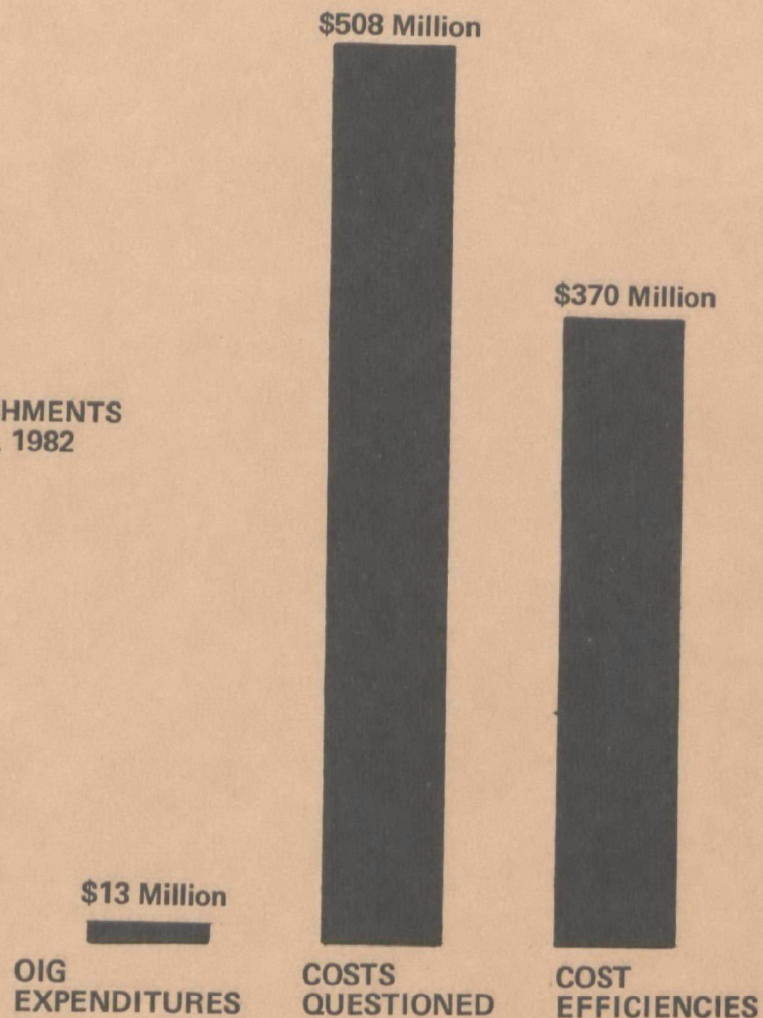




Office of the Inspector General Semiannual Report

April 1, 1982,
through
September 30, 1982

OIG ACCOMPLISHMENTS
DURING FISCAL 1982



OFFICE OF THE INSPECTOR GENERAL SEMIANNUAL REPORT

APRIL 1, 1982, THROUGH SEPTEMBER 30, 1982

EXECUTIVE SUMMARY

This is the seventh semiannual report to the Congress prepared since an Office of the Inspector General (OIG) was established in the Environmental Protection Agency (EPA). The reporting requirements, as prescribed by the Inspector General Act of 1978 and other applicable legislation, and a reference to the page where each requirement is addressed are shown on page iv of this report.

A. ACCOMPLISHMENTS

In the last six months, the OIG surpassed all previous accomplishments. During this period, the OIG staff issued significant reports questioning more than \$465 million. Agency officials concurred in many of our findings and indicated that action would be taken to deobligate, avoid, or recover approximately \$323 million of Federal funds. During all of fiscal 1982, we questioned \$508 million; Agency officials have committed themselves to deobligate, avoid, or recover \$370.5 million. Most of these funds will be used to support other needed projects authorized under the wastewater treatment works construction grants program.

In addition, efforts of our investigative staff to get more involved with major cases began to bear fruit with the indictment and conviction of several EPA contractors for antitrust violations and the arrest and indictment of EPA employees for drug trafficking.

Considering the small size of our OIG staff, the work accomplished in this period surpassed our greatest expectations. However, much more needs to be done before the OIG can truly fulfill the complete realm of responsibilities set forth in the Inspector General Act.

1. Audits

Work on several major special projects was completed. Case studies were issued on task force reviews of six selected construction grants. Based on these studies, a summary report was prepared which contained recommendations for improving management of the construction grants program. A nationwide audit of change orders under construction grants was completed. This report will be used as part of a Government-wide analysis of change order procedures performed for the President's Council on Integrity and Efficiency. An audit of unliquidated obligations in one region resulted in a commitment to deobligate more than \$300 million of construction grant funds. In total, we issued 947 audit reports which questioned \$465 million of the \$3.86 billion audited. Agency officials have continued their concerted efforts to close outstanding audit reports and have committed themselves to deobligate, avoid, or recover \$323 million of the costs questioned.

Details of the audit accomplishments are contained in section I of this report, which begins on page 1. Appendix 1 provides definitions for many of the terms used in this report; appendix 2 summarizes the audit reports issued this period; appendix 3 lists all audit reports issued; and appendix 4 summarizes the actions taken on outstanding audit reports.

2. Investigations

During the last six months, we opened 86 new investigations and closed 47. At present 178 cases are under investigation. Many of the investigations in process are significant cases which require extended examination. During the period, we had seven indictments and convictions, which resulted in fines totaling \$320,000, and other dollar recoveries of \$9,345. On the administrative side, investigative efforts resulted in five terminations and one suspension. More specific information on investigative activities is presented in section II of this report, which begins on page 35.

3. Prevention of Fraud, Waste, and Abuse

Considerable OIG staff effort was expended during this reporting period on major projects to reduce the potential for fraud, waste, and abuse under EPA programs. The OIG developed questionnaires and briefed program officials performing vulnerability assessments of their offices. The OIG is guiding and overseeing this process. Final suspension and debarment regulations were promulgated, and administrative actions have been initiated. Calls to the hotline have increased substantially. In addition, we have reviewed and suggested modifications to proposed legislation and regulations. These activities are discussed more thoroughly in section III, which begins on page 39 of this report.

4. Support Activities

The OIG is faced with the responsibility for handling a large workload with very limited resources. While better use of resources and more effective work scheduling have permitted us to function satisfactorily to date, a large increase in requirements for final construction grant audits may force us to give up other important activities. We have requested additional travel and contract funds to help us cope with construction grant audits in the coming year. Appendix 5 analyzes the audit workload, and appendix 6 analyzes OIG staffing.

B. FUTURE DIRECTIONS

The future is a challenge. Given our limited resources, we must continue to look for new, more effective ways of doing business. In this respect, a new approach to construction grant audits has been developed. This approach will be less resource intensive and should permit the Agency to close out many of the construction grant projects without significant accountability risks.

Faced with a growing backlog of old construction grants requiring closeout, the Administrator established an Agency goal for eliminating this backlog. The [OIG's] portion of this goal is to complete the required audits of these projects within one year of their request. Accordingly, we have made this our highest priority for fiscal 1983. We plan to accomplish this goal even if it means reducing or eliminating audits in other vital areas of management.

The OIG will also strive to be at the forefront of other Government-wide initiatives. If resources are available, we will continue to work on projects for the President's Council on Integrity and Efficiency. We will continue to work with professional organizations, the Office of Management and Budget, and other EPA officials to implement the single audit concept. Continued emphasis will be placed on detecting and preventing fraud, waste, mismanagement, and abuse in EPA programs and operations.

In facing the future, the OIG will keep in mind the environmental issues and priorities facing the Agency. Through more effective use of our resources and a cooperative relationship with Agency officials, we can better ensure proper management of available resources and improved responsiveness to environmental needs.

REPORTING REQUIREMENTS

The specific reporting requirements prescribed in the Inspector General Act of 1978 are listed below. Also included are the reporting requirements which resulted from Public Law 96-304, the Supplemental Appropriations and Rescission Act of 1980.

<u>Source</u>	<u>Location in This Report</u>
<u>Inspector General Act</u>	
1. Section 4(a)(2)--Review of Legislation and Regulations	Section III, Part D, Page 42
2. Section 5(a)(1)--Significant Problems, Abuses, and Deficiencies	Section I, Parts B and C, Pages 6 and 19
3. Section 5(a)(2)--Recommendations with Respect to Significant Problems, Abuses, and Deficiencies	Section I, Parts B and C, Pages 6 and 19
4. Section 5(a)(3)--Prior Recommendations Not Yet Implemented	Section I, Part D, Page 25
5. Section 5(a)(4)--Matters Referred to Prosecutive Authorities	Section II, Part B, Page 35
6. Section 5(a)(5) and 6(b)(2)--Summary of Instances Where Information was Refused	See Note 1 below
7. Section 5(a)(6)--List of Audits	Appendix 3, Page 50
<u>Public Law No. 96-304</u>	
1. Senate Report, Page 11--Resolution of Audits	Section I, Part E, Page 32 Appendix 4, Page 89
2. Senate Report, Page 12--Delinquent Debts	Section I, Part E, Page 32

Note 1: There have been no instances during this reporting period where requested information has been refused. Accordingly, we have nothing to report pursuant to sections 5(a)(5) and 6(b)(2) of the Inspector General Act of 1978.

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SECTION I--AUDITS

A. ACCOMPLISHMENTS

During this reporting period, the Office of the Inspector General (OIG) provided coverage which balanced management needs with the mandates of the Inspector General Act. Top priority continued to be given to a number of special projects of interest to top EPA and Office of Management and Budget (OMB) officials. As a result, significant resources during the last six-months were spent:

- Completing the task force review of six selected construction grant projects undertaken to identify major problems and recommend means by which such problems can be avoided in the future;
- Completing reports on EPA's portion of the President's Council on Integrity and Efficiency's (PCIE) Government-wide review of construction contract change orders; and
- Participating in other PCIE projects.

Our audit staff also assisted in investigations, completed internal audits of EPA operations, performed limited interim and final audits of EPA grants and contracts, oversaw audits performed by Independent Public Accountants (IPAs) and State auditors, reviewed various laws and regulations, and participated in various projects to help identify and prevent fraud, waste, and abuse in EPA programs.

1. Summary Statistics

Audit reports issued for this six-month period are summarized on page 2.

2. Analysis of Audit Statistics

Our audit reports are classified according to three major types: internal and management audits of EPA operations; construction grant audits; and other grant and contract audits.

SUMMARY OF AUDIT REPORTS ISSUED BETWEEN
APRIL 1 AND SEPTEMBER 30, 1982

<u>Type of Review</u>	<u>Number of Reports</u>	<u>Federal Share (Dollars in Millions)</u>		
		<u>Audited</u>	<u>Questioned</u>	<u>Set Aside</u>
Internal and Management Audits	17	\$744	\$386	---
Construction Grant Audits				
Preaward	12	8	0	\$ 3
Interim	36	313	19	17
Final	190	418	14	18
Subtotal	<u>238</u>	<u>739</u>	<u>33</u>	<u>38</u>
Other Grant or Contract Audits				
Preaward	332	2,197	37	171
Interim	52	73	0	2
Final	225	105	9	0
Indirect Costs	83	0	0	0
Subtotal	<u>692</u>	<u>2,375</u>	<u>46</u>	<u>173</u>
Total 4/1/82-9/30/82	<u>947</u>	<u>3,858</u>	<u>465</u>	<u>211</u>
 Total Prior 6 months	 704	 932	 43	 30
Total Fiscal 1982	<u>1,651</u>	<u>\$3,790</u>	<u>\$508</u>	<u>\$241</u>

a. Internal and Management Audits

The audits of EPA programs and functions represent internal and management audits which are done primarily by OIG auditors. These audits are considered most valuable in that they provide the mechanism for assessing and improving overall EPA administration. Through such audits, the OIG staff determines whether EPA is complying with legal or regulatory requirements and whether operations can be performed more effectively, efficiently, and economically. These reviews help EPA operate more efficiently and simultaneously act to deter possible fraud, waste, and abuse.

During the last six months, the OIG issued internal and management audit reports in the following areas:

Construction Grants	7
Financial Management	10
Total	<u>17</u>

Our office did not attempt in the past to quantify the cost benefits of our internal and management audits. In this reporting period, however, to become more consistent with PCIE reporting requirements, we began to implement a system for tracking benefits of internal and management audits. As a result, we identified more than \$304 million of cost efficiencies resulting from internal and management audit reports issued during this six-month period. The specific cost efficiencies are quantified below and discussed in more detail in part C.1 of this section (see page 20).

<u>Amount</u> (Millions)	<u>Discussion</u>
\$301.40	Deobligations of construction grant funds based on audit of obligations in Region 2.
1.35	Deobligations of \$1.35 million in construction grant funds based on audit of amounts made available for contingencies in Region 4. Implementation of our recommendations will also save approximately \$192,500 of interest annually.
<u>2.00</u>	
Total <u>\$304.75</u>	Recovery being sought on duplicate payments to one grantee.

b. Construction Grant Audits

EPA's wastewater treatment works construction grants program is the largest single program administered by the Environmental Protection Agency. In the Agency's fiscal 1983 budget, the construction grants program represented \$2.43 billion of EPA's total \$3.68 billion budget (66 percent). As of August 1982, \$21.6 billion was obligated on 10,183 active construction grant projects.

Audits of the construction grants program are performed by OIG staff, IPAs, State auditors, and other Federal agencies. The following schedule shows the construction grants audit reports completed by source.

<u>Audits Performed by</u>	<u>Number of Reports</u>	<u>Federal Share (Dollars in Millions)</u>		
		<u>Audited</u>	<u>Questioned</u>	<u>Set Aside</u>
OIG Staff	73	\$121	\$ 3	0
IPAs	115	309	12	\$29
State Auditors	46	309	18	9
Other Federal Agencies	4	0	0	0
Total 4/1/82-9/30/82	<u>238</u>	<u>739</u>	<u>33</u>	<u>38</u>
Total Prior 6 months	260	605	36	28
Total Fiscal 1982	<u>498</u>	<u>\$1,344</u>	<u>\$69</u>	<u>\$66</u>

c. Other Grant or Contract Audits

EPA also issues many other types of grants and contracts. The OIG is responsible for performing all types of audits on these grants and contracts. The OIG also provides audit counsel on grants and contracts to contracting officers and project officers. Preaward audits may be done to provide awarding officials with information on the propriety of costs proposed and the acceptability of accounting and financial management systems. Fiscal and compliance audits may be performed to ascertain the acceptability of costs claimed or reported.

Like construction grant audits, audits of other grants and contracts may be performed by a number of sources. The following schedule shows a breakdown of reports issued by source.

<u>Audits Performed by</u>	<u>Number of Reports</u>	<u>Federal Share (Dollars in Millions)</u>		
		<u>Audited</u>	<u>Questioned</u>	<u>Set Aside</u>
OIG Staff	51	\$ 68	\$ 9	\$ 7
IPAs	28	58	1	1
State Auditors	2	4	0	0
Other Federal Agencies	611	2,245	36	165
Total 4/1/82-9/30/82	<u>692</u>	<u>2,375</u>	<u>46</u>	<u>173</u>
Total Prior 6 months	422	327	7	2
Total Fiscal 1982	<u>1,114</u>	<u>\$2,702</u>	<u>\$53</u>	<u>\$175</u>

We anticipate that most of our future audits of other grants will be performed by auditors working for our grantees as part of the single audit approach called for under Attachment P to OMB Circular A-102. Accordingly, we have planned to perform no such audits with EPA resources during fiscal 1983. To date, however, this program still appears to be in its infancy. During the last six months, we issued 5 reports on Attachment P audits where we were the cognizant agency. In addition, we received 17 reports where other Federal agencies were cognizant. In these reports, Federal funds totaling more than \$135 million were audited, but only \$16,000 of costs were questioned. This ratio is far lower than that normally encountered on Federal audits.

3. Cost Benefits of Financial and Compliance Audits

Because of the length of time it takes to resolve audit reports, we cannot accurately tabulate financial savings which may result from our work in this period. Moreover, many of our findings may not result in "savings" in the true sense; instead, they may result in a more effective and efficient EPA program operation, or they may serve to prevent future instances of possible fraud or other irregularities. In many instances, these latter improvements are even more important than cost recoveries. Our audit tracking and control system (ATCS) does identify, however, the amount of costs questioned and sustained during the last six months.

Due to the sustained emphasis on closing out audit reports during this six-month period, EPA closed out an additional 886 audit reports, sustaining \$19.2 million of costs questioned. This represents \$18.4 million for which Agency management has indicated it is establishing accounts receivable and is initiating recovery action, and \$0.8 million of cost efficiencies resulting from reductions made in contract or grant awards as the result of preaward audits.

B. SPECIAL PROJECTS

A major portion of the OIG's internal resources is devoted to special projects. Reacting to inquiries from the President's Council on Integrity and Efficiency, the Administrator, other top Agency officials, members of the House or Senate, or internal assessments of Agency programs, the Inspector General may initiate special reviews or analyses of areas with potentially significant problems. Through such special reviews, resources are brought to bear on problems which need to be addressed nationwide. In this manner, the OIG gains the knowledge necessary to provide more meaningful recommendations to top Agency management. During the last six months, OIG resources were utilized on the following special projects.

1. Construction Grants Audit Task Force

Recognizing potential problems in the construction grants program, the Administrator of EPA established a task force to review selected construction grant projects. This task force, chaired by the Inspector General, included EPA's Assistant Administrator for Water; Director, Office of Water Program Operations; and Associate Administrator for Legal and Enforcement Counsel. Under this task force, teams composed of auditors and engineers representing the Office of the Inspector General, Office of Water Program Operations, and Office of Legal Counsel and Enforcement completed a review of six selected construction grants. The purpose of the reviews was to identify the major problems which occurred on each project, ascertain the reasons the problems occurred, and identify any breakdowns in EPA or State review procedures which should have identified and prevented such problems. While the bulk of the work on these projects was completed by September 30, 1982, the final reports on these reviews were not transmitted until late in November. The results of five of the six task force reviews are summarized below. The other review involved a project currently under litigation.

a. Three Lakes Water and Sanitation District, Grand Lake, Colorado

The village of Grand Lake was served by a collection system and treatment works with an outfall into Shadow Mountain lake. This facility, originally built in 1953, was rebuilt and updated in 1971 with EPA construction grant assistance, converting the existing trickling filter plant to an extended aeration treatment system. This facility had a history of poor operation and an effluent of unacceptable quality.

Rather than improve the existing treatment works again, the grantee offered to construct a regionwide system. The project as built was not the least-cost alternative considered, and adequate justification for this project was not demonstrated. Segmentation of the project was not seriously considered.

This project, which cost over \$16 million, was to serve a resident population of some 380 persons and an estimated total population of up to 8,000 persons during the summer recreational season. Exporting the wastewater out of the lake's drainage area contributed greatly to the project costs when existing studies showed that secondary effluent discharges to the lake waters would not violate established water quality standards.

