency are available from only one responsible source and no other type of property or services will satisfy the needs of the executive agency." However, the CICA, requires that two rules be

applied to determine if services are unique and available from only one source.

> (1) ... the property or services shall be considered to be available from only one source if the source has submitted an unsolicited research proposal that demonstrates a unique and innovative concept ... ; and (2) in the case of a follow-on contract for the continued development or production of a major system or highly specialized equipment when it is likely that award to a source other than the original source would result in (i) substantial duplication of cost ... or (ii) unacceptable delays in fulfilling the executive agency's needs ....

In the case of the TAI procurement, neither applied. The work provided for in the TAI contract was not of a unique nature and did not involve the development of major systems or highly specialized equipment which would justify other than a competitive procurement. The work performed by TAI consisted mainly of "bench-level" support for research and development which was available from other sources. In contrast, ERL-A had argued the availability of alternative sources approximately four years earlier when it awarded TAI its first contract. CMD took no exception to ERL-A's procurement proposal and awarded a third 8(a) sole-source contract to TAI.

During this time, the Section 8(a) program provided for both sole-source and competitive procurements. FAR 6.302-5 provided that when procuring under the Small Business Act, Section 8(a) program agencies could use other than full and open competition. This interpretation allowed for sole-source as well as competitive acquisitions under the 8(a) program authority. Since competitive thresholds were not put into the authority until October 1, 1989, ERL-A and CMD had the choice between competition among 8(a) firms, an 8(a) sole-source award, or unrestricted competition. ERL-A's and CMD's request was for a sole-source 8(a) award. According to the Project Officers' Handbook, April 1984 [M-3.106-8(c)(1)], CMD's subsequent approval of a sole-source 8(a) award was contrary to EPA's policy not to seek an 8(a) contract if:

> The contracting office can make a noncompetitive award directly to a small minority business concern [not participating in the 8(a) program], or there is a reasonable probability that an award can be won by such

> a small minority business concern through normal competitive procedures.

Awarding a third 8(a) sole-source procurement to TAI also potentially violated the intent of the CICA which specifically stated:

> In fulfilling the statutory requirements relating to small business concerns and socially and economically disadvantaged small business concerns, an executive agency shall use competitive procedures but may restrict a solicitation to allow only such business concerns to compete.

While a sole-source acquisition could be used, the CICA encouraged competition for small and disadvantaged business and the Small Business Act encouraged the development of firms so they could compete in the American market.

At the time of this third sole-source procurement TAI had acquired a competitive, if not monopolistic, position at ERL-A. TAI had been performing successfully as the on-site contractor for the past two years and its employees were already on-site and familiar with the work being performed. Furthermore, TAI had also gained a competitive edge through the contract modification to 68-03-3198 which expanded its staffing at ERL-A to perform the revised SOW tasks while the follow-on contract was being negotiated. Although awarding 8(a) sole-source contracts was administratively easier and less time-consuming for ERL-A, competing contracts gives the added benefit to the government of controlling costs. TAI had already fully demonstrated its ability to perform and to compete, at a minimum, with other firms participating in the 8(a) program.

It was to ERL-A's advantage to restrict the procurement to TAI because of its desire to retain the contract employees they had developed and to guarantee continuity of services to preclude interruption of mission-critical research. ERL-A's continued efforts to award TAI sole-source contracts increased with its vulnerability to contractor support. There was no evidence in ERL-A or CMD files where competition was ever considered for this contract procurement. ERL-A's award of this sole-source procurement to TAI again avoided competition under the veil of the 8(a) program and continued to demonstrate its favored treatment of the incumbent.

Significant Modifications of Contract 68-03-3351 Circumvented Competition: ERL-A also avoided competition for contract awards when it made two substantial modifications (modifications 7 and 16) to contract 68-03-3351. Each modification's estimated value was over $1 million and resulted in additional services performed by TAI. Both modifications were initiated and promoted by the contractor. Modification 16 significantly extended the scope and period of contract performance just one day before TAI's graduation from the 8(a) program when its eligibility for 8(a) sole-source awards would expire. In our opinion, both modifications represented a substantial change in the size and scope of the contract and further abused the 8(a) program. By the expiration of contract 68-03-3351, its value increased over two and one-half times the original estimate, the number of contract employees increased over 100 percent, additional contractor duties were added, and the period of performance was extended by two years to a five-year performance period.

Modification 7

Modification 7 increased the contract's LOE by 50 percent at an additional cost of $1,287,821. The original LOE initially provided for 16 man-years. Within eight months after contract award, ERL-A was discussing the possibility of modifying the TAI contract. On April 10, 1987 modification 7 was approved to increase the LOE by the addition of eight new staff positions. ERL-A file documentation indicated that the contractor may have initiated and promoted the request to extend and modify the contract. In a letter, dated December 17, 1986, TAI's president wrote to a CMD CO about extending their contract at the Gulf Breeze Laboratory. TAI was scheduled to graduate from the 8(a) program on April 21, 1987 and would be precluded from competing for the follow-on contract at Gulf Breeze. The Gulf Breeze Laboratory and CMD had elected to keep the this procurement as an 8(a) set-aside. TAI's president wrote:

> ...we recognize that contractual considerations may preclude this action [contract extension at Gulf Breeze]. However, other alternatives exist. We currently support the ERL (Athens, Georgia) and the Environmental Monitoring and Support Laboratory (Cincinnati, Ohio). ...Through the appropriate modifications to either of these contracts, TAI could continue to support the Gulf Breeze laboratory without any cessation of services or disruption of personnel [emphasis added]. In fact, a precedent for this action

exists within the EPA and we will be happy to discuss the details with you at the appropriate time.

A record of communication, dated January 7, 1987, showed that within one month after receipt of this letter, ERL-A requested an increase in the LOE under modification 7 roughly equivalent to TAI's loss of contract work at Gulf Breeze. Therefore, the TAI letter regarding loss of the Gulf Breeze contract and its location in the ERL-A files raises questions as to ERL-A's actual intent in requesting an increase of the LOE under ERL-A's TAI contract. While the value of modification 7 did approximate TAI's contract loss at Gulf Breeze, none of the additional work proposed under modification 7 appeared related to TAI's Gulf Breeze work.

ERL-A documented in the January 1987 record of communication that SBA initially denied CMD's request for modification 7 to amend the contract's LOE. SBA wanted ERL-A and CMD to compete the contract. However, file documentation show that TAI later informed CMD that SBA had reconsidered and was now saying that the LOE could be increased for both the current and option years. No file documentation existed at either ERL-A or CMD that showed SBA resistance to TAI's request or a subsequent change in attitude. Neither did we find any record of CMD's or ERL-A's verification of TAI's statement. The only documented SBA stipulation found was that the proposed modification must be received in the SBA office prior to TAI's graduation date on April 21, 1987. On March 10, 1987, ERL-A officials submitted a procurement request to CMD stating that the modification was necessary due to an underestimation of manpower needed to perform laboratory support services for the various on-going research programs at the facility. This modification request occurred just ten months after contract 68-03-3351 was awarded. The resulting modification 7, dated May 6, 1987, increased the LOE for the base year by 6,080 hours and each of the two option years by 15,360. This approximated the value of the contract TAI lost at Gulf Breeze.

Modification 16

A subsequent change in the Section 8(a) set-aside program allowed participating firms to extend their graduation date. TAI's graduation date was extended 12 months from April 21, 1987 to April 21, 1988. In November 1987, the second year of this 3-year contract, TAI contacted ERL-A officials to request an extension of the period of performance under 68-03-3351 for an additional

20 months to a total of 5 years. TAI gave ERL-A officials a package of sample documents with an example of where SBA approved a 2-year extension of an engineering support contract between TAI and the Department of the Navy. TAI informed ERL-A that:

> Contracting Officer may elect to purchase additional supplies or services called by the contract or may elect to extend the term of the contract (FAR 17.201). ...FAR 17.204(e) states "The total of the basic and option periods shall not exceed five years in the case of services, and the total of the basic and option quantities shall not exceed the requirements for five years in the case of supplies, unless otherwise authorized by statute."

TAI also provided the laboratory pro-forma contract modification documents to assist ERL-A in its request to CMD. ERL-A officials used the pro-forma examples (filled-in the blanks) submitted by TAI and on December 15, 1987 requested an extension of the contract from CMD under the 8(a) program through April 1991. The PO noted in the request to CMD that the extension would serve:

> ... to ensure continuity of services and to eliminate the potential cost of having to recompete [once TAI graduated from 8(a) eligibility]. Also, it would help EPA to meet set-aside goals for disadvantaged businesses.

SBA said that it would grant approval to the modification as long as the contract SOW was not changed and, as stated previously, the modification was in SBA's office prior to TAI's graduation date on April 21, 1988.

ERL-A took maximum advantage of TAI's extended 8(a) graduation date through issuance of modification 16 which extended the contract's period of performance by two additional option periods and increased the LOE by approximately four staff positions. This change permitted TAI to continue providing services to ERL-A 20 months beyond its graduation from the 8(a) program and increased its on-site staff and workload without competing a new contract.

In our opinion, contrary to SBA's warning, modification 16 changed the scope of the contract substantially because the contract value increased by $2.4 million (a 92 percent increase over the initial contract value). The modification also expanded

the contract's scope to provide additional contract services for: Chemistry Branch Support which included Chemical Dye Transformation, Metal-Humic Interactions, Chemical Availability Enhancement; Biology Branch Support included Trace Gas Fluxes and Bioremediation Processes and Systems; Assessment Branch Support which included technical liaison between ERL-A Assessment Branch and OSW Waste Characterization Branch, Analysis Modeling Section; and Indirect Support included quality assurance and Preventive Maintenance Program Support. To get SBA approval, the scope of the contract was to remain unchanged. However, from our analysis, we concluded that these activities were major additions to the scope of the original contract and, therefore, the scope changed substantially.

A CMD legal review dated April 7, 1988, also questioned the propriety of extending a contract when a firm was about to graduate from the 8(a) program. The CMD attorney commented:

> In light of legislation on the Hill which will preclude awards to 8(a) firms which contain options when the 8(a) firm is about to graduate, it concerns me that the addition here of Options III and IV is an attempt to keep TAI on-board for 2 more periods when firm is graduating 4/21/88.

Nevertheless, on April 20, 1988, just one day before TAI graduated from the SBA 8(a) set-aside program, SBA approved the extension of the contract from a three to a five-year contract with the addition of at least four staff years in 1988. According to OAM, the legal comment was only advisory and OGC signed the file signifying legal sufficiency of the proposed modification.

EPA's vulnerability to the TAI contractor dramatically increased under contract 68-03-3351. In the interest of ERL-A, the number of contract employees under this third TAI sole-source contract was increased by 100 percent and on-site contractor support expanded to include almost all of the laboratory's operations. At the end of this contract, the contractor support services had developed into prohibited personal services relationships between contractor staff and ERL-A staff, contractor performance of inherently governmental functions (IGFs), and directed subcontracting by ERL-A to further avoid competition and to obtain consultants and other laboratory needs unattainable with limited intramural funds.

ERL-A Biased the Competitive Procurement Process For TAI's Fourth Contract Award, Contract 68-C1-0024

ERL-A recommended the removal of the technical support contract from the 8(a) program after TAI graduated from the 8(a) eligibility and then biased the follow-on competitive procurement through its technical evaluation ranking factors and evaluation of contractor proposals. ERL-A documented in its Acquisition and Source Selection Plan and CMD concurred that the contract was removed from 8(a) status to increase competition. However, only two contractors submitted proposals for this procurement. In our opinion, the second proposal was a token submission by the other ERL-A on-site 8(a) contractor (AScI). AScI had not attended the pre-proposal conference and its proposal was characterized as deficient.

At the time of the competitive procurement, ERL-A's vulnerability to the TAI contractor had increased substantially. Of the seven EPA contracts awarded to TAI since 1982, three provided technical support directly to ERL-A. Over the life of these three contracts, TAI became ERL-A's primary technical support contractor. Since its initial contract in 1982, the number of employees under the contract had grown from 6 to 31. ERL-A had become as reliant on TAI employees, as it was on its own staff, to perform work critical to the accomplishment of the laboratory's mission.

ERL-A Recommended Removal the TAI Contract From The 8(a) Program: At the end of contract 68-03-3351, when ERL-A could no longer use the 8(a) umbrella to contract with TAI, ERL-A recommended that the contract be removed from the 8(a) set-aside program. After expiration of the third 8(a) sole-source contract (68-03-3351) on April 30, 1991, ERL-A would have been required to compete its on-site support contract under the 8(a) set-aside program because it exceeded the $3 million competitive threshold established under the 1988 amendments to the Small Business Act. If the contract remained as a 8(a) set-aside, ERL-A risked losing TAI and its employees because TAI no longer qualified as an 8(a) contractor and would not be allowed to compete. By removing the contract from 8(a) program and allowing for full and open competition, TAI would be eligible to compete.

We found no justifiable support for removing this contract from the 8(a) program. The proposed staffing levels, staffing mix, and the SOW for this procurement did not differ substantially from the requirements in the predecessor contract. The removal

of the contract from the 8(a) program contradicted ERL-A's previous efforts to keep the procurement 8(a) sole source, even though they made substantial changes to the SOW and staffing levels. Because of ERL-A's reliance on TAI and its prior efforts to retain the incumbent, we could not determine any other reason for the decision to remove the contract from the 8(a) program other than the desire of the ERL-A officials to allow the incumbent to bid and to continue as ERL-A's on-site contractor.

FAR 19.501, entitled Set Asides for Small Business, states:

> Once a product or service has been acquired successfully by a contracting office on the basis of a small business set-aside, all future requirements of that office for that particular product or service not subject to simplified small purchase procedures shall, if required by agency regulations [emphasis added], be acquired on the basis of a repetitive set aside. This procedure will be followed unless the contracting officer determines that there is not a reasonable expectation that 1) offers will be obtained from at least two responsible small business concerns offering the products of different small business concerns and 2) awards will be made at reasonable prices.

However, EPA had no regulation to require repetitive set-asides. CMD's Small Business Specialist told us that the programs are not obligated to keep any contract in the 8(a) set-aside program and can remove a contract at any time without justification. The specialist provided two examples of when it would be acceptable to remove a contract from 8(a) status: (1) if it was determined that the solicitation would not receive enough bids from small/minority business and (2) if the proposed work was within the capability of large business only.

To justify unrestricted competition, ERL-A stated in the Acquisition and Source Selection Plan (approved December 10, 1990) that the follow-on contract would be enlarged in scope to over twice the original LOE due to increased demands on ERL-A's support. The original LOE on the predecessor contract (contract 68-03-3351) was 16 contractor staff compared to the proposed first-year staffing of 39 for the proposed contract. However, approximately 31 TAI employees were actually on-site when the predecessor contract expired which would only represent an increase of 8 employees. In our opinion, this does not represent a substantial enough increase in scope to argue that this

contract could be performed by a large business only, especially, since TAI had been successfully performing this contracted work for nine years as an 8(a) contractor.

In addition, the SOW for the proposed contract changed minimally, if at all, from the SOW on the predecessor contract. During the pre-proposal conference on December 19, 1990, one contractor asked "How do the requirements specified in this RFP differ from the requirements in the current technical support contract [68-03-3351] at Athens-ERL?" ERL-A responded that "The staffing levels, staffing mix, and specific aspects of the statement of work for the current contract do not differ substantially from those requirements stated in this RFP." The primary change between this competitive procurement and the predecessor contract was that TAI was no longer an 8(a) contractor.

In the Acquisition and Source Selection Plan, ERL-A recommended that the acquisition be competed on an unrestricted basis to ensure adequate competition and to "accommodate the incumbent contractor which has graduated from the 8(a) program." In our opinion, this was not an acceptable reason to remove the contract from the 8(a) set-aside program. The purpose of the 8(a) program is to develop the minority business to the point where it can be competitive on an equal basis in the American economy not to sustain that business once it graduates from the program. Regardless of the scope similarities between the current and proposed contract, the specialist and contracting officer accepted ERL-A's contention that the procurement was "Within the capability of large business only."

ERL-A's logic in justifying full and open competition for this award was inconsistent with past justifications for 8(a) sole-source awards. Under the predecessor contract (68-03-3351), the contract SOW expanded from support for one branch to support to all the branches and the LOE increased by twice the original LOE (from 16 employees to 31 employees.) At that time, ERL-A justified keeping this contract as a sole-source procurement because the work to be performed by the contractor was unique and not available from other sources. Since the SOW for the proposed competitive contract, in ERL-A's own words, remained basically the same, the work would, according to prior ERL-A logic, still be unique and allow awarding the contract under procedures other than competitive. However, to fulfill its current objectives [retention of TAI], ERL-A now argued that the new procurement was only within the capability of large business.

ERL-A Biased The RFP And Technical Evaluation To Favor TAI:

Once the procurement was removed from the 8(a) set-aside program, ERL-A went through the required actions for a competitive procurement. Although it was fairly certain that TAI would have a competitive advantage, ERL-A established technical ranking factors which favored TAI and made it extremely difficult for others to compete. For instance: (1) the technical evaluation ranking factors put the most points (65 percent) on experience and required key employee commitment letters which also favored TAI; and (2) the proposed statement of work encompassed too many tasks which made it difficult for competing contractors, other than TAI, to have the technical expertise to fulfill all responsibilities. These biases created an unfair advantage for TAI as the incumbent contractor because they had most of the employees required by the RFP already performing the SOW tasks and ERL-A was openly pleased with TAI's performance. ERL-A predicted significant interest in the contract and anticipated strong competition. However, ERL-A's relationship with TAI and the biasing of the procurement resulted in only one other contractor, AScI, submitting a proposal for this procurement. AScI was also an 8(a) on-site contractor at ERL-A and its contract was due to expire and be re-awarded during this same time period. With the submittal of only two proposals, we believe that ERL-A actions discouraged competition. With all this in favor of the incumbent, ERL-A's technical review naturally led to the conclusion that the incumbent was the best qualified for award. While this procurement went through the competitive process, in our opinion, it was less than competitive and failed to serve the best interests of the Federal government.

The Competition in Contracting Act of 1984 states that in preparing for the procurement of property or services, an executive agency shall:

> (A) specify its needs and solicit bids or proposals in a manner designed to achieve full and open competition for the procurement;
>
> (B) use advance procurement planning and market research; and
>
> (C) develop specifications in such manner as is necessary to obtain full and open competition with due regard to the nature of the property or services to be acquired.

On September 25, 1990, ERL-A submitted a Request for Contract for a follow-on contract with TAI. The request was for a 17-month base year and three option years at an estimated cost of $18.8 million. [After CMD review, the performance period was changed to a 5-month base period and 4 one-year option periods.] To promote competition, ERL-A outlined in the Acquisition and Source Selection Plan nine ways they would enhance competition. ERL-A also documented in the Plan that no restrictive criteria would be used. Further, they would promote competition by placing more emphasis on personnel qualifications and the proposed management plan than corporate experience, thereby enhancing the potential for participation by firms that have not had direct experience supporting ERL-A. The RFP contained two lists of contractors who would possibly bid on the recompete of this contract. The first list outlined six contractors with TAI being the first contractor listed. The second was an alphabetical list of 58 additional contractors. The RFP was issued to 40 sources. During the pre-proposal conference held on December 19, 1990, only three contractors were present. When the RFP was closed on January 22, 1991, only two proposals were submitted, one from TAI and the other from AScI, an 8(a) on-site contractor also located at ERL-A.

Proposals submitted for this procurement were evaluated on five criteria: (1) Demonstrated Corporate Experience; (2) Demonstrated Experience and Qualifications of Proposed Upper Level Personnel--Base Level of Effort; (3) Qualifications of Other Base Level of Effort Personnel; (4) Adequacy of Program Management Plan; and (5) Adequacy of Quality Assurance Program Plan. The maximum points that a contractor could obtain under this RFP was 3600. Criteria 2 and 3 accounted for 65 percent of the total available points. While most of the points were placed on experience qualifications, TAI had an advantage, under Criteria 1, 4, and 5, from being the incumbent for the last 9 years. For Demonstrated Corporate Experience, TAI had gained experience in managing a contract with a SOW almost identical to the one outlined in this RFP. For criteria 4 and 5, TAI had the advantage because the TAI manager served as ERL-A's Quality Assurance Officer which was an inherently governmental function. ERL-A technical review of the two proposals resulted in TAI receiving a score of 2640 and AScI receiving a score of 1800 (a difference of 840 points). AScI's lower score was attributed in great part to points lost in the experience qualifications category because AScI did not obtain personnel commitment letters as required by the RFP.

Ranking Experience at 65 Percent Biased the Procurement

In their Acquisition and Source Selection Plan, ERL-A documented that the offeror's capability of providing and managing highly qualified scientific and technical personnel was considered more important than cost factors under this acquisition. ERL-A placed the most emphasis on personnel qualifications which accounted for 65% of the total available points. The RFP stated that the contractor would be required to provide personnel who were highly qualified in a number of technical and scientific disciplines. The work provided for under the SOW of work primarily provided for bench-level support. Through review of the AScI's technical proposal and through an interview with another contractor in attendance at the pre-bid conference, we determined that obtaining employees qualified to perform under the proposed SOW was not prohibitive. In fact, most of the employees AScI proposed met the SOW qualifications. However, as the incumbent contractor, TAI had a significant advantage because TAI had provided support to Athens for the past nine years and ERL-A officials were openly pleased with their work. Some favorable comments made on the TAI's proposal in the Technical Evaluation Report, dated February 20, 1991 were: (1) the employees had experience with a contract SOW almost identical to the one in the RFP, and (2) the employees were already on site and were essentially or currently performing the same duties required by the SOW. However, TAI's most significant advantage was that ERL-A had helped to develop expertise in the employees working under TAI's contract. Therefore, to have a reasonable chance at winning the contract the contractor would have to meet ERL-A's personnel expectations and hire the employees already under the TAI contract.

Discounting Corporate Experience Hurt Competitors

ERL-A documented that corporate experience was weighted much less heavily (8 percent) than personnel qualifications, and this should enhance competition by reducing the incumbent's advantage in this area. We determined that this would not be the case when ERL-A considered employees to be more important than the contractor itself. Under this point allocation, another large business might successfully demonstrate significant corporate experience in performing similar support type contracts, but when rated at 8 percent this experience would provide little advantage.

The Technical evaluation report documented that TAI had

demonstrated its ability to manage contracts similar in size, nature, and scope to that described in the RFP. TAI described 6 contracts to show appropriate corporate experience. However, approximately 50 percent of TAI's laboratory experience was gained at ERL-A which could have been considered a weakness. AScI had broad experience in conducting and managing contracts such as the one described in the SOW. AScI reported 19 contracts providing environmental services throughout the U.S. with contract values ranging from $200,000 to $6,200,000. However, in the technical evaluation, ERL-A emphasized that AScI's experience spanned only a short period of time--less than 5 years. ERL-A scored TAI and AScI equally for corporate experience.

Considering that ERL-A documented in the Acquisition and Source Selection Plan that technical proficiency would be weighted more heavily than cost, ERL-A officials did not seem interested in determining the extent of AScI performance. TAI had an advantage over any competitor because it was already performing the tasks documented in the SOW in support of all four branches and also providing administrative support. However, AScI did not perform on-site services for the Biology and Measurement branches under its current contract at ERL-A. On April 9, 1991, the CMD contract specialist informed ERL-A that where the offeror is known to have performed contracts for comparable work, their past performance under the agreements should be evaluated. On April 15, 1991, ERL-A commented on the past performance of each of the offerors in its supplemental technical evaluation report. ERL-A responded in the report that:

> Since both offerors are currently performing work at the laboratory, we did not seek comments from other EPA or government offices but are providing comments from the branches that these contractors are supporting.

The RFP outlined contractor support for each of the four branches. Because AScI did not provide services to the Biology and Measurement Branches, no comments could be provided. Therefore, it appeared in the supplemental narrative, that AScI did not possess the capabilities to perform the duties in these branches. AScI had outlined in its proposal work that it performed in the area of Biology and Measurement under other contracts. However, ERL-A elected not to obtain comments from outside sources. This caused us to conclude that there was a lack of any interest on behalf of ERL-A to actually determine the technical proficiency of AScI.

Commitment Letters and Start-Up Plan Created An Unfair Advantage

ERL-A stated in the Acquisition and Source Selection Plan that should a contractor other than the incumbent receive the contract award, there was a further risk that ERL-A activities could be disrupted during the contractor changeover. Therefore, TAI had an obvious advantage in that it could guarantee 100 percent productivity from day one of the contract. To minimize what it considered to be an unacceptable disruption in service, ERL-A required that offerors develop a start-up plan as part of an overall management plan which would ensure full operations within 30 days of award. However, as described by ERL-A, a competing contractor would require many months to become familiar with work already being performed by the TAI employees. Further, as part of the plan, contractors were required to submit commitment letters for key employees. Unless a competing contractor hired the employees already working under the TAI contract, they had little chance of winning this procurement.

ERL-A's requirement for employee commitment letters gave an additional advantage to TAI. The commitment letters were a subcategory of experience qualifications which accounted for 65 percent of the total available points. The RFP required 37 employees for the base level of effort for which commitment letters had to be submitted. Through review of the technical evaluation report, dated February 20, 1991, we determined that commitment letters were easily obtainable from employees already working at ERL-A. Contractors usually did not obtain the letters from contingency hires. As the incumbent, TAI already had 31 of these 37 employees essentially performing the same duties required by the SOW. Five of the remaining six employees were contingency hires. The technical evaluation report documented that all the on-board TAI personnel had signed a letter of commitment and the remaining positions would be filled as soon as tasking was made available. However, the AScI proposal was considered deficient in relation to the TAI contract for experience qualifications because they failed to submit commitment letters for the proposed employees. In most cases, the employees AScI proposed did meet the technical qualifications of the SOW. However, the non-submittal of the commitment letters resulted in a loss of 585 points.

After the technical evaluation of the proposal was completed, AScI had another opportunity to increase its score by improving on the deficiencies in the proposal. A supplemental technical evaluation of the proposals was issued April 15, 1991. TAI's

score was increased from 2640 to 2910 and AScI's score was increased from 1800 to 2245. The AScI proposal was still deficient because they failed to provide commitment letters for some of the employees. Therefore, we further question AScI's resolve and whether AScI submitted a serious bid for the contract.

Under the commitment letters, the prospective employees would be required to commit to working at ERL-A for a minimum of one year. The purpose of commitment letters according to ERL-A was to provide a way to evaluate the company's ability to provide the necessary expertise. However, in our opinion, commitment letters only served to give ERL-A a way to establish that current contractor employees providing on-site research support would continue to be employed. However, commitment letters made it more difficult for competing contractors to comply with the personnel requirements of the RFP. We believe that the hiring of acceptable employees could have been reasonably accomplished in the 30-day transitional period. However, the 30 day start-up period posed an additional obstacle to competing contractors. As part of the start-up plan, the contractor had to demonstrate that it would be "fully operational" at the end of 30 days. ERL-A documented the importance of retaining TAI employees in its April 16, 1991 request to extend the TAI contract 68-03-3351 by two weeks (from May 1 - May 14, 1991) until the new contract could be awarded. The new contract was anticipated to be awarded by May 1, 1991. ERL-A justified the extension under the authority of 41 U.S.C. 253 (c) (1) stating "only one responsible source for the services to satisfy the Agency's requirement". Specifically, the request noted:

> Although other firms exist with the capability to supply the general type of services required for the projects in progress, they do not have the in-depth familiarity with these projects to step in and immediately take over and continue task activities to completion. For instance, the research activities require "hands on" familiarity and technical expertise relative to the methodology and instrumentation. New personnel would require many months to gain the familiarity and expertise inherent in the incumbent personnel. Also, new personnel would need to become familiar with previous studies, technical approaches that have been followed to date, and procedural requirements.

To further demonstrate the bias presented by the 30-day start-up plan, the incumbent would be given 60 days to phase out operations should they be unseated in this procurement. The Acquisition and Source Selection Plan documented that under the Continuity of Services clause the incumbent would be given up to 60 days after expiration of the contract for phase-in/phase-out services. The phase-in/phase-out services required the incumbent to provide phase-in training and to cooperate in any transition should a different contractor be selected for award. Unless the competing contractor could obtain commitment letters from the employees already working under the TAI contract, it seems unlikely that it could hire 37 employees for the on-site work and be fully operational in 30 days. With a 65 percent ranking factor, obstacles to fulfilling personnel requirements, in particular commitment letters, would make it very difficult for competitive firms to score in the competitive range.

SOW Encompassed Too Many Tasks

The SOW was also restrictive in that it encompassed too many tasks which made it difficult for competing contractors to have the technical expertise required to perform all tasks. There was no apparent interest on the part of ERL-A or CMD to break up the contract into smaller procurements which could have permitted further small and disadvantaged business participation. However, as discussed previously ERL-A's interest was in TAI and its employees not in 8(a) participation. Having an all encompassing SOW would naturally favor the incumbent.

TAI Documented Minimum Competition

ERL-A officials also documented that they anticipated strong competition. In the Acquisition and Source Selection Plan, ERL-A documented that potential offerors had already expressed an interest in the RFP including a number of EPA's on-site support contractors. ERL-A represented that approximately 50 firms had requested a copy of the solicitation. Because of the strong competition anticipated, ERL-A documented that a market survey was unnecessary as required by the Competition in Contracting Act since a number of these organizations are known to have the capability of performing the required services. The RFP was subsequently issued to 40 companies identified as potential sources.

While we did not see evidence of strong competition at the pre-proposal conference or in subsequent proposals, we did find where

TAI predicted its own chances of winning the ERL-A contract at 95 percent. TAI summarized its strengths which included: proven incumbent; high customer satisfaction; detailed knowledge of customer needs and requirements; and competitive salary structure. TAI's self assessed weaknesses included: customer is sensitive to increasing indirect costs; and as incumbent, we could be vulnerable to lowballer on direct labor costs. Contrary to ERL-A's claim that it anticipated strong competition, TAI documented only minimum opposition. TAI noted that providing qualified key personnel would be a major obstacle for its competitors. This would be an obstacle primarily because commitment letters were required under the request for proposal and the most knowledgeable personnel were currently under the TAI contract.

In a TAI Recapture Plan, dated November 29, 1990, TAI anticipated competition from only three contractors. Although the AScI contractor worked on-site at ERL-A, AScI did not send a representative to the pre-proposal conference held at ERL-A. The pre-bid conference, held on December 19, 1990 showed that anticipated competition was more in line with what TAI had predicted because only three contractors (including TAI) attended. Of the three firms attending the pre-bid conference, only TAI submitted a proposal. We contacted the other two contractors who attended the pre-proposal conference to determine why they did not submit a proposal on the RFP. One contractor did not submit a proposal because: (1) TAI had a reputation for low-balling, (2) the perception was that ERL-A was pleased with the work of the incumbent and EPA usually awarded to incumbents, (3) the contract was fairly low-rated, meaning a lot of the positions were for technician-level employees, and (4) the contract was perceived as being a personal service contract.

On December 21, 1990, two days after the pre-proposal conference, the other contractor who was in attendance at the pre-proposal conference wrote a letter to CMD requesting that the date for submittal of proposal be extended to January 31, 1991. CMD extended the date to January 22, 1991. However, we found no documentation in the CMD files relating to the request or why CMD and ERL-A did not take this opportunity to increase competition for this procurement by extending the date to January 31, 1991, as requested. File documentation from this contractor show that the extension was requested due to the significant modifications expected in the RFP as a result of questions discussed during the pre-proposal conference, as well as the time and effort required to prepare a quality proposal in response to

the new RFP requirements.

AScI Proposal Appears To Be Token Submission

The lack of apparent resolve on the part of AScI suggests that the proposal may have been submitted as a token bid. This assertion is made because: (1) AScI did not attend the pre-proposal conference; (2) the AScI proposal was deficient and AScI did not try to resolve important deficiencies; and (3) ERL-A did not utilize all available opportunities to increase competition. If ERL-A had received only one proposal, ERL-A would have been required to take additional steps to increase competition. This would have delayed the date of award and disrupted the work. Also, if the work was supposed to be within the capability of large business only, the receipt of a second proposal from an 8(a) contractor raises additional question as to the competitive nature of this procurement. However, CMD accepted the two proposals as being in the competitive range; thereby, ruling that the procurement met the requirements of competition.

ERL-A's long-term utilization of TAI employees as equivalent FTEs to perform personal services and IGFs contributed to TAI's advantage in this procurement. ERL-A's and CMD's action or inactions at the pre-proposal conference, the biased ranking factors, a questionable second proposal, and a reluctance to allow a short filing extension for a third competitor makes us question the competitive nature of the TAI procurement.

AScI Contract Split To Circumvent Competitive Requirements Of The Small Business Act

ERL-A officials underestimated a follow-on contract (68-C0-0054) with AScI to avoid the $3 million dollar competition threshold established under the Small Business Act, Section 8(a). On July 3, 1990, ERL-A requested a second contract (68-04-0012) for AScI which was intended for off-site services. The SOWs for the on-site and off-site contracts were identical and "off-site" was roughly two miles from ERL-A at a contractor facility established for the sole purpose of providing support to the laboratory. The proposed off-site facility was to be paid for under the contract. According to ERL-A management, the prime motivation for a second AScI contract was a pressing need for additional space at the laboratory which necessitated the relocation of personnel off-site. However, this factor alone would not justify two separate 8(a) contracts. In our opinion, the only purpose of two contracts was to avoid the prolonged competition process for a

single 8(a) contract in excess of $3 million and the possible disruption of services if a contractor other than AScI should win the award. By ensuring the retention of AScI and, more importantly, its employees, ERL-A avoided the inconvenience and the perceived risk of competition. This calculated action by ERL-A intentionally circumvented established provisions of the Small Business Act which required competition for 8(a) contracts over $3 million.

The 1988 revisions to the Small Business Act established monetary competitive thresholds for 8(a) procurements. The statutory thresholds were written into SBA regulation 13 CFR 124.311(a)(2) which states:

> ... a contract opportunity offered to the 8(a) program for award shall be awarded on the basis of a competition restricted to eligible program participants if the anticipated award price of the contract, including options, will exceed $5,000,000 for contracts assigned manufacturing Standard Industrial Classification (SIC) codes and $3,000,000 for all other contracts.

The congressional intent as shown in the Small Business Act, Section 101 was to increase competition in order to promote the Congressionally mandated business development objectives and purposes. By establishing maximum dollar amounts for 8(a) sole-source contracting, Congress required competition within the 8(a) program. Prior to the amendment's effective date of October 1, 1989, large sole-source acquisitions could be awarded without competition.

On-site AScI Contract

On February 22, 1990, ERL-A submitted a three-year $4.9 million sole-source procurement request to be awarded sole source to AScI for on-site support. The request was approved through the Director of OEPER and the AA for Research and Development. On March 14, 1990, without ERL-A's knowledge, CMD requested that SBA approve a competitively bid 8(a) set-aside since the maximum potential value of the contract exceeded the $3 million noncompetitive threshold for 8(a) contracts established by the 1988 amendments to the Small Business Act. On March 19, 1990, SBA notified CMD of its acceptance of the competitive set-aside. SBA instructed CMD to advertise the procurement in the Commerce Business Daily and issue a solicitation.

On March 23, 1990, after its initial review of ERL-A's request, CMD informed ERL-A that the requested procurement exceeded the $3 million threshold for noncompetitive 8(a) awards and would have to be competitively bid. ERL-A then was faced with advertising for a follow-on contract and developing technical evaluation criteria for proposals. CMD further stated that, if the contract was to be competitively awarded, ERL-A would have to provide substantial effort to award the contract before September 30, 1990, when AScI's current contract expired.

Subsequent to CMD's communication to ERL-A that an award in excess of $3 million would have to be competed, a note in the ERL-A PO's file, dated April 9, 1990, documented:

> In accordance with [Senior Science Advisor], the AScI continuation procurement package beginning 10/1/90 should not exceed $3 million for the three year period [emphasis added].

The note also stated that the laboratory director concurred with the decision. On April 11, 1990, two days after the date of this file note, ERL-A submitted a new request to CMD for an on-site AScI contract with a revised cost estimate of $2.9 million. This was just under the $3 million 8 (a) competition threshold established in the Small Business Act.

ERL-A officials maintained that there was no intent to avoid competition when they withdrew the initial procurement. There was merely a reduction in anticipated work needed under the contract. Our review of ERL-A and CMD file documents indicated, that while the laboratory support functions described under the original and revised contract request for on-site support remained virtually the same, ERL-A took deliberate steps to reduce the procurement to under $3 million threshold. While the procurement request remained at three years, the estimated cost was reduced to $2,984,073. ERL-A accomplished the reduction by reducing consulting costs, and eliminating $168,886 in clerical support costs, $708,410 in quantity option increases, and $1,082,164 in labor categories and other direct costs. By reducing the proposed cost estimate below $3 million, ERL-A was able to award the 8(a) set-aside sole-source contract to the incumbent, AScI, and avoid the additional administrative burden of awarding an 8(a) competitive procurement.

No documented evidence was found that either OEPER or CMD questioned the significant revisions and/or omissions to the

proposed contract. The only written comment found related to the reduction in the contract scope and estimated cost was a statement in the revised contract request transmittal letter dated April 11, 1990 as follows:

> We have re-evaluated our needs for on-site contract support and, as discussed with you on April 5, reduced the level-of-effort accordingly.

There was no documented evidence in either CMD's or ERL-A's files concerning the April 5, 1990 discussion mentioned in the transmittal letter.

In response to ERL-A's revised contract request, CMD wrote to SBA on April 19, 1990 explaining that:

> ... the scope of work for the procurement we offered to the SBA for a competitive 8(a) proposal has been changed. Therefore, we are requesting a cancellation of the set-side. We will evaluate the changes and resubmit at a later date.

In a second letter dated the same day, CMD informed SBA about ERL-A's proposed $2.9 million contract stating only that:

> EPA would like to award this contract to an 8(a) contractor pursuant to Section 8(a) of the Small Business Act .... This procurement was not publicly synopsized because it is the feeling of this office that eligible 8(a) firms would be at a disadvantage and could not win by normal competitive means.

Based on ERL-A's assessment of AScI's performance, CMD's evaluation as to the contractor's ability to compete appears contradictory. During interviews, ERL-A staff repeatedly told us that ERL-A was very pleased with AScI's performance and AScI had the ability to win a competitive procurement. Also, AScI had recently won a $4.6 million full and open competitive procurement at the Environmental Research Laboratory - Duluth and had ten other noncompetitive awards in place with a maximum potential value of $22.6 million. Given the number of contracts already awarded to AScI noncompetitively and AScI's demonstrated ability to compete successfully at Duluth, the validity of ERL-A's noncompetitive 8(a) set-aside appeared questionable.

The $2.9 million procurement that ERL-A resubmitted to CMD was

ultimately awarded to AScI as a sole-source contract on September 25, 1990 at a revised maximum potential value of $3.3 million. The initial $2.9 million estimate was increased above the $3 million competition threshold during the pre/post and final negotiations. The contractor's estimate was $212,283 above ERL-A's original estimate due to the escalation of the contractor's fixed fee and the annual labor hour estimate. During negotiations, AScI also requested that consultant hours be increased to reflect historical utilization of consultants. This increased the final negotiated contract costs to $3.3 million. CMD officials contended that sole-source procurements could be negotiated above the $3 million threshold for noncompetitive procurements as long as the procurement's estimated cost was initially estimated below $3 million. CMD explained that SBA refused to compete anything below $3 million.

Because the initial estimate, according to CMD's policy, was the determining factor for a competitive versus sole-source 8(a) contract, it was to ERL-A's advantage to underestimate its initial estimate of contract cost. During the negotiation, CMD allowed the contract cost to significantly exceed the $3 million threshold and did not require competition. CMD's policy provides no incentive to programs for accurate initial estimates of contract costs.

Off-site AScI Contract

On July 3, 1990, three months before award of the sole-source on-site AScI contract, ERL-A requested a second 8(a) sole-source contract with AScI. The laboratory director said the primary motivation for the off-site procurement was to alleviate serious overcrowding at the laboratory by moving some of the contract employees off-site. We were told by other managers that the possibility of an off-site contract had been discussed for several months. While we did find references as early as February 1990 to an off-site contract, we believe the need for an off-site contract became more advantageous when ERL-A learned that it would have to compete its original $4.9 million follow-on contract. Another ERL-A concern was the possibility that the follow-on contract might not be in place by September 30, 1990 when the current contract expired. Therefore, to avoid additional processing delays, we believe ERL-A elected to hold the on-site procurement below $3 million to allow a faster sole-source procurement and follow-up with an off-site contract to make up the difference.

Our review disclosed that the SOW for the proposed off-site contract was identical to that proposed for the on-site. The only change was where "off-site" was substituted for "on-site." The off-site procurement request was also deficient in that it did not include an estimate for off-site support facilities. On July 25, 1990, ERL-A corrected this oversight by decreasing the LOE by one staff year to "... compensate for rent estimates." A note to the file which documented a meeting with the Senior Science Advisor remarked "We already had 57K to play with from the aggregate contract amount (Attach G)." Attachment G showed the cost estimate for the off-site contract as $2,942,484 which was approximately $57,000 from the $3 million dollar limit for a noncompetitive 8(a) contract. This statement clearly indicates ERL-A's intention to also keep its initial cost estimate for the off-site contract under the SBA $3 million ceiling for a noncompetitive procurement.

During CMD's initial review of this off-site procurement request, an internal review document contained a handwritten note from the contracting officer to the Small and Disadvantaged Business Utilization Specialist (SDBUS) stating "Talk to {ERL-A Official} about some firm other than AScI." From interviews with the SDBUS and the CO, they confirmed their telephone conversations with ERL-A concerning the utilization of some other firm other than AScI. CMD officials expressed concern with AScI obtaining an additional sole-source procurement since CMD was concurrently reviewing the on-site procurement package. CMD officials suggested to ERL-A that they should either obtain another 8(a) contractor or compete the contract. ERL-A officials responded to CMD's concerns by stating that they needed to retain AScI because the AScI employees were performing work that was critical to the lab's mission. They did not want the work interrupted by having the contract awarded to another contractor or potentially delayed by a long competitive award process. During an interview with OIG auditors, the SDBUS stated that the program took the position that if they could not request AScI through an 8(a) set-aside, then they would re-do the procurement as a sole source and justify why they wanted AScI. Since the program was so insistent, CMD decided to go with AScI as an 8(a). In interviews with ERL-A officials, they confirmed the telephone conversations with CMD responding that they wanted to retain AScI because the AScI employees were performing work that was critical to the lab's mission. They did not want the work interrupted by having the contract awarded to another contractor or potentially delayed by a long competitive award process.

On July 30, 1990, CMD received written SBA approval for the off-site 8(a) sole-source procurement to AScI and on August 15 1990, CMD requested a proposal from AScI for the contract. This was two weeks after the request for proposal for the on-site contract was issued. While CMD had reviewed both requests, the CO contended that she did not know that the proposed off-site work was actually "near-site" until August 23, 1990, when AScI submitted its proposal.

From August 23, 1990 to March 21, 1991, when the off-site contract was eventually awarded, there was continual correspondence between CMD, ERL-A, and AScI concerning position requirements, labor rates, personnel, overhead rates, etc., which delayed the procurement. In responding to questions from the contract specialist regarding labor rates and personnel, AScI stated in a September 21, 1990 memorandum that the site manager's time would be split between his on-site and off-site responsibilities. AScI added that "The technical requirements for both the on-site and off-site contract in Athens, Georgia are similar in the level of scientific and engineering expertise required." If the contracts were to be managed by the same site manager and required similar technical requirements, there was again no logical reason why the two contracts could not have been combined and CMD should have been alerted to this fact.

Interviews with CMD personnel confirmed that they had serious concerns over the off-site procurement. The CO indicated that she brought the issue to the attention of the CMD's Director who stated that ERL-A would not be allowed to proceed with the second contract. However, no evidence was found in CMD's files documenting the CMD Director's decision cited by the CO. Despite apparent concerns over the off-site proposal and the potential for a split procurement, CMD awarded the on-site contract on September 25, 1990 and on March 21, 1991, after ERL-A certified (incorrectly) that its needs had changed and there was sufficient work to support both AScI contracts, CMD ultimately allowed the award of the off-site contract as well. This was done even though CMD was aware that the site manager was the same, the proposed SOW was the same as the on-site contract, and the off-site work would be performed actually near-site. Also, CMD was aware that 10 months earlier ERL-A had submitted a $4.9 million request which was later reduced below $3 million because of a reduction in anticipated work, and that ERL-A was now certifying (in just 10 months) that it had sufficient work to support two contracts with a total estimated potential value of $5.9 million. At this point, CMD should have been fully aware of the extreme

steps ERL-A had taken to avoid competing the AScI procurement. However, CMD elected to go ahead and award the off-site contract without any documented explanation.

During our audit, the CO reviewed CMD's files for both the ERL-A on-site and off-site contracts and apparently concurred with our conclusion that ERL-A did underestimate and split the AScI procurement to avoid competition. In a letter, dated February 13, 1992, the CO wrote to the ERL-A PO requesting that the ERL-A contracts be recompeted at the end of FY 1992 to rectify the situation. Her rationale was that "the original contract was split into an on-site and an off-site contract in order to avoid a competitive 8(a) RFP." In response, ERL-A maintained that it was not its intent to split the AScI procurements to avoid 8(a) competition. The off-site AScI contract expired on September 30, 1992 and was not renewed. Also, based on CMD's subsequent review, the last option year scheduled to start on October 1, 1992 for the on-site AScI contract was not exercised.

CONCLUSION

TAI's dramatic growth at ERL-A was attributed to the increased SOW and substantial modifications made to the predecessor contract awarded in 1985. Contract support was expanded from one branch to all four branches. TAI was also providing administrative support. ERL-A's vulnerability to contract support increased as it utilized the TAI employees as an extension of intramural resources. As the mission of the laboratory and contract support grew, EPA employees became increasingly involved in the administrative oversight of TAI's operations and TAI employees became the vehicle for getting the work done. The loss of these 31 employees would have caused the laboratory's work to suffer greatly. Some TAI employees had been on-site at ERL-A longer than some EPA employees. For example, the TAI Program Manager had been working on-site at ERL-A since 1980 which was longer than the current ERL-A Director and PO put together.

The actions taken by ERL-A under the 8(a) umbrella to award repetitive sole-source contracts to TAI disregarded the intent of the Small Business Act, Section 8(a) program and the CICA. ERL-A's actions did not contribute to the development of small minority businesses and avoided the recognized benefits of full and open competition. ERL-A's favored treatment of the incumbent corrupted the competitive process and increased the potential for

the incumbent to establish a monopoly at the laboratory. Subsequent removal of the procurement from the 8(a) program clearly indicated an act intended to favor the incumbent.

ERL-A's over-reliance on the AScI employees to perform mission-critical work compelled them to reduce the requests for contract to just under $3 million to: guarantee a sole-source procurement to AScI; speed up the procurement process; and avoid any possible cessation of AScI services as a result of changing contractors.

CMD's established role in the preaward procurement process was to ensure compliance with applicable federal statutes and FAR and EPAAR requirements. Post-award, CMD was also responsible for evaluating the use and overall management of contracts. However, CMD admitted that due to their heavy workload, they had become more of a service than an oversight function. In retrospect, CMD officials said the AScI contacts should have never been awarded sole source. However, with knowledge on August 23, 1990, that the proposed off-site contract was actually near-site and that both contracts had the same SOW, CMD still awarded the on-site contract on September 25, 1990. Not until our audit was initiated did CMD attempt to rectify this overt act to avoid competition and circumvent sound procurement practices. Therefore, CMD was negligent in its oversight function in allowing ERL-A to circumvent competitive procedures and corrected the problem only under pressure from the OIG.

In our opinion, ERL-A's procurement practices were driven by its desire to keep critical contractor employees and to maintain continuity of services rather than on sound contracting practices and cost-effective use of government resources. Once the on-site contractors were procured, ERL-A treated them no differently than FTEs.

RECOMMENDATIONS

Recommendations to the Assistant Administrator, Research and Development

We recommend that the Assistant Administrator for Research and Development ensure significant improvements are made in ERL-A's contracting process to obtain strict compliance with applicable statutes, regulations, and EPA policies and ensure effective use of Agency resources. Specifically, the Assistant Administrator should:

- Consider decreasing scopes of laboratory contract awards to award contracts to more expert firms in each technical area and to increase competition for technical support contracts.

- Create an extramural resource management position at remote laboratories to oversee the management of extramural resources.

- Provide that ORD managers' performance standards and evaluations clearly establish accountability for compliance with procurement regulations and Agency's acquisition policies.

In addition, the Assistant Administrator for Research and Development should require the:

Director, Environmental Processes and Effects Research to:

- Evaluate ERL-A's research mission focusing on core programs. Establish what research activities should be performed on-site by FTEs or on-site/off-site via contracts and other extramural agreements.

- Review ERL-A's on-site contractor tasks to determine whether the work should be eliminated, moved off-site, or retained under strict controls. This should include an evaluation of existing and future contract activities that provide long-term on-site support to determine if ERL-A is continuing to improperly award such contracts or using its contracts for prohibited contract activities. Particular attention should be given to repetitive awards to the same contractor.

- Revise laboratory managers' performance evaluations to increase the criticality and weight of proper procurement of extramural resources.

- Provide adequate guidance, in coordination with OGC and CMD, to ensure that laboratory managers understand their extramural limitations and provide close oversight over extramural operations to include:

    * The review of an annual Acquisition Plan prepared by ERL-A and other ORD laboratories to demonstrate laboratory compliance with ORD policy and procurement regulations during the coming fiscal years

    * Systematic reviews of laboratory operations, in conjunction with CMD, to assure adherence with required

contract acquisition and management regulations, including applicable EPA/ORD policies. Also, to ensure that ERL-A is in compliance with its acquisition and contract management plans.

* Requiring more technical evaluation members from organizations other than the laboratory procuring the contract panels for competitive procurements to reduce the potential for biased procurements.
* Eliminate requirement for employee commitment letters that may bias contract awards in favor of incumbents.

In addition, we also recommend that the Assistant Administrator for Research and Development require:

Director, Environmental Research Laboratory - Athens to:

- Develop, as part of the annual planning process, a detailed Acquisition Plan, documenting ERL-A's planned acquisitions, the justification for these acquisitions, and how competition will be increased. Also, for each on-site support contract, a contract management plan describing procedures and controls to ensure that contracts are properly used and managed in accordance with the FAR and existing Agency policies. Both documents should be reviewed and approved by ORD and CMD.

Recommendations to the Assistant Administrator, Administration and Resources Management

We recommend that the Assistant Administrator for Administration and Resources Management ensure significant improvements are made in the contract acquisition, management, and oversight processes conducted at CMD - Cincinnati to obtain compliance with applicable statutes, regulations, and EPA policies. Specifically, the Assistant Administrator should require the:

Director, Office of Acquisition Management (OAM) to:

- Provide written instructions to OAM, ORD, and ERL-A staffs describing the appropriate procurement, use, and management of 8(a) contracts under CMD's oversight.

- Require CMD to perform in-depth reviews of all future 8(a) procurements falling within close range of the threshold for competing 8(a) contracts to assess if requested sole-source

procurements are justified. The review should focus on determining if all necessary calculations have been included in the estimated cost. CMD should make an assessment of the contractor's ability to compete in consultation with the SDBUS and SBA. The decision for an 8(a) competitive or sole-source procurement should rest with CMD and the Agency's Competition Advocate, not ORD or ERL-A. CMD should not routinely allow a sole-source procurement when:

* contractors are currently performing work under an existing contract for that location. CMD should be sensitive to multiple sole-source contracts awarded or proposed to be awarded to the same contractor within close timeframes that may indicate an intent to avoid competition.

* the contractor has demonstrated its ability to successfully compete for similar contracts at other EPA

  locations. For 8(a) firms, at a minimum, CMD should require competition with other qualified 8(a) companies.

* Contract modifications would significantly increase the contract's value over the competitive threshold or extend the contract performance past expiration of the contractor's 8(a) eligibility.

- Establish definitive guidelines for justifying removal of contracts from 8(a) participation. Once a contract has been set-aside for 8(a) participation for an extended period of time, the labs should be encouraged to keep the contract in the 8(a) program or adequately justify its removal. CMD should not allow laboratories to remove a procurement from 8(a) status just to accommodate a former 8(a) contractor who has graduated from the program.

- Establish a maximum potential value or percentage increase for all contracts that will automatically trigger a re-compete. Significant modifications that increase LOE or scope of contracts should not be allowed.

- Require ERL-A to remove any bias from all procurements. ERL-A competitive procurements should:

  * Permit short extensions of solicitation periods where such extensions are justified due to circumstances/delays in

submission of proposals caused by the Agency.

* Place a reasonable amount of technical evaluation ranking points on the strengths of an incumbent contractor.

* Require commitment letters only when absolutely necessary. Contractors should be given sufficient time to staff-up and become operational.

ERL-A MISUSE OF CONTRACTOR ACTIVITIES HAS SUBSTANTIALLY INCREASED

The AScI and TAI contracts and related WAs contained broad SOW with undefined deliverables resulting in indefinite contractor operations. ERL-A management misused contracts by personally directing the activities of contract employees to enhance ERL-A research rather than adhere to a contractual relationship. The lack of an arms-length contractual relationship resulted in: (1) directed subcontracting; (2) personal service relationships; (3) contractors being involved in critical, if not IGFs; (4) inadequate WAs and SOWs; and (5) inadequate review and acceptance of contract charges. This contract misuse greatly elevated ERL-A's vulnerability to fraud, waste, abuse, related COI situations, and a potential loss of the Agency expertise in critical functions. In addition, ERL-A's close relationship with on-site contractors and their employees provided the incumbent contractor resident expertise in certain research projects which created a contractor monopoly on these projects and precluded, or at a minimum, inhibited future "open" competition for on-site contract support.

With the exception of directed subcontracting, issues related to prohibited personal services, contractor performance of IGFs and critical functions, inadequate WAs and SOWs, and potential COIs were previously reported in OIG Survey Report E1XMG2-04-0102-3400007 on ERL-A contract management, issued November 30, 1992. Therefore, these issues are only briefly summarized below to provide insight into ERL-A's overall misuse of support contracts.

ERL-A Involvement In Directed Subcontracting

ERL-A officials directed the utilization of consultants under the AScI and TAI contracts. In order to accomplish research projects at the laboratory, ERL-A officials circumvented procurement regulations by directing contract employees to obtain specific

consultants sole source. EPA's October 1990 Contract Administration manual clearly prohibits the directed hiring of consultants by EPA:

> ... EPA cannot direct the contractor to hire any consultants or influence the selection of such consultants in any way. And, as with subcontractors, EPA has no privity of contract with any consultants used in the performance of its contracts. The prime contractor is responsible for all aspects of performance.

Under the Contract Administration Manual, EPA is also prohibited from directing the activities of a consultant acquired by a contractor. EPA has no contractual authority with the consultant since the privity of contract is with the contractor and not EPA.

In order to determine the technical qualifications, the benefits to be derived from his or her use, the amount of usage, and the rates proposed, all consultants are subject to the review and approval of CMD. The Contract Administration manual requires that:

> A contract modification is executed to approve the use of the consultant, and it will usually specify the fixed rate to be charged and set a limit on the number of hours and days the consultant can be used. This way, the Government is protected against excessive use of, and excessive charging by, expert consultants under cost-reimbursement and indefinite quantity type contracts.

During our review, consultant rates were found in ERL-A contract files that varied from $50 to $100 a hour, often without appropriate approval by CMD or any determination of reasonableness for these charges. Therefore, the hourly or daily rates charged by consultants may not have been commensurate with the technical benefits derived. In addition, consultants used were not approved at all or in advance by CMD as required. For example, one AScI consultant utilized on Superfund sites under contracts 68-03-3551 and 68-C0-0054 was obtained sole source and paid at a rate of $100 a hour for a total of $63,225 over a two-year period. We did not find in the contract files where this contractor or his rates had been approved by CMD or where the contract was modified to authorize his use.