Team observations of selected collection lines--previously determined to be eligible for EPA participation--indicated that less than two-thirds of some tracts were inhabited. In one area, the extension of the system to provide service to eight houses appeared not to be cost effective.

Citizen allegations that the system charges were inequitable were noted, and examination of the circumstances seemed to support the allegations in two areas: (1) inequitable fees levied and (2) credits allowed some users in lieu of user charges.

b. Thayne, Wyoming

Thayne, Wyoming, a small agricultural community of about 200, is located in the upper Star Valley in the mountainous region of west central Wyoming about 60 miles south of Jackson, Wyoming. Agriculture in this valley is largely dependent upon dairy farming. A construction grant was awarded to Thayne in July 1973 for \$341,925 as the Federal share of a wastewater collection and treatment works estimated to cost \$455,900. This facility was primarily to treat the wastes from a cheese plant located just outside the town boundaries, since 96 percent of the organic loading and 93 percent of the flow volume were from this source.

In the spring of 1974, the contract for construction was let to the lowest bidder of five contractors offering bids. During construction, the contractor declared bankruptcy. The construction was of poor quality and was incomplete. The town opted to accept a cash settlement from the bonding company rather than require that it complete the project. The amount accepted was inadequate to cover required work. During the construction period, EPA increased the grant amount to \$392,000 as the project costs increased to \$522,000.

The cheese plant began discharging wastewater to the system in 1975 without any written agreement between parties concerning the volume or strength of the discharge. About the time the discharge began, the ownership of the cheese plant changed, as did its product. The new operations resulted in a tenfold increase in the pollutorial load, resulting in severe odors and operational failure.

Additional funds were provided in 1978 for system improvements, resulting in a project cost of \$1.1 million. EPA increased its grant by an additional \$317,325, and the Economic Development Administration awarded a \$300,000 grant for correction of deficiencies ineligible for EPA participation.

It became abundantly evident that the discharges from the cheese plant were excessive and the modified system would be inoperable. Therefore, in August 1980 the town disconnected the industry from the treatment system.

Our review of this project showed that:

- ° Management was faulty at all levels. The town of Thayne failed to enter into a written agreement with the cheese plant on discharge limitations and did not adequately monitor construction, maintain proper accounting and contract records, or operate the facility properly. The State justification for the project was faulty, and the State took no action to require the cheese plant to limit its discharge to the treatment system. EPA funded a municipal project to solve an industrial problem and accepted a lower level of treatment than was previously required.
- ° The original justification for the project was inadequate. It was based on State certification that Thayne's septic systems could potentially cause a health hazard, but no effort had been made to correct the two or three systems causing the potential.
- ° The project no longer treated the industrial waste which created the prime need for the facility. On August 6, 1980, Thayne disconnected the cheese plant from the treatment system after it became evident that the cheese plant's excessive discharge would make the repaired system inoperable and the two parties could not reach agreement on discharge limits.
- ° Construction was poor. Sewer lines were built with leaking joints and breaks in the pipe; poor compaction of soil at the blower building resulted in cracks in the building wall; the pond liner was improperly installed; and the irrigated area was inadequately graded.
- ° The design contained features which led to severe operational problems. These features included poor evaluation of the quantity and quality of wastewater to be treated, an extended holding period for partially treated cheese plant wastewater in the pump wet well (resulting in severe odors), and poor control over the aeration function in the aeration tank.

c. North and South Shenango Joint Municipal Authority, Pennsylvania

North and South Shenango are in a small, sparsely populated, mostly rural area in northwestern Pennsylvania. The facilities built at Shenango were quite extensive and covered a large acreage. There were over 70 miles of collecting sewer pipes and over 7 miles of interceptor sewer pipes. These lines used 22 pumps, and all fed to one treatment plant.

This \$15 million wastewater treatment facility consisted of 15 construction or supply contracts, 14 of which were classified as grant eligible. However, the review team found:

- ° The need for wastewater collection and central treatment was not adequately established.
- ° Eligibility requirements for the collector and interceptor sewers were not adequately evaluated by EPA Region 3 or Pennsylvania prior to grant awards. Significant amounts of vacant land were sewered. Therefore, the entire grant appeared ineligible for Federal participation because of noncompliance with 40 CFR 35.925-13, Sewage Collection System, and appendix A to 40 CFR 35, subpart E.
- ° The method of wastewater treatment to be afforded was not sufficiently analyzed as to type, quantity of flow, size of plant, segmenting and sequencing of construction, or cost effectiveness.
- ° The grantee did not have at the time it applied for the grant, nor did it have during our review, the capability of complying with 40 CFR 30.340, Responsible Grantee, or 35.925-5, Funding and Other Capabilities.

Notwithstanding the above shortcomings, a grant was awarded and a sewer system was built. Yet, because of flawed pipe joints, a majority of the sewer lines leaked, causing massive infiltration which led to sewer overflows and excessive pump wear. The overflows were a pollution source which did not exist before the system was constructed. As a result of this deficiency, certain loans were not obtained, and the North and South Shenango Joint Municipal Authority filed for bankruptcy.

d. Detroit, Michigan

Between 1968 and 1981, Detroit received over \$400 million in Federal grants for the planning, design, and construction of regional wastewater treatment facilities in the Detroit metropolitan area.

(1) Planning

Our review identified a number of significant weaknesses and concomitant planning deficiencies which resulted from a lack of effective planning regulations and guidance from EPA and the State of Michigan prior to the passage of Public Law 92-500. Detroit's administration of the planning process also was deficient due to managerial and financial weaknesses and the inability of Detroit's consultants to apply today's good planning practices and methodologies.

We found that the plans developed in 1964 and 1966, which were the basis for the design and construction of almost all major interceptors and treatment facility improvements, only provided a basic framework, in sharp contrast to today's detailed facilities planning documents. These plans failed to evaluate the cost effectiveness of alternatives, develop priorities and schedules for achieving pollution control requirements, and identify project management and financial arrangements commensurate with effectively implementing such a complex, extensive regional program.

The adverse impacts of these planning deficiencies--unnecessary capacity in some areas, insufficient treatment capabilities in others, inoperable facilities, and delays in compliance with effluent and water quality requirements--were specific indicators of weaknesses in Detroit's program. We found that specific corrective actions resulted from a series of "new" planning reports, produced since promulgation of EPA's planning regulations in 1974. However, we concluded that a mixture of positive and negative aspects was associated with these planning efforts, which involved over \$25 million in EPA grants. The positive aspect was that EPA, the State, and the city realized considerable savings by avoiding the design and construction of unnecessary projects, based on a reevaluation of data on population projections, costs, and environmental impacts. The negative aspects included the voluminous nature of planning reports and their failure to address the problems of intergovernmental cooperation and of financing the recommended construction.

(2) Design and Construction

From this limited review, we were only able to identify major design and construction deficiencies. We found specific design deficiencies associated with both liquid- and solids-processing units at the treatment plant, and both design and construction deficiencies associated with the East Arm interceptor system. As a result of these deficiencies, the capacity of the treatment plant had been reduced, the East Arm system did not function as originally intended, and the useful life of the interceptors could not be assured.

During our review, the capacity of the Detroit wastewater treatment plant was restricted to a flow substantially below that for which it was originally intended, due to design deficiencies and a change in the definition of secondary treatment. The most serious deficiency was the poor design of the secondary clarifiers. Other design deficiencies included out-of-sequence construction of process units, a malfunctioning scum incinerator, and a lack of proper equipment to control flows and to monitor operations.

In its final 15 miles, the East Arm interceptor, constructed at a cost of over \$60 million, was oversized, and the interceptor had not been connected to the treatment plant. This lack of a connection required separate sanitary sewage from Detroit's newer suburbs to be transported in combined sewers after entering the city of Detroit, and as a result large amounts of this previously separate sewage were discharged to the Detroit River during wet weather overflows.

Two sections of interceptors collapsed in the East Arm interceptor system. At the request of EPA, the U.S. Army Corps of Engineers analyzed the second collapse and concluded that design and construction deficiencies contributed to that collapse and that potential safety and construction problems may exist elsewhere in the system as a result of similar design and construction practices on the entire East Arm system. A subsequent inspection of the East Arm system identified two additional areas where corrective actions were recommended.

(3) Grantee Management

Before 1977--at which time over 50 percent of Detroit's existing facilities were inoperable--Detroit was not effectively managing its wastewater treatment program; however, due primarily to EPA enforcement action in 1977 and a change in program administrators in 1979, Detroit made substantial progress in improving its management capabilities. As of June 1981, Detroit was, for the first time, in compliance with its secondary effluent requirements. Although Detroit made substantial progress--especially in the areas of funding, staffing, and training--our survey identified certain problems--funding, preventive maintenance, and the accounting system--where additional corrective actions were needed. Our survey also identified certain items which warranted an in-depth review, audit, or possible investigation.

e. Washington, D.C., Metropolitan Area

Considering that more than \$1 billion (\$770 million Federal share) had been expended on planning, designing, and constructing treatment works in the Washington area, one would have expected that the area would be well on its way to resolving its wastewater treatment problems. Unfortunately, this was not the case.

(1) Planning

The lack of a regional body with authority to manage wastewater treatment across jurisdictional lines hampered the planning process:

- ° Regional planning efforts did not succeed in recommending acceptable treatment facilities for the Washington metropolitan area.
- ° Planning efforts were not successful in dealing with local governments' opposition to proposed sitings for wastewater treatment works and sludge facilities.
- ° Negotiations with parties involved failed to ensure that solutions proposed on even a case-by-case basis were appropriate or acceptable to all involved parties.

As a result, public funds were wasted, and time and money were lost in extensive and costly litigation efforts.

Even in those instances where there was apparent agreement on needed regional facilities, some local communities later changed their positions and blocked construction. In some instances, this resulted in millions of dollars being spent in constructing facilities rendered virtually valueless by local communities refusing to construct component parts of regional facilities already started.

Throughout this process, Region 3 officials diligently tried to negotiate and settle differences between parties, but did not use available regulatory powers. When roadblocks arose which prevented acceptance of previous planning efforts or slowed construction of needed facilities, Region 3 approved further planning efforts. Additional planning efforts, however valuable in themselves, have not resolved the basic problem: lack of regional cooperation.

(2) Unused Facilities

About \$50 million of public funds had been expended for facilities which were not being utilized as intended. In addition, an administrative building constructed partially with grant funds was unnecessarily ornate. These situations occurred because responsible parties did not properly implement their planning and design decisions. Furthermore, when grantees elected not to complete the work on segmented projects for which substantial expenditures had already been made, neither the State nor EPA exerted sufficient leverage to get the projects satisfactorily completed.

(3) Operation and Maintenance

At the time of our review, the Blue Plains treatment plant was running with several major operating constraints:

- ° A lack of adequate information as to flows through the plant;
- ° Major portions of the facility--west bank of primaries and multimedia filters--out of service; and
- ° Inadequate facilities to handle even the District of Columbia's --much less the suburbs'--share of sludge.

Records showed that Blue Plains had violated its discharge permit. Previous reviews at Blue Plains indicated that the plant was overloaded and was discharging pollutants in excess of the established legal limits. By taking full advantage of the operational capabilities of the facilities remaining in service and using chemical additives, Blue Plains operators were achieving a remarkable level of treatment. However, once the primaries are renovated and full flow through the plant is resumed, such levels of treatment will not be possible.

The lack of appropriate operation and maintenance had long been a problem at Blue Plains. Shortages of staff severely reduced or eliminated preventive maintenance programs. Shortages of repair parts led to cannibalization and shutdown of operating units or processes. Worn out or defective equipment was not always replaced in a timely manner. At the time of our review, major safety questions were being raised with respect to the digester gas collection and storage system and the chlorine system. These apparent operation and maintenance problems could represent a disaster just waiting to occur.

(4) Financial Management

Improved financial management controls were needed both at the District of Columbia and the Washington Suburban Sanitary Commission (WSSC). Previous OIG audits showed that project accounting records and controls must be strengthened to:

- ° Differentiate between eligible and ineligible costs (D.C. and WSSC);
- ° Ensure that direct charges for work actually performed by the grantee were made to the appropriate projects (D.C.); and
- ° Substantiate the merit of and relative responsibility for claims (D.C. and WSSC).

As a result of these kinds of weaknesses, recent OIG reports questioned or set aside more than \$20 million of costs claimed under EPA grant projects.

Improvements were also needed to ensure that sufficient funds to operate and maintain the District's wastewater treatment facilities were generated by means of an equitable cost distribution system.

f. Summary Report

Based on analysis of these reviews and consideration of the broader aspects of the construction grants program, the Construction Grants Audit Task Force drafted a summary report recommending actions the Agency should take to improve management of the construction grants process. This report set forth eight proposed principles to guide management decisions on existing and future grant projects:

- (1) The Agency will not divert resources from needed projects to fund measures to redress poor performance of previously funded projects.
- (2) Program resources will be directed toward projects which offer the greatest actual water quality improvement at the lowest cost.
- (3) Program resources will be directed toward projects which focus on abatement of existing pollution problems.
- (4) The Agency will work to foster orderly improvement in sewage treatment technology.
- (5) The Agency will require evidence of grantee financial management capability.

- (6) The Agency will enforce strict standards of cost eligibility.
- (7) The Agency will enforce statutory powers with all resources available.
- (8) The Agency will not provide grant assistance to replace, through reconstruction or substitution, treatment works that were built with Federal assistance that fail prior to initiation of operation or do not meet project performance standards due to improper design, poor construction, or grantee mismanagement.

The Office of Water will emphasize these principles throughout the various phases of the construction grants program management process. For example, these principles will provide a foundation for development of future guidance documents. Also, these management principles will be addressed in the annual evaluation of regional office water programs and the periodic assessments by EPA regional offices of State-managed construction grants.

2. Change Order Audits

Our office issued a final audit report (EluW1-11-0038-21571) on the administration of change orders under EPA's construction grants program. This review was conducted as an integral part of a Government-wide evaluation of construction contract change orders undertaken at the request of the President's Council on Integrity and Efficiency. The audit included a review of 26 grantees in Regions 3, 5, 9, and 10, with 247 construction contracts valued at \$1.4 billion and 2,318 related change orders cumulatively valued at more than \$58 million. The report concluded:

...the former regulations requiring EPA approvals of change orders didn't work....under "Adequacy of Review," we demonstrated that EPA officials were apparently "rubber stamping" the approvals of change orders and in some instances even waiving the regulatory requirements. We also found that only a few grantees had EPA on-site reviews performed on their procurement systems.

Many of the previously "approved" change orders were found to contain charges which we believe are not legitimate costs in which EPA should be required to participate. To illustrate, of the 346 change orders we reviewed at a value of \$40,647,000, 147 change orders (valued at (\$6,025,000) potentially related to design deficiencies attributable to the A/E [architect/engineering] firms. In addition, 88 change orders (valued at \$22,620,700) were for differing site conditions. In our opinion, many of these change orders possibly occurred because of inadequate work by the grantee, A/E firms or construction contractors.

In our opinion, EPA's relaxation of regulations did nothing to impede the proper management and control of change order costs. The final responsibility for acceptance and payment of change orders has always been with the grantee. If the grantee properly reviews change order requests, identifies the reason that change orders are required, holds all involved parties responsible for the adequacy of their work, reviews cost and pricing data against independent estimates and cost principles, and meaningfully negotiates and documents the negotiation process, few exceptions should arise to change orders.

The question is how EPA can best ensure that change orders are thoroughly reviewed. With grantees only financing a small portion of the cost of a project (generally 10 to 25 percent), it is questionable how many grantees will fully consider the total cost impact of the change orders they are evaluating. In this situation, it would be quite easy to rationalize that payment of a change order would be less costly than potential litigation. Under the program as it currently exists, we can only recommend that EPA:

1. Emphasize to its grantees that they:
 - a. are ultimately responsible for ensuring the propriety and acceptability of costs under change orders.
 - b. need to obtain training for their grants personnel or hire the necessary expertise to thoroughly review change orders.
 - c. will be held responsible for failing to properly review and evaluate change orders; i.e., EPA will not participate in costs related to ineligible or unallowable activities.

2. Encourage grantees to initiate time extension change orders as soon as possible once the necessity and reasons for such extensions can be determined.
3. Evaluate the benefits resulting from the use of construction managers to review and evaluate change orders. If such assistance provides an effective mechanism for improving grantee management of change orders, EPA should consider requiring such services on major grant projects or major change orders.
4. Review the various estimating guides in use to:
 - a. determine the validity and acceptability of their use for estimating costs under EPA's construction grants program; and
 - b. provide guidance on the proper use or application of guides.
5. Ensure that delegated State agencies closely scrutinize change orders which necessitate any grant amendments to ensure that only meritorious changes are funded which are:
 - a. within the scope of the project;
 - b. not caused by the grantee's mismanagement; and
 - c. not caused by the grantee's vicarious liability for the improper actions of others.

An alternative to this approach might be to decline to participate in the cost of change orders substantially in excess of the amount normally encountered in construction projects. EPA grant awards generally contain a three to five percent contingency to cover such items as change orders. If EPA did not participate in changes beyond this amount, grantees would have an increased burden to ensure that all changes were, in fact, necessary. Additionally, grantees would be encouraged to ascertain whether or not their engineers or construction contractors were at fault and hold them responsible for any increase in costs caused by their inadequate performance. In our opinion, such an approach could also do much to improve the overall quality of design and inspection efforts. If the agency believes that this approach might be appropriate but lacks necessary statutory authority to implement such changes, we believe the agency should consider seeking the necessary legislative changes.

The Office of Water basically concurred with our findings and indicated that action was underway to implement our recommendations.

3. President's Council Projects

During the last six months, the Office of the Inspector General has worked on several major projects for the President's Council on Integrity and Efficiency.

a. Performance Evaluation Committee

The Performance Evaluation Committee is responsible for devising a system for evaluating the effectiveness of the Inspectors General. During the last six months, the Performance Evaluation Committee, chaired by EPA Inspector General Matthew N. Novick, has worked with OMB and the IGs of other agencies to finalize the reporting categories and definitions used for the PCIE's semiannual summary report. The focus in this effort was to:

- Identify those measures of output and results which can most meaningfully be quantified; and
- Provide necessary rationale and constraints regarding each reporting element so that the readers of the report can better understand the information provided.

Final recommendations on reporting categories have been distributed to all PCIE members. We anticipate that these categories will be adopted at the next PCIE meeting and used for the summary report covering October 1, 1982, through March 31, 1983.

Staff members working for the committee also drafted:

- Input and workload measurements. Such measurements would provide a more consistent basis for determining an IG's workload and resource requirements.
- Quality standards for the Offices of Inspector General. These standards set forth the expectations with which a good Office of Inspector General is expected to comply.

These drafts are currently under review by the Committee members and OMB prior to distribution for comment.

b. Unliquidated Obligations

The final report on our unliquidated obligations audit in Region 2 was issued (see section C.1.a).

C. SIGNIFICANT FINDINGS AND RECOMMENDATIONS

The items discussed in this section were extracted from audit reports issued during this reporting period. As these items represent our most significant findings, they should not be considered representative of the overall adequacy of EPA operations or programs. Due to the recentness of some of these reports, final disposition or resolution has not been determined. However, each of these items will be followed up, and instances where our recommendations have not been implemented will be identified in our next semiannual report.

1. Internal and Management Audits

The following findings were selected from among our most significant internal and management audits of EPA programs, activities, and functions.

a. Unliquidated Obligations, Audit Report Elvw2-02-0029-21443, August 1982

By far EPA's largest program in terms of expenditures is the wastewater treatment works construction grants program. Because of a continuing history of failure by some grantees to initiate work on their projects, EPA has had to initiate controls to ensure that projects move forward to construction and are completed in a timely manner. Accordingly, section 35.935-9 of EPA's construction grant regulations states that, if construction of a step 3 project is not initiated within one year after award, grant assistance will be terminated. However, a regional administrator may defer (in writing) the annulment or termination for not more than six additional months if:

- (1) The grantee has applied for and justified the extension in writing to the regional administrator;
- (2) The grantee has given written notice of the request for extension to the National Pollutant Discharge Elimination System permit authority;
- (3) The regional administrator determines that there is good cause for the delay in initiation of project construction; and
- (4) The State agency concurs in the extension.

Should grant funds be deobligated, they can then be used for other projects within the State, consistent with the State project priority system.

To determine the validity of construction grant obligations in Region 2, we reviewed a sample of 54 grants with unliquidated obligations totaling \$727 million. The auditors concluded that \$381 million of these obligations should have been deobligated. This included 24 grants totaling \$272 million where work had not been started as of July 15, 1981 (these grants were awarded up to 61 months before our review), and 12 grants totaling \$109 million for which no progress payments had been made in more than 2 years.

Regional officials generally concurred with our findings and indicated that appropriate actions would be taken to deobligate the inappropriate obligations and to install procedures to prevent such occurrences in the future. In September, the Region had terminated and/or deobligated grants totaling \$300 million. Upon learning of the results of one audit in Region 2, EPA's Administrator transmitted a copy of the report to all other regional administrators and requested them to review the validity of their construction grant obligations and deobligate any inappropriate obligations in their regions.

b. Payments under Grant to Spokane, Washington, Audit Report
ElhW2-10-0071-20919, May 1982

In response to a request from Region 10's General Counsel, we reviewed payments made under EPA grant C530580. In addition to double claiming the \$100,964 of design costs questioned in audit report E2cW1-10-0001-11531, the grantee also double claimed the total costs of grant segment 01. This resulted in a duplicate payment to the grantee of \$2,079,291. We recommended that the Region recover this overpayment. Regional officials concurred and indicated that recovery would be initiated.

c. Contingency Allowances under Constructon Grants, Audit Report
ElzW1-04-0087-21093, June 1982

A contingency allowance is a reserve included in the project budget to cover change orders and cost overruns. Common practice has been to allow a 10 percent contingency allowance at the time of grant award and to adjust it to between 3 and 5 percent of construction cost after receipt of bids.

In Region 4, we reviewed 68 projects and found that 34 (50 percent) had contingency allowances in excess of the 5 percent limit contained in EPA's Construction Grants Handbook of Procedures. We recommended that EPA reduce the obligations on these grants and institute procedures to ensure that obligations were appropriately adjusted in the future.

Regional officials generally concurred with our findings and deobligated \$1.35 million of construction grant funds. This action should save the Government an estimated \$192,500 of interest costs each year.

2. Construction Grant Audits

The following findings were selected from the most significant construction grant audit reports.

a. Payments for Inoperable Facilities

(1) Audit Report E2cW2-07-0065-20946, Williamsburg Sewer District, Fulton, Missouri

A final audit was performed on a grant awarded to the Williamsburg Sewer District, Fulton, Missouri, for construction of a lift station, a waste treatment plant, and three interceptors. The project was estimated at \$563,400, with a Federal share of \$422,500. Through June 1974, the grantee had been reimbursed \$294,600 in Federal funds. A final inspection by EPA on November 13, 1974, found that construction was essentially complete, but that there were no hookups. Consequently, EPA recommended no further payment. A second inspection was completed on January 23, 1980. At that time, the facility was found to be completely abandoned. The inspection report stated: "Neither water nor electrical service was ever brought to the plant. Many of the pipe related structures have had the fill material eroded away by flash floods and are toppled over or are disjointed. The prefabricated metal building has been shot with rifle bullets numerous times. The nearest residence to the treatment plant is some five miles away and the only improvements within the District's boundaries are those which were EPA funded; i.e., collection, interceptor, and treatment facilities." The auditors confirmed that the grantee had failed to comply with grant terms in that the facility was inoperable. Therefore, the auditors recommended recovery of all Federal funds paid to the grantee, \$294,600.

(2) Audit Report P2cW0-03-0216-21301, Accident, Maryland

A final audit was performed on a grant awarded to the town of Accident, Maryland, for the construction of a sewage treatment plant and interceptor sewer lines. The auditors noted serious structural problems in the system which prevented the treatment plant from operating as it was designed. Among the problems reported by the auditors:

- ° Manholes located in the storm drain path did not have water-proof lids.
- ° A portion of the sewer line was crushed due to rocks in the backfill.
- ° Some of the sewer lines were found to contain horizontal cracks.

As a result of these problems, the grantee did not fulfill the grant requirement to construct and maintain an operable system in accordance with the plans and specifications. Until the sewer system is repaired, none of the \$610,000 claimed by the grantee can be accepted.

b. Payments for Ineligible Claims

(1) Audit Report P2cW0-03-0117-20929, Hagerstown, Maryland

A final audit was performed on a grant awarded to Hagerstown, Maryland. The auditor found that the grantee had requested reimbursement for the costs of constructing sewer lines through large areas of undeveloped land. These sewer lines were apparently constructed for ineligible, speculative land development rather than for the prevention, control, or abatement of sewage-caused pollution. The auditors questioned \$1.1 million of construction costs and \$100,000 of related engineering fees.

(2) Audit Report P2cW1-03-0173-21146, Mount Union Municipal Authority, Pennsylvania

A final audit was performed on a grant awarded to the Mount Union Municipal Authority, Pennsylvania, for the preparation of plans and specifications, the construction of sewer lines, and the upgrading of a sewage treatment plant. The auditors found that the municipal authority claimed reimbursement for engineering fees which were not computed in accordance with EPA guidelines. The improper computation of engineering fees caused the auditors to question \$84,000 claimed by the authority. In addition, the auditors noted that the authority contracted for both eligible and ineligible construction work for one contractor. However, the contractor charged higher unit prices for eligible items than for identical ineligible items, resulting in overall higher costs to the Federal Government and lower costs to the municipal authority. Consequently, the auditors set aside \$112,000 in construction costs until the municipal authority and contractor justify the difference in unit price for identical items. As a result of the audit, the municipal authority was requested to repay the Federal Government \$135,364.

(3) Audit Report P2cW2-10-0036-21469, Valdez, Alaska

In a final audit of grants awarded to Valdez, Alaska, auditors questioned \$392,150 claimed for the construction of three lift stations. The stations had been specifically identified as ineligible when EPA approved the contract.

(4) Audit Report S2cW0-09-0223-21437, North San Mateo
County Sanitation District, California

In a final audit of grants awarded to the North San Mateo County Sanitation District, California, auditors questioned (1) \$658,335 which had been claimed but not incurred, and for which no supporting documentation existed; and (2) \$783,666 which had been erroneously claimed because the grantee did not reduce claimed costs by the project's eligibility factors.

(5) Audit Report E2bW1-09-0240-21031, Petaluma, California

An interim audit was performed on the EPA construction grant awarded to the city of Petaluma to plan, design, and construct a pump station, force main, oxidation ponds, and an outfall as an addition to the grantee's existing wastewater treatment facilities. At the time of audit, the grantee had claimed \$6,216,181 (\$4,662,136 Federal share), and the audit disclosed questionable expenditures of \$729,973 (\$547,480 Federal share). The costs questioned consisted principally of (1) construction bid items declared ineligible by program officials and (2) technical service costs allocable to ineligible construction and incurred after the scheduled construction completion date. The grantee's response to the draft report indicated reservations on a position pending further evaluation.

c. Inappropriate Claims

(1) Audit Report S2bW2-09-0213-21160, Victor Valley
Wastewater Reclamation Authority, California

An interim audit of the EPA construction grant showed that the grantee had entered into a sewage utility agreement in which an Air Force base had agreed to pay a connection charge of approximately \$2.4 million as its share of the costs of constructing the sewerage project. As of the close of field work, the grantee had actually collected \$1.9 million of this amount. The grantee had not, however, appropriately reduced grant costs by the \$1.9 million provided by the Air Force. In responding to the audit, the grantee indicated that there was some question as to whether or not there was sufficient capacity available to permit connection of the Air Force base. It is our opinion that if the Air Force base is not connected, the Air Force will be entitled to a full refund of amounts paid.

- (2) Audit Report P2bW1-04-0121-21323, Sanitation District No. 1 of Campbell and Kenton Counties, Kentucky

An interim audit was performed on grants awarded to Sanitation District Number 1 of Campbell and Kenton Counties, Kentucky, for construction of a treatment plant, pump stations, interceptor sewers, and force mains. The grantee received \$625,000 (\$458,000 Federal share) from a bid bond forfeiture when the low bidder failed to perform. The grantee did not reduce the project costs by the income received. The item was omitted by the grantee since the grantee believed its grant was reduced by the amount of the bid bond forfeiture. EPA had intended to reduce the amount of the grant to the grantee, but through administrative error the bond forfeiture lost its identity.

- (3) Audit Report P2cW1-03-0144-21302, Willistown Township Municipal Authority, Pennsylvania

In a final audit of an EPA construction grant, the auditors noted that the grantee claimed reimbursement under this grant for payments made to two other townships for its share of costs of unrelated additional wastewater treatment facilities. The other two townships were recipients of EPA grants and were constructing a joint conveyance and treatment facility which would accommodate Willistown Township as well as themselves. In effect, Willistown Township attempted to obtain reimbursement for its share of costs on other EPA projects. The questioned costs of \$991,448 were 20 percent of the total claimed by the grantee.

d. Elaborate Construction

- (1) Audit Report P2bW1-06-0070-21501, Dallas, Texas

An interim audit was performed on a grant awarded to the city of Dallas, Texas. Under the provisions of OMB Circular A-87, which states that allowable costs must be "necessary and reasonable for proper and efficient administration of the grant program," the auditors questioned \$110,094 claimed for an outdoor display fountain and \$446,512 claimed for landscaping. In the same report, the auditors also questioned \$731,939 of claims for a variety of ineligible technical services.

3. Other Grant or Contract Audits

The following findings were selected from the most significant audit reports on other grants or contracts.

a. Audit Report E5c02-10-0076-21089, Department of Ecology, Washington

The State of Washington had claimed a credit of \$7,132,503 against its share of any costs incurred under the Comprehensive Environmental Response, Compensation, and Liability Act (commonly known as superfund) for Commencement Bay, Washington. EPA auditors concluded that none of the purposes for which the \$7,132,503 had been incurred met the criteria set forth in section 111(a) of the authorizing legislation, PL 96-510. The grantee disagreed with the conclusion.

b. Audit Report E5cH2-04-0185-21504, State of North Carolina

The State of North Carolina had claimed a superfund credit of \$493,113 for cleaning up polychlorinated biphenyls which had been discharged along 211 shoulder miles of roadway. The auditors questioned \$44,536 which had been claimed under other EPA grants and \$141,556 claimed for land originally purchased for a landfill but not used in that capacity.

D. STATUS OF PRIOR AUDIT RECOMMENDATIONS

EPA Order 2750.2 prescribes uniform requirements and procedures for processing and resolving audit findings and recommendations. It includes specific procedures for referring unresolved issues to the next highest organizational level and to the Agency's Audit Resolutions Board when necessary.

Findings and recommendations which remain unresolved from our prior semiannual reports are primarily complex issues that warrant further management review and study. There are, however, some cases where Agency officials have not answered our audit reports.

The following schedule shows actions taken with respect to the audit findings previously reported as significant.

<u>Category</u>	<u>Number of Reports Included in Previous Semiannual Reports</u>	<u>Number of Reports Closed During Period</u>	<u>Number of Reports Remaining Unresolved</u>
OIG Report Covering 10/1/81-3/31/82	19	15	4
Previous OIG Reports	14	7	7
Total	<u>33</u>	<u>22</u>	<u>11</u>

Listed below are items previously reported that require further action. To facilitate referencing these "open" items to the prior OIG report, we have identified the pages where these items were previously presented. This cross-referencing appears in parentheses following the heading of each prior finding.

1. Findings First Reported in Our October 1, 1981, to March 31, 1982,
OIG Semiannual Report
 - a. Audit Report P2bW1-03-0436-20472, Issued February 11, 1982,
Washington Suburban Sanitary Commission (Page 14)

As part of a segmented project, one Maryland community installed a 108-inch outfall on a sewage treatment plant which was to be later expanded. The community subsequently decided that it did not want to expand the plant to treat sewage from other communities in the region. Accordingly, the community took action both to preclude connection with other treatment plants in the area and to prevent expansion. We questioned the \$3.6 million of extra cost incurred to increase the plant's outfall to 108 inches.

A response was received from Region 3 officials. This response was not considered acceptable, however, because although the regional officials basically agreed with our findings, they indicated that no corrective actions would be initiated until ongoing planning efforts were completed.

- b. Audit Report E2aW1-09-0406-20471, Issued February 10, 1982,
Eureka, California (Page 14)

EPA provided more than \$24.9 million to one regional water authority to construct a regional wastewater treatment system to serve five communities. After further evaluation, the involved communities decided they did not want a regional system. Instead, three of the communities elected to build their own individual systems.

To accomplish this, the total remaining funds from the regional project were transferred to one of the communities. This community was to subgrant money to the other communities for their portions of the project. In auditing this project, we concluded that these actions were not in conformance with EPA regulations.

In addition, we found that the individual communities had spent more than \$4.2 million in replanning and redesigning the proposed systems. As EPA had already financed its portion of the planning and design costs of the regional system and the decision not to go ahead with that system was the choice of the local communities, we do not believe that the Federal Government is required to participate in these replanning and redesign costs. Furthermore, we believe that overall Federal participation in projects in this area should be limited to \$24.9 million (the Federal grant for constructing the regional system).

We have not yet received a response to this report. We understand that regional officials are working closely with the Office of General Counsel and the State to resolve the questions raised by our report.

c. Audit Report P2cW1-06-0116-20503, Issued February 18, 1982, Urania and Tullos, Louisiana (Page 15)

In touring a treatment plant constructed with EPA funds, we noted that:

- ° Much of the plant was corroded to the point of near collapse;
- ° Neither the grit removal unit, the comminutor, nor the effluent flow meter was functioning; and
- ° Excess solids were floating in the aeration basins.

The grantee and its consulting engineer told us that the problem had existed since the plant began operating, that a lawsuit had been filed against the plant's general contractor, and that final payment to the contractor had been withheld. Considering the condition of the plant and the litigation involved, we set aside the entire cost of the plant, \$348,770.

We have received no response to this report.

d. Audit Report S2bW9-09-0406-20471, Issued February 10, 1982, San Bernardino, California (Page 15)

Over \$1 million of costs were questioned on the San Bernardino project because the sludge disposal system was inoperable. This system was shut down in August 1975 because of operational problems.

We have not received a response to this report.

2. Findings Reported in Prior OIG Reports

In the previous OIG semiannual reports which covered the period from April 1, 1979, through September 30, 1981, examples of problems, abuses, and deficiencies in EPA programs were given and appropriate OIG recommendations were reported. The following is a report on the status of audits discussed in those semiannual reports which remain unresolved.

a. Audit Report E1Z00-09-0196-11002, Issued May 18, 1981, State of California (Page 20)

Our review showed that although a State agency had promulgated guidance concerning the allowability of landscaping costs under EPA's construction grants program, it had not always adhered to this guidance or to the existing Federal guidelines. To the contrary, we found that the State had approved landscaping features which were considered unallowable under both the Federal and State guidelines. These guidelines stressed that only reasonable landscaping should be provided, and that the landscaping should be located around the perimeter of the treatment facility. However, our review of 26 construction projects disclosed that excessive landscaping had been approved for 19, or 73 percent, of the grants. While the landscaping costs represented only a small percentage of the total construction costs, we estimated that the excessive landscaping costs on EPA-funded projects in the State could exceed \$10 million.

We recommended that the State be required to strengthen its review procedures to ensure that excessive landscaping costs were not accepted as charges to EPA grants.

In reviewing the response, we noted that Region 9 had not definitely decided its final course of action. Accordingly, we are continuing to carry this report as open in our audit tracking and control system.

b. Audit Report E2dW0-02-0092-10937, Issued May 6, 1981, West Windsor, New Jersey (Page 20)

(1) Adequacy of Construction

Major construction contractors and inspectors representing the grantee's consulting engineer did not ensure that sewer lines were properly constructed in accordance with plans and specifications. Significant deficiencies were found in installed sewer lines.

- ° Many of the lines were installed at less than design slopes.
- ° Many house connections were installed at less than depths required by plans and specifications.

- Numerous flexural breaks were caused by an apparent lack of uniform, continuous bedding.
- Risers and "T" connections were not properly encased in concrete.
- Large pieces of asphalt or rocks were frequently directly on top of or in the immediate vicinity of breaks in the lines.
- Class 2400 asbestos cement pipe had been used where class 3300 pipe was required by the specifications.

Construction contractors had apparently tried to conceal the numerous flexural breaks from EPA, State, and grantee officials by gelling the lines so that they would pass State tests.

Although actions had been taken to correct the known deficiencies, the adequacy of construction on the remainder of the lines remained in doubt. To resolve this dilemma, we recommended that EPA either (1) require reexcavation of selected areas throughout the project so that the adequacy of construction can be checked or (2) obtain necessary safeguards such as TV inspections, extended warranties, and assurances of cleaning and maintenance.

(2) Resident Inspection

The grantee's consulting engineering firm did not effectively inspect construction. We found that:

- Inspectors had not identified many of the construction deficiencies which had occurred on the project.
- Even in those instances where actual, latent, or potential deficiencies were identified, engineering personnel were ineffective in evaluating the possible consequences and in taking necessary corrective action.
- Inspection records contained many inaccuracies. The inaccuracies remained even after the engineering firm employees spent considerable time checking and rechecking their data.

Because this engineering firm had been terminated, we made no specific recommendations concerning improvement of inspection services on the project. We did, however, recommend that EPA consider whether such services were adequate to support the more than \$750,000 claimed for resident inspection services.

(3) Change Orders

The grantee's consulting engineer had not adequately handled change orders. We found that the firm's employees did not promptly recognize changed conditions and issue change orders. Change orders which were identified were not adequately reviewed with respect to nature and scope of change or reasonableness of price. In several cases, data provided to the State were inadequate and incomplete. We recommended that the grantee be required to have its new consulting engineer evaluate each of the change orders previously submitted.