On March 19, 1992, a CMD procurement analyst reported to the CMD Director isolated contract management issues relative to the CMD/ORD review of on-site support contracts at ERL-A. The issues were identified during CMD file reviews but were not considered global in nature and reported directly to ERL-A in the July 14, 1992 CMD/ORD report on ERL-A's contract management. However, these unreported issues were discussed with applicable ERL-A project officers. For the AScI and TAI contracts, the procurement analyst reported that consultants were often not submitted to CMD for approval although they were provided for in the work assignments and subsequently invoiced by the contractor. For the TAI contract (68-C1-0024), it was reported that the contractor was showing the use of individual consultants but no consultants had been previously approved by the contracting officer as required under the contract. Consultants must be approved separately even if work plans with hours for unidentified consultants have been previously approved. For the AScI contract (68-C0-0054), the March review documented an example of one "weak" sole-source consultant approval that was processed. However, the procurement analyst noted that there was no price analysis of the proposed rate in the file as required by the contract. The review also documented that when requesting approval of the consultant the on-site AScI contract manager referenced previous consultant request letters; however, the letters could not be located in the CMD files. This same issue was reported again by the contract specialist to the CMD Director on September 15, 1992. The procurement analyst and the contract specialist both made the same basic recommendation to the CMD Director. They recommended that CMD:

> Advise the contractor [AScI] of his responsibility to secure competition to the maximum extent practical [for subcontracts] and to include his price analysis of proposed rates for the consultants proposed. Advise the contractor that the contract requires the approval of the CO prior to engaging consultants. Approval of work plans that do not specifically identify the consultants to be used even though they do not identify [specific] "consultants" does not constitute CO approval for the use of a specific consultant.

We found no evidence in CMD or ERL-A files to show where this recommendation and others in the March and September reports were made formally to the ERL-A Director.

However, ERL-A did not ensure that contractors adhered to contract provisions to secure competition for consultants to the maximum extent practical and it did not submit consultants to CMD for approval. Through interviews and file reviews at ERL-A, we learned that ERL-A management had significant input into selecting consultants under on-site contracts. Also, ERL-A was engaged on behalf of the contractor to get consultant approval after the fact. For example, on January 29, 1992, the AScI site manager wrote CMD for approval of a sole-source acquisition of a consultant to assist ERL-A on the Global Climate Project under contract 68-C0-0054, work assignment 2A. The period of performance was scheduled for February 3-7, 1992. On February 19, 1992, the contract specialist wrote AScI to explain that WA 2A did not provide for consultant services as approved by the CO and that the PO would have to request an amendment to the WA before approval could be given. The contract specialist also cautioned AScI that consultants do not "assist" ERL-A they "support" in accomplishment of its mission. However, by February 19, 1992 (the date of CMD's letter), the consultant work had already been performed with apparent knowledge of ERL-A management as documented in a subsequent memorandum dated May 11, 1992 from the PO to ERL-A program managers. The PO requested that these managers prepare the necessary paperwork to justify the sole-source acquisition of the consultant. The PO indicated that he had talked with CMD about the consultant issue and CMD had agreed, with proper documentation, to approve this consultant "after-the-fact" so the contractor could be paid for the work already performed.

ERL-A violated contract provisions for hiring consultants on a reoccurring basis. One ERL-A official stated that ERL-A generally used contracts to hire the consultants they wanted. Another ERL-A official admitted that it was simply much easier to obtain consultants through the contracts than to procure them directly through CMD. Consultants under the AScI and TAI contracts were utilized primarily for two reasons. First, the AScI contract called for the contractor to organize and present workshops to promote the use of models which predict the fate and transport of pollutants. ERL-A would generally use the most prominent scientist, usually the developer of the model to present a workshop on the model. Prior to contracting with AScI, ERL-A organized and presented these workshops. Both AScI and ERL-A employees confirmed that there was a general agreement that AScI would continue to use the consultants utilized previously by ERL-A to conduct workshops and it was not likely that AScI would chose another consultant without the ERL-A's consent.

Consultants were also utilized to provide direct assistance to ERL-A. For example, consultants provided guidance to RPMs on Superfund Sites. During interview, one AScI employee stated that ERL-A officials in almost every instance determined when and which consultants were used under the AScI contract. ERL-A file documentation confirmed the involvement of ERL-A management in selecting consultants. For example, a January 22, 1990 memorandum from ERL-A's Director to the PO of the AScI contract requested the PO to:

> "put in 3 peer reviews per year with 3 reviewers [consultants] brought in for them (expenses for 3 days, plus travel to and from Athens). May do this thru TAI, but best to include it here just in case."

Budgeting for unnamed consultants (e.g. peer reviews) under the AScI contract provided for directed subcontracting on the part of the ERL-A management. Determining the need for consultants under a contract is a determination that should be made by the contractor not laboratory management. As discussed above, ERL-A officials avoided competing the procurement of consultants by directing AScI to select particular individuals instead of soliciting bids.

Such AScI involvement on behalf of ERL-A to justify and acquire consultants on a sole-source basis without CMD approval (doing favors for ERL-A) created the potential for favoritism during the contract procurement process and placed ERL-A employees in a potential COI situation. The directed subcontracting occurred because of the close relationship ERL-A managers had developed with on-site contractors at the ERL-A laboratory. Essentially no arms-length transactions existed at ERL-A.

ERL-A Used the Contract For Personal Services[11]

A 1992 ORD/CMD review identified all six of the FAR's indicators of prohibited personnel service at ERL-A (FAR at 48 CFR subpart 37.1), including the appearance of direct supervision. Our audit also documented evidence of prohibited personal services relationships between ERL-A and its on-site contractors. ERL-A managers clearly stated that, in the past, personal service relationships did exist between ERL-A and its contractor staff.

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[11] See OIG Survey Report E1XMG2-04-0102-3400007, issued November 30, 1992, page 11, for additional details.

As a result of our interviews at ERL-A and CMD, and file reviews including the newly prepared WAs for FY 1993, we remained concerned that the new controls established at Athens to provide and document technical direction are intended more to avoid the appearance of personal services rather than to actually establish the proper arms-length relationship between ERL-A and its contractors. In some instances, ERL-A is continuing contractual relationships that require continuous and routine guidance by EPA staff to obtain research objectives. Under these conditions, this guidance may be no more than routine supervision under the guise of technical direction.

As a consequence of the lack of an arms-length relationship between laboratory and contract employees, numerous examples existed of questionable activities by contract employees which qualified as personal services. For example, in conjunction with the US-USSR Bilateral Agreement, an AScI employee was selected by ERL-A to travel to the Soviet Union for three months to perform water quality modeling of the Don River. ERL-A justified this assignment because the contractor employee was developing water quality models under the AScI contract. Another contractor employee accompanied ERL-A staff on a trip to Egypt. AScI staff also performed as secretaries at ERL-A. One secretary working under the AScI contract was assigned to the ERL-A Director for four months before she was converted to FTE status. ERL-A also utilized the TAI contract to perform QA and health and safety reviews of ERL-A's activities which involved evaluating the work of EPA and other contract employees. In addition, TAI employees looked to the EPA PIs for assignments and review of projects. As a result, instructions to the contract staff came from EPA lead scientists (PIs) who provided research direction and guidance to the contract staff. These examples not only show a personal services relationship that existed at ERL-A but that work performed by contractors was sometimes outside the scope of on-site support contracts. The PO admitted that he would have preferred using FTEs to perform these functions, but with a controlled FTE ceiling the workload had become too great for EPA personnel to accomplish all required tasks.

Potential Inherently Governmental Functions Were Performed Under The TAI and AScI Contracts[12]

TAI and AScI employees performed potentially IGFs. The justification for allowing contract employees to perform these functions was based on the lack of available federal staff to accomplish the mission of the laboratory and not on logical decisions justifying the significant merits of using contract personnel over EPA employees. As a result, contractor employees performed as surrogate FTEs with their roles not always distinguishable from that of the federal staff. Using contractor employees to perform IGFs was a natural evolution from a laboratory culture which apparently emphasized "science and engineering research" at the expense of congressional, OMB, and EPA legal and regulatory requirements.

For example, contractor employees (AScI) assigned to the Center for Exposure Assessment Modeling (CEAM) performed activities which, in our opinion, were inherently governmental. The CEAM, which consisted primarily of AScI employees, was initially established to develop and modify computer models designed to predict the fate and transport of pollutants, and to provide technical assistance to outside users of those models. CEAM's functions were subsequently evolved into providing direct assistance to RPMs on Superfund sites and other program offices. To accomplish the CEAM mission, ERL-A staff was substantially supported through the AScI contract. We were told that federal FTEs were originally requested and would have been the preferred source of needed expertise; however, because of established FTE ceilings, the CEAM program had to rely heavily on the computer-related and scientific expertise of contractor personnel.

TAI employees also performed inherently governmental activities such as QA and health and safety. Overall responsibility for performance of these activities was assigned to ERL-A staff. However, because of increased work loads or other priorities, ERL-A viewed QA and health and safety as "collateral" duties and delegated them to contractor employees. The performance of these activities by TAI employees created a potential conflict-of-interest situation where the contractor oversaw his own work, the work of other contractors, and ERL-A.

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[12] See OIG Survey Report E1XMG2-04-0102-3400007, November 30, 1992, page 4, for additional discussion.

Inadequately Defined Work Assignments/Statements Of Work Resulted In Prohibited Contract Management Practices[13]

The POs for the AScI and TAI contracts prepared SOWs that did not provide an adequate description of expected contractor activities and acceptance criteria for deliverables or any other tool for measuring the contractor's progress. These deficient SOWs permitted contractor performance of virtually any activity desired by ERL-A. As described above, the lack of adequate contract definition contributed to contractor performance of potentially IGFs, personal services relationships, and other prohibited activities under the contract. Although CMD COs reviewed and approved the SOW and WAs, CMD and ERL-A did not attempt to correct deficiencies in these documents until after the CMD/ORD contract management review (issued July 1992) at ERL-A.

The SOW and each WA should be the foundation of the work performed under the contract. These documents identify the work the contractor is legally obligated to perform, sets the boundaries within which the contractor must operate and provides management tools for monitoring progress. These documents should serve as a guide for both the contractor and ERL-A. However, ERL-A's SOW and WAs for the TAI and AScI contracts did not provide sufficient detail for contractor personnel to independently perform the tasks being procured under the various WAs. In addition, there was no acceptance criteria to enable the WAMs to properly determine when an acceptable product or task was completed. Such detail was not required by ERL-A management since ERL-A staff were intimately involved in the day-to-day performance of the contractor and its personnel. Further, the work under these WAs primarily represented continuing support rather than definite deliverables or products.

Inadequate Review and Acceptance of Contract Charges[14]

The ERL-A survey and subsequent audit work indicated that POs and WAMs were not adequately reviewing contractor invoices to verify that billed amounts were legitimate contract charges. ERL-A had

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[13] See OIG Survey Report E1XMG2-04-0102-3400007, November 30, 1992, page 17, for additional discussion.

[14] See OIG Survey Report E1XMG2-04-0102-3400007, November 30, 1992, page 20, for additional discussion

no independent record of contractor performance and relied entirely on contractor supplied data/invoices to review and approve invoices. In addition, the contractor's invoices were inadequate for determining the propriety of contract charges. This could have resulted in improper contract payments.

Under cost-reimbursable contracts the PO has the responsibility to verify contractor invoices. At ERL-A, the PO stated that he only performed a cursory review of the invoices. In addition, since there were no WAMs in the past assigned to ERL-A contracts, there was no independent review or monitoring of contractor work to determine the appropriateness of contract charges. In our opinion, the performance of only a cursory invoice review relates directly to the close relationship that existed between ERL-A managers and on-site contractors. Essentially no arms-length transactions existed at the ERL-A laboratory. EPA managers believed that they controlled the purchase and utilization of labor hours, consultants, equipment and supplies under the contracts. Therefore, ERL-A officials were less concerned with the administrative review of contractor invoices. TAI and AScI would only invoice them for what ERL-A managers directed the contractors to do and purchase through the contract WAs.

CONCLUSION

Consultant use under contract should be used solely for the benefit of the contract and should be subjected to CMD review and approval. By directing subcontracting under its on-site contracts, ERL-A exceeded its authority and violated sound procurement practices, as well as Agency contracting procedures. Also, prohibited contract activities like personal services and the contractor performance of IGFs should be avoided while management controls over contractor performance improved.

While contracting for on-site services has created an increased dependency on contractors for accomplishment of ERL-A's mission, it has also made the accomplishment of ERL-A's research more complicated and increased the staff's administrative burden. ERL-A was forced to use FTEs, hired primarily for their scientific expertise, as practically full-time managers of on-site contractors coupled with the administrative responsibilities dictated by contracting out essential on-site support. Unless ERL-A obtains additional FTEs to perform the on-site scientific and technical support work mandated by Congress, it will continue to be placed in the dilemma of having to choose between achieving

its mission through the improper utilization of contracts to support on-site research or limiting the use of contract support to comply with legal and regulatory requirements at the expense of the mission.

RECOMMENDATIONS

We recommend that the Assistant Administrator for Research and Development ensure significant improvements are made in ERL-A's use and post-award management of contracts to ensure adherence with applicable statutes, regulations, and EPA policies. Specifically, we recommend that the Assistant Administrator:

- Through ORD managers' performance standards and evaluations, establish strict accountability for contract management in compliance with regulations and contract terms. This should include accountability for proper oversight and control of laboratory extramural operations.

In addition, the Assistant Administrator should require the:

Director, Environmental Processes and Effects Research to:

- Instruct ERL-A director to refrain from using on-site contractors for directed subcontracting of consultants.

- Take necessary action to ensure that ERL-A contracts are managed in accordance with regulations and Agency policies. Specifically, the Director should:

    * Require ERL-A to submit a contract management plan describing how contracts retained for on-site support will be controlled to prevent improper contract activities i.e., personal service relationships, directed subcontracting, and contractor performance of inherently governmental activities.

    * Direct ERL-A to place available FTEs into the most critical technical support positions currently performed by contractors which are determined to be essential for retention of Agency expertise or are inherently governmental or personal services in nature. If sufficient FTEs cannot be obtained to replace contractors, either through staffing increases or conversion of extramural funds, or the work cannot be

moved off-site or performed on-site without a personal services relationship, these positions and related tasks should be eliminated.

- Perform periodic, on-site reviews, in conjunction with CMD, to independently evaluate ERL-A's on-going use and management of contracts. This should include a review of the overall utilization of on-site contracts to eliminate contractor performance of inherently governmental or personal services which creates an over-dependence on incumbent contractors.

Recommendations to the Assistant Administrator, Administration and Resources Management

We recommend that the Assistant Administrator for Administration and Resources Management ensure significant improvements are made in the oversight of contract management. Specifically, the Assistant Administrator should require the:

Director, Office of Acquisition Management (OAM) to:

- Require CO approval for consulting expenditures under contracts and establish a policy of not authorizing after-the-fact payments. CMD should ensure that proper approval is obtained before consultant expenditures are made.

AGENCY RESPONSE AND OIG EVALUATION OF AGENCY COMMENTS

ORD Response

ORD generally agreed with the findings and recommendations as presented in Chapter 4. Corrective actions proposed by ORD appear responsive to our recommendations and, therefore, fulfill the acceptable action criteria of EPA Order 2750. ORD's comments and OIG's evaluation on Chapter 4's recommendations are detailed in Appendix I.

OAM Response

OAM generally agreed with our findings and recommendations related to the splitting of the AScI contracts, and ERL-A's misuse of contractor activities. However, OAM took exception to our findings regarding ERL-A's abuse of the contracting process as relates to the TAI's contracts. Specifically, OAM objected to our conclusion that ERL-A exploited 8(a) procurements to retain

TAI as a favored contractor and later biased a competitive procurement in favor of TAI.

According to OAM, standard practice within EPA and SBA was to award consecutive sole-source 8(a) contracts to firms that remained certified under the 8(a) program. OAM contends that during the period FY 1981 through FY 1989, the 8(a) program did not contain any provision for competition among disadvantaged firms in civilian agencies. According to OAM, prior to FY 1990, congressional legislation required agencies to support national socioeconomic goals for diversity in the marketplace by utilizing noncompetitive 8(a) contracts [the only 8(a) mode available] wherever feasible. If EPA had decided to compete the TAI services, OAM contends that it would have had to do so outside the 8(a) program. Thus, in OAM's opinion, there was not a potential violation of the intent of the Small Business Act and CICA when TAI was repetitively retained under sole-source 8(a) contracts.

Although the FAR provides a specific exception from competition for 8(a) contracts, we know of no policy, regulation, or statute that precluded competitive 8(a) contracts prior to 1988. In fact the 1984 CICA encouraged competitive awards among socially and economically disadvantaged small business concerns. OAM apparently assumes that because 8(a) has a special exemption from competition, only sole-source 8(a) contracts could have been awarded. This assumption is not supported by any written policy, regulation, or statute that we are aware of and OAM did not identify any official written policy in this regard. Based our examination of the Small Business Act's legislative history, the exemption from competition was primarily for new 8(a) firms to gain entrance to the marketplace. It was not intended to continue repetitive sole-source contracts to established 8(a) firms that had developed a competitive edge. It is apparent that Congress intended that some competition exist in the 8(a) program prior to 1988. Congressional concern for lack of competition between 8(a) firms prompted the 1988 amendments which required the competing of 8(a) awards in excess of $3 million.

OAM's response also implies that EPA and SBA had established a "standard" practice of awarding consecutive sole-source 8(a) contracts to firms that remained certified under the 8(a) program. However, OAM provided no written policy or reference to support this position. In any case, FAR 19.811(b) states agencies, not SBA, determine the type of contract award to the 8(a) firm. If EPA has allowed SBA to dictate the types of 8(a)

contract awards, then it has improperly ceded its authority to SBA.

OAM also disagreed with our finding that modifications 7 and 16 to the third TAI contract represented a substantial change in the size and scope of the contract which further abused the 8(a) program by avoiding competition and extending the contract period 20 months past TAI's graduation from the 8(a) program. While OAM agreed that both modifications did significantly increase the size of the contract, it disagreed that the modifications violated any provisions of the 8(a) program as it existed at the time the contract was modified. OAM also took exception to our position that ERL-A improperly removed its technical support contract from the 8(a) program. OAM states that CMD reclassified the contract because the size of the contract was such that it was deemed too large for available 8(a) firms and was not suitable for the 8(a) program. The only known 8(a) firm that might have potential to perform the requirement was AScI, an 8(a) contractor which already had similar contracts at Athens. OAM maintains that 8(a) requirements do not dictate that contracts automatically stay in the 8(a) program after an incumbent graduates. However, OAM conceded that last minute extensions of 8(a) contracts under sole-source 8(a) procedures just prior to the expiration of the 8(a) firm's eligibility was not good business practice and CMD would no longer allow it.

OAM's response correctly states that modification 7 to TAI's third sole-source contract increased the contract's LOE by 50 percent; however, it fails to mention that modification 16 increased the LOE over 200 percent. This 1986 contract was originally estimated at a cost of $2.6 million; however, at the expiration of the contract the maximum value had grown, through modifications to over $6.6 million, a 300 percent increase over the original estimated cost. Also, contractor staff had gone from 6 staff years under TAI's second contract to 31 staff years under this third contract (a 500 percent increase), the contract was extended to five years, and the contract support had expanded from support of one branch at ERL-A to support of all four ERL-A branches. If this is not a change in contract scope, then CICA restrictions on contract modifications to contract scopes without competition are essentially meaningless. We believe these large contract modifications to TAI's third sole-source 8(a) contract constituted a change in scope under the CICA and that CMD should have given some consideration to recompeting the contract.

Finally, OAM took exception to our contention that ERL-A used

biased technical evaluation ranking factors which gave TAI a competitive advantage and that the AScI proposal was a token submission. OAM concludes that its file reviews did not reveal any bias or unfair consideration in the RFP. In OAM's opinion, the SOW represented the government's minimum need for support services at the Athens laboratory and the related technical evaluation criteria placed the most weight on the decisive requirement for successful contract performance, e.g., the qualifications of dedicated staff located at ERL-A. According to OAM, our interpretation of a lack of resolve on the part of AScI represents only a weaknesses of a small 8(a) firm not accustomed to the competitive arena. Overall, OAM contends that the solicitation process and award selection were conducted in accordance with the precepts of FAR 15 and EPAAR 1515. However, OAM did conclude that better evaluation measures must be found to avoid prolonged incumbency by one firm at any given laboratory, particularly for on-site contracts, where the advantage of incumbency is difficult to offset.

We maintain that ERL-A and CMD could have retained the contract in the 8(a) program if they had so desired. If the scope of the contract in its form at that time was to large for 8(a) firms, they could have split up the scope into smaller contracts to allow 8(a) firms to compete for the work. In fact, file documentation evidences that ERL-A requested that the contract be taken out of the 8(a) program so that TAI would have a chance to compete for the contract. The size of the contract scope was only a secondary consideration which could have been solved by breaking up the contract into smaller tasks. Also, the fact that ERL-A and CMD considered an existing 8(a) firm's bid for the contract in the competitive range indicates that the justification "of for large business only" was weak. AScI received a substantially high technical score and the score was not affected by the size of the contract versus AScI's status as an 8(a) contractor.

OAM also maintains that there was no bias in the competitive award to TAI but later states that they are trying to eliminate the inherent bias in EPA's competitive procedures that favor incumbent contractors. OAM goes to great lengths to justify the need for personnel commitment letters and emphasis placed on contractor experience with EPA operations in the competitive award process; however, the perceived need for such evaluation factors does not eliminate the large competitive edge such factors give to incumbent contractors; thereby, substantially discouraging competition.

In conclusion, it was OIG's intention that TAI's contract awards be viewed as a whole or as a trend to show ERL-A's avoidance of full and open competition in order to ensure retention of TAI as the on-site contractor. It was not intended that each individual procurement be analyzed as to whether the procurement, in and of itself, was proper and in compliance with policy and procedures. In addition, repetitive sole-source awards to an 8(a) contractor who has developed the expertise to compete does not further or promote the mission of the 8(a) program to develop the 8(a) contractor's competitive edge. It only reduces the Agency's administrative burden in competing the contracts.

Except as discussed above, OAM generally agreed with the findings and recommendations as presented in Chapter 4. OAM's response included planned or initiated actions for some recommendations. OAM's comments and OIG's evaluation on Chapter 4's recommendations are detailed in Appendix I. A complete copy of OAM's response to Chapter 4 and OIG's evaluation is available upon request.

CHAPTER 5

CIRCUMVENTION OF STATUTORY AND REGULATORY REQUIREMENTS EXTENDED INTO USES OF INTRAMURAL RESOURCES

Our review of extramural resource management at ERL-A also disclosed questionable uses of intramural resources and a potential violation of appropriation law restrictions. These questionable actions related to the improper acquisition and construction of an office building with S&E appropriated funds and Superfund monies and the payment of excessive travel costs. The building was obtained through a fiscal year-end contract award. These questionable uses of intramural resources indicated that the circumvention of laws and regulations and misuse of resources was not restricted to extramural funds.

THE ACQUISITION AND CONSTRUCTION OF AN ERL-A OFFICE BUILDING WITH S&E FUNDS AND SUPERFUND MONIES VIOLATED AGENCY PROCEDURES AND APPROPRIATIONS LAWS

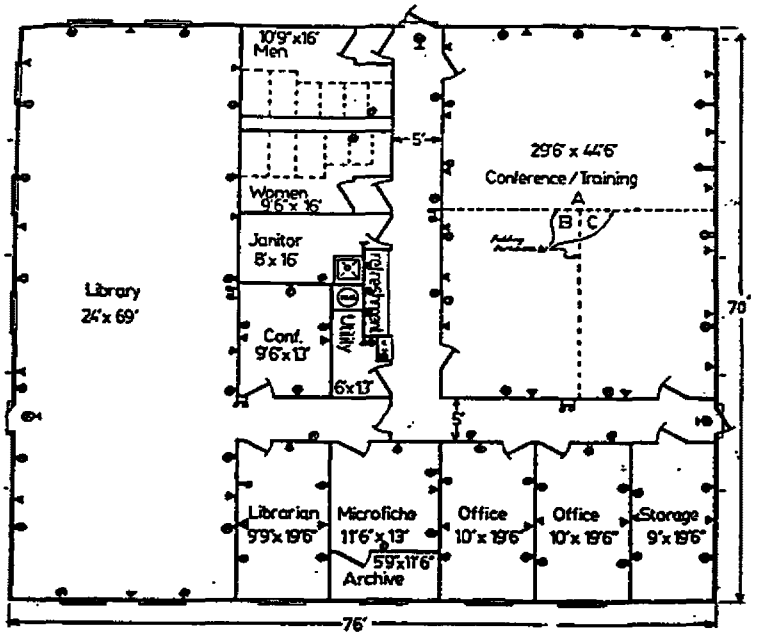
Appropriations laws and Agency restrictions on construction and acquisition of buildings with S&E funds were circumvented by the purchase of a modular office building which was improperly classified as personal property rather than real property. At the end of FY 1988, ERL-A obligated $201,817 ($170,617 in expiring FY 1988 S&E appropriated funds and $31,200 in Superfund monies) to purchase, through a CMD year-end contract award, a 5,320 (70 feet by 76 feet) square foot modular building. In FY 1989, the structure was transported to ERL-A in five sections and assembled on-site. With incidental installation costs of $2,770, the total cost of the construction totalled $204,587.

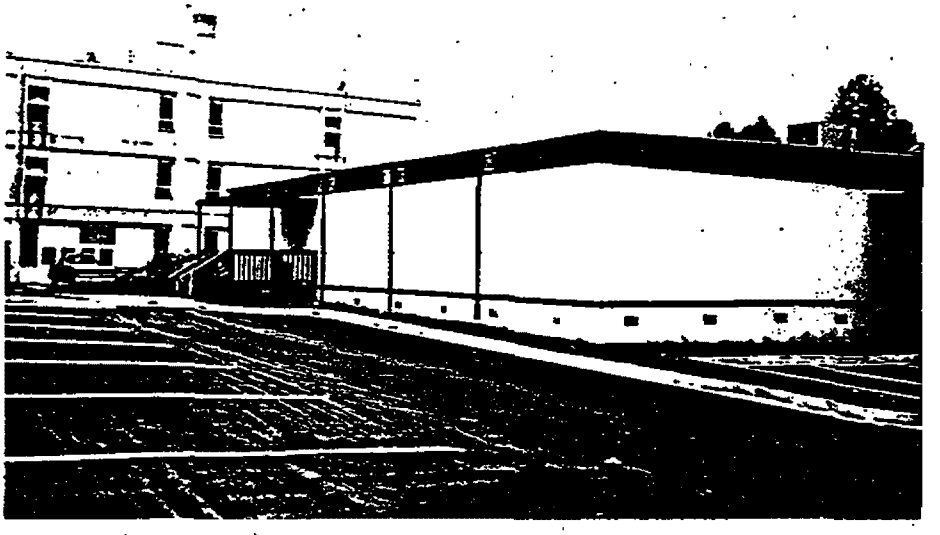
According to ERL-A managers, prior to initiating its procurement request on July 26, 1988, ERL-A contacted the Facilities Management and Services Division (FMSD), Engineering, Planning, and Architecture Branch (EPAB), Washington and the FMSD, Personal Property and Supply Management Branch, Cincinnati to determine if an office building qualified as personal or real property. While we could not locate documented evidence of these contacts in ERL-A files, ERL-A managers remembered that both offices stated that the purchase would be considered personal property.

CMD files evidenced that on August 8, 1988, the CO contacted the Chief of FMSD's EPAB about the acquisition of the portable building for ERL-A. The CO faxed a copy of the building's specifications for EPAB's review. In response, the EPAB Chief told the CO that ERL-A did have the authority to purchase such modules without EPAB oversight and without the use of EPAB (e.g., Buildings and Facilities Appropriation) funds. Based on FMSD's

response and its previous designation of "portable" buildings as personal property, the CO concluded in the August 8 memorandum that the acquisition and award of the contract for this building using S&E and Superfund monies was appropriate. The CO indicated in the memorandum to the file that the Chief, EPAB was subsequently apprised of the proposed acquisition but the Chief provided no further response.

In FY 1989, the modular building was delivered to ERL-A and permanently mounted on numerous concrete pillars next to ERL-A's other facilities. The buildings floor plan and an exterior photograph are shown below:





As shown, this building did not appear to be any more readily transportable than other ERL-A buildings constructed by more conventional methods. The building, like a permanent building, has electricity, heating/cooling units and water/sewer hookups.

Historically, Comptroller General decisions have ruled that such modular buildings represent major construction projects or, at a minimum, major acquisitions of real property. For example, Comptroller General Decision B-235086 stated the following concerning the acquisition of modular buildings by the Forest Service which were initially classified as transportable personal property:

> Congress provided the Forest Service with a specific appropriation in fiscal year 1984 for the construction and acquisition of buildings and other facilities. ...In fiscal year 1984, the Forest Service used the more general National Forest System appropriation to acquire three modular constructed buildings.
>
> Generally, an appropriation for a specific object is available for that object to the exclusion of a more general appropriation. 65 Comp. Gen. 881, 884 (1986). The existence of a specific appropriation for the construction and acquisition of a building would thus preclude the Forest Service from using a more general appropriation to pay for such a purchase.

> Here, each building was permanently installed and cost more than $100,000. Thus, we think it reasonable to classify them as major construction projects. See 63 Comp. Gen. 422, 435 (1984). However, even if we did not consider them "construction" projects, we would nevertheless consider them "acquisitions" for purposes of Pub. L. No.98-146. Therefore, since Congress provided a specific appropriation for the "construction and acquisition" of buildings, the Forest Service improperly used the more general appropriation to purchase buildings.

As in the Forest Service case above, EPA has a specific appropriation for the construction and acquisitions of buildings - the FY 1988 Buildings and Facilities Appropriation (Public Law 100-404). In addition, the FY 1988 S&E Appropriation (Public Law 100-404) contained the following restrictive provisions for the use of the S&E appropriation for construction and alteration of facilities:

> For necessary expenses, not otherwise provided for, including... construction, alteration, repair, rehabilitation, and renovation of facilities, not to exceed $25,000 per project...[emphasis added].

The 1988 Appropriations Act (P.L. 100-404) did not provide for any utilization of Superfund money to purchase real property.

An ORD memorandum, dated November 10, 1987, to all laboratories reminded laboratory managers that laboratory directors only have the authority to charge B&F (Building and Facilities) items under $5,000 to the S&E appropriation and:

> B&F items which cost between $5,000 and $25,000 require prior approval of the Facilities Management and Services Division. Any item exceeding $25,000 must be charged to the B&F appropriation.

Based on the size and permanent nature of this building and the Comptroller General decisions regarding similar acquisitions, we question the advice apparently provided by FMSD. In our opinion, the acquisition of a 5,320 square foot modular building costing in excess of $200,000, using "portability" as the justification, violated Agency appropriation restrictions. CMD awarded this contract on September 30, 1988 one day before the S&E appropriation was due to expire.

Potential Violations of Appropriation Restrictions

This questionable use of S&E and Superfund monies for the purchase of a modular building represented only one of at least four instances of potential violations/circumvention of appropriations laws found during our audit of ERL-A extramural resource management. In Chapter 3, R&D appropriated funds were misused to fund, through CAs, the development of an ERL-A on-site child-care center and the attainment of a Phd for an EPA employee. These actions appeared to violate the purpose and authorities contained in the applicable R&D appropriations. In another case in Chapter 3, extramural R&D funds were exchanged through reciprocating IAGs with another federal agency to fund intramural travel of employees working on a common project. This situation again appeared to violate the purpose of the R&D appropriation since S&E appropriated funds should be used for EPA staff travel. At a minimum, we believe this represented unauthorized reprogramming of extramural funds to intramural uses. In conclusion, such circumventions of appropriation restrictions usurp congressional oversight of Agency funding and bypass Agency, as well as congressional and OMB budgetary and fund controls.

ERL-A USED PURCHASE ORDERS TO CIRCUMVENT FEDERAL TRAVEL REGULATIONS AND MAXIMUM PER DIEM RATES

Through use of purchase orders, ERL-A circumvented travel regulations and authorized per diem rates in order to hold conferences at high cost Georgia resort areas at St. Simon's Island and Callaway Gardens. For example, ERL-A sponsored a "2-day" laboratory directors meeting (May 28 to May 30, 1991) at a high-cost resort hotel on St. Simon's Island. ERL-A used a purchase order to pay for accommodations, some meals and refreshments. In documentation, dated April 2, 1991, entitled "Justification For Other Than Full and Open Competition" attached to the purchase order, the ERL-A director stated:

> ...this meeting requires uninterrupted time and attention of attendees. Therefore, a meeting place other than EPA premises is needed.

ERL-A documentation indicated that only hotels and resorts on St. Simon's had been contacted and the King and Prince Hotel was selected because the "...suggested source was the only one in the area [emphasis added] with available rooms." This was used as the basic justification for the sole-source purchase. However, no evidence existed that ERL-A had checked lower cost areas such

as Athens, Georgia (near the laboratory) or nearby Atlanta, Georgia.

As stated above, ERL-A elected to pay for hotel accommodations and some meals and refreshments with a purchase order rather than having attendees claim the costs on individual travel vouchers. However, attendees were issued individual travel authorizations (TAs) and they claimed airfare, mileage, and other subsistence and incidental costs associated with the St. Simon's conference.

By using the purchase order/invoice payment method, ERL-A was able to circumvent the maximum per diem limits allowed by travel regulations for the St. Simon's area. Based on our calculations, ORD paid almost $1,750 in excess of the total maximum authorized per diem (150 percent of authorized per diem for St. Simon's area) for the "2-day conference" at St. Simon's. If the conference had been conducted off-site in Athens (the nearest location with adequate hotel facilities), ORD could have saved almost $3,500 over the total travel cost for the St. Simon's conference. In addition, ERL-A authorized and paid for additional travel time/costs (some attendees arrived early, some late, and some came all the way from the West coast just for a 2-day meeting which included travel time) for the traveler's own convenience and separately paid $436.16 for refreshments at breaks which is not permitted. These types of abuses of government funds can subject EPA to public criticism and erosion of public trust.

ERL-A used another purchase order to exceed maximum per diem for a three-day meeting at the Callaway Gardens resort. ERL-A contacted only three facilities for comparative conference room and guest room rates. Two of these facilities were high priced resorts in the Atlanta vicinity (Lake Lanier Islands - $105/night and Stone Mountain - $189/night) and the other was Callaway Gardens ($92.50/night).

Based on this limited survey of high cost resorts, ERL-A selected Callaway Gardens for a sole-source procurement because of "cost and availability of lodging and conference facilities." There are many large, convention center type hotels in the Atlanta vicinity where rooms and facilities can be obtained at prices below the $79 per day authorized lodging rate for Atlanta. None of these hotels were contacted by ERL-A.

The Callaway Gardens conference took place just one week before the St. Simon's trip discussed above. The authorized lodging rate for the Callaway Garden area was $40 per day. However, through the purchase order, ERL-A paid $92.50 a night for 35

individuals including OEPER personnel. The rooms at Callaway Gardens were used from May 18 through May 21, 1991, for a total of 94 lodging nights. When compared to the authorized rate of $40 per diem, this purchase was $4,935 in excess of total authorized per diem. Even using the maximum authorized lodging rate (150 percent of authorized rate or $60 per day) excessive travel of $3,055 was incurred for this conference. In addition, the Callaway Gardens invoice submitted with the purchase order for payment included a $3,146 supplemental charge on the invoice described only as "Environmental." ERL-A could produce no supporting documentation or explain the purpose of this expenditure. During processing of the Callaway Gardens invoice, a financial technician at the Commodities Payment Section, Research Triangle Park, wrote ERL-A:

> Invoiced as received does not provide information we can use to match what you authorized on the purchase order against what they are charging us. Will you approve payment as billed or should we return the invoice to the vendor.

On July 8, 1991, ERL-A instructed the technician to "Pay the invoice as billed." On July 16, 1991, the ERL-A Laboratory Director signed a statement found in ERL-A files which certified:

> ... all charges were appropriate and necessary to accomplish the goals set for the Ecological Risk Assessment Research Program Science Advisory Board Review. Therefore, I authorize payment of this purchase order.

According to ERL-A files, the Callaway conference package at $92.50 per night included many complimentary items such as free admission to the Gardens park. However, other features of the package included breakfast and dinner, a prime rib banquet, daily greens (golfing) fees, etc., which may account for the $3,146 additional charge on the invoice.

We question whether paying excess lodging, totaling at least $3,055, at a resort area within 90 minutes of Atlanta and its available facilities (per diem lodging rate of $79 per day); and an unexplained invoiced charge of $3,146 was either appropriate or necessary.

RECOMMENDATIONS

We recommend that the Assistant Administrator for Research and Development:

- Provide guidance to ERL-A concerning appropriation law, proper uses of funds, and appropriation restrictions related to funds ERL-A receives.

- Obtain formal, written OGC legal opinions concerning: (1) potential appropriation law violations related to ERL-A's use of S&E and Superfund monies to purchase and construct a modular building; and (2) use of R&D funds to pay for development of a day-care center for ERL-A staff and training costs of an EPA employee (see Chapter 3). If any violations occurred, report any resulting Anti-deficiency Act violations in accordance with applicable law.

- Instruct ERL-A to refrain from using purchase orders to circumvent maximum per diem rates and strictly comply with federal travel regulations in the authorization and payment of all travel costs.

- Instruct ERL-A to hold future conferences in locations that offer suitable accommodations at the least cost to the government and that comply with current EPA guidance on restricting EPA meetings at resort areas.

- Require ERL-A to provide supporting documentation and justification for the unidentified $3,146 charge on the purchase order for the Callaway Gardens conference. Instruct ERL-A that future purchase order costs should be fully justified in the purchase request and properly supported by file documentation and invoices.

We also recommend that the Assistant Administrator for Administration and Resources Management require the:

Director, Facilities and Management Services Division to:

- Review FMSD's policies on classification of real property versus personal property as relates to the procurement of modular structures and the proper funding for such structures. If needed, issue revised or more definitive guidance on the classification and funding of modular buildings.

AGENCY RESPONSE AND OIG EVALUATION OF AGENCY COMMENTS

ORD Response

ORD generally agreed with the findings and recommendations as presented in Chapter 5. Corrective actions proposed by ORD are responsive to our recommendations and appear to fulfill the acceptable action criteria of EPA Order 2750. ORD's comments and OIG's evaluation on all Chapter 5's recommendations are detailed in Appendix I.

OAM Response

OAM comments are no longer germane because the audit report was changed in accordance with those comments. Neither OARM or OAM responded to our audit recommendation for the Director, FMSD.

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CHAPTER 6

ERL-A'S FMFIA PROCESS DID NOT ENSURE PROPER CONTROL OVER EXTRAMURAL RESOURCE MANAGEMENT

ERL-A's FMFIA process did not adequately identify internal control weaknesses or ensure proper implementation of FMFIA control objectives and techniques relative to the management of contracts, CAs, IAGs and other support/administrative activities that came to our attention during the audit. Many material control weaknesses in ERL-A's extramural resource and administrative activities were not previously identified in ERL-A's FMFIA risk assessments. In addition, ERL-A had not adequately assessed control techniques to ensure proper implementation by management staff. Critical control techniques identified in ERL-A's FMFIA documentation were either not implemented or improperly implemented by ERL-A management. As a result, there was insufficient assurance that Agency resources were safeguarded against waste, fraud, abuse, and conflicts of interest. Because many of ERL-A's extramural activities were of a mission-critical nature, proper control of the extramural and administrative operations were essential to the integrity of the Agency's programs.

BACKGROUND

The Federal Managers' Financial Integrity Act (FMFIA) of 1982 requires that each executive agency establish internal accounting and administrative controls in accordance with standards prescribed by the Comptroller General. FMFIA specifies that these controls are to provide reasonable assurance that agencies' obligations and costs comply with applicable law; that Government assets are safeguarded against waste, loss, unauthorized use, and misappropriation; and that revenues and expenditures are properly accounted for and recorded for proper reporting and accountability purposes.

OMB Circular A-123 and EPA Resources Management Directive 2560 prescribe the policies and procedures for Agency implementation of FMFIA requirements. ERL-A has been designated as an assessable unit under EPA procedures. The FMFIA process for each assessable unit consists of the following events: (1) risk assessments every three years to identify vulnerable operations, (2) a Management Control Plan (MCP) every five years which details event cycles, control objectives and techniques, and (3) Internal Control Reviews (ICR) and Alternate Internal Control Reviews (AICR) annually. In addition, each EPA program manager is responsible for periodically evaluating the internal control systems in place and taking action to correct identified weaknesses.

ERL-A'S REVIEWS OF EXTRAMURAL RESOURCE MANAGEMENT WERE INSUFFICIENT TO ENSURE ATTAINMENT OF FMFIA CONTROL OBJECTIVES

Although extramural resource management was identified by ORD as a material weakness, no internal control reviews were conducted by ERL-A to determine whether internal control responsibilities were adequately defined and internal controls techniques were properly implemented to meet its extramural control objectives. CAs and on-site LOE contracts provided great flexibility to program offices, but provided little incentive for efficiency and placed a large oversight burden on EPA management to assure performance. In addition, cooperative agreements and on-site contracts were highly susceptible to favoritism and COI situations. Considering the high risk nature and ERL-A's heavy reliance on extramural resources in achieving the mission of the laboratory, management should have ensured that an adequate system of internal controls was established. However, ERL-A's extramural resource management controls were not adequate or effective in fulfilling this large oversight responsibility and ensuring that extramural activities were needed and represented the most cost-effective approach. In addition, ERL-A management did not periodically evaluate implementation of established FMFIA controls as related to extramural resource management as required by EPA guidance. These conditions lead to the internal control weaknesses in extramural resource management identified in this and other chapters of this report.

ERL-A's Internal Control Reviews Did Not Identify Major Internal Control Weaknesses

Although ORD in its 1990 and 1991 FMFIA internal control reviews identified the management of extramural resources as a presidential-level weakness, extramural management was not identified as a material weakness at ERL-A. ORD reported in its 1990 FMFIA report:

> ... that there is a serious disparity between growth in R&D funding and human resources available to manage the resources properly. This imbalance may make ORD vulnerable to fraud, waste and mismanagement of funds.

ERL-A's internal control coordinator stated that at the time of their 1991 FMFIA report, ERL-A did not see extramural management as a material weakness, although no formal reviews were conducted to verify their assumptions. As a result, many of the deficiencies in ERL-A's extramural resource management identified in this report went undetected and uncorrected.

According to the EPA's Senior Council on Management Controls, the failure to identify previously reported Agency-wide weaknesses at the assessable unit level was not uncommon. A synopsis of an August 15, 1990, meeting of the Senior Council on Management Controls recognized an inherent problem of Agency managers not adequately identifying their internal control weaknesses. EPA's Deputy Administrator stated that "EPA must work to change the culture not to hide weaknesses." A GAO representative at the meeting further defined the problem when he stated:

> Internal controls and financial management systems are ... treated as paperwork exercise {and}... often delegated to lower levels without senior management involvement or understanding.

GAO also concluded, even when material weaknesses are identified at the Agency level:

> EPA program offices do not typically report these kinds of fundamental problems as material weaknesses, but as agency-wide weaknesses, which seem to be some sort of lesser problem that does not need to be brought to the attention of the President and the Congress.

At ERL-A we found the same situation as identified by the Senior Council on Management Controls. ORD identified extramural resource management as a material weakness at the Agency level, but ERL-A managers did not deem extramural resource management a priority at the field level. The identification of material weaknesses as related to extramural resources was seen by ERL-A as a responsibility of ORD, CMD, and GAD. In spite of their reliance on external review, the Agency's FMFIA guidance states:

> All EPA managers are responsible for operating effective and efficient systems of internal control. Periodically they must evaluate the internal control systems and take actions to correct identified weaknesses.

In our discussions with ERL-A management, it became evident that many of the established controls over the management of extramural resources were often viewed by laboratory management as a bureaucratic hindrance. Achieving the ERL-A's mission of research was deemed more important than working within the constraints imposed upon them. The 1990 Lab Directors Retreat's Resource Utilization Workgroup addressed the difficulty of

working within resource limitations and regulatory constraints. For instance, topics discussed at the retreat included:

- Congressional, OMB and EPA constraints on use of resources make it more difficult to do quality science and engineering research.

- Innovative uses of R&D [funds] to enhance in-house research, facilities and skill mix are being used by Laboratories in spite of the system.

The innovative use of R&D funds "in spite of the system" was in essence the circumvention of internal controls as they related to the use of extramural resources. The apparent attitude of ERL-A management that the end justifies the means subsequently contributed to the abuses detailed in previous chapters of this report.

Internal Control Responsibilities Were Not Adequately Defined

Internal control responsibilities were not adequately defined at all levels of extramural resource management. Specific FMFIA requirements were not included in the performance standards of all managerial levels and managers did not understand the importance of the part they played in the internal control system. This facilitated inadequate implementation of an effective internal control system over ERL-A's extramural resource management.

At ERL-A, extramural resource managers from the director down to the PO and WAM level have an integral role in the Agency's adherence to FMFIA. However, specific FMFIA requirements and responsibilities were not included in PO and WAM performance standards. Inadequate extramural resource oversight at these management levels could produce material weaknesses in the internal control system. OMB Circular A-123 and EPA Resources Management Directive 2560 require that each Senior Executive Service, Merit Pay and any other employee with significant internal control responsibilities maintain written performance agreements against which a manager's internal control performance can be recognized and evaluated. The performance agreement should outline specific internal control responsibilities and establish performance standards which are specific to the employee under evaluation. In order to assure a viable, effective internal control system, all levels of contract or assistance management should have specific control responsibilities defined in their performance standards.

INTERNAL CONTROLS OVER EXTRAMURAL MANAGEMENT INEFFECTIVE

ERL-A's heavy reliance upon extramural resource activities to achieve its mission and the vulnerability of many of ERL-A's extramural activities to fraud, waste and mismanagement, necessitated the need for extensive internal controls and reviews to assure proper implementation of an effective internal control system. However, ERL-A managers did not effectively utilize available resources to design and implement an effective system of internal controls. As a result, the procurement process was abused, extramural agreements and intramural resources were misused and mismanaged, and prohibited contract activities developed. These conditions were previously reported in Chapters 2, 3, 4, and 5.

ERL-A Did Not Properly Document Critical Event Cycles, Control Objectives and Control Techniques

ERL-A managers did not identify all critical event cycles, control objectives, and control techniques for the management of extramural activities. ERL-A also did not properly follow through and systematically test whether established internal controls were adequate or functioning. In order to certify as to the adequacy of event cycle documentation and controls, Agency FMFIA guidance in Resources and Management Directive 2560 requires that these controls be systematically tested. If ERL-A officials had systematically reviewed its existing internal control documentation for extramural management, they would have found that event cycles, control objectives and control techniques were insufficient to permit a conclusion as to the adequacy of internal controls. Without adequate and detailed event cycle documentation, ERL-A's FMFIA process became merely a "paper exercise".

As a result of identifying extramural management as a material weakness in its 1990 FMFIA report, ORD contracted in early 1991 for a review of its administrative processes and internal controls. The review objective was to assist laboratories in meeting their FMFIA event cycle documentation requirements. The review produced four studies which listed extensive control objectives and control techniques for all levels of contract, CA, and IAG administration including ORD Headquarters, CMD, GAD, and individual laboratories. In transmitting these contractor reports

to the laboratories, ORD's Director of the Office of Research Program Management, stated:

> It is expected that individual offices and laboratories may use this report to evaluate and refine their internal controls documentation and to identify opportunities for improvement... Accordingly, the report is not intended to be a standard procedures manual for adoption by all laboratories, nor a compilation of all the variations in procedures.

However, ERL-A did not utilize these documents to refine and strengthen their event cycle documentation and control techniques as suggested, but merely referenced these documents as examples of detailed control techniques. These documents contain extensive listings of control techniques for all levels of contract, CA, and IAG management and many would not apply to ERL-A's operations. In addition, this documentation by reference was in direct contradiction of the Director's statement that the "report is not intended to be a standard procedures manual". Therefore, ERL-A did not establish realistic, detailed FMFIA documentation or test ERL-A's internal controls related to its management of extramural resources. ERL-A's FMFIA process primarily remained "a paper exercise."

Contract Procurement and Management

Pre-award contract management or procurement related to planning, requesting, evaluating proposals, and awarding of contracts was omitted from ERL-A's FMFIA event cycles. ERL-A did include some control objectives and techniques in their FMFIA documentation related to post-award contract administration. These objectives and controls were either superficial, inadequate, or not properly implemented to preclude abuse, misuse, or mismanagement of extramural resources.

Pre-Award Contract Management

As previously stated, ERL-A's FMFIA process did not document the pre-award process or control objectives/techniques for this highly vulnerable process. Our audit disclosed that this process was substantially abused by ERL-A (see Chapter 4). The 1991 FMFIA documentation produced by the Procurement and Contracts Management Division (PCMD) listed the following control objectives and control techniques for its pre-award process. None of these critical control techniques had been documented or implemented by ERL-A.

Control Objective	Control Techniques (Examples)
To obtain maximum competition.	-Adherence to EPAAR[1]. -Review of RFPs one level above CO. -Acquisition Plan for RFPs approved by Competition Advocate.
Impartial and comprehensive evaluation of proposals.	-Adherence to EPAAR. -Acquisitions over $5 million require 3 member TEPs. -All TEP members must be appointed by Source Selection Official. -TEPs must certify to no COIs.

As previously stated in Chapter 4, ERL-A officials did not act in the best interest of the Agency by maximizing full and open competition. To ensure that favored, incumbent contractors and their employees were retained, ERL-A: (1) abused 8(a) set-asides to guarantee repetitive sole-source procurements and (2) biased a competitive procurement when 8(a) eligibility expired. ERL-A's circumvention and avoidance of competition did not guarantee that the Agency received the best services at the least cost, created an atmosphere where contractors were reluctant to submit proposals against incumbent contractors, created a potential contractor monopoly over critical laboratory operations, and increased EPA's vulnerability to extramural support for accomplishing the ERL-A's mission.

In conclusion, ERL-A's pre-award process contradicted sound contracting practices and compromised any control objectives that could have been documented for this process.

Contract Administration

ERL-A did document certain event cycles and related control objectives/techniques for overall or post-award contract management. Event cycles included PO and WAM certifications as to required experience and training, contract monitoring and review, contract payments, and contract close-out. However, our review disclosed that many of the controls identified were either

[1] EPA Acquisition Regulations.

insufficient to preclude improper actions or were ineffectively implemented.

PO/WAM Qualifications: Controls to ensure that POs and WAMs had sufficient contract management and technical expertise to properly manage the contract were not effective. Although ERL-A's designated POs and WAMs had received the basic, required contract management courses, their experience was inadequate for the level of contract management responsibility delegated to these positions. In some cases, the POs technical ability was also inadequate for contract monitoring. In one case, the (former) PO for an on-site technical support contractor was on the laboratory's administrative staff and did not possess the scientific or technical background necessary to monitor the contractor's operations. Lack of contract management expertise contributed to numerous deficiencies in SOW and WA preparation and oversight. These problems were detailed in OIG's Survey Report E1XMG2-04-0102-3400007 on ERL-A's contract management operations, issued November 30, 1992.

In addition, ERL-A employees were performing contract management functions without proper certification or delegation of authority. This primarily involved EPA employee oversight of contractor employees in prohibited personal services relationships.

Contract Compliance: Neither ERL-A or CMD provided sufficient resources to properly manage contracts and ensure compliance with contract terms and conditions. Because of insufficient CMD resources, many contract management duties had been effectively delegated to ERL-A management who had no contract authority. Also, the CO and PO did not adequately review all of SOWs and WAs before approval or ensure that deficiencies noted in those reviewed were corrected. As a result, prohibited personal services relationships developed, contractors performed potentially inherently governmental functions, and work was performed outside the SOW. Details of these deficiencies were presented in OIG Survey Report E1XMG2-04-0102-3400007, issued November 30, 1992.

Invoice Review and Approval: Internal controls over the review and approval of contractor invoices were not properly implemented. As a result, improper contractor charges were paid without question. ERL-A control techniques did identify the requirement for the PO to review contractor invoices for compliance with contract terms; however, only limited invoice reviews were being conducted. Contractors did not provide sufficient detail in their invoices for proper verification of

charges and services received by ERL-A. Details of this problem were included in OIG Survey Report E1XMG2-04-0102-3400007, issued November 30, 1992.

Cooperative Agreement Management

Event cycles for CA award and administration were totally excluded from ERL-A's FMFIA documentation until July 26, 1991. ERL-A's FY 1991 event cycle documentation included a reference to ORD's contractor report on CA controls, entitled "Documentation of Administrative Processes/Internal Controls of Administrative Processes/Internal Controls of Cooperative Agreements." As previously discussed, this contractor report contained an extensive list of possible CA controls for all levels of CA management. ORD specifically informed laboratories that the report was not to be used in its entirety in place of detailed FMFIA documentation but merely as a guide in tailoring control plans to individual laboratory needs. Therefore, ERL-A still has not prepared detailed control techniques for CA activities at ERL-A. Also, ERL-A's FMFIA process did not establish the detailed documentation necessary to permit the testing/verification of ERL-A's internal control processes related to CAs.

Below are examples of control objectives and techniques from GAD's FMFIA documentation for CAs that should have been included in ERL-A's control processes.

Control Objectives	Control Techniques (examples)
Award CAs in compliance with laws, regulations, policies.	-Oversight of review and approval process. -Compliance with FGCA Act. -Eligibility of recipient. -Indirect cost-rate approval. -Proper cost-sharing.
Obtain maximum competition in CA awards.	-Compliance with 1977 FGCA Act. -ORD Policy. -Needs specified in form that permits maximum competition.
Assure project progress, compliance, and timely, accurate reporting.	-Properly maintain CA files. -Monitoring compliance (site visits). -Obtaining and reviewing progress and financial reports.

However, ERL-A did not properly document CA event cycles and controls and, as reported in Chapter 3, this contributed to the misuse, abuse, and mismanagement of CAs. ERL-A circumvented statutory requirements by using CAs, instead of contracts as required, to obtain goods and services for the direct benefit of the federal government (specifically ERL-A). Virtually all of the CAs we reviewed produced specific information that would be directly incorporated into Agency technical, policy, or regulatory decision.

Also, ERL-A's CAs were not awarded in a competitive environment. Almost 63 percent of ERL-A's active cooperative agreements, comprising over $10 million of ERL-A's $14.2 million in CA funding, were awarded without competition. Potential favoritism was indicated in such noncompetitive awards to former employers or alma mater of ERL-A staff or current employers of former ERL-A staff or on-site cooperators. Also, doubt existed as to how truly competitive were ERL-A's competitive CA awards. Five of the CAs we reviewed were awarded competitively and, in every case, we identified potential review panel COIs and/or other irregularities which may have compromised the free and open competition of the CAs.

Finally, CAs were not properly managed after award. ERL-A either did not have or did not implement procedures to assure compliance with the terms of the extramural agreements or ensure that government assets were safeguarded against waste or abuse. An overall lack of documentation existed related to management and oversight of the CAs. ERL-A POs were not properly fulfilling their responsibility to ensure proper cooperator use of government resources.

Interagency Agreements

Until June 26, 1991, ERL-A had no established event cycles or controls documented for the issuance and management of IAGs. ERL-A's FY 1992 event cycle documentation included a reference to two ORD contractor reports which included examples of control systems for IAGs. As previously discussed, these studies were not intended to be referenced in entirety as detailed FMFIA documentation for laboratories, but were to be used to tailor controls to individual laboratory operations. These reports contained extensive listings of possible control techniques for all levels of IAG management. Therefore, ERL-A did not identify or document any specific detailed control techniques for its IAG activities through its reference to the contractor reports. In addition, ERL-A's FMFIA process did not establish the necessary detailed control documentation to permit testing/verification of ERL-A's internal controls related to IAGs.

Examples of control objectives and techniques for CAs were found in GAD's FMFIA documentation. These controls were not documented or implemented by ERL-A.

Control Objective	**Control Techniques** (examples)
Proper award and administration of IAGs	-Reviews of IAG proposals/ approvals for compliance, completeness, accuracy, funding. -Review of Agency authority for IAGs used for grants or CAs.
Awards that promote environmental mission.	-Review for compliance with statutory, policy, procedural requirements.