(4) Federal and State Administration

EPA and State personnel did not always adhere to the requirements in Federal regulations. Specifically, we found that Federal and State officials:

- ° Had apparently authorized full participation in the installation of interceptor sewers larger than those needed to accommodate reasonable projections of future growth.
- ° Had approved the construction of a collection system without obtaining any specific commitment as to time frames for connection to the regional treatment systems.
- ° Did not provide consistent advice on requests for grant increases.

We have evaluated Region 2's preliminary response to this report. An overall assessment of the adequacy of West Windsor's sewer line is under review, and litigation has been initiated to require contractors to take appropriate corrective actions. Until these actions have been completed so that a final determination can be made, we will maintain this report as active in our audit tracking and control system.

c. Audit Report P2bW0-03-0236-11556, Issued September 11, 1981,
Washington Suburban Sanitary Commission (Page 24)

Although a grantee constructing a regional treatment system had spent more than \$36 million constructing initial portions of a segmented project, one local jurisdiction took action to stop further construction. Without completion of the subsequent portions of the project, the initial segments were not needed. Accordingly, we questioned the total funds expended to date pending resolution of interjurisdictional disputes and actual construction of the remaining parts of the project.

A response was received from regional action officials. This response was not considered acceptable because, although the regional officials basically agreed with our findings, they indicated that no corrective actions would be initiated until ongoing planning efforts were completed.

d. Audit Report P2bW9-03-0436-11490, Issued August 28, 1981,
District of Columbia (Page 24)

Construction costs of \$2,504,035 for an operations control building were questioned. While EPA had approved participation in a portion of the cost of an administration building, our engineering staff concluded that the building was inordinately ornate and had "elegant" construction. As a result, this building cost \$82.31 per square foot as compared to the median cost of office space in the area of \$34.41 per square foot. In addition, we found that only 19 percent of the building's space was used by wastewater treatment personnel.

Regional action officials and the Office of the Inspector General could not agree on certain major aspects of this problem. Actions are currently underway to develop a national policy with respect to aesthetic features and their eligibility for Federal participation.

e. Audit Report S2cW0-01-0008-11081, Issued June 5, 1981,
Dartmouth, Massachusetts (Page 25)

Although an engineering firm had obtained sophisticated, labor-saving, computerized equipment for designing sewage treatment works, we found that it did not consider possible savings when estimating costs for design. As a result, we found that this firm had received a \$391,185 lump sum contract for which the engineer had incurred costs totaling \$184,788. Thus, the firm got a \$206,397 profit (111.7 percent). We recommended that appropriate defective pricing clauses be invoked to reduce eligible costs to a reasonable level.

We have not received a response to this report.

f. Audit Reports P2cW9-06-0100-10683 and P2cW9-06-0199-
10681, Issued March 5, 1981, Port of New Orleans (Page 28)

Two grants with claimed costs totaling \$2.8 million were awarded to a port authority. Because the port authority did not have jurisdiction over the disposal of sewage, industrial wastes, or other wastes, it was ineligible to receive construction grant funds under the provisions of the Clean Water Act.

We have received no response to these reports. We understand that Region 6 submitted this matter to the Office of General Counsel for a ruling.

E. OTHER REPORTING REQUIREMENTS

1. Resolution of Audits

Top management at EPA has continued to emphasize the resolution of outstanding audit reports. As a result, even though our report output was up more than 200 audits, there was no corresponding increase in the number of unresolved audit reports. While there were 947 reports issued to EPA officials in this six-month period, 886 were resolved. The number of outstanding reports more than six months' old remained virtually constant, 68 as of March 31, 1982, and 71 as of September 30, 1982. These reports may be classified as follows:

For Referral to Audits Resolution Board	13
Responses Received, Being Reviewed	11
Valid Responses Not Received	47
Total	<u>71</u>

In resolving 886 reports during the period, EPA officials sustained \$19.2 million of costs questioned. Agency officials indicated that accounts receivable would be established for the recovery of \$18.4 million which had already been paid to our grantees or contractors. The remaining \$0.8 million represents cost avoidances resulting from reductions in grant or contract awards due to costs questioned and sustained on preaward audits.

The Office of the Inspector General does not keep track of the recovery of audit disallowances. Instead, the Agency has established a procedure whereby accounts receivable are established when Agency officials concur with our questioned costs. The Financial Management Division then tracks and collects these receivables along with the other receivables due EPA. Procedures have been established to reconcile the costs questioned and sustained with the accounts receivable established by Financial Management. This serves to ensure that the receivables are established properly. Furthermore, interest accrues on these receivables from the date the grantees or contractors are first notified of EPA's determination on the audit.

Taking into account the \$47.2 million sustained during the first half of the fiscal year, OIG efforts have potentially resulted in \$66.4 million of cost benefits to the Federal Government on grants and contracts alone in fiscal 1982. As an additional \$304.1 million was made available for use through internal and management audits, the OIG produced measurable benefits totaling \$370.5 million.

2. Delinquent debts

We have completed a limited review of EPA's accounts receivable and collection procedures in 9 of the Agency's 15 servicing finance offices (SFOs). During the period from April 1, 1982, through September 30, 1982, EPA collected \$2,867,000 and wrote off \$11,798. As of September 30, 1982, accounts receivable totaled \$13,872,295. EPA's Financial Management Division has continued to concentrate on improving the Agency's collection activities. Our review showed that all nine of the SFOs were performing necessary followup actions on delinquent debts. In addition, all were assessing interest against delinquent debts. We found that EPA had assessed \$735,987 in interest on overdue accounts and had collected \$597,056 of this amount. We noted that two of the SFOs were experiencing difficulty when making collections from some States.

The automated accounts receivable subsystem, which identifies and ages individual debts, should agree with the general ledger control accounts. We noted that three SFOs had not reconciled their accounting records. In two cases, the accounts receivable subsystem exceeded the general ledger control accounts by insignificant amounts. In the other SFO, the general ledger accounts exceeded the subsystem by \$4,788. The SFOs are working on resolving the discrepancies.

When delinquent debts are determined to be uncollectible, they are forwarded to the EPA claims officer. The claims officer may compromise, terminate, or suspend further collection efforts on debts under \$20,000. Any debt over \$20,000 must be forwarded to the General Accounting Office or the Department of Justice for approval of the final resolution of debt. The claims officer has authorized a writeoff on seven debts totaling \$48,581. In addition, he has referred two debts amounting to \$6,621 to the General Accounting Office and has referred one debt to Department of Justice for evaluation of a compromise. The Department of Justice agreed to compromise a \$20,797 debt for a \$2,000 payment.

EPA management has taken a number of steps to improve the delinquent debt situation. These steps include coordinating activities among the Agency's program offices, finance offices, and claims office. Specifically, the following directives were issued:

- ° A guidance memorandum which directed all Agency managers on collection procedures to be used for Freedom of Information Act requests. One growing problem was the collection of these small but numerous debts. The new procedure will require advance payment for fees in excess of \$10. Advance payment will eliminate the need to record a debt in the accounting system.

- ° Two directives which gave SFOs detailed instructions on handling accounts receivable records and resolving delinquent debts. One of the directives dealt with improving the process for managing debt collection; the other gave detailed, step-by-step instructions designed to increase debt collection efficiency.

EPA's Financial Management Division provided the following summary of EPA's collections and writeoffs for April 1, 1982, through September 30, 1982, and accounts receivable as of September 30, 1982. These may not be the Agency's final figures. Although they reflect the Agency's accounting records as of September 30, they are preclosing figures (i.e., we obtained them before the closing process was completed).

		<u>Notes</u>
Amount Collected	\$ <u>2,867,000</u>	
Amount Written Off	\$ <u>11,798</u>	
Accounts Receivable		
Under 90 Days' Old	\$ 2,761,018	
Over 90 Days' Old	6,949,030	1
Intergovernmental		
Agreements	<u>4,162,247</u>	2
Total	<u>\$13,872,295</u>	

Note 1: The major part of this figure, 71 percent, constitutes receivables which are being appealed. They will not be collected until the appeal process is completed.

Note 2: This amount is for debts owed EPA by other Federal agencies. Since these debts do not have an impact on the U.S. Treasury, we have not included them in the regular accounts receivable figures. However, it is still important to note that these debts impact the Agency's budget. Approximately 17 percent of the total in this category is over 90 days' old.

SECTION II--INVESTIGATIONS

A. ACCOMPLISHMENTS

During this reporting period, we opened 32 more cases and closed 18 more cases than in the previous reporting period. The following schedule reflects investigative activities.

<u>Category</u>	<u>Previous Period</u>	<u>Current Period</u>
Cases Opened	54	86
Cases Closed	29	47
Cases Pending	139	178
Cases Referred to Prosecution	16	15

During this reporting period, our office completed a review of the Resource Conservation and Recovery Act confidential business information security manual and recommended changes. Additionally, we conducted a security inspection of the Office of Pesticide Programs to determine the cause of two unlawful disclosures of confidential business information which occurred in the past few months. It was determined that both disclosures were the result of human error. Additions and safeguards designed to strengthen the security of confidential business information have been implemented by the Office of Pesticide Programs.

B. RESULTS OF REFERRALS

The following schedules summarize referral actions during this reporting period.

Referrals for Prosecution

Cases Pending as of March 1982	15
Cases Referred This Period	15
Total Cases	<u>30</u>

Disposition of Cases

Cases Accepted	8
Cases Declined	5
Cases under Consideration	17
Total Cases	<u>30</u>

Actions on Cases

Indictments*	7
Convictions	7
Dollar Recoveries	\$9,345
Fines	\$320,000

Referrals for Administrative Action

Pending from Previous Periods	6
New Referrals This Period	6
Total under Consideration	<u>12</u>
Decisions Made This Period	7
Pending End of Period	<u>5</u>

Actions Taken on Administrative Referrals

Personnel Actions

Terminations	5
Suspensions	<u>1</u>
Total Personnel Actions	<u>6</u>

Other Actions

Debarments	<u>1</u>
Total	<u>1</u>

*Three of these cases were handled through criminal informations (i.e., the offenses were punishable by one year or less in jail).

C. CURRENT EFFORTS

1. Increase in Caseload

During this reporting period, the Office of Investigations opened 32 more cases than were opened in the prior reporting period. This increase is due to an increase in personnel and the resultant increased visibility of Inspector General investigative personnel within the Agency and U.S. Attorneys' offices.

2. Antitrust Activities

As a result of an investigation conducted in North Carolina, evidence was obtained to show that two EPA contractors conspired to restrain interstate trade and commerce. This violation was related to the construction of water treatment plants, sewer lines, and pumping stations. In this case, our office, in conjunction with the Antitrust Division of the U.S. Department of Justice, obtained three indictments, three convictions, and fines totaling \$300,000.

In another Grand Jury case, we are working with the Antitrust Division on a project in Virginia. This project involves allegations of bid rigging by contractors in EPA's construction grants program throughout the State of Virginia.

3. Public Corruption

As a result of a Grand Jury investigation conducted with the Federal Bureau of Investigation and the Internal Revenue Service, we have developed evidence to show that local public officials received kickbacks in return for favoritism in Government contracts. It is anticipated that this investigation will result in numerous indictments in the near future.

4. Bribery

In a joint investigation with the Federal Bureau of Investigation, we obtained evidence of a contractor's attempt to bribe an EPA employee to receive a \$3 million contract. This investigation has been concluded, and an indictment is imminent.

5. Debarment

In Cincinnati, Ohio, we investigated, for a Federal Grand Jury, an EPA contractor accused of defrauding the Government through false billings. As a result of this investigation, the contractor has been debarred.

6. Trafficking in Narcotics

Based on information received from an EPA Region 5 employee concerning Federal employees suspected of dealing in narcotics, a joint investigation was initiated in Chicago by the EPA Office of the Inspector General, the Federal Protective Service, and the Internal Revenue Service. The investigation uncovered a widespread conspiracy involving employees of several Federal agencies to distribute marijuana, cocaine, and phencyclidine (PCP) over a three-year period. An undercover agent and videotape camera were used to document Federal employees buying and selling narcotics from their work stations. As of September 30, 1982, one EPA employee had been indicted. Since that time, another five individuals have been indicted. We expect eight or nine additional indictments in the near future.

D. INVESTIGATIVE WORKLOAD STATISTICS

<u>1. Inventory of Cases</u>	<u>Number</u>
Pending as of March 31, 1982	139
Opened This Period	86
Closed This Period	(47)
Pending as of September 30, 1982	<u>178</u>

2. Profile of Pending Cases

Area of Investigation

Office of

	A D M I N I S T R A T O R	I G	P O L I C Y	W A T E R	A I R	R E S E A R C H	S O L I D W A S T E	T O X I C S	A D M I N	O T H E R	T O T A L
Conflict of Interest	1		1	7				2		1	12
Local Corruption				3							3
Fraud Against the Gov't				47	2	3				3	55
Federal Procurement Fraud			1	3	1	1	1		1	1	9
Federal Program Fraud			1	26							27
Gov't Regulatory Offenses						1	1				2
Administrative Actions		1		1			1			1	4
Travel, Time, & Attendance	4			2	4	1	1	3	1		16
Misuse of Gov't Property			2	2					1		5
Waste & Abuse of Resources				3	2			2	1		8
Personnel Violations	1					1				1	3
Theft of Gov't Property				1					2		3
Antitrust				18							18
Privacy Act/Confidential Business Information								3			3
Other	2			3	1				2	2	10
Total	8	1	5	116	10	7	4	10	8	9	178

SECTION III—PREVENTION OF FRAUD, WASTE, AND ABUSE

A. IMPLEMENTATION OF OMB CIRCULAR A-123

In March 1982 the Administrator designated the Inspector General as the Agency official responsible for ensuring EPA compliance with OMB Circular A-123. The Circular requires that vulnerability assessments be conducted of all Agency programs and administrative functions by December 31, 1982. The Audit Operations Staff completed the Agency's plan for conducting vulnerability assessments throughout EPA in early April. The Administrator submitted the plan to OMB in compliance with the Circular's requirements.

The Agency plan required self-assessments of program and administrative functions by EPA management, with technical assistance and oversight provided by the OIG. Each EPA region and headquarters office was required to conduct an assessment of its programs and administrative functions. During May through July, the Audit Operations Staff met with the heads of all EPA offices and presented an overview of the assessment. In addition, they met with staff from each office to explain the detailed procedures involved. Each office was given 60 days to complete its assessment, so that all assessments were to be completed by September 30. The Audit Operations Staff and divisional audit staffs were available throughout the 60-day period to answer questions and resolve issues. Divisional audit staffs reviewed all regional office assessments for obvious omissions and errors before transmitting them to Headquarters.

As of September 30, only 4 of EPA's 29 offices had not completed their assessments, although most were in the final stages of completion. Top Agency management officials have assured us that all vulnerability assessments will be completed and data will be available so that the OIG can complete its work and issue its overall analysis to the Administrator on time before December 31. The report will recommend programs and administrative functions in need of internal control reviews. By January 31, 1983, the Administrator will have reviewed the report and its recommendations and will issue directives to conduct internal control reviews.

B. SUSPENSIONS AND DEBARMENTS

In this six-month period, the Agency issued its final suspension and debarment regulations. Under these regulations, EPA can take steps to safeguard its grants programs against grantees, contractors, consultants, engineers, suppliers, etc., who are found to have violated laws, committed improprieties, or been responsible for a willful or serious failure to perform adequately. We believe that the adoption of these regulations provides the Agency with a valuable tool for ensuring that needed facilities are built at a reasonable cost.

The Agency has already initiated action under these regulations to suspend six firms and/or individuals and to debar another one. We anticipate that in the coming period, significant efforts will be expended to identify and take actions against many contractors who have been found guilty of bid rigging or antitrust violations on Department of Transportation contracts. The extent of OIG efforts to initiate reviews of potential poor performance cases related to EPA construction grant projects will, of course, be dependent on the resources which can be made available for this vital task.

C. HOTLINE

This reporting period was marked by a dramatic increase in complaints received by our hotline office. One hundred twelve cases were logged in, against totals of 19 and 11 in the previous two reporting periods. The apparent reasons for this increase were:

- (1) The installation in March 1982 of a nationwide, toll-free "800" hotline number, which now is the source of a majority of all hotline complaints. We previously offered only a Federal Telecommunications System (FTS) hotline for Federal employees.
- (2) A memorandum from the EPA Administrator informing all EPA employees of the existence of the hotline and urging its use.
- (3) A message on the pay stubs of all EPA employees publicizing the hotline numbers.
- (4) Publicity given all Federal agency hotline numbers in the popular tabloid press.

The following table shows a summary of hotline cases by origin:

"800" Toll-Free Nationwide Number	52
FTS or Local Telephone	23
Mail	16
Referred from General Accounting Office	17
Referred from Agency Other than GAO	3
In Person	1
	<u>112</u>

We anticipate that this growth in hotline activity will continue during the next six months. The Administrator of EPA has authorized our office immediately to begin the implementation of a program of cash awards for disclosures which result in cost savings. Publicity relating to this program, including the distribution to EPA offices throughout the country of originally designed "Hotline" posters, should help maximize this potential.

The following table shows the disposition and current status of hotline complaints received since April 1. The largest number (36) were closed administratively following preliminary inquiry. Assignments to audit accounted for 15; program unit referrals accounted for 35; and investigative referrals, 13.

Status of Hotline Complaints as of September 30, 1982

	<u>Closed</u>	<u>Open</u>	<u>Total</u>
	<u>Unsubstantiated</u>	<u>Corrective Action Taken</u>	
Assigned to Audits	2		13 15
Assigned to Investigations	3		10 13
Referred to EPA Program Unit	8	3	24 35
Referred to Other Agency		2	2 4
Assigned to Office of Management and Technical Assessment			1 1
Assigned to Hotline Office			1 1
Closed Administratively Following Preliminary Inquiry	29	7	36
Still in Preliminary Inquiry Stage			7 7
	42	12	58 112

It is too early to assess the effectiveness of the hotline office in terms of audit recovery produced or indictments and convictions. Most cases which appear to have the potential for significant results remain open and unresolved.

On the other hand, approximately 20 percent (12) of the 54 cases closed during the period resulted in some form of corrective action. For example:

- ° Steps were taken to eliminate seepage from a gypsum pile;
- ° An improper job vacancy announcement was cancelled and rewritten;
- ° Action was taken to correct the dumping of raw sewage;
- ° The site of a proposed meeting was changed to effect economies.

D. REVIEWS OF PROPOSED LEGISLATION AND REGULATIONS

During this reporting period, EPA requested our review of a bill deleting various congressional reporting requirements. We saw no problem with the proposed bill. On a Government-wide basis, we reviewed a revised bill to protect "whistleblowers" (contributors of information concerning waste, fraud, and abuse) from reprisal. This bill would encourage employees of grantees and contractors to report possible waste, fraud, or abuse on Government projects. While we agreed completely with the intent of the bill, we opposed its enactment because:

- ° It would inevitably increase workload substantially without necessarily providing a concomitant increase in resources; and
- ° By placing undue priority on review of allegations, it would remove vital work-planning responsibilities from the control of the Inspector General.

The OIG reviewed more than 20 proposed regulations. In this process, greatest emphasis and time were spent on reviewing and working with EPA's grant regulations. We believe efforts expended in this direction are important in ensuring adequate controls are in place to see that the Government receives full value for its expenditures.

SECTION IV--SUPPORT ACTIVITIES

A. STAFFING

Throughout fiscal 1982, while other components of EPA were declining in size, the Office of the Inspector General not only held its own, but actually increased in size. The Agency's fiscal 1983 budget provides for continued operation at near-current levels of staffing.

Both our audit and investigative staffs, however, are faced with workloads substantially in excess of their available resources. For example, the Office of Audits has an estimated workload of 868.9 staff years and has available approximately 163 staff years of resources to perform this work (see appendix 5 on page 91 of this report). Our investigative staff is similarly short-handed.

Throughout the year, our staff has worked to streamline procedures, identify the relative priority of work, and shift resources to accommodate changes in workload. To a great extent, this year we have been successful in keeping up with major audit and investigative requirements. The burden, however, is getting heavier.

On the audit side, major efforts are underway to close out the large backlog of final construction grant audits. The Administrator has given us the goal of ensuring that these projects are promptly audited so that closeout actions can be expedited. While this goal can be accomplished, it will necessitate the commitment of the vast majority of our available audit resources to this one task. Thus, staff will not be available to perform other needed audits, and flexibility will not be available to undertake even emergency audits in other areas.

On the investigative side, similar problems are arising. Our caseload has increased from 114 at the beginning of the fiscal year to 178 at the year's end. The composition of the caseload has changed even more dramatically. Significant efforts are underway in both antitrust and fraud cases. These cases take substantially more time than many of the lesser cases investigated in the past.

Workload grows as we do a better job of identifying possible instances of fraud, waste, abuse, and mismanagement. Shifting resources and ranking work can only go so far in dealing with increasing workloads. Resources available for audits and investigations of EPA operations, functions, and activities have simply never been enough. For a breakdown of available OIG permanent full-time resources, see appendix 6 on page 92.

B. TRAVEL

Frequent travel is inherent--and mandatory--in audit and investigative work. Our fiscal 1983 budget provided the OIG with \$442,000 of travel funds. This was approximately \$150,000 less than the level in our fiscal 1982 operating plan. We have requested an additional \$100,000 of travel funds in fiscal 1983 primarily for use in accomplishing the Administrator's goal of conducting final audits of construction grants.

C. CONTRACTS

Most audits of construction grants are performed by independent public accountants under contract with the OIG. Our fiscal 1983 budget provided the OIG with \$2.2 million of contract funds. This was approximately \$1.1 million less than the level in our fiscal 1982 operating plan. We have requested that our budget be restored the \$1.1 million for use in accordance with the Administrator's goal to increase the number of final construction grant audits initiated in fiscal 1983.

DEFINITION OF TERMS USED
IN SEMIANNUAL REPORT

A. TERMS USED IN SECTION I--AUDITS

1. Types of Audits

a. Internal and Management Audits

These are independent reviews of Agency programs and operations designed to determine whether: (1) desired results and objectives are being effectively; achieved; (2) resources are managed and used economically and efficiently; (3) operating procedures are effective and are being carried out; (4) applicable laws and regulations have been complied with; (5) financial operations are conducted properly; and (6) financial reports are presented fairly. A given management audit may include review of a particular activity (such as finance or procurement) at one, some, or all Agency organizations responsible for that activity. When the purpose of the audit is to assess the adequacy of aspects of overall program administration, a management audit might also encompass a top-to-bottom review of the administration of a program or portions of a program at Federal, State, and local governmental or nongovernmental levels.

b. Grant and Contract Audits

These are independent reviews of the records and performance of individual grantees and contractors made in accordance with the U.S. General Accounting Office standards for audit of governmental organizations, programs, activities, and functions. These audits are made as a means of ascertaining the fairness of presentation of financial statements and the degree of compliance with statutes, regulations, and terms and conditions of the agreements under which Federal funds were made available. These audits also assess the reasonableness and allowability of costs claimed or reported under the agreement and may provide Agency management with information on the adequacy of grantee systems to efficiently, effectively, and economically carry out their responsibilities under the signed agreements. Grant and contract audits include:

(1) Preaward Audits

A review and evaluation conducted to determine whether cost data submitted were current, accurate, and complete, and to assess the adequacy of the grantee's or contractor's system to manage the grant or contract.

(2) Interim and Final Cost Audits

A review and evaluation conducted to assess, at minimum, the reasonableness and allowability of costs claimed or reported under the grant or contract and ensure compliance with applicable statutes, regulations, and terms and conditions of the award. These audits include a review of incurred costs and overhead (indirect costs) and contractors' policies, procedures, and practices which influence and control grant and contract costs.

(3) Indirect Cost Audits

A review and evaluation conducted to determine whether a grantee's or contractor's indirect cost proposal properly allocates costs allowable under Federal cost principles on the basis of relative benefits received.

At EPA, we break grant and contract audits into two major categories: "construction grants audits" include all audits performed of grants made under EPA's wastewater treatment works construction grants program; all other grant or contract audits are reported under the category "other grant or contract audits."

2. Cost Categories

The following cost categories are applicable primarily to grant and contract audits. Amounts reported may reflect the total proposed or actual expenditures or only the Federal share.

a. Costs Audited

Costs audited reflect the expenditures proposed, claimed, or reported by a prospective or actual grantee or contractor.

b. Costs Questioned

Costs questioned represent the portion of costs which the auditor has concluded should not be incurred or should be recovered because the expenditures are not allowable under the provisions of applicable laws, regulations, policies, cost principles, or terms of the grant or contract.

c. Costs Set Aside

Costs set aside represent the portion of costs for which the grantee or contractor does not have sufficient documentation to support a determination of allowability or eligibility. These costs may require submission of additional information and eligibility determinations by responsible Agency program officials.

d. Costs Questioned and Sustained

Costs questioned and sustained represent EPA management's decision with respect to costs questioned on grant and contract audits. This means that Agency officials have reviewed the questioned costs in detail and provided a written response identifying the actions which will be taken on the cost adjustments recommended in the audit report. When questioned costs are classified as sustained, Agency management has agreed with the auditor and stated that as a result of the audit recommendations, the questioned costs will be either avoided or recovered.

(1) Costs Avoided

The Agency has decided that either the grant or contract in its entirety or a portion of costs under the grant or contract will not be awarded.

(2) Costs to be Recovered

The Agency has recovered or is committed to recovering the questioned amount through billing and collecting from the grantee or contractor or through offsetting against payments under existing and future grants or contracts.

3. Reports Issued

This category reflects the number of audit reports issued by the Office of the Inspector General during the six-month reporting period. This category includes:

a. OIG Audits

These audits are performed by the Office of the Inspector General's own audit staff.

b. Contract Audits

These audits are performed for the Office of the Inspector General under contract by another Federal agency, State auditor, or Independent Public Accountant. Under such arrangements, the OIG normally requests the audit, reviews the report, and authorizes payment for the audit.

c. Initiated by Others

These are audits of Federal programs initiated by the grantee or others receiving Federal funds. Under such arrangements, entities contract directly for audits of Federal funds with IPAs. When audits are completed, they are submitted to the OIG. This category also includes single audits of grantees performed under Attachment P to OMB Circular A-102.

4. Reports Closed

This category refers to the number of audit reports issued to Agency management officials which have been properly resolved in this reporting period. To resolve an audit report, Agency officials must respond in writing by identifying actions to be taken to resolve the issues and cost adjustments recommended in the report. OIG officials must then agree that these actions are satisfactory. At the time a report is classified as closed, Agency management officials may or may not have completely implemented the necessary corrective actions.

B. TERMS USED IN SECTION II--INVESTIGATIONS

1. Case

"Case" is the term used administratively to control information relating to irregularities requiring investigative action or allegations of violations of Federal statutes or regulations.

2. Cases Opened

A case is considered open when sufficient information concerning an allegation is available which, if proven, would constitute a violation. When a case is open, managers are notified not to take administrative action without consulting the OIG.

3. Cases Closed

A case is considered closed when all issues have been resolved; all legal, civil, or administrative action has been completed at the initial level of adjudication; a final report on the investigation has been issued; or no action is required and, therefore, the case has been closed by OIG administrative action.

4. Cases Pending

Cases are considered pending from the time they are opened until they are closed. Thus, a case may be pending (1) while awaiting assignment of an investigator, (2) while undergoing investigation, and (3) while in the judicial or administrative review process.

Appendix 2

SUMMARY OF AUDIT REPORTS ISSUED
FOR THE PERIOD APRIL 1, 1982 THROUGH SEPTEMBER 30, 1982
(IN THOUSANDS OF DOLLARS ROUNDED TO THE NEAREST THOUSAND*)

Type of Audit	EPA	IPA	State	Other Federal Agency	Total
Internal and Management					
Number of Reports Issued	17	0	0	0	17
Federal Share Audited	\$744,341	0	0	0	\$ 744,341
Federal Share Questioned	385,610	0	0	0	385,610
Construction Grants					
- Preawards					
Number of Reports Issued	1	8	0	3	12
Federal Share Audited	\$ 90	\$ 7,618	0	\$ 612	\$ 8,320
Federal Share Questioned	14	238	0	7	259
Federal Share Set Aside	45	3,210	0	70	3,325
- Interim					
Number of Reports Issued	6	18	11	1	36
Federal Share Audited	\$ 15,255	\$110,953	\$187,174	0	\$ 313,382
Federal Share Questioned	990	6,865	11,717	0	19,572
Federal Share Set Aside	183	12,896	3,904	0	16,983
- Final					
Number of Reports Issued	66	89	35	0	190
Federal Share Audited	\$105,171	\$190,381	\$122,700	0	\$ 418,252
Federal Share Questioned	1,645	5,220	6,874	0	13,739
Federal Share Set Aside	295	12,967	4,808	0	18,069
Other Grants and Contracts					
- Preawards					
Number of Reports Issued	22	13	0	297	332
Federal Share Audited	\$ 42,501	\$ 44,867	0	\$2,109,313	\$2,196,681
Federal Share Questioned	194	1,005	0	36,059	37,258
Federal Share Set Aside	4,698	1,549	0	164,580	170,827
- Interim					
Number of Reports Issued	5	0	2	23	30
Federal Share Audited	\$ 5,031	0	\$ 3,843	\$ 37,410	\$ 46,284
Federal Share Questioned	19	0	77	151	247
Federal Share Set Aside	1,602	0	0	0	1,602
- Final					
Number of Reports Issued	15	11	0	199	225
Federal Share Audited	\$ 11,970	\$ 12,470	0	\$ 80,600	\$ 105,040
Federal Share Questioned	7,615	389	0	757	8,761
Federal Share Set Aside	312	75	0	81	468
- Attachment P					
Number of Reports Issued	5	0	0	17	22
Federal Share Audited	\$ 8,370	0	0	\$ 17,562	\$ 25,932
Federal Share Questioned	0	0	0	16	16
Federal Share Set Aside	0	0	0	0	0
- Indirect Costs					
Number of Reports Issued	4	4	0	75	83
Total					
Number of Reports Issued	141	143	48	615	947
Federal Share Audited	\$932,729	\$366,289	\$313,717	\$2,245,497	\$3,858,232
Federal Share Questioned	396,087	13,717	18,668	36,990	465,462
Federal Share Set Aside	7,135	30,697	8,712	164,731	211,275

*Any footing difference due to rounding.

SEMI-ANNUAL AUDIT REPORTS ISSUED - SECTION I

PAGE 1

PERIOD ENDING 09/30/82

DATE: 10/23/82

AUDIT CONTROL NUMBER	AUDITEE	FINAL REPORT ISSUED	DATE CLOSED
D3A02060106-20703	RADIAN CORP (CONSAD RSCH CPITX	04/01/82	06/07/82
P2CW1060077-20704	TRINITY RIVER AUTH/COPPELL TX	04/01/82	05/05/82
N3G02060102-20705	TULSA (CITY OF)	04/01/82	04/01/82
E1UN2100014-20706	REGION X	04/01/82	
D3A02090131-20707	CLAREMONT ECONOMICS INSTIT CA	04/01/82	04/01/82
D3A02010123-20709	TEMPLE BARKER & SLOANE INC MA	04/02/82	04/02/82
D3A02010124-20710	POLICY ANALYSIS INC MA	04/02/82	04/02/82
D3A02010125-20711	INDUSTRIAL ECONOMICS INC MA	04/02/82	04/02/82
D3C02010126-20712	UNITED TECHNOLOGIES CORP CT	04/02/82	04/02/82
D3C02010127-20713	UNITED TECHNOLOGIES CORP CT	04/02/82	04/02/82
D3A02010128-20714	ARTHUR D LITTLE INC MA	04/02/82	04/02/82
D3A02030176-20715	ECOLOGICAL ANALYSTS INC.-MD	04/05/82	04/05/82
D3A02030195-20716	CRC SYSTEMS-VA	04/05/82	08/24/82
D3A02030191-20717	CONSAD RESEARCH CORP-PA	04/05/82	04/05/82
D3C02030094-20718	CAMP DRESSER MCKEE INC-MA	04/05/82	04/05/82
D3C02030194-20719	EDWARD ROBBINS-DC	04/05/82	04/05/82
D3A02030212-20720	ICF INCORPORATED-DC	04/05/82	04/05/82
E5AH2050131-20721	INLAND WATERS PCI ECORSE MI	04/05/82	04/22/82
E5AH2050141-20722	ACTION CONSTRUCTION HUGO MN	04/05/82	04/22/82
D3C02050337-20723	A T KEARNEY CHICAGO IL	04/05/82	
D3A02050282-20724	JONES & HENRY ENGRS TOLEDO OH	04/05/82	06/23/82
E5AH2050132-20725	MARINE PC DETROIT MI	04/05/82	04/22/82
D3C02090130-20726	SRI INTERNATIONAL MENLO PARK CA	04/05/82	04/05/82
D3C02080059-20727	AUTOMOTIVE TEST LABS AURORA CO	04/05/82	04/05/82
D3C02080060-20728	AUTOMOTIVE TEST LABS AURORA CO	04/05/82	04/05/82

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D3A02030208-20729	POLICY RESEARCH GROUP INC-DC	04/05/82	04/05/82
D3A02030210-20730	BOOZ ALLEN & HAMILTON INC-MD	04/05/82	04/05/82
D3A02020066-20732	SYRACUSE RESEARCH CORP NY	04/06/82	04/06/82
D3A02080062-20733	ENGY & RESRCE CONS BOULDER CO	04/07/82	04/07/82
D3CA2080063-20734	AUTOMOTIVE TEST LABS AURORA CO	04/07/82	04/07/82
D3B02090133-20735	ENGY & ENVIR RESCH IRVINE CA	04/07/82	04/07/82
D3AH2090134-20736	ROCKWELL INTL NEWBURY PARK CA	04/07/82	04/07/82
E5AH2010070-20737	NEW ENGLAND MARINE CONT	04/06/82	04/14/82
D3D02020060-20738	MATHTECH INC NJ	04/08/82	04/08/82
D3A02020049-20739	FOSTER WHEELER DEV CORP NJ	04/08/82	06/29/82
D3A02020052-20740	HYDROTECHNIC CORP NY	04/08/82	04/08/82
D3A02020054-20741	GERAGHTY & MILLER INC NY	04/08/82	04/08/82
D3C02020051-20742	JACK FAUCETT ASSOC	04/08/82	04/08/82
D3D02020053-20743	BURNS & ROE CORP NJ	04/08/82	04/08/82
D3A02020108-20744	ECOLOGY & ENVIRONMENT NY	04/08/82	
D3A02020107-20745	ECOLOGY & ENVIRONMENT NY	04/08/82	
D3C02020005-20746	FRED C HART ASSOC NY	04/08/82	04/08/82
P2CW0010213-20747	SOMERSWORTH NH	04/09/82	09/17/82
P2BW1010218-20748	SOMERSWOTH NH	04/09/82	04/09/82
P2BW1010186-20749	STAFFORD CT	04/09/82	09/30/82
P2CW1010185-20750	STAFFORD CT	04/09/82	08/23/82
P2CW1010144-20751	STAFFORD CT	04/09/82	05/19/82
E1Z02010119-20752	FINANCIAL MGMT BRANCH REG I MA	04/09/82	04/09/82
S2CW0090250-20753	CA DEPT CORRECTION-DEUEL TRACY	04/12/82	
E2CW2090015-20754	CRESCENT CITY CA	04/12/82	09/01/82

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E2CH1090264-20755	TRANQUILITY PUD CA	04/12/82	09/23/82
H3A02050306-20756	UN OF MI DE & IH ANN ARBOR MI	04/12/82	
D3D02090070-20757	AIR POLLUTION TECH S DIEGO CA	04/13/82	04/13/82
D3A02100056-20758	SHAPIRO & ASSOCIATE SEATTLE WA	04/13/82	04/13/82
D3A02100057-20759	CH2M HILL CORVALLIS OR	04/13/82	04/13/82
D3A02030180-20761	JRB ASSOCIATES-VA	04/14/82	08/24/82
D3A02030173-20762	JRB ASSOCIATES INC-VA	04/14/82	05/25/82
D3A02030178-20763	GANNETT FLEMING CORDRY CAR-PA	04/14/82	04/14/82
D3C02030113-20764	INFORMATICS INC	04/14/82	04/14/82
D3C02030217-20765	INFORMATICS INC-MD	04/14/82	04/14/82
D3A02030188-20766	GANNETT FLEMING CORDRY CAR-PA	04/14/82	05/10/82
D3C01030037-20767	APPLIED SCIENCE ASSOC-PA	04/14/82	07/23/82
E2CH1090204-20768	SAN JOAQUIN COUNTY OF STOCKTON	04/14/82	
E2BW1090239-20769	MURPHYS SD	04/14/82	06/23/82
D3C02040144-20770	BREEDLOVE ASSOCIATES INC FL	04/15/82	05/04/82
D3A02040145-20771	CLAUDE TERRY & ASSOCIATES GA	04/15/82	08/16/82
S2CH1040046-20772	CHATTANOOGA TN	04/15/82	05/05/82
P2CH2040014-20773	RIVIERA BEACH FL	04/15/82	04/16/82
P2CH1040132-20774	JEFFERSONTOWN KY	04/15/82	07/22/82
D3A02060114-20775	RADIAN CORPORATION	04/15/82	05/20/82
P3CH0060235-20776	TX DEPT HEALTH WATER SUPPLY	04/15/82	04/27/82
P2CH0060201-20777	DALLAS TX	04/15/82	05/17/82
E2CH0030165-20778	ELEANOR TOWN-WV	04/16/82	04/30/82
D3A02030225-20779	INFORMATICS INC-MD	04/19/82	04/19/82
D3D02030057-20780	JACA CORPORATION	04/19/82	05/10/82