The lack of detailed documented control objectives and techniques for IAG award and administration contributed to the IAG deficiencies cited in Chapter 3. As discussed in Chapter 3, ERL-A misused IAGs to improperly supplement FTE travel, improperly initiate research funds to a foreign government, and circumvent/violate procurement regulations in the use of an on-site contractor and acquisition of a subcontractor for another federal agency.

Administrative Management/Fund Controls

During our audit we also became aware of other administrative management and fund control problems both related and unrelated to extramural management. These deficiencies also pertained to inadequate FMFIA processes and related internal controls. The event cycles and related deficiencies are discussed below.

Records Management: Although ERL-A identified an event cycle for records management with a control objective and control techniques, the control techniques were not effectively implemented. As a result, ERL-A failed to assure the laboratories's file maintenance and record retention adhered to federal and Agency policies. The following critical control objective and a control technique related to record storage/retention were documented in ERL-A's FY 1992 FMFIA report.

> Control Objective: To ensure that all records are maintained for easy retrieval and documentation.
>
> Control Techniques: Assure that records are stored, archived, and destroyed in accordance with Lab policy and EPA procedures (e.g., specified by the Records Management Manual, Office of Information Resources Management.

The control technique cited above contained conflicting guidance because laboratory record retention policies did not agree with EPA records management policies. EPA policy required 5 to 10 year retention of PO, contract, CA, and/or IAG files to include correspondence, notes, telephone memos, etc; however, ERL-A's policy was to periodically purge such documentation from the files contrary to Agency policy. Record retention problems are also detailed in Chapter 7 of this report.

Our audit of ERL-A's extramural files disclosed that various types of documents usually found in Agency records (i.e., telephone memos, routine correspondence, etc.) were sometimes

absent. The ERL-A director suggested that systematic file purging were the cause. The director identified the continued practice of purging laboratory records as "operation clean sweep." Lack of file space was used as a reason for this practice; however, the laboratory had never used the Federal Records Center (FRC) for file storage.

Also, the ERL-A director maintained that the laboratory's files were not official files subject to extended retention requirements and that all official files were maintained at GAD and CMD; however, EPA's procedures did not distinguish between official and unofficial files. EPA's Records Management Manual, Appendices C and E, specifically required retention of R&D laboratory contract, CA, IAG, and PO files at R&D laboratories for 5 to 10 years and an additional 3 to 9 years at the FRC. These Appendices also identify routine correspondence, telephone, memos, all records of day-to-day management as part of files subject to retention.

A February 1992 evaluation report, entitled Records Management In the Environmental Protection Agency, prepared by the National Archives and Records Administration (NARA), found that proper records management practices were implemented inconsistently within EPA despite Agency directives and procedures that were generally satisfactory. At ERL-A, the NARA evaluation team found that:

> No one responsible for files management has had training in records management. Records have not been transferred to the FRC [Federal Records Center], and cutoffs are not used. Instead, records are retired or destroyed in periodic purgings that are determined by needs for additional office space.

As noted in the NARA report, records created or acquired in the course of government business are government property and that willful and unlawful destruction of these records carries penalties under the law. ERL-A by its own admission, routinely destroyed laboratory records for which Agency policy specifically identified extended retention either on-site or at the FRC.

Standards of Conduct: Event cycles and related controls for standards of conduct were totally excluded from ERL-A's FMFIA documentation. As an example of a control objective and control

technique related to standards of conduct, we utilized PCMD's FMFIA documentation as follows:

> Control Objective: To ensure that a program is in place to establish and promote high standards of conduct for both Government and contractor personnel.
>
> Control Techniques: Assignment of a Designated Ethics Official [DEO] for personnel to contact to obtain advice on standards of conduct. The Management Support Staff distributes all ethics advisory memorandum and keeps them of file for reference. Confidential Statements of Financial Interests are filed up to three times a year by managers and other senior level personnel.

Although we found that ERL-A had implemented some of these controls, the controls were not effective. ERL-A's DEO, who is the ERL-A Director, did not ensure that ERL-A employees disclosed their spouses' employment on their Confidential Statements of Financial Interests. At least two managers with contract oversight responsibilities (both POs) had not reported spousal employment on their Confidential Statements. Because the statements were incomplete as to spousal employment, the DEO could not determine whether actual or apparent COIs existed. In addition, the Agency did not require WAMs to file such disclosures of financial interests even though they manage contractors. Although WAMs at ERL-A had filed disclosure statements, this was due to their management position and not their contractual responsibilities. WAMs prepare work assignments for contractors and monitor the contractors' performance. Therefore, WAMs can influence a contractors' work and award fees.

Employee Travel: Although event cycles, a control objective, and control techniques for travel were included in ERL-A's event cycle documentation, these controls were not always effective in preventing abuse of travel funds and violation of travel regulations. ERL-A's FY 1992 FMFIA report included the following control objective and control techniques that were not properly implemented at ERL-A.

> Control Objective: To assure travel is necessary, properly authorized and documented, and in compliance with regulations.
>
> Control Techniques: Signed copies of travel authorization are submitted and approved by Lab

> Director before travel and filed. Signed copies of travel voucher are submitted along with necessary receipts after travel and filed. Requires use of economy fares and other cost saving measures.

As previously discussed in Chapter 5, our review disclosed that ERL-A circumvented Agency travel regulations and authorized per diem rates in order to hold conferences at high cost Georgia resort areas such as St. Simon's Island and Callaway Gardens without proper justifications. For the St. Simon's conference alone, between $1,750 and $3,500 in questionable travel costs were identified. While we did not determine total possible excessive travel costs for the Callaway Gardens conference, we did identify almost $8,100 in unsupported or questionable charges on the purchase order used to pay for lodging, refreshments, and entertainment at the conference. Details concerning questionable travel costs for these two conferences were previously reported in Chapter 5.

Acquisition and Classification of Property: Event cycles and related controls for the acquisition and proper classification/reporting of property, particularly real property, were omitted from ERL-A's FMFIA documentation. Our review disclosed that controls related to real property acquisitions and related appropriation restrictions were needed but had not been identified or implemented. As detailed in Chapter 5, ERL-A circumvented appropriation restrictions on construction and acquisition of buildings with S&E funds by purchasing a modular office building and classifying the building as personal property.

As previously reported in Chapter 5, ERL-A utilized $201,817 in 1988 S&E appropriated funds and Superfund monies to purchase, through a CMD awarded contract, a modular building (70' 76') in five sections. This building was erected next to the existing laboratory. The 5,320 square foot structure was permanently mounted on concrete pillars. However, because the modular sections came as trailers, ERL-A improperly classified the building as "portable" personal property instead of real property and, thereby, ERL-A bypassed congressional limitations of $25,000 for S&E funding of non-budgeted construction, renovation, etc. The 1989 EPA Salaries and Expense Appropriation Act (Public Law 100-104, August 19, 1988) specifically states:

> For necessary expenses, not otherwise provided for, including... construction, alteration, repair, rehabilitation, and renovation of facilities, not to exceed $25,000 per project...[emphasis added].

Similar restrictions exist for the use of Superfund monies to purchase real property.

ERL-A managers stated that they contacted Facilities Management Services Division (FMSD) and were told that the property classification and expenditure was correct. ERL-A had no documentation of this FMSD approval and based on letters in the contract files and interviews with ERL-A staff, we concluded that both the CO and ERL-A presented the purchase to FMSD as acquisition of "portable offices or trailers" rather than a constructed "modular office building permanently erected on-site." Comptroller General decisions have ruled that such modular buildings are construction and subject to applicable appropriation restrictions (i.e., Comp. Gen. B-235086, issued April 24, 1991). (see details in Chapter 5)

CONCLUSION

ERL-A's FMFIA process did not adequately identify internal control weaknesses or ensure proper implementation of FMFIA control objectives and techniques relative to contracts, other extramural agreements, and certain administrative management functions. ERL-A managers did not recognize the importance of FMFIA requirements. ERL-A management gave the process low priority and treated the process as a "paper exercise" rather than as an opportunity to review and strengthen laboratory operations. Therefore, few effective internal controls existed at the laboratory to assure adherence to sound procurement/award and management practices. Critical control objectives and techniques were either not identified in internal control documentation or improperly implemented. Failure to fully comply with FMFIA requirements contributed to the problems discussed in this report - lack of competition, inappropriate use of contracts and other extramural agreements, inadequate management and oversight of extramural resources, and other improper uses of administrative funds.

The establishment of event cycles, control objectives, and control techniques is only a part of the FMFIA process. Internal control systems are only as good as the effort devoted to implementing those systems. ERL-A's extramural resource managers did not assure that the controls established were functioning properly by defining FMFIA responsibilities and conducting systematic reviews of control activities.

Of greater concern, however, is the seriousness of management problems and resource abuses at ERL-A that have gone mostly

undetected and uncorrected by ORD, CMD, and GAD internal control systems. In addition, ORD management reviewed and accepted FMFIA documentation produced by ERL-A in 1992 and prior years even though this documentation obviously did not cover all critical event cycles in laboratory operations and control objectives and control techniques were not detailed or sufficient to permit evaluation and testing, and were not in accordance with ORD instructions. Some of the most critical, vulnerable phases of laboratory operations, such as contract pre-award management, have never been addressed in ERL-A documentation. As we concluded in Chapter 2, ORD, CMD, and GAD oversight of ERL-A operations is seriously flawed and needs strengthening and improvement.

RECOMMENDATIONS

We recommend that the Assistant Administrator for Research and Development require proper implementation of ERL-A's FMFIA internal control process to ensure material weaknesses are properly identified and adequate controls are established for extramural resource management and administrative processes. Specifically, the Assistant Administrator should require the:

Director, Office of Environmental Processes and Effects Research to:

- Instruct the ERL-A director in the importance of proper implementation of the FMFIA and establishment of effective internal control systems over every critical phase of laboratory operations.

- Incorporate into the ERL-A director's, as well as all other laboratory directors' performance standards, a critical element for FMFIA implementation.

- Establish more effective oversight of all laboratory FMFIA documentation and implementation to ensure that laboratory directors properly implement FMFIA requirements in compliance with statutory and Agency procedures and establish effective controls that can be readily identified, tested and evaluated.

- Incorporate into laboratory directors' performance standards accountability for any future deficiencies in their FMFIA processes, documentation, and control systems.

- Include in any future on-site reviews at ERL-A or other ORD laboratories an evaluation of FMFIA documentation and

effectiveness of related control systems to ensure compliance with applicable laws, regulations and policies.

Director, Environmental Research Laboratory - Athens to:

- Report extramural management as an ERL-A material weakness for the FY 1993 FMFIA report.

- Review current FMFIA processes and documentation at ERL-A and ensure that:

  * All critical event cycles for extramural management and administrative processes are identified with specific control objectives and control techniques.

  * Detailed control objectives and techniques are identified for all critical event cycles and are tailored to ERL-A operations including IAG and CA activities (not merely references to all inclusive ORD reports).

  * Control objectives and techniques are documented in sufficient detail to permit testing and evaluation of control implementation.

  * Reviews and tests are performed on established controls to ensure adequacy and proper implementation.

- Document specific FMFIA requirements and responsibilities in the performance standards of all ERL-A staff with contractor or cooperator oversight functions and managers who supervise employees with oversight responsibilities.

- Closely monitor the laboratory's FMFIA process and ensure that ERL-A staff, with FMFIA responsibilities, are held accountable for proper implementation of controls over their extramural management activities.

AGENCY RESPONSE AND OIG EVALUATION OF AGENCY COMMENTS

ORD generally agreed with the findings and recommendations as presented in Chapter 6. Corrective actions proposed by ORD are responsive to our recommendations and appear to fulfill the acceptable action criteria of EPA Order 2750. ORD's comments and OIG's response to all Chapter 6 recommendations are detailed in Appendix I.

CHAPTER 7

MISSING RECORDS AND INCONSISTENT STATEMENTS BY ERL-A, CONTRACTOR, AND COOPERATOR STAFFS DELAYED AND POTENTIALLY LIMITED AUDIT DISCLOSURE

During our audit, several impediments were encountered at ERL-A that hampered the accomplishment of audit fieldwork and may have limited our assessment of laboratory operations. Impediments included: (1) inconsistent (often contradictory) statements by ERL-A staff, contractors, and cooperators and (2) missing documentation in ERL-A's contract/cooperator and/or laboratory correspondence files. In some cases, the inaccurate statements made by ERL-A employees, contractors, and cooperators appeared to be "textbook" answers to our questions rather than answers that accurately reflected ERL-A day-to-day operations. Evidence obtained indicated that ERL-A staff had been briefed prior to start of audit fieldwork as to our audit objectives and the "correct" answers to our questions. Also, some of the missing records could be attributed to ERL-A's improper record retention procedures. However, according to certain ERL-A managers, the laboratory was seriously concerned about the negative impact of our audit on ERL-A's operations and, in particular, about the effect on contractors that worked at the laboratory. This concern was based on the impact of the recent OIG audit of Duluth ERL on that laboratory's operations. The missing records and conflicting statements necessitated alternative record reviews and additional interviews which would not have been necessary if full disclosure had been made when questions were first asked. These impediments significantly delayed completion of audit fieldwork and left us unsure that all pertinent information and conditions had been disclosed.

BACKGROUND

Section 6(a)(1) of the Inspector General (IG) Act of 1978, as amended, authorizes the Inspector General or his authorized designee access to all records, reports, documents, papers, materials, etc., available to the Agency. Further, Section 6(b)(1) of the Act requires the Agency to provide any information requested by the Inspector General or his authorized designee unless prohibited by existing statute or Agency regulation. In addition, provisions of 18 U.S.C. 1516 prohibit deliberate obstruction of a federal audit and subjects any such act to criminal penalties.

EPA's Record Management Manual, Appendices C and E, describe various types of files and related file documentation and the proscribed record retention policy for each type of file for Research and Development and Research and Development Laboratories, respectively. Provisions of 44 U.S.C. 3105 and 36

CFR 1228.102 prohibit the deliberate destruction or removal of federal records. Provisions in 18 U.S.C. 2071 makes it a criminal offense to conceal, remove, mutilate, obliterate, or destroy any record, paper, or document that is filed or deposited in any public office.

INACCURATE, INCONSISTENT STATEMENTS BY ERL-A, CONTRACTOR, AND COOPERATOR STAFFS

As stated above, EPA employees, contractors, and cooperators supplied answers to our questions that contradicted file documentation or answers given by other staff members. Some of the answers provided to auditors appeared to be "textbook" answers (the way things should operate per procedures rather than how they really operate). We were told that briefings were conducted at ERL-A as to the audit objectives and the importance of providing the correct answers to our questions. Notes to one such briefing was found during the audit which confirmed this statement.

For example, one case of apparently contradictory statements came from two UGA on-site staff. Both of these on-site cooperators insisted that they did not work directly for or talk to the ERL-A sub-PO on their projects but were only supervised by and talked to the UGA PI who was located at the University. However, the sub-PO on two occasions told us that these employees worked on his subprojects at ERL-A and that he frequently talked with them (often weekly) about their research. In addition, the UGA PI (UGA Vice President for Research) said that until our earlier audit survey he did not know he was the PI on these employees subprojects. He further said he had no contact with these people and knew nothing of their research.

We also questioned one of the on-site UGA employees as to whether he had been briefed on how to respond to our questions. He replied no and said that he had not been told that auditors were at the laboratory. However, it was evident from the responses of this and other cooperators that they had been briefed to tell us that they were not supervised by EPA employees. The on-site UGA CA coordinator subsequently told us that she had informed all the on-site UGA employees (several of whom were foreign post-docs) that auditors were present and that they should answer our questions slowly and clearly to preclude misunderstandings.

Several inconsistent statements given by ERL-A staff involved the ERL-A director. For example, on September 25, 1992, when we informed the director that one of the UGA CA subprojects was for

development of an ERL-A on-site day-care operating plan, she seemed surprised and said she was not aware of this. The laboratory director was the PO for this CA subproject. She said that the $30,000 R&D funded subproject was supposed to be for developing a day-care environmental education curriculum. However, both the ERL-A sub-PO and UGA PI had already informed us that the subproject was definitely for the development of an ERL-A on-site day-care operating plan. Also, ERL-A's and UGA's CA files contained a "working draft" of the subproject proposal submitted by UGA to ERL-A in June 1992 which specifically identified the work as the development of a day-care operating plan. There were no curriculum tasks in this draft proposal. According to a transmittal attached to the draft proposal, the PO (ERL-A director) had reviewed the proposal and commented "good job so far...You need to work w/them in improving/revising this plan..." Also, the ERL-A director had placed a note on an attached proposed Phase II budget for the subproject indicating that she had reviewed the budget also. This budget included the salary for a day-care center director to be paid out of CA R&D monies.

MISSING/INCOMPLETE FILE DOCUMENTATION AND IMPROPER RECORD RETENTION PROCEDURES

ERL-A file documentation, especially PO files, for current contracts was limited primarily to official executed documents with little or no correspondence, memos of conversation, notes, or other routine records to document the contract solicitation and award processes. The routine records that good practice would dictate be present for day-to-day contract management were missing. However, we noted the predecessor contract files for these same contractors contained much more of these routine records and correspondence. Therefore, we were concerned that the current files may have been "sanitized" prior to the audit. File documentation on CAs and IAGs reviewed was equally lacking.

As previously discussed in Chapter 6, some of this missing documentation may be attributed to ERL-A's record retention (or "destruction") policy which conflicted with Agency records management procedures. The ERL-A director told us that she directed periodic systematic cleaning-out of ERL-A files. She identified the records destruction as "operation clean sweep" and indicated that this was the reason routine correspondence, telephone memos, etc., may be missing from current ERL-A PO, contract, CA, and IAG files. Since none of these files were over two to three-years old, ERL-A's record destruction violated EPA's record retention policies.

EPA's Records Management Manual, Appendix C, "Research and Development Records," and Appendix E, "Research and Development Laboratory Records," requires the retention of PO, contract and assistance files and related records on-site for 5 (i.e., PO files) to 10 years (i.e., contract files), with additional retention at the Federal Records Center (FRC) for an additional 3 to 9 years before destruction. ERL-A has never transferred any files to FRC for storage. The Records Management Manual further identifies records ERL-A routinely purged as part of the files to be retained. For instance, PO files were to include "site visits, trip reports, telephone memos, and other records related to day to day management ...."

ERL-A management explained that they did not realize that the laboratory records for contracts and assistance agreements were official files and, therefore, were subject to retention for more than one year. ERL-A staff indicated that they thought the official files were at CMD and GAD. However, our review disclosed no EPA procedures or policy that specified what constituted official files or that would otherwise support the laboratory's definition. EPA's Record Management Manual makes no distinction between official and unofficial files. Appendix E specifically refers to "Research and Development Laboratory Records" and specifically identifies PO records maintained at the laboratories. According to Appendix E, PO files should be retained for at least five years after closeout of the project and these files should consist of the type records which were periodically destroyed by ERL-A. We believe that the records destroyed by ERL-A meet the definition of "Federal records" as defined in 44 U.S.C. 3301. In addition, EPA Ethics Advisory 92-24, dated December 10, 1992, issued by the Deputy General Counsel, included NARA Bulletin No. 93-2, entitled "Proper disposition of Federal records and personal papers." Section 8. of this Bulletin stated:

> As specified under 36 CFR 1222.42, nonrecord materials, <u>including extra copies of agency records kept only for convenience of reference</u> [emphasis added], may be removed [permanent removal or destruction] from Government agencies only with the approval of the head of the agency or another agency official designated by the agency head, such as the agency records officer or legal counsel.

Although some of the missing documents may be attributed to improper records retention policies, the importance of some of the documents to our audit objectives and disclosure of questionable activities at ERL-A raises doubts as to the intent

of any records purging just prior to our audit. For example, during our review of UGA files, we found reference to correspondence between a UGA PI and the ERL-A director. This correspondence was very critical of the way ERL-A managed and funded UGA's CA projects and essentially used the CA to fund EPA's research at the laboratory. Even though this letter was addressed to the ERL-A director (who was the PO on these subprojects), there were no copies of the correspondence in her files or the other correspondence files provided by ERL-A staff during the audit. We later obtained copies of these letters from the UGA PIs after lengthy negotiations with UGA and the PIs over our access authority related to these letters. Although the laboratory later found these letters in their files, this did not occur until after we became aware of the letters from UGA files and had subsequently demanded a copy of the correspondence from ERL-A.

CONCLUSION

It was evident that ERL-A staff, contractors, and cooperators had been briefed as to the "correct" answers to our questions. Incorrect, inconsistent statements occur in many audits due to human error or the natural instinct of individuals to protect their work or organization; however, this was not always the case at ERL-A. At ERL-A, many of these occurrences may have resulted from these same circumstances. However, the frequency of incorrect/inconsistent statements and missing documentation and the nature of missing records made us question the laboratory's intent.

ERL-A officials should be forewarned that any deliberate false statements to federal auditors or intentional destruction of Agency records to subvert audit disclosure could be construed as obstruction of a federal audit and a violation of 18 U.S.C 1516 which is subject to disciplinary or criminal penalties. Federal employees are required to fully disclose all pertinent facts and related records during official inquiries.

In addition, any destruction, removal or concealment of records in a manner which is inconsistent with established Agency records schedules or General Records Schedules is a violation of Agency policy and federal law, as cited in 44 U.S.C. 3105 and 36 CFR 1228.102. We believe that ERL-A's handling and improper disposal of records may have adversely impacted the OIG's ability to obtain critical documentation related to ERL-A's management of extramural resources. Without stringent controls over Agency records, management accountability may be lost.

RECOMMENDATIONS

Recommendations to the Assistant Administrator, Research and Development

We recommend that the Assistant Administrator require the:

Director, Office of Environmental Process and Effects Research to:

- Require that all ERL-A managers and staff receive ethics training regarding their responsibilities as federal officials for the ethical conduct of government business and federal programs.

- Instruct ERL-A staff, contractors, and on-site cooperators that deliberate obstruction of a federal audit or destruction of federal records without proper approval is a crime punishable under 18 U.S.C.

- Inform ERL-A staff, contractors, and cooperators of requirements of the IG Act and their obligation under the Act to furnish full and accurate information to any interrogatories by OIG auditors in the conduct of an official inquiry.

- Require ERL-A to establish record retention policies and procedures in accordance with EPA's Records Management Manual and ensure that records documenting day-to-day management of contracts and extramural agreements are maintained for the proper retention period and for easy access by any potential reviewers of this information.

- Require ERL-A director to utilize the FRC if additional storage space is needed at the laboratory.

AGENCY RESPONSE AND OIG EVALUATION OF AGENCY COMMENTS

ORD generally agreed with the findings and recommendations as presented in Chapter 7. Corrective actions proposed by ORD are responsive to our recommendations and appear to fulfill the acceptable action criteria of EPA Order 2750. ORD's comments and OIG's evaluation on Chapter 7's recommendations are detailed in Appendix I.

AGENCY COMMENTS ON DRAFT REPORT AND OIG EVALUATION

OFFICE OF RESEARCH AND DEVELOPMENT (ORD) COMMENTS

Overall OIG Evaluation

ORD offered no disagreement with the findings and recommendations presented in this report. ORD response provides specific corrective actions and milestone dates for completion of these actions. ORD's corrective actions are considered acceptable for resolution under EPA Order 2750 with the exception proposed actions for recommendations 3IAA-5, 3ILD2, 3ILD-5, 3ILD-6, 3IIOD-3, and 3IIIOD-1. Our concerns with the actions proposed for these recommendations are presented after the applicable ORD response below.

Assistant Administrator for Research and Development Comment on Findings and Proposed Corrective Actions In Draft Audit Resort E1JBF2-04-0300

CHAPTER 2 - RECOMMENDATIONS

2AA-1 Review all ORD guidance related to CAs, in coordination with OGC and GAD, to determine whether applicable guidance fully complies with the intent and statutory provisions of the 1977 Federal Grant and Cooperative Agreement (FGCA) Act, as amended. Obtain a formal written OGC opinion as to compliance of current ORD policies with the intent and provisions of the 1977 FGCA Act.

Response: Concur

Corrective Action: The Director of ORD's Office of Research Program Management (ORPM) will establish a team to review ORD guidance related to CAs. OGC and GAD will be asked to participate on the team. To support the review, OGC will be asked for a written opinion on the extent of compliance of current ORD policies with the FGCA and for recommendations for improving that guidance. If any changes to ORD policy are needed, revised policy will be reissued within 60 days of the

completion of the review. Final or interim guidance as appropriate will be issued by September 30, 1993, to reduce the potential for confusion about which guidance or policy to follow.

2AA-2 Instruct ERL-Athens management to refrain from its pattern of circumventing and noncompliance with laws, regulations, and Agency policies related to extramural and intramural resources.

Response: Concur

Corrective Action: The Director of OEPER will instruct ERL-Athens management to comply with Agency policies and regulations related to extramural and intramural resources. These instructions will be contained in a memorandum to be issued by March 31, 1993.

Additionally, a Deputy Laboratory Director position will be added to the Athens organization. The Deputy will have full operational responsibilities for the laboratory and will strengthen the internal "check and balance" system for extramural management.

2AA-3 Continue to promulgate and refine CA guidance to laboratories which encourages or requires competitive awards and improves ORD oversight and control of laboratory management of assistance agreements.[1]

Response: Concur

Corrective Action: The Director of ORD's ORPM will continue to refine and expand ORD policy requiring competition for CAs. ORPM approval will be required for all non-competitive CA awards, and AA approval will be required for any CA award over one million dollars.

The Director of ORD's ORPM will also develop ORD policy to improve ORD oversight and control of laboratory management of assistance agreements. Although final policy may have to wait for new Agency-wide policy, ORD interim policy will be issued by September 30, 1993.

2AA-4 Evaluate and strengthen ORD's oversight and controls over ERL-Athens contract management activities and encourage full and

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[1] ORD issued interim and draft guidance documents during the audit which encouraged competitive CA awards, elevated approval level for noncompetitive CA awards, and strengthened some oversight and management controls for laboratory programs.

open competition in laboratory contracts as intended by the Competition in Contracting Act of 1984.

Response: Concur

Corrective Action: The Director of OEPER will participate actively in evaluating and strengthening all extramural management in Athens and in assuring full and open competition when appropriate. Effective immediately and continuing through March 31, 1994, OEPER will review and approve all new contracts, CAs, and IAGs proposed by the Athens laboratory. All modifications and amendments to existing contracts, CAs, or IAGs will similarly be reviewed by OEPER. OEPER will also approve all new work assignments and will be sent copies of technical directives at the same time they are sent to the Contract Office.

The Deputy Director of OEPER will carry out a complete audit of all existing contracts, CAs and IAGs to verify they are appropriate or to correct any differences that may exist. He will report back the results of his review audit to the Director of OEPER by May 15, 1993.

2AA-5 Evaluate ERL-Athens staffing needs, and if appropriate, request through the budget process additional work years for ERL-Athens resource/contract management functions, as well as mission critical research projects. With the approval of EPA's Comptroller and the Office of Management and Budget, this may be accomplished through conversion of extramural funds to intramural work year support. Such work year increases could preclude continuing personal services relationships with contractor staff, prevent contractor performance of inherently governmental functions, and improve contractor and cooperator oversight.

Response: Concur

Corrective Action: ORD has reported the lack of sufficient Federal work years to manage extramural resources as a material weakness under the FMFIA. This weakness exists in each ORD Office and Laboratory, not just in Athens. To solve the chronic under-staffing problem will require support from the EPA Comptroller and Administrator, OMB, and Congress. ORD management is committed to addressing the underlying problem.

OIG identification of the under-staffing situation in Athens provides an opportunity for an ORD-wide study. The Director of OEPER will develop a plan and schedule for completing an evaluation of the staffing at Athens. The plan will be submitted to the acting AA for ORD by April 30, 1993. After approval, the

methodology will be applied in the Athens laboratory as a pilot test. This evaluation will be completed by August 15, 1993. After modifications (if needed), the methodology will be used in each ORD laboratory to determine staffing needs. This ORD-wide evaluation effort will be conducted by ORPM during FY 1994.