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D3A02030207-20781	AMERICAN MANAGEMENT SYSTEMS-VA	04/19/82	04/19/82
D3D02030117-20782	SCOTT ENVIRONMENTAL TECH INC	04/19/82	06/03/82
D3A02030200-20783	ENVIRONMENTAL LAW INSTITUTE-DC	04/19/82	04/19/82
D3AS2020061-20784	LOUIS BERGER & ASSOCIATES NJ	04/19/82	04/19/82
D3A02020116-20785	MATHTECH INC NJ	04/19/82	06/15/82
D3AS2020062-20786	LOUIS BERGER & ASSOCIATES NJ	04/19/82	08/17/82
D3A02020058-20787	FRED C HART ASSOCIATES INC NY	04/19/82	04/19/82
S2CW0090242-20788	CAMBRIA COMMUNITY SERV DIST CA	04/20/82	
S2CW1090150-20789	JACKSON CA CITY OF	04/21/82	09/23/82
H3C02050105-20790	PURDUE UNIV W/LAFAYETTE IN	04/20/82	10/07/82
H3A02040163-20791	RESEARCH TRIANGLE INSTITUTE NC	04/20/82	
P2CW1060012-20792	GLENMORA LA	04/20/82	06/15/82
P2CW1060104-20793	GRETNAL LA	04/20/82	04/20/82
P2CW2060046-20794	FORDYCE ARK	04/20/82	06/23/82
E5AH2090037-20795	IT CORPORATION WILMINGTON CA	04/20/82	04/20/82
E1UW2090038-20796	REGION IX-CHANGE ORDER REVIEW	04/20/82	08/18/82
D3AA2050379-20797	CHARLES RIVER ASSOC BOSTON MA	04/21/82	08/16/82
D3D02070380-20798	MIDWEST RES INST KANSAS CTY MO	04/21/82	04/21/82
D3D02070375-20799	MIDWEST RES INST KANSAS CTY MO	04/21/82	04/21/82
E2CW2090098-20800	CRESCENT CITY CA	04/21/82	
D3D02030246-20801	BURNS & ROE INDUSTRIAL SERV-NJ	04/21/82	06/15/82
D3C02010165-20802	YORK RESEARCH CORPORATION CT	04/21/82	07/01/82
D3C02010166-20803	COMBUSTION ENGINEERING INC CT	04/21/82	09/29/82
D3B02070383-20804	MIDWEST RES INST KANSAS CITY M	04/22/82	04/22/82
D3B02070382-20805	MIDWEST RES INST KANSAS CTY M	04/22/82	04/22/82

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D3B02070381-20806	MIDWEST RES INST KANSAS CITY M	04/22/82	04/22/82
D3B02070384-20807	MIDWEST RES INST KANSAS CTY MO	04/22/82	04/22/82
D3C02070350-20808	MIDWEST RES INST KANSAS CITY M	04/22/82	04/22/82
D3C02050277-20809	FRED DEBRA CINCINNATI OH	04/22/82	04/22/82
D3C02070328-20810	MIDWEST RES INST KANSAS CITY M	04/22/82	04/22/82
D3A02050317-20811	ETA ENGINEERING IN WESTMONT IL	04/22/82	04/22/82
D3A02050338-20812	PEDCO ENVIRON CINCINNATI	04/22/82	04/22/82
P2CW1050046-20813	MARSHALL MN	04/22/82	
D3A02060120-20814	BAKER LAWSON/DAN SHERWOOD TX	04/22/82	06/16/82
E1Z02060105-20815	REG VI REVIEW OF DELIN DBTS TX	04/22/82	08/16/82
E1ZW1100064-20816	DELAYS IN CLOSING CONST GRANTS	04/22/82	04/22/82
E3C02100055-20817	ALDER CREEK WATER COMPANY OR	04/22/82	04/22/82
P2CW1030135-20818	MANCHESTER PA	04/23/82	09/24/82
D3B02030254-20819	GANNETT FLEMING INC-PA	04/23/82	09/10/82
D3C02030255-20820	BOOZ ALLEN & AHMILTON INC-MD	04/23/82	04/23/82
D3A02030247-20821	FEIN MARQUART ASSOCIATES-MD	04/23/82	10/14/82
D3C02030003-20822	ROY F WESTON	04/23/82	04/23/82
D3D00030246-20823	SRAC - DC	04/23/82	05/24/82
D3C01030262-20824	SYSTEMS SCIENCES	04/23/82	04/23/82
D3C01030235-20825	MAR INC	04/23/82	04/23/82
H3CW1050098-20826	MICHIGAN DOH LANSING MI	04/23/82	10/07/82
P5AH2020123-20827	CECOS INTERNATIONAL INC NY	04/23/82	09/16/82
P5AH2020125-20828	CECOS INTERNATIONAL INC NY	04/23/82	04/28/82
P5AH2020124-20829	RESOURCE CONSERVATION NH	04/23/82	09/16/82
P2CW1020012-20830	MIDDLETOWN SA NJ	04/23/82	09/15/82

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D3C02020128-20831	SYRACUSE RESEARCH CORP NY	04/23/82	04/23/82
E5AH2050140-20832	COMRP PUMP INCIN HIGHLAND IN	04/26/82	09/16/82
D3A02050324-20833	MONSANTO RES CORP DAYTON OH	04/27/82	04/27/82
D3C02050315-20834	BATTELLE COLUMBUS LAB OH	04/27/82	04/27/82
H3A02050331-20835	U OF WIS SUPERIOR WI	04/27/82	
H3A02050319-20836	ST OLAF COLLEGE NORTHFIELD MN	04/27/82	06/15/82
D3A02070320-20837	DEVLP PLNG & RES MANHATTAN KS	04/27/82	04/27/82
P2CW2040033-20838	WEST SMITHFIELD SANIT DIST NC	04/27/82	05/04/82
P3C00040021-20839	NC DEPT HUMAN RESOURCES	04/27/82	08/27/82
E2CW2080021-20840	GRAND JUNCTION CO CITY OF	04/27/82	
P2CW2080038-20841	BOZEMAN MONTANA CITY OF	04/27/82	04/27/82
D3A02090139-20842	JONES & STOKES ASOC SACTO CA	04/27/82	04/27/82
D3CA2090140-20843	PACIFIC ENVIR SERV S MONICA CA	04/27/82	04/27/82
D3CA2090141-20844	PACIFIC ENVIR SERV S MONICA CA	04/27/82	04/27/82
D3AH2090142-20845	CALSCIENCE RESCH HUNT BEACH CA	04/27/82	04/27/82
D3A02090143-20846	WOODWARD-CLYDE CONSULT SF CA	04/27/82	04/27/82
D3C02090144-20847	PACIFIC ENVIR SERV S MONICA CA	04/27/82	04/27/82
D3A02090145-20848	DAVID DORNBUSCH & CO SF CA	04/27/82	04/27/82
D3D02090146-20849	CAL RECOVERY SYS RICHMOND CA	04/27/82	04/27/82
D3A02090147-20850	ENGINEERING SCIENCE ARCADIA CA	04/27/82	04/27/82
D3C02090148-20851	METEOROLOGY RESCH ALTANTA CA	04/27/82	04/27/82
D3A02090149-20852	TETRA TECH INC PASADENA CA	04/27/82	04/27/82
D3A02090150-20853	ROCKWELL INTL NEWBURY PARK CA	04/27/82	04/27/82
D3A02090151-20854	SOBOTKA & CO SAN RAFAEL CA	04/27/82	04/27/82
D3A02100065-20855	EVS CONSULTANT MERCER ISL WA	04/27/82	06/17/82

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D3A02100066-20856	ALSID SNOWDEN ASOC BELLEVUE MA	04/27/82	04/27/82
D3A02100067-20857	ENTRANCO ENGINEERS BELLEVUE MA	04/27/82	04/27/82
D3A02100068-20858	KAHN/MORTIMER ASOC SEATTLE MA	04/27/82	04/27/82
D3A02100069-20859	PARAMETRIX INC SUMNER CA	04/27/82	04/27/82
E2CW2080068-20860	BEULAH ND CITY OF	04/28/82	04/28/82
D3D00010119-20861	WALDEN RESEARCH DIV OF ABCOR M	04/28/82	04/28/82
D3D02010103-20862	BARRY LAWSON	04/28/82	04/28/82
D3AW2010167-20863	WOODS HOLE OCEANOGRAPHIC INSM	04/28/82	04/28/82
D5AH2010168-20864	JBF SCIENTIFIC CORP MA	04/28/82	04/28/82
D5AH2010169-20865	ARTHUR D LITTLE INC MA	04/28/82	04/28/82
D3CA2010170-20866	ENVIRONMENTAL RESEARCH TEC MA	04/28/82	04/28/82
D3CA2010171-20867	ENVIRONMENTAL RESEARCH TEC MA	04/28/82	04/28/82
D3CA2010172-20868	ENVIRONMENTAL RESEARCH TEC MA	04/28/82	04/28/82
D3A02010173-20869	CHARLES RIVER ASSOC INC MA	04/28/82	07/12/82
D3A02010174-20870	ADVANCED FUEL RESEARCH INC CT	04/28/82	04/28/82
D3CA2010175-20871	ENVIRONMENTAL RESEARCH TEC MA	04/28/82	04/28/82
D3AW2010176-20872	ARTHUR D LITTLE INC MA	04/28/82	04/28/82
D3AW2010177-20873	URBAN SYSTEMS RESEARCH ENG MA	04/28/82	04/28/82
D3C02010178-20874	ABCOR INC WALDEN RES DIV MA	04/28/82	04/28/82
D5AH2010179-20875	CAMP DRESSER MCKEE INC MA	04/28/82	04/28/82
D3C00050366-20876	BATTELLE MEM INST COLUMBUS OH	04/29/82	04/29/82
D3AH2020129-20877	RECRA RESEARCH INC NY	04/30/82	
D3AW2020127-20878	GERAGHTY & MILLER NY	04/30/82	06/15/82
D3A02020126-20879	FRED C HART NY	04/30/82	04/30/82
D3A02010181-20880	TRC ENVIRONMENTAL CONS CT	05/03/82	05/03/82

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D3CA2010182-20881	ENVIRONMENTAL RESEARCH TEC MA	05/03/82	05/03/82
D3CO2030202-20882	HITTMAN ASSOCIATES INC-MD	05/03/82	05/03/82
E5AO2060111-20883	T BROWN CONSTRUCTION INC NM	05/03/82	06/25/82
D3AA2090157-20884	TEKNEKRON RESEARCH BERKELEY CA	05/03/82	05/03/82
D3CH2090156-20885	SCS ENGINEERS LONG BEACH CA	05/03/82	05/03/82
D3DO2090159-20886	BECHTEL CORP SAN FRANCISCO CA	05/03/82	05/03/82
D3AO2090158-20887	SCS ENGINEERS LONG BEACH CA	05/03/82	05/03/82
P2BW1030455-20888	GREENBRIER COUNTY PSD #2	05/04/82	
P3CO2040171-20889	NC DEPT OF AGRICULTURE NC	05/04/82	08/03/82
D3DO2060123-20890	CRS GROUP ENGINEERS INC TX	05/04/82	05/07/82
D3CO2060124-20891	WALK HAYDEL & ASSOC	05/04/82	
H3CO2050378-20892	PURDUE UNIV W LAFAYETTE IN	05/04/82	05/04/82
S2BW0090175-20893	SACRAMENTO REGION CSD SACTO CA	05/04/82	
S2CW0090217-20894	LOS ANGELES CO CSD WHITTIER	05/04/82	07/13/82
E2CW2090113-20895	ANGELS CA CITY OF	05/04/82	
D3AO2020122-20896	UNIVERSITY OF ROCHESTER NY	05/04/82	06/21/82
E1ZO1110040-20897	W-4 WITHHOLDING ALLOWANCE	05/05/82	05/05/82
D3DO1030100-20898	ICF INC-DC	05/05/82	06/07/82
D3DO1030182-20899	ENERGY & ENVIRONMENTAL ANALYSI	05/05/82	05/05/82
D3DO2030270-20900	PRC SYSTEMS-VA	05/05/82	07/23/82
D3AO2030249-20901	NATIONAL ACADEMY OF SCIENCE-DC	05/05/82	05/05/82
D3CO1030323-20902	CAMP DRESSER & MCKEE	05/05/82	05/05/82
D3CO2030267-20903	BOOZ ALLEN & HAMILTON-MD	05/05/82	05/05/82
S2CW0090302-20904	LOS ANGELES CSD WHITTIER CA	05/05/82	05/21/82
S2CW0090336-20905	LOS ANGELES CO CSD WHITTIER	05/05/82	06/03/82

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E3D08050023-20906	MSD CHGO IL	05/05/82	05/05/82
D3A02050376-20907	BATTELLE MEM INST COLUMBUS OH	05/06/82	09/01/82
E2CW9030070-20908	AMITY TOWNSHIP-PA	05/06/82	09/28/82
E2BW9030108-20909	BLUEFIELD SANITARY BOARD-WV	05/06/82	09/28/82
E2CW9030068-20910	BLUEFIELD SANITARY BOARD-WV	05/06/82	09/14/82
E2CW9030130-20911	BLUEFIELD SANITARY BOARD-WV	05/06/82	
E2CW9030069-20912	BLUEFIELD SANITARY BOARD-WV	05/06/82	09/14/82
S2CW0090225-20913	LOS ANGELES CO CSD WHITTIER	05/06/82	10/21/82
D3A02100075-20914	SHAPIRO & ASSOCIATE SEATTLE WA	05/06/82	05/06/82
H3C02080074-20915	COLORADO UNIVERSITY OF DENVER	05/06/82	05/06/82
H3C02080075-20916	NAT JEW HOSPT RESCH DENVER CO	05/06/82	05/06/82
D3CW2080076-20917	DENVER UNIVERSITY OF CO	05/06/82	05/06/82
D3AH2090163-20918	TRW INC REDONDO BEACH CA	05/06/82	09/21/82
E1HW2100071-20919	REGION X WA	05/06/82	09/01/82
D3A02030209-20920	SOBOTKA & CO INC-DC	05/07/82	06/08/82
D3C02030271-20921	APPLIED SCIENCE ASSOC-PA	05/07/82	05/07/82
H3C02030039-20922	TEMPLE UNIVERSITY OF MEDICINE	05/07/82	05/07/82
D3A02030231-20923	INFORMATICS INC-MD	05/07/82	05/07/82
D3A02030278-20924	CLEMENT ASSOCIATES IN-DC	05/07/82	06/08/82
D3CB2010111-20925	RAYTHEON CO	05/10/82	05/10/82
D3CW2010187-20926	RAYTHEON COMPANY RI	05/10/82	05/10/82
D3A02010186-20927	GCA/TECHNOLOGY DIV MA	05/10/82	05/10/82
D5AH2010185-20928	E C JORDAN CO INC ME	05/10/82	05/10/82
P2CW0030117-20929	HAGERSTOWN - MD	05/10/82	
D2AW2050309-20930	AA MATHEWS HOUSTON TX	05/10/82	10/07/82

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D3C02030465-20931	VERSAR INC-VA	09/08/82	09/08/82
D3A02050373-20932	MONSANTO RESEARCH DAYTON OH	05/10/82	
E2CW2080055-20933	FREEMAN SD CITY OF	05/10/82	05/10/82
D3C02050377-20934	SYSTECH CORP ZENIA OH	05/11/82	05/11/82
H3CP2050396-20935	PURDUE UNIVERSITY IN	05/11/82	09/08/82
D3C02030264-20936	NUS CORPORATION-MD	05/11/82	05/11/82
D3A02030192-20937	COMPUTER SCIENCES CORP-VA	05/11/82	08/24/82
D3A02030227-20938	COMPUTER SCIENCE CORP-VA	05/11/82	10/18/82
D3D02030283-20939	TRITON CORPORATION-DC	05/11/82	07/13/82
D3C00030061-20940	HALIFAX ENGINEERING	05/11/82	05/11/82
D3D01030342-20941	ASSOC ANALYTICAL CHEM-VA	05/11/82	07/13/82
D3CA2090164-20942	SRI INTERNATIONAL MENLO PARK CA	05/11/82	05/11/82
D3C02090166-20943	PACIFIC ENVIR SERV S MONICA CA	05/11/82	05/11/82
S2CW1090152-20944	KETTLEMAN CA CITY OF	05/12/82	
E5AH2050136-20945	SPILL RECOVERY INDIANAPOLIS IN	05/12/82	09/16/82
E2CW2070065-20946	WILLIAMSBURG SDTP MO	05/13/82	07/28/82
S2CW1090095-20947	THOUSAND OAKS CA CITY OF	05/13/82	06/03/82
H3A02050333-20948	CASE WESTERN RESERVE U CLEVE O	05/13/82	10/07/82
E2CW2080031-20949	TOOELE CITY CORPORATION UT	05/14/82	
D3D02050083-20950	ESEI SOUTH BEND IN	05/17/82	05/17/82
D3D02050405-20951	REXNORD INC MILWAUKEE WI	05/17/82	05/17/82
H3A02050332-20952	U OF MICHIGAN ARBOR MI	05/17/82	09/28/82
D3A02030228-20953	SCIENCE MANAGEMENT CORP-MD	05/17/82	09/17/82
D3A02030250-20954	ENERGY & ENVIRON ANALYSIS-VA	05/17/82	09/02/82
D3A02030272-20955	PERFORMANCE DEVELOPMENT INS-DC	05/17/82	05/17/82

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E2CW2060031-20956	CORPUS CHRISTI TX	05/18/82	08/16/82
E2CW2060065-20957	CORPUS CHRISTI TX	05/18/82	
P2AW2060017-20958	MEHLBURGER TANNER RENDHAM ASSO	05/18/82	07/22/82
P2CW2060027-20959	GIDDINGS TX	05/18/82	06/14/82
P2CW2060047-20960	EL DORADO ARK	05/18/82	06/23/82
E2CW1040197-20961	FULTON CO GA	05/18/82	09/28/82
E3AO2040166-20962	IT ENVIROSCIENCE INC. TN	05/17/82	
E2CW1100095-20963	TILLAMOOK OREGON CITY OF	05/18/82	08/13/82
D3CO2090115-20964	SRI INTERNATIONAL MENLO PARK CA	05/18/82	05/18/82
D3CA2090167-20965	PACIFIC ENVIR SERV S MONICA CA	05/18/82	05/18/82
D3CO2090168-20966	PACIFIC ENVIR SERV S MONICA CA	05/18/82	05/18/82
D3CO2090169-20967	PACIFIC ENVIR SERV S MONICA CA	05/18/82	05/18/82
D3AH2090170-20968	ACUREX CORP MOUNTAIN VIEW CA	05/18/82	05/18/82
D3CA2090171-20969	AIR POLLUTION TECH S DIEGO CA	05/18/82	05/18/82
D3CA2090172-20970	AIR POLLUTION TECH S DIEGO CA	05/18/82	05/18/82
D3CA2090173-20971	AIR POLLUTION TECH S DIEGO CA	05/18/82	05/18/82
D3CA2090174-20972	AIR POLLUTION TECH S DIEGO CA	05/18/82	05/18/82
H3AO2090175-20973	CA UNIV OF DAVIS	05/18/82	05/18/82
D3CO2090176-20974	PACIFIC ENVIR SERV S MONICA CA	05/18/82	05/18/82
D3CO2090177-20975	SCS ENGINEERS LONG BEACH CA	05/18/82	05/18/82
D3CO2090178-20976	SCIENCE APPLICATION LA JOLA CA	05/18/82	05/18/82
D3B02030262-20977	CATALYTIC INC-PA	05/19/82	05/19/82
E2CW2080050-20978	CORVALLIS COUNTY SEWER DIST MT	05/19/82	05/19/82
D3D01010100-20979	METCALF & EDDY INC MA	06/11/82	08/16/82
E2CW2080071-20980	PUEBLO CO CITY OF	05/20/82	05/20/82