Notwithstanding the above actions, ORD will ensure compliance with Administrator Browner's direction that EPA's mission will be accomplished in full compliance with all laws, regulations, and principles of sound management. To the extent that ORD does not have the federal work years to do all the required work, proper prioritization and planning will be used to determine what will and will not be done.

2AA-6 Establish periodic, recurring on-site reviews of laboratory management of contracts and assistance agreements to be performed jointly with CMD and GAD, respectively.

Response: Concur

Corrective Action: ORD is accountable for the integrity of its management of extramural resources. We are now hiring acquisition specialists in every laboratory to assist our management efforts.

For the Athens laboratory and the rest of OEPER, the Director of OEPER will redesign management review procedures to incorporate the review and audit practices that will be necessary to fulfill his responsibilities and accountability for management of extramural resources. The design for new management review procedures will be completed by July 1, 1993.

The Director of ORPM will develop ORD-wide review procedures. CMD and GAD will be invited to participate. When these procedures are issued in FY 1994, ORD managers will be held accountable for carrying out on-site reviews that will uncover the types of problems found in the audit. They will be responsible for getting expert advice from the contracts and grants offices on an as-needed basis.

2AA-7 Evaluate the planning, timing, and funding processes for research projects which may preclude laboratory selection of the best and appropriate extramural mechanism.

Response: Concur

Corrective Action: Each of the ORD offices and laboratories have the same situation as Athens, in that they do not know what their

resources will be for a fiscal year until the Agency budget is determined and distributed. This distribution is often after the fiscal year begins. Nevertheless, the fact that a Laboratory may not know its exact resources for the coming year is not an acceptable excuse for failure to select the proper extramural instrument for any project.

ORD's Issue Planning process is intended to help Athens and other ORD laboratories plan their projects better, including the determination of the appropriate funding and extramural mechanism. This process was started last year and is currently being implemented in all of the ORD Offices and Laboratories.

To address the recommendation for Athens, the Director of OEPER will require Athens to prepare its acquisition plans and laboratory research work plans in response to Recommendation 4IOD.4 and submit them when required. This guidance will be issued by May 15, 1993.

2AA-8 Eliminate arbitrary allocations of extramural resources which may preclude ERL-Athens from using the appropriate extramural mechanism.

Response: Concur

Corrective Action: The Director for OEPER will review allocation formulas and policies that exist within OEPER. Any that are considered arbitrary will be eliminated. The Office Director will report to the AA on findings and actions taken by June 1, 1993.

CHAPTER 3 - RECOMMENDATIONS

3IAA-1 In collaboration with GAD and the Comptroller, promulgate definitive guidance on the proper uses of R&D funds under CAs, especially those uses related to ambiguous project areas such as curriculum development. Prohibit the use of R&D funds, either directly or indirectly, for the direct benefit of federal employees.

Response: Concur

Corrective Action: The Director of ORD's ORPM will continue to work with GAD, the Comptroller, and OGC to obtain more definitive guidance on uses of R&D funds, especially those related to areas of apparent ambiguity. In addition, we will issue revised policies emphasizing the prohibition on the use of appropriated funds for the direct benefit of Federal employees, except as

authorized by law and regulation. These strengthened policies will be issued by May 30, 1993.

3IAA-2 Receive and review all CA RFPs and decision memorandums to assure that the purpose of the agreement is to provide assistance and not directly benefit or support ERL-A/ORD research projects.

Response: Concur

Corrective Action: The Director of OEPER will review all CAs and decision memoranda from ERL-A to ensure that they are appropriate. ORD's ORPM will develop ORD-wide policy clarifying appropriate use of CAs and work with OEPER to assure review of ERL-A agreements.

3IAA-3 Develop a policy which clearly states how graduate academic training and/or advanced degrees for EPA employees will be funded, either through IPAs or established Agency training programs. Require commitment of 3 years of federal service for every 1 year of training received whether training is funded through IPAs or regular training funds. Prohibit the funding of federal employee training under CAs in accordance with Assistance Administration requirements.

Response: Concur

Corrective Action: The Director of ORD's ORPM will develop and issue new ORD-wide policy clarifying how graduate academic training and/or advanced degrees for EPA employees will be funded. This policy will emphasize the Agency requirements specified in the recommendation.

3IAA-4 Develop a policy on the funding of foreign travel under CAs which will result in improved ORD controls over any foreign travel funded by EPA, including full disclosure to Congress of total expenditures for foreign travel by FTEs, contractors, and cooperators/non-federal persons (academics) under such agreements.

Response: Concur

Corrective Action: The Director of ORD's ORPM will develop ORD-wide policy on the funding of foreign travel under CAs and the appropriate controls on such travel by September 30, 1993.

3IAA-5 Remind the ERL-Athens director that directed and sole source contracting through IAGs is prohibited without proper

approval and that use of extramural agreements under IAGs should be clearly disclosed on the IAG application in accordance with the IAG Compendium. In addition, instruct the ERL-Athens director that currently no authority exists under the Economy Act for use of CAs under IAGs.

Response: Concur

Corrective Action: The Director of ORD's ORPM will develop and issue an ORD Directive by May 30, 1993, reminding all ORD Offices and Laboratories of the prohibitions on IAG usage reflected in this recommendation.

OIG Evaluation

ORD's planned corrective action on recommendation 3IAA-5 did not address disclosure to Congress of all CA expenditures for foreign travel by FTEs, contractors, cooperators, and academics. We will need ORD planned actions regarding such disclosure prior to resolution of this recommendation.

3IAA-6 Determine, with assistance from OGC, if any unauthorized reprogramming of R&D funds to S&E funds occurred under the NASA IAG's.

Response: Concur

Corrective Action: The Director of ORD's ORPM has already requested assistance from OGC in determining the propriety of accepting NASA funds for EPA travel usage. We will submit any other evidence we find in this matter to OGC for appropriate determination as soon as we can assemble the documents. We expect to have all the documents by April 30, 1993.

3ILD.1 Ensure that all POs have all available written guidance necessary to effectively manage their extramural agreements through the pre-award and post-award phases.

Response: Concur

Corrective Action: Operating Procedures on CAs from pre- through post-award phases are already sent to each ERL-A PO. The ERL-A Extramural Assistant maintains relevant Operating procedures, GAD guidance documents, the GAD Assistance Manual and IAG Compendium, and related informational material for access by POs. On February 9, 1993, an ERL-A Quality Action Team was formed and charged to review the current set of policies and procedures, including adequacy of current reference materials and their

availability to POs. Training has been planned for all current POs, with completion set for August 30, 1993. The training will include problems of favoritism, conflicts of interest, and new ORD/OEPER procedures to guard against such actions. A Procedures Manual will be prepared by August 1, 1993.

3ILD-2 Require ERL-A managers to review all current and future CA RFPs and decision memorandums to assure that the primary purpose of the agreement is to provide assistance and not to procure goods and services which directly benefit ERL-A or ORD and that decision memorandums for all extramural agreements have all of the required elements. Terminate funding of those current CA projects or sub-projects that directly benefit or support ERL-A or that violate laws, regulations or Agency policies.

Award contracts if there is a need for continuance of these CA projects.

Response: Concur

Corrective Action: ERL-A has initiated a project-by-project review of all current CAs to determine compliance with the intent and statutory provisions of the 1977 FGCA Act, as amended. All CAs or proposals found by this review to be out of compliance with the Act will not be continued, awarded, or renewed unless modifications are implemented to ensure compliance. The review of current projects will be completed by April 15, 1993. In addition, the UGA sub-project on day-care curriculum development has been terminated effective March 8, 1993, and funds in this sub-project will be deobligated and returned to the government. The Deputy Director of OEPER will evaluate the results of these reviews and concur if acceptable.

The Director of ORD's ORPM will work with GAD and OGC to review current guidance on the use of CAs and will update existing guidance by September 30, 1993.

OIG Evaluation

ORD actions do not address ORD compliance with OARM's December 2, 1992 policy letter which prohibited use of CAs to obtain (1) data and reports for inclusion in EPA policies and technical, regulatory decisions, (2) computer models for EPA regulatory use, and (3) technical, analytical, and application review advice for direct benefit of EPA offices. ORD's draft response to the audit report indicated ORD would comply with OARM's policy; however, the final response does not address this issue. If ORD does not agree with OARM's policy letter, we need ORD's proposed actions

to resolve this policy disagreement before resolving this recommendation.

3ILD-3 Where appropriate, immediately move all UGA and other cooperator employees off-site to preclude direct supervision of cooperators by ERL-A staff and remove inappropriate direct benefit to ERL-A under the UGA CA.

Response: Concur

Corrective Action: By March 31, 1993, all remaining UGA cooperator employees will be moved off-site or their appointments terminated.

3ILD-4 Ensure that all CAs clearly identify the primary function of the CA. Large travel or equipment budgets should not be added

as an addendum to relatively small research budgets to obscure the actual function of the CA.

Response: Concur

Corrective Action: The Deputy Director of OEPER will review all active CAs to insure that the scopes of work describe the primary function of the agreement. All CA amendments that change the CA objectives or scope will be developed according to GAD guidelines and reviewed and submitted for approval with any changes from the original agreement clearly described and justified. When appropriate, competitive CAs will be preferred.

The Director of ORD's ORPM will issue policy for all ORD CAs by September 30, 1993, and will develop in consultation with the office and laboratory directors a program to assure that the policy is followed.

3ILD-5 Ensure that all ERL-A employees have equal access to IPA training opportunities. In addition, provide full disclosure of all sources of funding in IPA applications and cease utilizing CAs to fund IPAs for academic training of FTEs.

Response: Concur

Corrective Action: Effective immediately, no IPA assignee whose IPA is funded by a CA will be permitted to enroll in any academic courses that may lead to any advanced degree without the approval of the OEPER Office Director. The Laboratory will develop a procedure for application and acceptance for IPAs. The procedures will be reviewed by OEPER Director and implemented by

June 1, 1993 and will be distributed to all employees.

The Director of ORD's ORPM is directed to develop and implement an ORD-wide policy on IPAs, the rules on use of EPA funds to support IPAs, and conditions under which IPAs can be used. The policy will be effective when issued and incorporated in the ORD Policy and Procedures Manual when updated in FY 1994.

OIG Evaluation

ORD's response to recommendation 3ILD-5 states that IPAs funded by CAs can not be used for academic attainment unless approved by the OEPER Director. This is the same approval level previously used to approve the IPA partially funded by the MSU CA. We can see no improvement in ORD oversight or control from this action. In addition, appropriation restrictions could preclude approval of any IPA for an EPA employee's academic training where R&D funds under a CA are used to fund the IPA. Past R&D appropriations have not authorized the use of R&D funds for federal employee training, travel, compensation or benefits. Only the S&E appropriation and certain EPA trust funds have been authorized by Congress to support EPA personnel costs.

Although GAD views an EPA employee on an IPA as an employee of the recipient organization (see GAD comments in this Appendix), we believe the individual is still legally a federal employee because the federal government determines the individual's level of compensation and benefits, the individual continues to accrue federal retirement and annual/sick leave benefits and maintains his federal health and life insurance, and he is required to return to federal service upon completion of the IPA without applying for a federal position (SF-171). Therefore, we conclude that R&D funds could not be legally used to train "federal employees" under IPAs.

3ILD-6 Prohibit ERL-A POs, scientists, and on-site cooperators from preparing or assisting in preparation of proposals and/or decision memorandums for CAs in which they will benefit or act in a PO capacity.

Response: Concur

Corrective Action: In accordance with existing ORD guidance, CA proposals are jointly implemented research projects in which Federal and academic cooperating scientists collaborate. Scientific proposals must be prepared by the scientists proposing to do the work. Preparation of decision memoranda is an inherently governmental activity and is accomplished only by

appropriate Federal officials.

The Quality Action Team charged on February 9, 1993, to review and modify existing ERL-A policies and procedures for CAs, or propose new policies and procedures, has been specifically asked to address this recommendation. The QAT will complete their deliberations by April 15, 1993. Until such time as the QAT process is complete, and effective immediately, only Branch Chiefs or other designated Federal officials other than the existing or proposed PO, will be permitted to develop the Decision Memorandum. The decision memo can only be approved by the Laboratory Director (except for the next year, when the deciding official will be the Director of OEPER). An internal ERL-A memorandum announcing this policy was issued on March 8, 1993.

OIG Evaluation

ORD's response indicates that ERL-A prospective POs will not be permitted to prepare decision memorandums for CAs; however, a change in the ORD Policy and Procedures Manual, dated January 1988, will be necessary to prohibit such practice ORD-wide. The current manual permits PO preparation of CA decision memorandums. We need to know whether ORD intends to change its manual to preclude PO involvement in decision memorandums before resolving this recommendation.

3ILD-7 Establish policies which allows cooperators the maximum involvement and control possible in their research projects.

Response: Concur

Corrective Action: The Laboratory will establish policy that will clearly put the cooperator in charge of the research being proposed under the CA. Federal POs will not be permitted to unilaterally change the scope or direction of the research. The policy will be issued by April 30, 1993.

3ILD-8 Review and terminate IAGs with NASA that are being used to fund FTE travel and circumvent Agency fund controls.

Response: Concur

Corrective Action: The Director of ORD's ORPM has already requested assistance from OGC in determining the propriety of accepting NASA funds for EPA travel usage. We will submit any other evidence we find in this matter to OGC for appropriate determination as soon as we can assemble the documents. We

expect to have all the documents by April 30, 1993. Further actions will be determined by the outcome of the review. If this review indicates that funds are being improperly used for travel, then the IAG will be modified or terminated as appropriate.

3ILD-9 Require and ensure proper documentation of authority, rationale, and justifications in IAG decision memorandums and preclude prospective POs from preparing IAG decision memorandums.

Response: Concur

Corrective Action: The Director of ORD's ORPM will develop and issue new ORD-wide policies on required controls relative to IAGs by September 30, 1993.

3IIAA Recommend the AA/ORD ensure significant improvements are made in assistance agreements awards that increase competition and assure a fair and equitable proposal review process.

Response: Concur

Corrective Action: As indicated in response to an earlier recommendation, the Director of ORD's ORPM has undertaken a comprehensive policy development process to make significant improvements in the CA and IAG processes, including methods to increase competition. Policy will be effective when issued and incorporated in the ORD Policy and Procedures Manual during FY 1994.

3IIOD-1 Ensure that ORD personnel are included on ERL-Athens proposal review panels for competitive CAs as required by ORD policies and procedures.

Response: Concur

Corrective Action: The Director of OEPER will reissue the policy with respect to membership of HQ personnel on review panels for CAs to be awarded by Athens and other laboratories. The Office Director or his Deputy will select and deputize personnel in laboratories other than the proposing laboratory to represent the Office's interest in these review panels as necessary. This redefined policy will be issued by May 1, 1993. CAs greater than $500 thousand will require the use of an OEPER HQ peer review mechanism or the OER standing peer review panels in arranging for peer reviews of the proposals.

3IIOD-2 Provide training and/or guidance to ORD and ERL-Athens managers and POs, in collaboration with GAD, to enhance ORD

awareness of potential COIs or the appearance of COIs in the review and award of assistance agreements.

Response: Concur

Corrective Action: Written guidance on conflicts of interest in panel selection or award of assistance requirements will be developed and issued by OEPER by September 30, 1993. GAD will be asked to assist. All CAs larger than $500 thousand will be required to use the OEPER HQ peer review mechanism or the OER standing peer review panels for arranging for peer reviews of the proposals.

3IIOD-3 Comply with prior audit recommendations to fully enforce existing CA procedures or develop new procedures to ensure that POs or prospective POs are removed from selecting external reviewers, preparing in-house reviews, and preparing decision memorandums covering CA applications.

Response: Concur

Correction Action: The Director of OEPER will issue guidance removing POs from selection of panels, preparing in-house reviews, and preparing decision memoranda covering CAs for all OEPER laboratories effective April 1, 1993. The guidance will also prohibit Laboratory Directors or the Office Director from acting as a PO without the written approval of his or her supervisor.

The Director of ORD's ORPM will develop and promulgate ORD-wide policy to assure compliance with this recommendation and issue it by September 30, 1993.

OIG Evaluation

ORD indicates that the OEPER Director will issue guidance by April 1, 1993, eliminating POs from selection panels, in-house reviews, and preparation of decision memorandums; however, these practices are currently authorized in the ORD Policy and Procedures Manual, dated January 1988, and a manual revision will be required to permanently change these practices. Therefore, we need a specific commitment from ORD to a revision of its current policy and procedures manual before resolving this recommendation.

3IIOD-4 Evaluate the justifications for ERL-Athens noncompetitive CA awards to ensure that they comply with ORD guidance, especially repetitive awards at or near the threshold for ORD

review and approval.

Response: Concur

Corrective Action: The Deputy Director of OEPER with a small team will review all active CAs at Athens that were not audited by the OIG. This review will begin by April 30 and be completed no later than September 30, 1993. All new CAs will be approved by the OEPER Office Director for the next year. For the longer term, the Director of OEPER, working with ORPM, will put in place an annual review system to provide the appropriate oversight to insure compliance with ORD and OEPER guidance.

3IIOD-5 Establish for ERL-Athens and other ORD laboratories stringent controls over noncompetitive awards to assure fair and equitable awards, eliminate the appearance of favoritism, and the effective use of Agency resources.

Response: Concur

Corrective Action: The Director of OEPER will reissue to the OEPER laboratories and emphasize the established ORD policy that competition is the preferred way of doing ORD business and that all noncompetitive awards must be approved by HQ. This guidance will be distributed by April 15, 1993. The Director of ORD's ORPM will issue similar guidance to all ORD Offices and Laboratories by September 30, 1993.

3IIOD-6 Emphasize to ERL-Athens managers ORD's goal to compete CAs awards.

Response: Concur

Corrective Action: The Director of OEPER will send a memorandum to all OEPER Laboratory Directors and to all managers in ERL-Athens reemphasizing ORD's goal of competition. The Director will emphasize that the degree of competition achieved will be an element in OEPER's management reviews and performance agreements and assessments. The memorandum will also cite the need to avoid favoritism of any kind in any non-competitive awards that may be proposed. The memorandum will be promulgated by April 15, 1993.

3IIOD-7 Instruct ERL-A managers that favoritism in noncompetitive CA awards cannot be tolerated without clear, sound, and legal justifications for such awards.

Response: Concur

Corrective Action: The Director of OEPER will send a memorandum to all OEPER Laboratory Directors and to all managers in ERL-Athens reemphasizing ORD's goal of competition. The Director will emphasize that the degree of competition achieved will be an element in OEPER's management reviews and performance agreements and assessments. The memorandum will also cite the need to avoid favoritism of any kind in any non-competitive awards that may be proposed. The memorandum will be promulgated by April 15, 1993.

3IIOD-8 Require complete and accurate justifications in CA decision memorandums for non-competitive awards including those awarded by ORD headquarters. Review decision memorandums for all non-competitive awards by ERL-A for inaccurate and/or unsupported justifications.

Response: Concur

Corrective Action: The Director of OEPER will establish a process to review all non-competitive awards by ERL-Athens and implement the process by April 1, 1993.

The Director of ORPM will reissue and emphasize ORD policy requiring complete and accurate justifications in CA decision memorandums by September 30, 1993.

3IIOD-9 Closely review any follow-on competitive CA awards to UGA to ensure competition procedures were unbiased and equitable.

Response: Concur

Corrective Action: The Director of OEPER will closely review any follow-on awards to UGA to ensure competition.

3IIOD-10 Require the ERL-Athens director to ensure that CA proposals are reviewed by scientists who are knowledgeable about the projects but who have no close ties with ERL-Athens or the prospective PO. If CA applicant has close ties to ERL-Athens, require competitive award procedures.

Response: Concur

Corrective Action: The Director of OEPER will send a memorandum to all OEPER Laboratory Directors reemphasizing ORD's goal of competition. The Director will also emphasize that the degree of competition achieved will be an element in management reviews and performance agreements. The memorandum will cite the need to

avoid favoritism of any kind in any non-competitive awards that may be proposed. The memorandum will be sent by April 15, 1993.

All Athens CAs will be reviewed for the next year for issues of competitiveness, favoritism, and conflict of interests.

3IIOD-11 Review adequacy of ORD corrective action on the prior OIG audit findings related to CA review panel COIs and the influence of the prospective PO over panel selections and panel recommendations. Ensure proper implementation of prior audit corrective actions by ORD laboratories.

3IIIOD-1 Review adequacy of corrective action taken on prior 1983 OIG audit finding related to infrequent and inadequate PO site visits and determine whether ORD laboratories properly implemented ORD's actions in this area.

Response: Concur

Corrective Action: The Director of OEPER will work with ORPM and GAD to determine and ensure proper implementation of the measures necessary to provide the corrective actions called for in the 1983 OIG audit. OEPER will send a report of findings and additional corrective actions to ORPM by April 30, 1993.

As part of ORPM's audit follow-up activities, an ORD-wide review of actions promised in response to the 1983 will be conducted. The review will be completed by August 30, so that any findings can be incorporated in ORD's annual FMFIA assurance letter process.

OIG Evaluation

As stated in response to ORD's planned actions on recommendation 3IIOD-3, implementation of corrective action on prior OIG audit will require a change in ORD's current policy and procedures manual and, therefore, we need an ORD commitment to an appropriate manual revision before resolving this recommendation.

3IIIAA Recommend the AA/ORD ensure significant improvements are made in assistance agreement management to assure compliance with agreement terms and that Agency resources are being effectively used and safeguarded against waste and abuse.

Response: Concur

Corrective Action: The AA/ORD established an ORD-wide work group to implement a series of management improvements. The group is

charged with developing guidance on how to conduct internal control reviews on ORD's highly vulnerable areas, including assistance management. The group's final report is due September 30, 1993.

3IIIOD Review adequacy of corrective action taken on prior OIG audit finding related to infrequent and inadequate PO site visits and determine whether ORD laboratories properly implemented ORD's actions in this area.

Response: Concur

Corrective Action: The Director of OEPER will work with ORPM and GAD to determine and ensure proper implementation of the measures necessary to provide the corrective actions called for in the 1983 OIG audit. OEPER will send a report of findings and additional corrective actions to ORPM by April 30, 1993. See response to 3IIOD-11.

3IIILD-1 Require that CA POs obtain quarterly progress reports from cooperators, in compliance with CA special conditions and Agency policies, to assist them in monitoring the status, progress, problems, and expenditures under CAs. CA special conditions should require written progress reports to document laboratory review and oversight of cooperator activities.

Response: Concur

Corrective Action: On June 6, 1992, the ERL-A Director issued LOPs 5330-6, requiring POs to maintain a comprehensive file of CA activities including quarterly/other progress reports. LOP 5330-8, effective September 28, 1992, requires all POs to conduct and document site visits to ensure, inter alia, compliance with CA Special Conditions. On February 9, 1993, a Quality Action Team was established to review, enhance or modify existing policies and procedures, or to propose new ones if required, for all phases of CA pre-award and post-award management. This team is charged to consider reporting, monitoring, and documentation among the issues. Finally, and in compliance with LOP 5330-8, all POs have had their performance standards updated since November 30, 1992, to reflect increased and specific emphasis on management and documentation of CA oversight. Laboratory management will use these standards in evaluating performance at the end of the current performance period.

3IIILD-2 Ensure that CA POs comply with all Lab Operating Procedures and Assistance Administration Manual requirements in the management of CAs.

Response: Concur

Corrective Action: Effective November 30, 1992, all PO's performance agreements were modified with an additional standard requiring specific accountability for CA management. Branch Chief agreements were also modified to focus more attention on this element of supervision. On February 9, 1993, a Quality Action Team was formed to review current practices and to propose additional actions by April 15, 1993. In addition, the Laboratory will establish an internal review and audit system for each level of management to determine performance. The new procedures will be in place by June 1, 1993.

The Director of OEPER will rely upon the Athens experience to assure that similar review systems are adopted in other OEPER laboratories for FY 1994.

3IIILD-3 Require frequent site visits by CA POs and allocate sufficient travel resources to accomplish this critical control technique.

Response: Concur

Corrective Action: Effective September 28, 1992, LOP 5330-8, on "Site Visits," was issued to establish policy and procedures for PO site visits. This LOP, requiring a minimum of one site visit per year coupled with one to two visits to ERL-A per year, will dramatically improve oversight. Additional management oversight will be through the performance agreement process. Compliance with this policy will be checked as part of OEPER's annual management review process cited in the preceding responses.

3IIILD-4 Require management review of PO trip reports for CA/IAG site visits and that the reports, in particular, adequately document PO oversight of expenditures under extramural agreements.

Response: Concur

Corrective Action: Effective September 28, 1992, ERL-A LOP 5330-8 was issued requiring site visits, specifically noting that the visit should verify to the extent feasible that resources (personnel, equipment, facilities, etc.) charged to the project are actually used thereon. In the quarterly ERL-A management reviews, each Branch Chief will report the progress of CAs and document and review the trip report files. The LOP 5330-8 also requires that trip reports be forwarded to GAD for their official records file. Management control for this action will be through

the newly implemented performance standards effective November 30, 1993, and the management review and audit process.

3IIILD-5 Remind CA POs of their financial management responsibilities as delineated in EPA's Assistance Administration Manual and request that GAD provide FSRs to POs for their use in monitoring cooperator financial transactions.

Response: Concur

Corrective Action: ORD will work with OARM to ensure that FSRs are sent to the POs for review. The Laboratory Director will issue written guidance to ERL-A POs by June 1, 1993.

3IIILD-6 Ensure that CA POs receive copies of FSRs from GAD as required by the Assistance Administration Manual and that they review the FSRs and report any discrepancies to GAD.

Response: Concur

Corrective Action: As part of the ongoing project-by-project review of CAs and IAGs, we will request that all relevant FSRs be forwarded to the POs from GAD or FMD, as OARM prefers. We would prefer that FMD use FAX service to send copies of FSRs to the POs. Any discrepancies noted upon PO review of those FSRs will be reported to GAD.

3IIILD-7 Ensure that POs maintain adequate written records to document their management and oversight of CAs, including but not limited to all ERL-A and recipient correspondence relating to the award, performance, and closeout of assistance agreements.

Response: Concur

Corrective Action: LOP 5330-6, Project Officers' Files, was issued on June 6, 1992, requiring that POs organize and complete their project (CA, IAG) files. The LOP requires, inter alia, that the following will be included in the PO files: letters, memos, ROCs, phone calls, trip reports, deviations, close-out memos, equipment disposition memos, etc. Additional management control will be provided through additions to the PO performance standards (completed November 30, 1992) and soon to be established management review and audit procedures for laboratory and HQ management.

3IIILD-8 Require and ensure that cooperators submit QA plans and that ERL-A staff properly perform QA audits of cooperator projects and document these audits in ERL-A files.

Response: Concur

Corrective Action: QA plans are required for all CAs and IAGs that make environmental measurements. Their existence and a review of their adequacy are required upon funding (LOP 5330-5, Documentation Requirements for Preparation of Cooperative Agreement Funding Packages, 8-28-91). Effective September 28, 1992, LOP 5330-8, Site Visits, requires POs to conduct QA audits as a major element of site visits. For current CAs and IAGs that require QA plans, POs conducted site visits and performed QA audits. All QA plans and their recent audits on file with both the Laboratory QA Officer and each PO file will be forwarded to the GAD files by May 1, 1993.

CHAPTER 4 - RECOMMENDATIONS

4IAA-1 Consider decreasing scopes of laboratory contract awards to award contracts to more expert firms in each technical area and to increase competition for technical support contracts.

Response: Concur

Corrective Action: All Technical Support contracts require OEPER Director's review and approval prior to formal request for procurement being sent to OAM. As part of the review process, the scopes of work are carefully evaluated to enhance competition. The Director of OEPER will examine the types of technical expertise required for on-site support at the Athens Laboratory and issue a report by September 30, 1993. A copy of the report will be provided to OIG.

4IAA-2 Create an extramural resource management position at remote laboratories, independent of laboratory management, to oversee the management of extramural resources.

Response: The AA-ORD previously directed that an extramural management expert position be created in every ORD Laboratory this year.

Corrective Action: The Director of ORD's ORPM has developed and distributed model position descriptions for the extramural management expert positions. ORPM is now assisting the Laboratory Directors in the recruitment and hiring of qualified personnel for these positions.

4IAA-3 Ensure that ORD managers' performance standards and evaluations clearly establish accountability for compliance with procurement regulations and Agency's acquisition policies.

Response: Concur

Corrective Action: The Director of ORD's ORPM will reissue policy by April 30 to insure that performance standards include proper accountability for extramural management. ORPM will require a report from each office and Laboratory Director certifying that this has been done.

4IOD-1 Evaluate ERL-Athens research mission focusing on core programs. Establish what research activities should be performed on-site by FTEs or on-site off-site via contracts and other extramural agreements.

Response: Concur

Corrective Action: This evaluation will be completed as part of the plan that will be developed and completed by September 1, 1993 in response to recommendation 2AA.5. All technical support contracts must be approved by OEPER HQ, and part of this review focuses on the on-site/off-site nature of the work.

41OD-2 Review ERL-Athens on-site contractor tasks to determine whether the work should be eliminated, moved off-site, or retained under strict controls. This should include an evaluation of existing and future contract activities that provide long-term on-site support to determine if ERL-Athens is continuing to improperly award such contracts or using its contracts for prohibited contract activities. Particular attention should be given to repetitive awards to the same contractor.

Response: Concur

Corrective action: The Deputy Director of OEPER in conjunction with ORPM and OAM will conduct a review of existing work assignments to determine if work should be eliminated. Review will be completed by June 15, 1993. All future technical support contracts require OEPER HQ review and approval so that competition is enhanced and that there is no potential for personal services and inherently governmental functions.

41OD-3 Revise laboratory managers' performance evaluations to increase the criticality and weight of proper procurement of extramural resources.

Response: Concur

Corrective Action: The Director of OEPER will rewrite the

performance standards for the OEPER Laboratory Directors to give the needed emphasis to management of extramural resources. This effort will be completed by May 1, 1993.

4IOD-4 Provide adequate guidance, in coordination with OGC and CMD, to ensure that laboratory managers understand their extramural limitations and provide close oversight over extramural operations to include:

* The review of an annual Acquisition Plan prepared by ERL-Athens and other ORD laboratories to demonstrate laboratory compliance with ORD policy and procurement regulations during the coming fiscal years.

* Systematic reviews of laboratory operations, in conjunction with CMD, to assure adherence with required contract acquisition and management regulations, including applicable EPA/ORD policies. Also, to ensure that ERL-Athens is in compliance with its acquisition and contract management plans.

* Requiring more technical evaluation members from organizations other than the laboratory procuring the contract panels for competitive procurement to reduce the potential for biased procurement.

* Eliminate requirement for employee commitment letters that may bias contract awards in favor of incumbents.

Response: Concur

Corrective Action: The Director for OEPER will review the current schedule, format, and approval process for annual acquisition plans and research workplans for the laboratories. By June 1, 1993, he will issue guidance for the development, submission and approval of both documents by the Office of the Director prior to September 30, 1993. (The Athens strategic study due September 1, 1993, is needed to complete the plan.)

The OD will carry out annual reviews and audits to comply with this recommendation as described in our response to Recommendation 3IIOD.4.

OEPER already has a requirement for one member of the TEP to be external to the Laboratory. OEPER will issue new guidance that in panels with more than 4 or 5 members, the number of outsiders must be two. Guidance will be issued by April 15, 1993.

OEPER has eliminated the need for prospective bidders to submit commitment letters from prospective employees on a case-by-case basis for new recompetes of contracts. OEPER will issue general policy by April 15, 1993.

4ILD.1 Develop, as part of the annual planning process, a detailed Acquisition Plan, documenting ERL-A's planned acquisitions, the justification for these acquisitions, and how competition will be increased. Also, for each on-site support contract, a contract management plan describing procedures and controls to ensure that contracts are properly used and managed in accordance with the FAR and existing Agency policies. Both documents should be reviewed and approved by ORD and CMD.

Response: Concur

Corrective Action: ERL-Athens will prepare an annual plan describing all planned extramural activity, including contracts, CAs, and IAGs. This plan will be submitted to OEPER for review, as part of OEPER's review of all Athens extramural activity.

CMD, in conjunction with ORD, issued new guidance in FY92 that required a detailed plan in FY93 for acquisitions valued at $25,000 or more. To assist in acquisition planning, general guidance was provided that requires an extensive justification and HQ approval for all new on-site contracts. Further, 8(a) contractors that are about to graduate from the 8(a) program will compete for any new or follow-on work. All other contracts also will be recommended for competition.

A draft LOP was prepared on January 15, 1993, to establish policy, procedures, and guidance for the management of on-site level-of-effort, research support contracts. It is being reviewed by HQ and CMD. On February 12, 1993, an Athens Management Control Enhancements Tracking System for Contracts was established to ensure implementation of various control measures. We have also developed a new strategy that dramatically downsizes on-site contractor support in FY94. We are moving ahead with plans to have this strategy implemented by October 1, 1993. Also, the FY93 Management Review focused entirely on extramural management with emphasis on progress made in implementing the recommendation of the joint ORD/CMD Acquisition Management Improvement Review.

4IIAA Through ORD managers' performance standards and evaluations, establish strict accountability for contract management in compliance with regulations and contract terms. This should include accountability for proper oversight and

control of laboratory extramural operations.

Response: Concur

Corrective Action: The Director of ORD's ORPM will reissue policy by April 30, 1993, to insure that performance standards include proper accountability for extramural management. ORPM will require a report from each Office and Laboratory Director certifying that this has been done.

4IIOD-1 Instruct ERL-Athens director to refrain from using on-site contractors for directed subcontracting of consultants.

Response: Concur

Corrective Action: The OEPER Director has admonished the ERL-A Director to refrain from any and all directed subcontracting.

4IIOD-2 Take necessary action to ensure that ERL-Athens contracts are managed in accordance with regulations and Agency policies. Specifically, the Director should:

* Require ERL-Athens to submit a contract management plan describing how contracts retained for on-site support will be controlled to prevent improper contract activities i.e., personal service relationships, directed subcontracting, and contractor performance of inherently governmental activities.

* Direct ERL-Athens to place available FTEs into the most critical technical support positions currently performed by contractors which are determined to be essential for retention of Agency expertise or are inherently governmental or personal services in nature. If sufficient FTEs can not be obtained to replace contractors, either through staffing increases or conversion of extramural funds, or the work can not be moved off-site or performed on-site without a personal services relationship, these positions and related tasks should be eliminated.

Response: Concur

Corrective Action: The Laboratory has submitted a draft LOP for approval. OEPER will review and approve or provide comments by April 15, 1993.

The FTE issue will be addressed by the on-site review by the Deputy Director of OEPER cited in Recommendation 2AA.4. The

Deputy Director will report his actions or his recommendations by June 30, 1993. Proper controls will be established for any remaining on-site work.

4IIOD-3 Perform periodic, on-site reviews, in conjunction with CMD, to independently evaluate ERL-Athens on-going use and management of contracts. This should include a review of the overall utilization of on-site contracts to eliminate contractor performance of inherently governmental or personal services which creates an over-dependence on incumbent contractors.

Response: Concur

Corrective Action: The revised management review policy and procedures to be prepared in response to Recommendation 2AA.6 will satisfy this recommendation.

CHAPTER 5 - RECOMMENDATIONS

5AA-1 Provide guidance to ERL-Athens concerning appropriation law, proper uses of funds, and appropriation restrictions related to funds ERL-Athens receives.

Response: Concur

Corrective Action: ORD understands the need for clear guidance and agrees that each Office and Laboratory should know these items. The Director of ORD's ORPM will request assistance from OGC and OARM in defining the limits of Agency policy in these areas. ORPM will issue new, strengthened ORD-wide guidance on these matters by September 30, 1993.

5AA-2 Obtain formal, written OGC legal opinions concerning: (1) potential appropriation law violations related to ERL-Athens use of S&E and Superfund monies to purchase and construct a modular building; and (2) use of R&D funds to pay for development of a day-care center for ERL-Athens staff (see Chapter 3). If any violations in occurred, report any resulting Anti-deficiency Act violations in accordance with applicable law.

Response: Concur

Corrective Action: The Director of ORD's ORPM has already requested OGC legal opinion relative to these issues.

5AA-3 Instruct ERL-A to refrain from using purchase orders to circumvent maximum per diem rates and strictly comply with Federal travel regulations in the authorization and payment of

all travel costs.

Response: Concur

Corrective Action: The OEPER Director will so instruct ERL-Athens and other OEPER Laboratories by April 30, 1993. The Director of ORD's ORPM will issue appropriate ORD-wide policy to all ORD Offices and Laboratories by June 30, 1993.

5AA-4 Instruct ERL-A to hold future conferences in locations that offer suitable accommodations at the least cost to the government and that comply with current EPA guidance on restricting EPA meetings at resort areas.

Response: Concur

Corrective Action: The OEPER Director will so instruct ERL-Athens and other OEPER Laboratories by April 30, 1993. The Director of ORD's ORPM will issue appropriate ORD-wide policy to all ORD Offices and Laboratories by June 30, 1993.

5AA-5 Require ERL-A to provide supporting documentation and justification for the unidentified $3,146 charge on the purchase order for the Calloway Gardens conference. Instruct ERL-A that future purchase order costs should be fully justified in the purchase request and properly supported by file documentation and invoices.

Response: Concur
Corrective Action: The OEPER Director will request the supporting documentation from ERL-A, analyze it, and report the results of his analysis to the Director of ORD's ORPM by April 30, 1993.

Concerning purchase order costs, the OEPER Director will so instruct ERL-Athens and other OEPER Laboratories by April 30, 1993. The Director of ORD's ORPM will issue appropriate ORD-wide policy to all ORD Offices and Laboratories by June 30, 1993.

CHAPTER 6 - RECOMMENDATIONS

6AA Recommend the AA/ORD require proper implementation of ERL-Athens FMFIA internal control process to ensure material weaknesses are properly identified and adequate controls are established for extramural resource management and administrative process.

Response: Concur

Corrective Action: The Director of ORD's ORPM is directed to implement an ORD-wide FMFIA improvement effort, including all five elements listed. The first round of this project will be completed by September 30, 1993. The Director of OEPER will include an assessment of Athens' FMFIA process in the Laboratory Director's FY 1993 performance evaluation.

60D.1 Instruct the ERL-Athens director in the importance of proper implementation of the FMFIA and establishment of effective internal control systems over every critical phase of laboratory operations.

Response: Concur

Corrective Action: The Director of OEPER will issue a memorandum to all OEPER Laboratory Directors emphasizing the importance of proper implementation of the FMFIA. In that memorandum he will indicate that OEPER will use the Athens Laboratory as a pilot for structuring and completing a detailed FMFIA review and evaluation. The Athens FMFIA effort will be completed by July 1, 1993, and will be used as the basis for action by other laboratories and for reviews and approvals of FMFIA evaluations by OEPER.

60D.2 Ensure that the ERL-Athens director's, as well as all other laboratory directors' performance standards contain a critical element for FMFIA implementation.

60D.3 Establish more effective oversight of all laboratory FMFIA documentation and implementation to ensure that laboratory directors properly implement FMFIA requirements in compliance with statutory and Agency procedures and establish effective controls that can be readily identified, tested and evaluated.

60D.4 Ensure that laboratory directors are held accountable for any future deficiencies in their FMFIA processes, documentation, and control systems.

60D.5 Include in any future on-site reviews at ERL-Athens or other ORD laboratories an evaluation of FMFIA documentation and effectiveness of related control systems to ensure compliance with applicable laws, regulations and policies.

Response: Concur with 60D.2 through 60D.5

Corrective Action: As part of the Athens pilot, develop guidance

and procedures for the FMFIA development, review and evaluation process for all OEPER laboratories. The new process will be implemented in FY 1994.

6LD.1: Report extramural management as an ERL-A material weakness for the FY93 FMFIA report.

Response: Concur

Corrective Action: Extramural management will be reported as a material weakness for the FY1993 FMFIA report for ERL-Athens. As part of that process, an action plan will be developed listing corrective measures to be undertaken and the schedule for doing so.

6LD.2 Review current FMFIA processes and documentation at ERL-A and ensure that:

* All critical event cycles for extramural management and administrative processes are identified with specific control objectives and control techniques. Detailed control objectives and techniques are identified for all critical event cycles and are tailored to ERL-A operations including IAG and CA activities (not merely references to all-inclusive ORD reports).

* Control objectives and techniques are documented in sufficient detail to permit testing and evaluation of control implementation.

* Reviews and tests are performed on established controls to ensure adequacy and proper implementation.

Response: Concur

Corrective Action: The Athens Laboratory Director will develop an improved FMFIA process. Current FMFIA processes and documentation will be carefully reviewed. Specific control objectives and techniques will be identified for extramural management and administrative processes in event cycle documentation. Detailed, ERL-A specific control objectives and techniques will be identified for all critical event cycles including IAG and CA activities. Control objectives and techniques will be documented in sufficient detail to permit testing and evaluation of control implementation. Established controls will be reviewed and tested to ensure adequacy and proper implementation.

6LD.3 Document specific FMFIA requirements and responsibilities in the performance standards of all ERL-A staff with contractor or cooperator oversight functions and managers who supervise employees with oversight responsibilities.

Response: Concur

Corrective Action: Performance standards documenting specific FMFIA requirements and responsibilities will be instituted by April 30, 1993, for all ERL-A staff having contract, IAG or CA oversight functions and for managers who supervise employees who have such oversight responsibilities. Inclusion of the standards will be verified and emphasized during mid-year reviews.

6LD.4 Ensure that ERL-A staff with FMFIA responsibilities are held accountable for proper implementation of controls over their extramural management activities.

Response: Concur

Corrective Action: ERL-A staff with FMFIA responsibilities will be held accountable for proper implementation of controls over their extramural management activities. The laboratory FMFIA processes will include measures to check compliance with FMFIA responsibilities. Performance evaluations conducted at the end of FY 1993 will include such considerations.

CHAPTER 7 - RECOMMENDATIONS

7OD-1 Ensure that ERL-Athens managers and staff receive ethics training regarding their responsibilities as Federal officials for the ethical conduct of government business and Federal programs.

Response: Concur

Corrective Action: A special ethics course tailored to ERL-Athens issues will be developed by OEPER and Athens staff in consultation with OGC by July 15, 1993. Training given at ERL-Athens by September 30, 1993.

7OD-2 Instruct ERL-Athens staff, contractors, and on-site cooperators that deliberate obstruction of a Federal audit or destruction of Federal records without proper approval is a crime punishable under 18 U.S.C.

7OD-3 Inform ERL-Athens staff, contractors, and cooperators of requirements of the IG Act and their obligation under the Act to

furnish full and accurate information to any interrogatories by OIG auditors in the conduct of an official inquiry.

Response: Concur

Corrective Action: All OEPER staff, contractors, and cooperators will be notified in a memo from the Office Director of the requirements to full cooperate with IG Act. Memo will be distributed by April 15, 1993.

7OD-4 Require ERL-Athens to establish record retention policies and procedures in accordance with EPA's Records Management Manual and ensure that records documenting day-today management of contracts and extramural agreements are maintained for the proper retention period and for easy access by any potential reviewers of this information.

Response: Concur

Corrective Action: All OEPER units will be informed of the record retention policies and procedures in accordance with EPA's Records Management Manual including the proper procedures for acquiring additional storage space by May 1, 1993.

GRANTS ADMINISTRATION DIVISION (GAD) COMMENTS

Response to Recommendations

Although GAD takes significant issue with many of the audit findings, particularly its use of inflammatory language, we generally believe the recommendations are reasonable. Our concurrence or non-concurrence for each of the recommendations applicable to GAD are as follows:

Agency Comment

0 Page 36: "Provide definitive written policies and procedures on the award and administration of assistance agreements, to include the specific eligible purposes of assistance agreements under the 1977 FGCA Act, and provide this guidance to ERL-A managers and POs, as well as to POs EPA-wide."

We concur with this recommendation, but we believe the beginning of the recommendation should say "Update, clarify, and communicate...".

OIG Evaluation

GAD concurred with recommendation but did not cite corrective action taken or planned or milestones for completion of any planned corrective actions. We have changed the recommendation to reflect the word changes requested by GAD.

Agency Comment

0 Page 37: "Establish Agency-wide policy on competition in award of assistance agreements that complies with the intent of the 1977 FGCA Act."

We concur. We plan to develop EPA-wide criteria on when programs should compete grants and cooperative agreements.

OIG Evaluation

GAD concurred with the recommendation and identified planned corrective actions. However, a milestone date for completion of corrective actions will be needed to resolve this recommendation.

Agency Comment

0 Page 37: "Strengthen oversight and review of proposed CAs and IAGs to ensure their compliance with applicable laws, regulations, and Agency policies before official approval of these assistance agreements."

We concur. We intend to review GAD's application review process to assure that proposed cooperative agreements and interagency agreements comply with applicable laws, regulations, and Agency policies. Based on this review we will develop a plan on how best to strengthen the process, e.g., additional training for grants specialists, shifting of resources, etc.

OIG Evaluation

GAD concurred with recommendation and included planned corrective actions. However, milestone dates for completion of actions will be needed to resolve this recommendation.

Agency Comment

0 Page 37: "Provide increased oversight of PO and recipient management, both technical and financial, to ensure proper PO compliance with their oversight responsibilities and to ensure recipient compliance with terms of their agreements. In addition, GAD should aggressively enforce its requirements on program operations and ensure that it is complying with its own requirements to include obtaining PO trip reports and submitting FSRs to POs for review."

We concur. We intend to develop a plan to meet this recommendation by efficiently focusing available Agency resources on front-end efforts to assure that requirements are clearly understood (e.g., training and communication) and implemented (e.g., program office certification of compliance) and by selected post-award monitoring with the resources available.

OIG Evaluation

GAD concurred with recommendation and included planned corrective actions. However, more specific information on the actions planned and milestone dates for completion of actions will be needed to resolve this recommendation.

Agency Comment

0 Page 37, "Review the adequacy and applicability of

current PO training and require such for all CA and IAG POs."

We concur. A new 3-day PO training course currently under development will be required training for all POs. This new course will be more current and up-to-date than the current PO training course. We have scheduled pilot testing of this new course in late FY 93. We will conduct the training for all EPA POs (approximately 1,900), using existing Agency resources over a three-year period.

OIG Evaluation

GAD concurred with recommendation and included planned corrective actions. However, milestone dates for completion of actions will be needed to resolve this recommendation.

Agency Comment

0 Page 37: "Compile and maintain the names and locations of all current IAG and CA POs for consultation, when needed, and to ensure they are provided written guidance and training materials in a timely manner."

GAD already has a computerized data base that includes the names, phone numbers and addresses of the EPA Project Officers. We agree that it is valuable to send POs appropriate written guidance in a timely manner and will employ the existing data base for that purpose.

OIG Evaluation

The recommendation has been changed to reflect the existence of the PO data base in accordance with GAD's response. The draft report's statement that GAD did not have such a data base was based upon interviews with GAD managers who were apparently unaware of the existence of a PO data base.

GAD generally concurred with the intent of the recommendation. However, specific corrective actions with milestone dates for completion of these actions will be needed to resolve the recommendation.

Agency Comment

0 Page 37: "Review the qualifications of all prospective POs and ensure the individuals have the proper training and experience required. A certification program for CA and IAG POs, similar to the certification of contract POs is recommended."

We believe the program offices are responsible for reviewing the qualifications of all prospective POs and ensuring individuals have the proper experience.

We concur with the need for PO certification. We plan to phase in implementation of a certification program between FY 94 and FY 97 working within existing resources. In the interim, we plan to issue provisional certification to all current POs with the requirement that they must take and pass the three-day PO training course and meet any other established requirements within the next three years (consistent with our ability to provide the training courses).

OIG Evaluation

We have changed the recommendation to indicate that GAD should perform a secondary review of the qualifications of POs designated by program offices. If GAD is going to maintain the data base of certified POs, there should be some review by GAD to ensure that POs designated by program offices have had the required training and are properly certified.

GAD concurred with the recommendation to establish a assistance PO certification program.

Agency Comment

0 Page 37: "Establish jointly with ORD, periodic/cyclical on-site reviews of laboratory management of assistance agreements."

We concur. We intend to work with ORD to develop a practical plan on how to best address this recommendation within existing resources.

OIG Evaluation

GAD concurred with the recommendation; however, more specific planned corrective actions and milestone dates for completion of these actions are needed to resolve this recommendation.

Agency Comment

0 Page 70: "Provide guidance to ORD managers and CA POs on the differences between acquisition and assistance and appropriate uses of contracts and assistance agreements with illustrations and definitive examples."

We concur. We are currently updating our guidance for

distinguishing between grants and contracts to include numerous illustrations and case studies.

OIG Evaluation

GAD concurred with recommendation and included planned corrective actions. However, milestone dates for completion of actions will be needed to resolve this recommendation.

Agency Comment

0 Page 70: "Assist ORD in preparing guidance on the proper uses of R&D funds as relates to the specific types of activities that are eligible for funding under CAs."

We concur.

OIG Evaluation

GAD concurred with recommendation; however, planned corrective actions and milestone dates for completion of these actions will be needed to resolve this recommendation.

Agency Comment

0 Page 70: "Assign responsibility for ERL-A extramural agreements to one grants specialist to improve controls over extramural resources through increased familiarity with laboratory operations/staff. Currently ERL-A agreements are assigned haphazardly to whichever specialist can take another case. Therefore, ERL-A's agreements are scattered among many specialists with no one person seeing the whole picture of ERL-A agreement awards. If one specialist had seen all of the NASA IAGs for exchange of extramural funds for FTE travel, the GAD specialist may have detected the improper use and disapproved the agreements."

We non-concur with the statement that projects are assigned haphazardly. Grants, cooperative agreements and IAGs are assigned systematically using a log. Projects are reassigned periodically to even out the workload between specialists.

We also non-concur with the recommendation to assign all of the ERL-A projects to one specialist. This recommendation requires further review. We are concerned that it would create uneven workloads among specialists and would slow down the processing of new applications. Also, we do not agree that assigning all projects to one grants specialist would prevent the abuses alleged in the audit report. As noted in the report, each

specialist has 150 projects. Each one is a different project, administratively separate from all others, with different start dates, different end dates, varying project officers, different scopes of work, etc. Specialists administer cooperative agreements project-by-project, rather than on a laboratory-wide basis.

We are, however, considering specific laboratory liaison arrangements that deal with the concerns raised in the report.

OIG Evaluation

We removed the word "haphazardly" and inserted "systematically." GAD non-concurred with assigning all ERL-A projects to one specialist; however, GAD agreed to perform further review of this proposal. One of GAD's objections to this method of assigning cases is that it may result in an uneven distribution of workload and that each assistance agreement is administratively separate with different start dates, different scopes of work, etc. However, a GAD manager told us that if one grant specialist had been assigned the NASA IAGs for instance, the specialist may have detected the misuse of the IAGs to launder R&D funds into travel funds for FTEs. The GAD manager also said under the current method of assigning cases, this misuse of multiple IAGs would never be detected. Therefore, if cases could be more or less evenly distributed by location rather than next available specialist, we continue to believe that better oversight of the propriety and use of assistance agreements and IAGs could be obtained.

Agency Comment

0 Page 70: "Provide guidance to POs that prohibit the use of IAGs for the purpose of reprogramming appropriated funds and awarding research funds to foreign countries unless proper approval or statutory authority is obtained."

We concur.

OIG Evaluation

GAD concurred with recommendation; however, planned corrective actions and milestone dates for completion of these actions will be needed to resolve this recommendation.

OFFICE OF ACQUISITION MANAGEMENT (OAM) COMMENTS

CHAPTER 2 RECOMMENDATIONS

The draft audit report recommends that the Assistant Administrator for Administration and Resources Management require the Director of the CCMD to:

Strengthen CCMD's contract review process to ensure that contract proposals are thoroughly reviewed and that all questionable actions are quickly resolved. Any procurement, requests for sole-source contractor including noncompetitive 8 (a) contract proposals should be closely scrutinized as to need for sole-source contracts and contract cost estimation to avoid competitive thresholds.

We agree with the OIG's recommendation. The CCMD review process has been strengthened in the following areas:

a. As the result of Total Quality Management (TQM) findings, a team approach in now used to review all major procurement request documents. The team consists of the assigned CS for solicitation/award; the Cincinnati Acquisition Management Branch (CAMB) Chief and/or PA; the Cincinnati Contract Management Branch (CCMB) Team Leader and the CS on the incumbent contract (for follow-on); and, after the first strategy meeting, program personnel. Concerted efforts are made to limit and restrict SOW services, identify the potential for Conflict of Interest (COI), sensitive activities, personal services and inherently governmental functions, and take appropriate measures. Major issues are escalated to division directors, office directors and the Senior Resource Official for the program office. Although it is recognized that all problems cannot be corrected in one year, improvements have been achieved relative to FY 93 follow-on solicitations to ORD on-site support contracts, including reducing the emphasis for personnel qualifications and the number of positions to be evaluated.

b. In FY 93 CCMD's internal control report identified the TEP proposal evaluations as a weakness in the acquisition process. More sample evaluations and instructive materials are being developed for TEPs (see Attachment 8) and emphasis has been placed on the TEP briefing conducted by the CS (see Attachment 9). This area will continue to be assessed for improvements.

c. Revised 8(a) procedures have been developed to ensure that programs review qualification statements for more than one 8(a) firm before selecting one for negotiation and that they

provide written documentation to CCMD which establishes their rationale for selection (see Attachment 2). Part of the documentation includes statements about whether the program has other contracts, or plans to have other contracts, with the selected 8(a) firm. Program estimates are more closely scrutinized. If any are close to $3 million; CCMD submits a competitive request to the SBA and revises the estimate to more than $3 million based on recent historical experience with Program estimates versus 8(a) proposals.

These reviews have proven to be excellent control techniques since they provide for the identification, elevation and resolution of potential regulatory or legal vulnerabilities in a proactive fashion.

OIG Evaluation

OAM generally concurred with the recommendation and identified planned corrective actions. However, the response does not identify what specific procedures and guidance were institutionalized to correct deficiencies in OAM's procurement process. In order to determine the adequacy of OAM's corrective actions, OAM will have to provide examples of specific procedures and guidance which were implemented.

OAM Comment

> Instruct Contracting Officers (COs) to immediately notify CCMD's director of any potential violation of contract laws and regulations or any unsound contract management practices identified. Also, ensure that the director of CCMD expeditiously resolves any potential violations or unsound practices.

We agree with the intent of this recommendation but not with the idea that every problem be elevated to the director's level. This would soon result in gridlock. In December 1992 the Office of Acquisition Management (OAM) issued Procurement Policy Notice (PPN) No. 93-01 (see Attachment 10) which instructed COs to elevate any and all irregularities and established the chain of command for expedited resolution of such matters. Team leaders have been designated in CCMB to oversee work processes and identify such irregularities so that they will be expeditiously elevated to the appropriate level.

OIG Evaluation

OAM generally concurred with the intent of the recommendation,

but disagreed that every potential violation of the law and unsound management practice be evaluated to the director level. The December 1992 PPN No. 93-01 mentioned by OAM seems to adequately address procedures for the escalation up the chain of command any identified irregularities. Corrective actions proposed by ORD are responsive to our recommendations and appear to fulfill the acceptable action criteria of EPA Order 2750.

OAM Comment

> Emphasize to COs that their primary obligation is to ensure compliance with contract laws and regulations and to protect the interests of the government while providing timely service to programs. Establish controls to ensure that CSs consistently comply with contract laws, regulations, Agency policy and sound contract management practices in all of their contract actions.

We agree with the recommendation. Team meetings are used to emphasize CO responsibilities. Solicitation review boards have been reinstituted to ensure that decision documents are well supported; personal accountability has been increased by granting warrants up to $5,000,000 to qualified CSs. In addition, CCMD reorganized its CCMB into Teams to support the various POs. Team leaders have been appointed to track workload and serve as mentors to contract specialists assigned to the Teams.

A single Specialist has been assigned to manage all contracts originating from a given Program Office (PO) such as ERL-A. This specialist now works closely with the CO in the CAMB on any follow-on contract to ensure that any lessons learned on the current contract are incorporated into the follow-on. Also, by being actively involved in the acquisition process, the contract specialist assigned to manage the contract is aware of different issues that occurred during the award phase and is better prepared to manage the contract.