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C3E02060135-20981	WICHITA FALLS	05/20/82	05/21/82
C3F02060134-20982	WICHITA FALLS	05/20/82	05/21/82
C3E02040189-20983	TALLAHASSEE FL	05/20/82	05/21/82
C3F02040188-20984	TALLAHASSEE FL	05/20/82	05/21/82
D3A02040184-20985	ENVIRONMENTAL SC & ENGR FL	05/20/82	
D3A02060133-20986	RADIAN CORPORATION	05/20/82	08/20/82
D3B02020151-20987	ECOLOGY & ENVIRONMENT NY	05/20/82	
D3A02020150-20988	ECOLOGY & ENVIRONMENT NY	05/20/82	
D3D02020134-20989	CALSPAN CORP	05/20/82	05/20/82
05AH2020131-20990	CONESTOGA ROVERS & ASSC LTD	05/20/82	05/20/82
D3A02050323-20991	TENECH ENVIRO ENGR SO BEND IN	05/20/82	06/24/82
D3A02050398-20992	UNIV OF DAYTON OH	05/20/82	05/20/82
D3A02070374-20993	MIDWEST RES INST KANSAS CITY M	05/20/82	05/20/82
D3C01070442-20994	K. TOOMER CPA MARYLAND HTS MO	05/20/82	06/23/82
E2CW2100058-20995	QUILEUTE TRIBAL COUNCIL WA	05/21/82	05/21/82
E5AH2050133-20996	MIDWEST PCI MT PLEASANT MI	05/21/82	09/16/82
P2AW2050256-20997	HERBERT G WHYTE ASSOC IN	05/21/82	
P3DW1020013-20998	CTY OF NASSAU PUBLIC WORKS NY	05/24/82	05/24/82
P2AW1020135-20999	LOZIER INC NY	05/24/82	
D3C02020018-21000	BEUKERS LAB INC NY	05/24/82	09/08/82
05AH2020159-21001	CONESTOGA ROVERS & ASSOC LTD	05/24/82	05/24/82
P2AW1020140-21002	ERDMAN ANTHONY LOZIER NY	05/24/82	
P2AW1020134-21003	ERDMAN ANTHONY ASSOCIATES NY	05/24/82	
H3C02050307-21004	U OF WI MADISON WI	05/25/82	05/25/82
D3A02030259-21005	BOOZ ALLEN & HAMILTON INC-MD	05/24/82	05/24/82

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D3B02030294-21006	BOOZ ALLEN & HAMILTON INC-MD	05/24/82	05/24/82
H3C01050380-21007	HEIDELBERG COLLEGE TIFFIN OH	05/24/82	10/07/82
D3A02050386-21008	MIDLAND ROSS CORP CLEVELAND OH	05/25/82	05/25/82
D3A02050404-21009	PEDCO ENVIRON CINCINNATI OH	05/25/82	06/23/82
D3A02090179-21010	TRW INC REDONDO BEACH CA	05/25/82	05/25/82
D3AH2090180-21011	TRW INC REDONDO BEACH CA	05/25/82	10/21/82
P2CW1010022-21012	GLASTONBURY CONN	05/27/82	
D3AS2010196-21013	GCA CORPORATION MA	05/27/82	05/27/82
D3C02010197-21014	UNITED TECHNOLOGIES CORP CT	05/27/82	05/27/82
D3C02010198-21015	UNITED TECHNOLOGIES CORP CT	05/27/82	05/27/82
D3A02010199-21016	ARTHUR D LITTLE INC MA MCAB	05/27/82	05/27/82
P2CW1030134-21017	LYNN TWP SEWER AUTH	05/27/82	09/16/82
P2CW1030140-21018	TUNKHANNOCK-PA	05/27/82	09/21/82
N3G02040191-21019	SEMINOLE COUNTY FL	05/25/82	05/28/82
N3G02040190-21020	BREVARD CO FL	05/25/82	05/28/82
E2CW2040124-21021	DELRAY BEACH FL	05/25/82	09/07/82
D3C02060132-21022	RADIAN CORPORATION	05/25/82	05/28/82
D3A02040186-21023	D P ASSOCIATES	05/25/82	09/20/82
D3A02040187-21024	INTERNATIONAL INCINERATORS GA	05/25/82	
P2AW2060038-21025	D RALPH CAFFERY ASSOC LA	05/25/82	07/08/82
P2CW1040179-21026	PALM BEACH FL	05/25/82	06/30/82
E2CW1040017-21027	BOYNTON & DELRAY BCH FL	05/28/82	09/15/82
N3G02060139-21028	REG PL COMM JEFF ORL ST BER LA	05/25/82	08/13/82
E3CW0050153-21029	NOACA CLEVELAND OH	05/27/82	10/07/82
E2CW2100007-21030	SHELTON WASHINGTON CITY OF	05/28/82	05/28/82

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E2BW1090240-21031	PETALUMA CA CITY OF	06/01/82	
E2CW2090084-21032	ELKO COUNTY JACKPOT NEVADA	06/01/82	07/20/82
D3CA2090181-21033	PACIFIC ENVIR SERV S MONICA CA	06/01/82	06/01/82
D3CA2090182-21034	PACIFIC ENVIR SERV S MONICA CA	06/01/82	06/01/82
D3CA2090183-21035	PACIFIC ENVIR SERV S MONICA CA	06/01/82	06/01/82
N3GO2060140-21036	ASSOCIATION OF OKLA GOVTS OK	06/01/82	06/03/82
P2CW9040334-21037	NEWTON NC	06/01/82	
N3GO2040197-21038	ATLANTA REGIONAL COMMISSION GA	06/01/82	06/03/82
S2CW0040182-21039	METRO GOVT NASHVILLE DAVIDSON	06/01/82	10/13/82
E1ZO2060030-21040	REG VI INNOVATIVE & ALTERNATIV	06/01/82	06/02/82
P2CW1030177-21041	RIVERBEND PSD-WV	06/02/82	07/28/82
P2CW1030121-21042	CAMPBELL COUNTY-VA	06/02/82	07/29/82
D3DW2050418-21043	EMA INC ST PAUL MN	06/02/82	06/02/82
P2BW2050013-21044	TROY IL	06/02/82	06/02/82
H3AO2050440-21045	UNIV OF CINCINNATI OH	06/02/82	07/29/82
D3AO2030245-21046	VERSAR INC-VA	06/03/82	06/03/82
D3CO2030301-21047	NAT'L ASSOC OF COUNTIES-DC	06/03/82	06/29/82
D3AO2030296-21048	COMPUTER DATA SYSTEMS INC-MD	06/03/82	09/17/82
D3CO2060138-21049	SOUTHWEST RESEARCH INST S.A.TX	06/03/82	06/03/82
D3CO2040195-21050	WYLE LABORATORIES	06/03/82	06/12/82
E3AO2060086-21051	NO TX STATE UNIV (PETRA) T	06/03/82	10/12/82
D3AO2090194-21052	HARDING LAWSON ASOC NOVATO CA	06/03/82	06/03/82
D3CO2030236-21053	GANNETT FLEMING CORD & CARP-PA	06/04/82	06/04/82
D3CO2030251-21054	CALCULON CORPORATION-PA	06/04/82	06/04/82
D3DO2030316-21055	WAPORA INC-MD	06/04/82	08/13/82

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D3A02030256-21056	UNITED ENGINEERS-TN	06/04/82	10/20/82
D3A02030257-21057	PRC GOVERNMENT INFO SYSTEMS-VA	06/04/82	08/31/82
E2CW2100045-21058	WESTPORT WA CITY OF	06/04/82	09/07/82
E2CW1080082-21059	HANKINSON ND DAKOTA CITY OF	06/04/82	
E2CW1080083-21060	GREAT FALLS MONTANA CITY OF	06/04/82	
D3A01020064-21061	AMERICAN SOCIETY CIVIL ENG NY	06/04/82	
D3C02020161-21062	BOWNE TIME SHARING INC NY	06/04/82	
D3C02020162-21063	ECOLOGY & ENVIRONMENT NY	06/04/82	
D3D02030314-21064	VERSAR INC-VA	06/07/82	07/13/82
D3D02030313-21065	HALIFAX ENGINEERING-VA	06/07/82	09/03/82
D3A02030315-21066	ELECTRONIC DATA SYSTEMS FC-MD	06/07/82	09/17/82
D3A02030321-21067	ENVIRONMENTAL LAW INSTITUTE-DC	06/07/82	06/07/82
D3A02030275-21068	ROY F WESTON-PA	06/07/82	06/07/82
D3C02050394-21069	MEAD TECHNOLOGY LAB DAYTON OH	06/07/82	06/07/82
D3C02050442-21070	MTL SYSTEMS INC DAYTON OH	06/07/82	
S2CW1090070-21071	LOS ANGELES CSD #2 CA	06/07/82	
S2CW1090083-21072	LOS ANGELES CSD #2 WHITTIER CA	06/07/82	06/07/82
D3A02030274-21073	JACK FAUCETT ASSOCIATES-MD	06/08/82	09/14/82
D3C02030306-21074	CALCULON CORPORATION-PA	06/08/82	06/08/82
D3C02030307-21075	CALCULON CORPORATION-PA	06/08/82	06/08/82
D3C02030308-21076	CALCULON CORPORATION-PA	06/08/82	06/08/82
D3C02030309-21077	CALCULON CORPORATION-PA	06/08/82	06/08/82
D3A02030258-21078	ARTHUR YOUNG & CO-DC	06/08/82	06/08/82
D3A02030322-21079	AMERICAN MANAGEMENT SYSTEMS-VA	06/08/82	06/08/82
D3D02030320-21080	MINE SAFETY APPLIANCE CO-PA	06/08/82	07/22/82

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D3C02090195-21081	PACIFIC ENVIR SERV S MONICA CA	06/08/82	06/08/82
D3C02100082-21082	AIR POLLUTION SYSTEMS KENT WA	06/08/82	06/08/82
D3A02100083-21083	BOEING COMPUTER SER SEATTLE WA	06/08/82	06/08/82
H3CP1050409-21084	PURDUE UNIV W/LAFAYETTE IN	06/08/82	10/07/82
S2CW0090219-21085	BLYTHE CA CITY OF	06/08/82	
S2CW2090100-21086	EASTERN MWD HEMET CA	06/08/82	
S2CW2090102-21087	KERN COUNTY CA	06/08/82	09/21/82
D3A02090197-21088	ROCKWELL INTL NEWBURY PARK CA	06/10/82	06/10/82
E5CH2100076-21089	ECOLOGY DEPT OF WA	06/10/82	10/07/82
E3CW2040018-21090	CHARLOTTE HARBOR WATER ASSOCFL	06/10/82	
D3A02040202-21091	ENTROPHY ENVIRO (RTI) NC	06/10/82	06/30/82
P2CW2040048-21092	BROWARD CO FL	06/10/82	09/02/82
E1ZW1040087-21093	CG OBLIGATIONS & EXPENDITURES	06/10/82	08/16/82
H3C02040194-21094	UNIV OF MISSISSIPPI MED CTR MS	06/10/82	06/12/82
D3C02010058-21095	YORK RESEARCH CORP	06/10/82	06/10/82
D2AW2010201-21096	WCH INDUSTRIES INC MA	06/10/82	06/10/82
D3C02050303-21097	IIT RESEARCH INST CHGO IL	06/14/82	06/14/82
D3C02050446-21098	BATTELLE MEM INST COLUMBUS OH	06/14/82	06/14/82
E5CH2070314-21099	BROSKI BROS KANSAS CITY MO	06/14/82	
P2BW1100091-21100	RUPERT IDAHO CITY OF	06/14/82	
N3G02040199-21101	KENTUCKY DEPT NATURAL RES KY	06/15/82	
D3D02040203-21102	NORTHROP SERVICES	06/15/82	07/08/82
H3A02040204-21103	RESEARCH TRIANGLE INSTITUTE NC	06/15/82	09/02/82
N3G02040205-21104	GEORGIA DEPT NATURAL RES GA	06/15/82	08/12/82
N3G02040209-21105	WEST FLORIDA REG PL COUNCIL FL	06/15/82	06/15/82

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D3C02060146-21106	RESOURCE CONVERSION SYSTEMS TX	06/15/82	
D3C02010073-21107	ABCOR INC	06/15/82	06/15/82
D3D02090198-21108	TECHNOLOGY SERV S MONICA CA	06/15/82	06/15/82
P3AM2020120-21109	PASSERO-SCARDETTA ASSOC NY	06/15/82	
P2AM2020145-21110	MUESER RUTLEDGE JOHNSTON NY	06/15/82	
P3AM2020119-21111	JOSEPH C LU PE NY	06/15/82	
D3A02030265-21112	COMPUTER SCIENCE CORP-VA	06/16/82	09/17/82
D3A02030299-21113	SYNECTICS GROUP INC-DC	06/16/82	06/16/82
D3D01030220-21114	TRACOR JITCO INC	06/16/82	06/24/82
D3A02030273-21115	SOBOTKA & CO. INC-DC	06/16/82	09/21/82
D3C02030330-21116	AUTOMATION LABORATORIES-MD	06/16/82	06/16/82
D3D02030331-21117	AMER INST OF BIOLOGICAL SCI-VA	06/16/82	08/11/82
D3D02030332-21118	GENERAL ELECTRIC CORP-PA	06/16/82	06/24/82
D3C02030333-21119	MINE SAFETY APPLIANCE CO-PA	06/16/82	06/16/82
E5AH2010088-21120	SCA CHEMICAL SERVICES	06/16/82	06/16/82
D3B02010121-21121	CAMBRIDGE DIAGNOSTICS INC MA	06/16/82	09/24/82
D3C02010210-21122	TRC RESEARCH CORP OF NE CT	06/16/82	
E2CW1100075-21123	LYNNWOOD WA CITY OF	06/16/82	06/16/82
E2CW2080084-21124	SALT LAKE CITY CORPORATION UT	06/16/82	06/16/82
H3A02050391-21125	UNIVER OF WI SUPERIOR WI	06/17/82	
D3A02060148-21126	RADIAN (PERFORMANCE DEV INS)TX	06/17/82	09/28/82
D3D01060153-21127	TERECO CORP	06/17/82	08/16/82
D3C02060147-21128	TERECO CORPORATION	06/17/82	07/09/82
P2CW2040069-21129	VERSAILLES KY	06/17/82	
D3A02090199-21130	SRI INTERNATIONAL MENLO PARK CA	06/17/82	06/17/82

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D3D02090200-21131	HAWAII UNIVERSITY OF HONOLULU	06/17/82	06/17/82
D3D01010075-21132	YORK RESEARCH CORP CT	06/18/82	09/13/82
D3AW2010211-21133	URBAN SYSTEMS RESEARCH&ENG MA	06/18/82	09/24/82
D3AW2010212-21134	URBAN SYSTEMS RESEARCH ENG MA	06/18/82	06/18/82
P2CW1030067-21135	SWOYERSVILLE MUN. AUTH	06/21/82	
D3DW2020006-21136	DMJM ROTFELD CA	06/21/82	06/21/82
P3CA1020021-21137	HUDSON REGIONAL HEALTH COMM NJ	06/21/82	
P3CO2020160-21138	NEW YORK CITY TAXI COMM NY	06/21/82	
D3D02090201-21139	JONES & STOKES ASOC SACTO CA	06/21/82	06/21/82
D3D02090202-21140	ROCKWELL INTL THOUSAND OAKS CA	06/22/82	06/22/82
P2CW1030142-21141	WALNUTPORT SEWER AUTH-PA	06/23/82	09/21/82
D3DW1050345-21142	POLYTECH INC CLEVELAND OH	06/23/82	06/23/82
S2CW2090126-21143	LOS ANGELES CSD #2 WHITTIE CA	06/23/82	06/23/82
E2AW2090138-21144	RICHGROVE COMM SER DIST CA	06/23/82	
D3DW2050355-21145	HNRW INC CHICAGO IL	06/24/82	06/24/82
P2CW1030173-21146	MOUNT UNION MUNICIPAL AUTH-PA	06/24/82	09/27/82
D3A02010213-21147	CORTEX CORP MA	06/24/82	08/16/82
D3B02010214-21148	MASS INSTITUTE OF TECH MA	06/24/82	06/24/82
D3CO2010215-21149	ABCOR INC WALDEN RESEARCH DI M	06/24/82	06/24/82
D3A02010216-21150	SPRINGBORN GROUP INC CT	06/24/82	06/24/82
D3A02010217-21151	MASS INSTITUTE OF TECH MA	06/24/82	06/24/82
D3D02030343-21152	BROOKINGS INSTITUTION-DC	06/24/82	06/29/82
D3D02050400-21153	CRS GROUP, INC HOUSTON TX	06/24/82	06/24/82
D3DW2050354-21154	WENDELL CAMPBELL ASSOC CHICAGO	06/24/82	06/24/82
P2BW2050014-21155	PORTAGE TOWNSHIP MI	06/24/82	06/24/82