TOM principles have been applied to CCMD's voucher review process and responsibilities as well as the development of new Work Assignment Forms and Checklist which must be completed by each Work Assignment Manager and Project officer for each Work Assignment. The Checklist specifically addresses all issues raised in the OIG report (e.g., work outside the SOW, personal services, subcontract consent). The contract specialists have been instructed to prioritize their efforts, with careful review and approval of the Work Assignments and the contractor's Monthly Progress Report which supports the monthly voucher submission being the top priorities. The Specialists' Performance Plans

have been changed to reflect this emphasis.

Special letters of instruction have been provided to all cost-type contractors and Project Offices' addressing the subject of subcontractors and consultants (see Attachment 11). Special letters of instruction have also been provided to all contractors and Project officers addressing the subject of Inherently Governmental Functions and providing copies of Office of Federal Procurement Policy (OFPP) Policy Letter 92-1 and EPA Order 1900.2 (See Attachments 12 & 13).

OIG Evaluation

OAM generally concurred with the recommendation and identified planned corrective actions. However, the response does not identify what specific procedures and guidance have been institutionalized to correct the past failure of COs and CSs to adhere to laws and regulations. In order to determine the adequacy of OAM's corrective actions, OAM will have to provide examples of specific procedures and guidance which were implemented.

OAM Comment

> Examine CCMD's or EPA's competitive contracting process and streamline where possible to eliminate unnecessary administrative burdens delays and incumbent bias (i.e., personnel commitments) and to overcome program management's resistance to competitive process awards.

We agree with the recommendation with one exception. As stated previously, TQM teams are used to examine and streamline the competitive process. Special care is being taken to review/revise procurement request documents to restrict vulnerabilities and enhance competition. Technical evaluation criteria are scrutinized and revised to reduce emphasis on personnel qualifications to 25% - 30% of the total weight with no more than 15% of total number of personnel evaluated. Market surveys, public meetings and preproposal conferences (where travel dollars are available) are used to encourage competition. For some major on-site procurements, arrangements are made to have a PO TEP Chair other than the one on the incumbent contract. CCMD has been working diligently with programs to overcome any program management resistance to the new contract management paradigm. We are making progress but with the result of greatly increased leadtimes and numerous extension to existing contracts as a result of the learning process involved. We believe that these delays in the short term are worthwhile in order to achieve

long term contract management improvements.

A number of quality actions teams from EPA's Standing Committee on Contracts Management are exploring options to streamline the procurement process. We anticipate implementation of their recommended initiatives beginning this fall.

OIG Evaluation

OAM generally concurred with the recommendation and identified planned corrective actions, except that they believe that some delays in the short term are worthwhile in order to achieve long term contract management improvements. We agree that those processes which are essential to the integrity of EPA's procurement process should not be overly influenced by time considerations. But the response does not identify what specific procedures and guidance have been implemented by OAM to expedite the procurement process, eliminate unnecessary bias, and overcome program management's resistance to competitive process awards. In order to determine the adequacy of OAM's corrective actions, OAM will have to provide examples of specific procedures and guidance which were implemented.

OAM Comment

Establish jointly with ORD, periodic/cyclical on-site reviews of laboratory management of contracts.

We agree with the recommendation. We anticipated conducting follow-up reviews during FY 93 but budgetary and workload constraints prevented our conduct of these reviews. The FY 94 and FY 95 budget submissions will include funds and FTE requests to continue lab reviews on an annual basis.

OIG Evaluation

OAM generally concurred with the recommendation and identified planned corrective actions. However, the response does not identify the establishment of a formalized review process and the scope and timing of planned reviews. In order to determine the adequacy of OAM's corrective actions, OAM will have to provide a specific information on their planned reviews.

CHAPTER 4 RECOMMENDATIONS

The draft audit report recommends that the Assistant Administrator for Administration and Resources Management require the Director of the Office of Acquisition Management to:

Provide written instructions to OAM, ORD and ERL-A staffs describing the appropriate procurement, use and management of 8(a) contracts under CCMD's oversight,

We agree with this recommendation. OAM has issued PPN 92-05 to provide guidance on use and management of 8(a) procedures (see Attachment 17) which includes additional controls on 8(a) set asides. Forms (see Attachment 2) are provided to programs which express an interest in awarding 8(a) contracts.

OIG Evaluation

OAM concurred with the recommendation and identified planned corrective actions. OAM identified a September 1992, Procurement Policy Notice (PPN) 92-05 and Forms provided to program offices as guidance on use and management of 8(a) procedures. Although PPN 92-05 addresses the issue of underestimating and splitting 8 (a) contracts, additional guidance should be provided by OAM addressing other programmatic issues involving the 8(a) program. This guidance should emphasize that EPA is committed to correcting problems within the 8(a) program, not eliminating the use of 8(a) contracts. The guidance should also emphasize to the program offices they should maintain an arms-length relationship with 8(a) contractors, unlike past practices where their operations were essentially utilized as extensions of the program. In addition, the guidance should emphasize that the purpose of the 8(a) program is to develop 8(a) contractors to compete in the open marketplace, not to develop an unhealthy dependence on EPA sole-source contracts. This symbiotical relationship between 8(a) contractors and program offices resulted in abuses of the 8(a) program such as, the underestimation and splitting of contracts and extensive modifications of sole-source contracts.

OAM Comment

Ensure that CCMD performs an in-depth review of all future 8(a) procurements falling within close range of the threshold for competing 8(a) contracts to assess if requested sole-source procurements are justified.

We agree with this recommendation. CCMD's revised 8(a) procedures (see above), require that Government estimates be reviewed in depth by the SDBUO and the Chief, CAMB. Although the procedures do not so state, CCMD itself increases the estimate to request a competitive 8(a) acquisition if the program estimate is near $3 million if historical experience leads us to believe that the final negotiated price will be over $3 million.

OIG Evaluation

OAM concurred with the recommendation and identified planned corrective actions. However, a milestone date for completion of corrective actions will be needed to resolve this recommendation.

OAM Comment

The OIG also recommends that CCMD should not routinely allow a sole-source procurement when contractors are currently performing work under an existing contract for that location. We agree with the intent of this recommendation as well. Under CMD's new 8(a) procedures, program offices are required to fill out a questionnaire which identifies any other 8(a) contracts the requested contractor holds for the initiating program office and any intention by the program office to request other contracts for the firm. The questionnaires are retained by the SDBUO for later reference as a control measure. This will enable the SDBUO to better manage the 8(a) program and keep any one firm from monopolizing any location (see attachment 2).

OIG Evaluation

OAM concurred with the recommendation and identified planned corrective actions. However, a milestone date for completion of corrective actions will be needed to resolve this recommendation.

OAM Comment

The OIG additionally recommends that CCMD should not routinely allow a sole-source procurement when the contractor has demonstrated its ability to successfully compete for similar contracts at other EPA locations. We disagree with this recommendation. The decision relative to noncompetitive or competitive is based on applicable statutes and thresholds established thereunder. Beginning in FY 90, those statutes have included the requirement for 8(a) firms which have been in the program for 4.5 years to participate in a certain percentage of competitive procurements while continuing to receive a certain percentage of noncompetitive awards. The number of noncompetitive and competitive solicitations in which any given firm participates is monitored by SBA, not by individual user agencies. Since 8(a) contractors receive awards from numerous other Federal Agencies, each with several contracting offices, neither EPA nor any Agency other than SBA has the information which would enable it to determine when a firm should be competing and when it should receive a noncompetitive award. That is why Congress has assigned to SBA the responsibility for

determining whether an individual contractor should compete any given requirement. Furthermore, since competition is an expensive process (costing offerors up to $100,000 per solicitation), and these firms are still in the developmental stage (as shown by their 8(a) status), Congress has wisely decreed that competition shall be conducted only above a certain level ($3,000,000 for services; $5,000,000 for supplies).

As an additional control, in accordance with FAR 19.806(b), if a noncompetitive 8(a) proposal in deemed unreasonable and cannot be negotiated down to a fair and reasonable price, SBA is notified of the intention to withdraw the solicitation from the 8(a) program and resolicit under full and open competitive procedures (see Attachment 18).

OIG Evaluation

OAM's response is inaccurate because it makes assumptions based on past management practices under the 8(a) program, not legally imposed requirements. Nowhere in the Small Business Act does it state that SBA dictates to the Agency the method of procurement. FAR 48 Section 19.809-1(b) states:

> *The Agency shall prepare the contract that the SBA will award to its contractor in accordance with agency procedures, as if the agency were awarding the contract directly to the SBA's contractor.*

SBA's role is of oversight of the 8(a) procurement process to promote the development of 8(a) companies, not determination of the Agency's method of procurement. The Agency, not SBA, is often in the best position to determine whether a contract should be awarded sole-source or competitively. OAM's first responsibility should be to assure the integrity of EPA's procurement process, and then meet requirements of the 8(a) program. Otherwise, continued abuses in the procurement process such as occurred in the awarding of the AScI and TAI contracts may continue.

The statutes OAM refers to on competition in the 8(a) program are minimum requirements and do not prohibit the Agency from requiring competition in procurements under the $3 million dollar threshold. In addition, OAM implies that determination of competition within the 8(a) program is the responsibility of SBA and that they don't have the information to determine when a firm should be competing and when it should receive a noncompetitive award. The award of the AScI contracts is in direct contradiction to this statement. AScI was awarded numerous sole-

source awards at EPA and essentially did not have contracts outside of EPA. At ERL-A we were informed that AScI would have had a commanding position in any recompete of the contract. Given the primary purpose of the 8(a) program was to develop minority firms to compete in full and open competition, it would seem self evident these contracts should have been competed. Again, OAM has the primary responsibility to assure the integrity of EPA's procurement process, not SBA.

OAM Comment

The OIG recommends that CCMD should not routinely allow a sole-source procurement when contract modifications would significantly increase the contracts value over the competitive threshold or extend the contract performance past expiration of the contractor's 8(a) eligibility. We agree with this recommendation. Last minute sole source contract extensions are no longer granted when the 8(a) contractor is ready to graduate from the program. No modifications have ever been issued by CCMD that take an 8(a) contract issued under noncompetitive procedures over the competitive threshold.

OIG Evaluation

OAM concurred with the recommendation and identified planned corrective actions. However, a milestone date for completion of corrective actions will be needed to resolve this recommendation.

OAM Comment

Establish definitive guidelines for justifying removal of contracts from 8(a) participation.

We agree with this recommendation. CCMD's 8(a) procedures include careful deliberation on whether to remove a contract from the 8(a) program. The decision on whether or not to retain a contract in the 8(a) program past the date of the incumbent contractor's graduation is based on relevant factors; such as availability of qualified 8(a) firms within the applicable Standard Industrial Classification (SIC) manual code and results of an SBA Impact Study [if the graduated 8(a) firm is still a small business].

OIG Evaluation

OAM concurred with the recommendation and identified planned corrective actions. However, a milestone date for completion of corrective actions will be needed to resolve this recommendation.

OAM Comment

> Establish a maximum potential value or percentage increase for all contracts that will automatically trigger a re-compete.

We disagree with this recommendation. Arbitrary dollar amounts or percentages cannot be substituted for good management decisions. Each decision must stand on its own merits. We agree that significant modifications that increase LOE or the scope of contracts should not be approved unless specific statutory authority exists to support the increase.

OIG Evaluation

At a minimum, OAM should consider establishing a maximum potential value or percentage increase which would automatically trigger a review by higher levels of management to determine whether program offices are avoiding competitive procedures. OAM is correct that arbitrary dollar amounts or percentages cannot be substituted for good management decisions, but these good management decisions were not always evident in the past. Therefore, we have changed the recommendation to require "consideration of recompete" when a certain percentage increase of maximum potential value is reached.

OAM Comment

> Ensure that ERL-A does not bias procurements by specifically ensuring that competitive procurements do not deny short extensions of solicitation periods where such extensions are justified; that competitive procurements do not place an unreasonable amount of technical evaluation ranking points on the strengths of an incumbent contractor and that competitive procurements do not require commitment letters,

We agree with the OIG recommendations with the exception of the requirement for commitment letters. CCMD oversight of ERL-A and other client programs has increased. The following measures are in effect:

(i) Requests for extensions of proposal periods are granted when they are reasonable and when they promote competition. As in the case of the ERL-A RFP, a reduced extension may be granted if the full time requested is not deemed to be needed.

(ii) Technical evaluation criteria and weights are reviewed and revised to develop an equitable plan to ensure that the

Government receives the quality of goods and services it requires without unduly restricting competition.

(iii) Commitment letters for key personnel are required in order to preclude "bait and switch" tactics by unscrupulous offerors. However, CCMD is working to decrease the number of key personnel and thus the number of commitment letters required while retaining safeguards for the Government's interests.

OIG Evaluation

OAM generally concurred with the recommendation and identified planned corrective actions, except for the elimination of commitment letters. If the commitment letters are used as OAM states to retain key personnel in order to preclude "bait and switch" tactics, we do not disagree with their use. In the past at ERL-A they were utilized to assure the retention of all 37 contractor employees under the TAI contract. This resulted in an overwhelming competitive advantage to the incumbent contractor in obtaining the commitment letters. A milestone date for completion of corrective actions will be needed to resolve this recommendation.

OAM Comment

The draft report recommends that the Assistant Administrator for Administration and Resource Management direct the Office of Acquisition management Director to ensure CCMD adequately reviews ERL-A contracts for inappropriate contract activities and compliance with contract provisions.

We agree with the recommendation. PPN 93-01 was promulgated by OAM to instruct COs to notify the appropriate management official of any and all irregularities, and to establish the chain of command for expedited resolution of such matters, Team leaders have been designated in CCMB to oversee work processes and identify irregularities so that they will be expeditiously elevated through the chain of command. The team leaders also track workload and serve as mentors to contract specialists assigned to the teams. A single specialist has been assigned to manage all contracts originating from a given program office such as ERL-A. This specialist now works closely with the Contracting Officer in the AMB on any follow-on contract to ensure that any lessons learned an the current contract are incorporated into the follow-on. Also, by being actively involved in the acquisition process, the contract specialist assigned to administer the contract is aware of different issues that occurred during the award phase and is better prepared to manage the contract.

In an effort by CCMD to provide increased controls, oversight, and review of ERL-A contracting activities, CCMD conducted a joint on-site contract management review of all ERL-A contracts with ORD. We agree with the OIG that this type of on-site review and follow-up should continue in the future as a part of CCMD's on-going monitoring of ERL-A's contract management activities, resources and travel funds permitting.

TQM principles have been applied to CCMD's voucher review process and responsibilities as well an the development of new Work Assignment Forms and Checklist which must be completed by each Work Assignment Manager and Project Officer for each Work Assignment. The Checklist specifically addresses all issues raised in the OIG report (e.g., work outside the SOW, personal services, subcontract consent). The contract specialists have been instructed to prioritize their efforts, with careful review and approval of the Work Assignments and the contractor's monthly progress report which supports the monthly voucher submission being the top priorities. Their Performance Plans have been changed to reflect this emphasis.

Special letters of instruction have been provided to all cost type contractors and project offices addressing the subject of subcontractors and consultants. Special letters of instruction have been provided to all contractors and project officers addressing the subject of Inherently Governmental Functions and provided copies of OFPP Policy Letter 92-1 and EPA Order 1900.2.

The OIG draft report also recommends, in particular that CO approval should be required for certain expenditures under contracts and CCMD should be required to establish a policy of not authorizing after-the-fact payments. Under this policy, the contractors should ensure that proper approval in obtained from ERL-A and CMD before expenditures are made.

Current policy and procedures already exist in the contract (FAR 52.244-2). and regulations (FAR 1.602-3, EPAAR 1501.602-3 and EPA Contracts Management Manual Chapter 12) regarding the need for advance approvals and subsequent ratifications. These policies and procedures have been stressed in recent Branch meetings with the contract specialists assigned to CCMB to manage post-award contract actions.

OIG Evaluation

OAM concurred with the recommendation and identified planned corrective actions. Based on OAM's response this recommendation was rewritten.

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

AAU	-	Assistance Administration Unit
AEcoS	-	Aquatic Ecosystem Simulator
AFB	-	Air Force Base
AScI	-	American Scientific International
BOREAS	-	Boreal Ecosystems Atmosphere Study
CA	-	Cooperative Agreement
CEAM	-	Center for Assessment Modelling
CFR	-	Code of Federal Regulations
CMD	-	Contracts Management Division
COI	-	Conflict of Interest
CPFF	-	Cost-Plus-Fixed-Fee
CSC	-	Computer Sciences Corporation
CSU	-	Colorado State University
EMAP	-	Environmental Monitoring and Assessment Program
EPA	-	Environmental Protection Agency
EPAAR	-	EPA Acquisition Regulations
ERL-A	-	Environmental Research Laboratory - Athens
ERL-N	-	Environmental Research Laboratory - Narragansett
FAR	-	Federal Acquisition Regulations
FGCA	-	Federal Grant and Cooperative Agreement Act
FMFIA	-	Federal Managers Financial Integrity Act
FSR	-	Financial Status Report
FTE	-	Full-Time Equivalent
FY	-	Fiscal Year
GAD	-	Grants Administration Division
GAIM	-	Global Analysis Interpretation and Modelling
GAO	-	General Accounting Office
GIAB	-	Grants Information and Analysis Branch
IAG	-	Interagency Agreement
IG	-	Inspector General
IGBP	-	International Geosphere/Biosphere Program
IPA	-	Intergovernmental Personnel Act
IVIC	-	Instituto Venezolano de Investigaciones Cientificas
LOE	-	Level of Effort
MBL	-	Marine Biology Laboratory
MPV	-	Maximum Potential Value
MSU	-	Montana State University
OARM	-	Office of Administration and Resources Management
OEPER	-	Office of Environmental Processes and Effects Research
OGC	-	Office of General Counsel
OIA	-	Office of International Activities
OIG	-	Office of Inspector General
OMB	-	Office of Management and Budget
ORD	-	Office of Research and Development

OSW	-	Office of Solid Waste
PCMD	-	Procurement and Contracts Management Division
PI	-	Principal Investigator
PO	-	Project Officer
QA	-	Quality Assurance
QC	-	Quality Control
RFP	-	Request for Proposal
ROC	-	Record of Communication
RPM	-	Remedial Project Manager
S&E	-	Salaries and Expenses
SBA	-	Small Business Association
SDBUS	-	Small and Disadvantaged Businesses Utilization Specialist
SPARC	-	SPARC Performs Automated Reasoning in Chemistry
SUNY	-	State University of New York
TAI	-	Technology Applications, Incorporated
UBC	-	University of British Columbia
UGA	-	University of Georgia
UNH	-	University of New Hampshire
URI	-	University of Rhode Island
WAM	-	Work Assignment Manager

SAMPLE OF CONTRACTS, COOPERATIVE AGREEMENTS, AND INTERAGENCY AGREEMENTS AUDITED

Recipient	Number	Date Awarded	Amount
Contracts:			
Technology Applications, Inc.	68-C1-0024	05/15/91	$16,833,253
	68-03-3351	05/05/86	$ 6,564,577
American Scientific International (AScI)	68-03-3551	09/30/87	$ 2,164,193
	68-CO-0054	09/25/90	$ 3,291,044
	68-C1-0012	03/21/91	$ 2,734,218
Cooperative Agreements:			
Alaska, University of	CR817688	09/29/90	$ 499,899
British Columbia, University of	CR816778	05/31/90	$ 247,916
Clemson University	CR817664	08/21/90	$ 519,457
Colorado State University	CR818652	07/11/91	$ 949,533
Georgia, University of	CR819053	09/30/91	$5,261,512
Mansoura University	CR816268	09/30/89	$ 248,750
Marine Biology Laboratory	CR817734	09/05/90	$ 607,713
Menufiya University	CR816290	09/29/89	$ 262,500
Montana State University	CR816316	08/24/89	$ 279,234
New Hampshire, University of	CR816278	09/11/89	$1,883,230
Rhode Island, University of	CR817743	09/14/90	$ 389,375
Interagency Agreements:			
Instituto Venezolano de Investigaciones Cientificas	DWVZ934787	07/31/90	$ 401,250

Recipient	Number	Date Awarded	Amount
NASA	DW80935084	05/21/91	$ 100,000
NASA	DW80935165	07/10/91	$ 200,000
NASA	RW80935320	11/91	$ 160,000
NASA	RW80935444	01/92	$ 60,000
U.S. Air Force (Tyndall AFB)	RW57934704	05/25/90	$ 389,000
			$44,046,654

PRIOR AUDITS OF EXTRAMURAL MANAGEMENT

OIG Audits:

1983 Review of the Office of Research and Developments Extramural Research Activities (Audit No. E1gB2-11-0019-30828), March 31, 1983.

ORD Locations: Office of Research and Development, Washington DC

Various laboratories at Research Triangle Park, North Carolina and Cincinnati, Ohio.

1986 Contract Management Practices at Environmental Monitoring Systems Laboratory - Las Vegas (Audit No. E1P25-09-0242-6000773), March 26, 1986.

ORD Location: Environmental Monitoring Systems Laboratory, Las Vegas, NV.

1992 EPA's Management of Computer Sciences Corporation Contract Activities (Audit No. E1NME1-04-0169-2100295), March 31, 1992.

ORD Locations: Office of Research Program Management

Atmospheric Research and Exposure Assessment Laboratory, Research Triangle Park, North Carolina.

Health Effects Research Laboratory, Research Triangle Park, North Carolina.

Environmental Research Laboratory - Gulf Breeze, Florida.

Environmental Research Laboratory - Corvallis, Oregon.

1992 Contracting Activities at Environmental Research Laboratory Duluth (Audit No. E1JBF1-05-0175-2100443), July 7, 1992.

ORD Location: Environmental Research Laboratory - Duluth, Minnisota

GAO Audit Reports and Testimony:

1982 EPA's Use of Management Support Services, (GAO/CED-82-36), March 9, 1982.

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

1987 Status of EPA's Contract Management Improvement Program, (GAO/RCED-87-68FS), January 1987.

1989 GAO Testimony - The Environmental Protection Agency's Use of Consultants, (GAO/T-GGD-89-5), February 3, 1989.

1989 GAO Testimony - Sound Contract Management Needed at the Environmental Protection Agency, (GAO/T-RCED-89-8), February 23, 1989.

1991 Government Contractors: Are Service Contractors Performing Inherently Governmental Functions?, (Audit No. GAO/GGD-92-11), November 1991.

SUMMARY OF DEFICIENCIES FOR COOPERATIVE AGREEMENTS REVIEWED
ATHENS ENVIRONMENTAL RESEARCH LABORATORY

	CLEMSON	CSU	MANSOURIA& MENUFIYA	MBL	MSU	UAF	UBC	UGA	UNH	URI
DIRECT BENEFIT										
CA (partially or fully) Contributed To Direct Support Of ERL-A Research Projects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
RFP/Decision Memorandum Indicated Importance Of Research To ERL-A's Mission	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
QUALITY ASSURANCE PLANS										
QA Plan Required Prior To Start Of Research Activities	Y	Y	Y	Y	N	Y	Y	N	N	Y
QA Plan Submitted By PI And Filed In ERL-A Records	N 1/	N 1/	N	Y	N/A	N	N	N/A	N/A	N

1/ QA plans had not been submitted for Clemson and CSU at the time of our initial review of the CA files. However, during the audit (12/92 and 09/92, respectively) QA plans were obtained by ERL-A.

SUMMARY OF DEFICIENCIES FOR COOPERATIVE AGREEMENTS REVIEWED
ATHENS ENVIRONMENTAL RESEARCH LABORATORY

	CLEMSON	CSU	MANSOURIA& MENUFIYA	MBL	MSU	UAF	UBC	UGA	UNH	URI
PROGRESS REPORTS										
Quarterly Progress Reports Required	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Quarterly Progess Reports Received By PO	N	Y	Y	N	N	N	N/A	N	Y	N
Progress Reports Recieved – Oral or Written	N/A	O	O	N/A	N/A	N/A	N/A	N/A	O	N/A
REVIEW PANELS										
COIs or Appearance Of COIs	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
ORD Headquarters Staff Included On Competitive Review Panels	N	N	N/A	N	N/A	N	N/A	N/A	N/A	N
Prospective PO Recommended Panel Members	UK	Y	Y	UK	N*	UK	Y	Y	Y	Y
Prospective PO Performed In-House Review Of CA	Y	Y	N	Y	N	N	N	N**	N	Y
Prospective PO Wrote Decision Memorandum	N	N	N	N	N*	N	N	Y	N	N

SUMMARY OF DEFICIENCIES FOR COOPERATIVE AGREEMENTS REVIEWED
ATHENS ENVIRONMENTAL RESEARCH LABORATORY

	CLEMSON	CSU	MANSOURIA& MENUFIYA	MBL	MSU	UAF	UBC	UGA	UNH	URI
SITE VISITS										
PO Made Required Site Visits	N	Y	Y	Y	Y	Y	N	N/A***	Y	Y
Dates Of Site Visits	N/A	10/91; 07/92	03/88; 01/92	UK	09/91	09/91	N/A	N/A	05/91; 09/91; 09/92	'90; '91
PO Prepared Trip Reports For Site Visits	N/A	Y 2/	N	? 3/	Y	N	N/A	N/A	Y 4/	N
PO Submitted Copies Of Trip Reports To GAD As Required	N/A	N	N/A	N	N	N/A	N/A	N/A	N	N/A

2/ CSU PO indicated thst site visits were made in 10/91 and 7/92; however, file only contained trip report for 10/92.

3/ MBL PO indicated site vists were made but dates unknown. PO also said trip reports prepared but none were found in CA files.

4/ CA files contained only one trip report for 09/92.

* ERL-A employee on IPA recommended panel members and wrote decision memorandum.

** Co-PO for UGA CA performed in-house review.

***: Local university

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SUMMARY OF DEFICIENCIES RELATED TO INTERAGENCY AGREEMENTS REVIEWED
ATHENS ENVIRONMENTAL RESEARCH LABORATORY

	Instituto Velnezola DWVA934787	NASA DW80935084	NASA DW80935165	NASA RW80935320	NASA RW80935444	U.S. Air Force RW57934704
USE OF INTERAGENCY AGREEMENTS						
IAGSs Used To Circumvent FTE Travel Ceilings/Restrictions	N	Y	Y	Y	Y	N
IAGs Awarded Outside Statutory Authority	Y	N	N	N	N	N
IAGs Used To Circumvent FAR Procurement Restrictions/ Requirements	N	N	N	N	N	Y
AWARD OF IAGs						
IAG Decision Memorandums Improperly Prepared	Y	Y	Y	Y	Y	Y

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SUMMARY OF DEFICIENCIES RELATED TO SAMPLE CONTRACTS REVIEWED
ATHENS ENVIRONMENTAL RESEARCH LABORATORY

	TAI On-Site	ASci On-Site	ASci Off-Site
USE OF CONTRACTS			
Mission Critical/Potentially Inherently Governmental Functions Performed	Y	Y	Y
Prohibited/Vulnerable Activities	Y	Y	Y
Prohibited Personal Services	Y	Y	Y
Probibited Directed Subcontracting	Y	Y	Y
PROCUREMENT OF CONTRACTS			
Repetitive 8(a) Sole Source Awards	Y	Y	Y
RFP and Technical Proposal Biased To Favor Incumbant	Y	N/A	N/A
Contracts Split To Avoid Competition	N	Y	Y
Contract Costs Underestimated To Avoid Competition	N	Y	Y
CONTRACT MANAGEMENT AND OVERSIGHT			
Inadequately Defined Statements of Work and Work Assignments	Y	Y	Y
Inadequate CMD Oversight	Y	Y	Y
Inadequate ORD Oversight	Y	Y	Y

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REPORT DISTRIBUTION

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Assistant Administrator for Research and Development (RD-672)

Director, Grants Administration Division (PM-216)

Director, Office of Research Program Management (RD-674)

Director, Office of Environmental Process and Effects Research (RD-682)

Comptroller (PM-225)

Agency Follow-up Official (PM-208)

Office of Congressional Liaison (A-103)

Office of Public Affairs (A-107)

Cincinatti, Ohio

Director, Contracts Management Division (RM-266)

Athens, Georgia

Director, Environmental Research Laboratory

External

General Accounting Office

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