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P2CW1050044-21156	PORTAGE COUNTY BCC RAVENNA OH	06/24/82	
H3BO2080085-21157	WYOMING UNIVERSITY OF LARAMIE	06/25/82	06/25/82
E3AH2090160-21158	IT CORP WILMINGTON CA	06/25/82	06/25/82
P2CW1030056-21159	LOWER SALFORD TWP AUTH	06/28/82	
S2BW2090213-21160	VICTOR VALLEY WM REC AUTH CA	06/28/82	
D3CO2010220-21161	BARRY LAWSON ASSOCIATES INC MA	06/28/82	06/28/82
D3CW2010221-21162	E C JORDAN CO INC ME	06/28/82	06/28/82
E3DW2090129-21163	EAST BAY MUNI UTILITY DIST CA	06/25/82	06/25/82
P2CW1030191-21164	POINT MARION MUNICIPAL AUTH-PA	06/28/82	
P2CW1060147-21165	GILBERT LA	06/28/82	
D3CO2040215-21166	STEWART LABORATORIES KNOX TN	06/28/82	06/30/82
P2AW2060048-21167	BOULDER ENGR CORP	06/28/82	08/17/82
D3AO2040216-21168	PRIEDE-SEDGWICK INC JAX FL	06/28/82	06/30/82
P2CW1060141-21169	SHREVEPORT LA	06/28/82	09/30/82
P2CW1060137-21170	MANY LA	06/28/82	08/25/82
P2CW2060019-21171	DEVERS TX	06/28/82	09/02/82
H3CO2060151-21172	TEXAS A&M UNIVERSITY CS TX	06/28/82	10/13/82
D3CO2040220-21173	WYLE LABORATORIES AL	06/28/82	07/22/82
E5AH2050389-21174	BERLEKAMP CONST GREEN SPRINGS	06/29/82	09/23/82
D3AO2030266-21175	CRC SYSTEM-VA	06/29/82	06/29/82
D3BO2030342-21176	ATRIS ASSOCIATES INCORP-MD	06/29/82	06/29/82
D3AO2090219-21177	SDC-SERVICES GROUP S MONICA CA	06/29/82	10/05/82
D3DO2060154-21178	LOCKHEED ENGR & MGMT SVC CO TX	06/30/82	09/28/82
D3CO2060155-21179	SOUTHWEST RESEARCH INST TX	06/30/82	07/01/82
D3AO2050407-21180	UNIV OF IL	06/29/82	

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D3C02030261-21181	VERSAR INC-VA	06/30/82	06/30/82
D3C02030345-21182	MINE SAFETY APPLIANCE CO-PA	06/30/82	06/30/82
D3D02030347-21183	NATIONAL CENTER RESOURCE-DC	06/30/82	08/04/82
P2CW0100005-21184	WRANGELL ALASKA CITY OF	06/30/82	10/05/82
D3C02090221-21185	SRI INTERNATIONAL MENLO PARK CA	06/30/82	06/30/82
E5EH2110005-21186	HEADQUARTERS SUPERFUND	07/01/82	
D3A02030285-21187	VIAR & CO-VA	07/01/82	09/17/82
D3C02030344-21188	AUTOMATION INDUSTRIES INC-MD	07/01/82	07/23/82
E5AH2030141-21189	SAVAGE CONSTRUCTION CO-WV	07/01/82	09/14/82
D3B02080086-21190	DENVER UNIVERSITY OF COLORADO	07/01/82	07/01/82
S2BW0090174-21191	SACRAMENTO REGION CSD SACTO CA	07/01/82	
S2CW0090199-21192	SAN FRANCISCO CA CITY & CTY OF	07/01/82	
S2CW2090215-21193	SAN FRANCISCO CITY & COUNTY CA	07/01/82	
E2CW2100008-21194	SW SUBURBAN SEWER DISTRICT WA	07/01/82	07/01/82
D3A02030260-21195	CRC SYSTEMS INC-VA	07/02/82	08/31/82
D2AW2040134-21196	PROFESSIONAL SERVICES GROUP	07/02/82	07/08/82
E5C02040198-21197	SCA SERVICES INCORPORATED SC	07/02/82	10/13/82
D3D02030346-21198	CHECCHI AND COMPANY-DC	07/07/82	08/11/82
D3C02030038-21199	JACA CORPORATION-PA	07/07/82	07/07/82
D3C02030353-21200	JACA CORPORATION-PA	07/07/82	07/07/82
D3D02010226-21201	META SYSTEMS INC MA	07/07/82	07/07/82
D3B02010227-21202	META SYSTEMS INC MA	07/07/82	07/09/82
E2CW2100009-21203	SKAGIT CQ SEWER DIST NO 2 WA	07/07/82	07/07/82
D3CA2090227-21204	AEROSPACE CORP EL SEGUNDO CA	07/08/82	07/08/82
P2CW2100037-21205	FAIRBANKS ALASKA CITY OF	07/08/82	

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P2CW1050106-21206	KENTWOOD MI	07/08/82	
P2CW1050077-21207	SWANTON OH	07/08/82	07/08/82
P2CW1050158-21208	CLINTON SD IL	07/08/82	
C3EO2060115-21209	SAN ANTONIO	07/08/82	07/08/82
C3FO2060116-21210	SAN ANTONIO	06/08/82	07/08/82
P2CW0050391-21211	TROY IL	07/08/82	
P2CW1050030-21212	LAPEL IN	07/08/82	
P2CW1050108-21213	HANCOCK MI-PORTAGE TOWNSHIP	07/08/82	07/08/82
C3EO2060157-21214	METROPLAN	07/09/82	07/15/82
C3FO2060158-21215	METROPLAN	07/09/82	07/14/82
P2CW2040070-21216	HENDERSON KY	07/09/82	09/28/82
D3AO2040226-21217	NORTHROP SERVICES (ENV SC) NC	07/09/82	09/17/82
E5AO2060112-21218	US POLLUTION CONTROL INC OK	07/09/82	
E1HO1110011-21219	AP-99 BILLINGS & RECEIVABLES	07/09/82	
E1ZO1110037-21220	IMPREST FUND-BELTSVILLE	07/09/82	
E1HO1070153-21221	I&M FINANCIAL MNGMT REGION VII	07/09/82	
E5AH2030142-21222	SHENANDOAH ENVIRON SERVICES-VA	07/12/82	07/26/82
N3GW2050473-21223	MIAMI VALLEY REG PLG DAYTON OH	07/12/82	07/12/82
D3CO2050471-21224	BATTELLE MEM INST COLUMBUS OH	07/12/82	07/12/82
D3CO2050406-21225	A T KEARNEY ALEXANDRIA VA	07/12/82	07/12/82
H3CA2080088-21226	UTAH UNIV OF SALT LAKE CITY CA	07/12/82	07/12/82
N3GO2040228-21227	BERKELEY CHARLESTON DORCHES SC	07/12/82	07/15/82
N3GO2040230-21228	VOLUSIA COUNCIL OF GOVTS FL	07/12/82	07/15/82
H3CO2040229-21229	WAKE FOREST (BOWMAN GRAY) NC	07/12/82	07/15/82
D3DO2090228-21230	ROCKWELL INTL CANOGA PARK CA	07/13/82	07/13/82

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E2CH2100010-21231	OAK HARBOR WASHINGTON CITY OF	07/12/82	07/12/82
P2CH1040107-21232	BURLINGTON NC	07/13/82	
E30D2040173-21233	IT ENVIROSCIENCE	07/13/82	07/15/82
P2CH0030215-21234	POUND - VA	07/14/82	
D3D02090229-21235	JONES & STOKES ASSOC SACTO CA	07/14/82	07/14/82
P2CH2070045-21236	ESTHERVILLE IA	07/14/82	09/02/82
H3A02050390-21237	UNIV OF CINCINNATI	07/15/82	
H3A02050456-21238	REGENT U OF MINN MINNEAPOLIS M	07/15/82	07/15/82
E2CH2050210-21239	MSD CHICAGO IL	07/15/82	07/15/82
E2CH2050220-21240	MSD CHICAGO IL	07/15/82	07/15/82
D3C02020171-21241	SYRACUSE RESEARCH CORP NY	07/15/82	07/15/82
D3C02020166-21242	URBACH KAHN MERLIN PC NY	07/15/82	07/15/82
O3D02020169-21243	ONTARIO RESEARCH FOUNDATION CD	07/15/82	07/15/82
D3C00020020-21244	MATHTECH INC NJ	07/15/82	07/15/82
O3AA2020172-21245	FOSTER WHEELER ENERGY CORP NJ	07/15/82	10/15/82
D3A02020177-21246	MATHTECH NJ	07/15/82	09/20/82
E2CH2100064-21247	COWLITZ COUNTY KELSO WA	07/14/82	07/14/82
N3GW2050478-21248	COUNTY OF MILWAUKEE WI	07/15/82	
E2CH2050216-21249	MSD CHICAGO IL	07/15/82	07/15/82
D3C02030116-21250	BOOZ ALLEN & HAMILTON INC-MD	07/16/82	07/16/82
D3C02090231-21251	SRI INTERNATIONAL MENLO PARK CA	07/16/82	07/16/82
D3D01030154-21252	INSTIT FOR DEFENSE ANAL-VA	07/16/82	09/23/82
D3C01030216-21253	NUS CORPORATION-MD	07/16/82	07/16/82
D3C02030213-21254	JACK FAUCETT ASSOCIATES-MD	07/16/82	07/16/82
D3A02030327-21255	INFORMATICS INC-MD	07/16/82	09/17/82

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D3A02030336-21256	GENERAL SOFTWARE CORP-MD	07/16/82	07/16/82
D3C02030337-21257	JACK FAUCETT ASSOCIATES-MD	07/16/82	07/16/82
D3A02030357-21258	AMERICAN MANAGEMENT SYSTEM-VA	07/16/82	07/16/82
D3D02030378-21259	AMERICAN MANAGEMENT SYSTEM-VA	07/16/82	09/21/82
S2CW1090162-21260	GRIDLEY CA CITY OF	07/19/82	
S2BW9090143-21261	LOS ANGELES CA CITY OF	07/19/82	
P2BW9090339-21262	HARDING-LAWSON NOVATO CA	07/19/82	
P2BW1090167-21263	GEOTECHNICAL CONS SANTA ANA CA	07/19/82	
D3C02090232-21264	SCIENCE APPLICATION LA JOLA CA	07/19/82	07/19/82
D3CW2090233-21265	CULP/WESNER/CULP CAMERON PK CA	07/19/82	07/19/82
D3C02090234-21266	CULP/WESNER/CULP CAMERON PK CA	07/19/82	07/19/82
D3CW2090235-21267	CULP/WESNER/CULP CAMERON PK CA	07/19/82	07/19/82
D3CW2090236-21268	CULP/WESNER/CULP CAMERON PK CA	07/19/82	07/19/82
D3CW2090237-21269	CULP/WESNER/CULP CAMERON PK CA	07/19/82	07/19/82
D3CW2090238-21270	CULP/WESNER/CULP CAMERON PK CA	07/19/82	07/19/82
D3C02090239-21271	CULP/WESNER/CULP CAMERON PK CA	07/19/82	07/19/82
D3C02090240-21272	CULP/WESNER/CULP CAMERON PK CA	07/19/82	07/19/82
D3A02090241-21273	SDC-SERVICE GROUP S MONICA CA	07/19/82	07/19/82
D3D02090242-21274	INTERSTATE ELECTRON ANAHEIM CA	07/19/82	07/19/82
D3AA2090243-21275	AEROCOMP INC COSTA MESA CA	07/19/82	07/19/82
D3C02010229-21276	EG&G MASON RESEARCH INST MA	07/19/82	
D3CW2010230-21277	EIC CORP	07/19/82	07/19/82
E2CW2100074-21278	KING COUNTY WA	07/19/82	07/19/82
E2CW2050218-21279	MSD CHICAGO IL	07/19/82	07/19/82
E2CW2050224-21280	MSD CHICAGO IL	07/19/82	07/19/82

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D3C02070487-21281	MIDWEST RES INST KANSAS CITY M	07/19/82	07/19/82
D3A02050488-21282	BATTELLE MEM INST COLUMBUS OH	07/19/82	07/19/82
P2CW1050076-21283	HASKINS OH	07/20/82	
E2CW2050213-21284	MSD	07/21/82	07/21/82
D3A02050455-21285	MIDWEST RES INST KANSAS CITY M	07/21/82	07/21/82
E2CW1100040-21286	ST CHARLES IDAHO CITY OF	07/21/82	07/21/82
E3B02110029-21287	STATE CONTROLLERS OFFICE-CA	07/22/82	07/22/82
E2CW2050025-21288	MSD CHICAGO IL	07/22/82	07/22/82
D3C02050441-21289	SVERDRUP & PARCEL ST LOUIS MO	07/22/82	07/22/82
D3A09020134-21290	EXXON RES & ENGINEERING CONJ	07/22/82	07/22/82
D3C09020236-21291	CALSPAN CORPORATION NJ	07/22/82	07/22/82
P5AH2010200-21292	JET-LINE SERVICES INC. MA	07/22/82	07/22/82
H3C02060161-21293	GULF SOUTH RESEARCH INST LA	07/22/82	07/22/82
E2CW2040179-21294	JACKSONVILLE	07/22/82	
P2CW2040066-21295	MORGANTON N C	07/22/82	09/13/82
P2CW1060133-21296	ORANGE CO WCID #3	07/22/82	
E2CW2050215-21297	MSD CHICAGO IL	07/22/82	07/22/82
D3A02030406-21298	BORRISTON LABORATORIES INC-MD	07/23/82	07/23/82
D3C01030355-21299	ROMAR CONSULTANTS INC-PA	07/23/82	07/23/82
D3D01030291-21300	HITTMAN ASSOCIATES-MD	07/23/82	08/31/82
P2CW0030216-21301	ACCIDENT - MD	07/23/82	
P2CW1030144-21302	WILLISTOWN TWP MUN AUTH-PA	07/23/82	
P2CW1030133-21303	HILLTOWN TWP SEWER AUTH-PA	07/23/82	
N3GW2010231-21304	NE CONNECTICUT RP AGENCY CT	07/26/82	
D3C02040247-21305	SOUTHERN RESEARCH INSTITUTE AL	07/28/82	09/21/82

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H3AO2040248-21306	RESEARCH TRIANGLE INSTITUTE NC	07/26/82	10/18/82
P2CH1060082-21307	BAYTOWN TX	06/26/82	09/28/82
E2CW2050026-21308	MSD CHICAGO IL	07/26/82	07/26/82
E2CW2050221-21309	MSD CHICAGO IL	07/26/82	07/26/82
P2CH1030137-21310	OIL CITY GENERAL AUTH-PA	07/27/82	
D3AO2030348-21311	DYNAMIC CORPORATION-MD	07/27/82	07/27/82
E5AH2020176-21312	S&D ENGINEERING SERVICES NJ	07/28/82	
D3DO1030219-21313	GANNETT FLEMING & CORDRY-PA	07/28/82	08/30/82
E5AH2010218-21314	GHR ENGINEERING CORP MA	07/28/82	10/15/82
D3AO2030335-21315	SCIENCE MANAGEMENT CORP-MD	07/28/82	09/17/82
D3CO2030186-21316	NATIONAL ACADEMY OF SCIENCE-DC	07/28/82	07/28/82
D3CO2030407-21317	HITTMAN ASSOCIATES-MD	07/28/82	07/28/82
P5AH2020178-21318	URS INC NY	07/28/82	10/18/82
P5AH2020163-21319	ROLLINS ENVIRONMENTAL SER NJ	07/28/82	07/28/82
P5AH2010184-21320	RECYCLING INDUSTRIES INC MA	07/28/82	09/24/82
P3CW0020079-21321	NEW JERSEY DEPT ENV PROT NJ	07/28/82	
E1ZO2100080-21322	REGION X WA	07/29/82	07/29/82
P2BW1040121-21323	CAMPBELL KENTON COS KY	07/29/82	
P2CW0040323-21324	DALLAS CO AL	07/29/82	
H3CO2050257-21325	U OF MICHIGAN ANN ARBOR MI	07/29/82	07/29/82
D3AO2030329-21326	COMPUTER DATA SYSTEMS-MD	07/29/82	10/18/82
P5AH2050463-21327	EMI CHICAGO IL	07/29/82	07/29/82
P5AH2050465-21328	PRC CONSQER TOWNSEND CHGO IL	07/29/82	10/13/82
P5AH2050464-21329	EMI TACOMA CHICAGO IL	07/29/82	10/04/82
D3AO2060164-21330	RADIAN CORPORATION	07/30/82	

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D3D02040251-21331	SOUTHERN RESEARCH INSTITUTE AL	07/30/82	10/13/82
E5AH2090217-21332	ENGINEERING SCIENCE ARCADIA CA	07/30/82	07/30/82
D5AH2050475-21333	HARZA ENGINEERING CHICAGO IL	07/30/82	07/30/82
E5AH2090218-21334	ENGINEERING SCIENCE ARCADIA CA	07/30/82	07/30/82
D3D00020134-21335	FRED C HART ASSC INC NY	08/02/82	08/02/82
D3CA2020181-21336	CHEMICO AIR POL CONT NY	08/02/82	08/02/82
D3A00020230-21337	HYDROQUAL INC NJ	08/02/82	09/27/82
D3A01020038-21338	GERAGHTY & MILLER INC NY	08/02/82	08/02/82
D3A01020245-21339	NYC DEPT OF ENV PROT NY	08/02/82	08/02/82
D3D01020018-21340	SYRACUSE RESEARCH CORP NY	08/02/82	08/02/82
D3A01020076-21341	PRINCETON AQUA SCIENCE NJ	08/02/82	08/02/82
D3A00020063-21342	CORNELL UNIVERSITY NY	08/02/82	08/02/82
D3C01020063-21343	CALSPAN CORP NY	08/02/82	08/02/82
D5AH2050476-21344	HOWARD NEEDLES KANSAS CITY MO	08/02/82	08/02/82
D3B02090251-21345	ACUREX CORP MOUNTAIN VIEW CA	08/02/82	08/02/82
D5AH2090252-21346	JACOBS ENGINEERING PASADENA CA	08/02/82	10/05/82
E5AH2090216-21347	ENGINEERING SCIENCE ARCADIA CA	08/02/82	08/02/82
D3AA2090253-21348	PACIFIC ENVIR SERV S MONICA CA	08/02/82	10/21/82
D3C02090254-21349	HITACHI SHIP & ENGERING JAPAN	08/02/82	08/02/82
D3C02030430-21350	JACA CORPORATION-PA	08/03/82	08/03/82
D3D02030432-21351	HAZLETON LABORATORIES INC-VA	08/03/82	08/11/82
P5AH2020182-21352	URS COMPANY INC NY	08/03/82	08/03/82
D5AH2030380-21353	CAMP DRESSER & MCKEE INC-MA	08/04/82	10/08/82
D5AH2030383-21354	DYNAMIC CORPORATION-MD	08/04/82	08/04/82
D5AH2030384-21355	ENVIRON CORPORATION-DC	08/04/82	08/04/82

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D5AH2030387-21356	ICF INC-DC	08/04/82	08/04/82
D5AH2030388-21357	JRB ASSOCIATES-VA	08/04/82	10/04/82
D5AH2030390-21358	MUS CORPORATION-DC	08/04/82	
D5AH2030392-21359	PEER CONSULTANT INC-MD	08/04/82	08/04/82
D5AH2030393-21360	PLANNING RESEARCH CORP	08/04/82	10/08/82
D5AH2030394-21361	SMC MARTIN-PA	08/04/82	10/04/82
D5AH2030395-21362	VERSAR INC-VA	08/04/82	10/04/82
D5AH2030398-21363	ROY F WESTON INC-PA	08/04/82	10/04/82
D5AH2030399-21364	ROY F WESTON INC-PA	08/04/82	10/04/82
D5AH2030400-21365	ICF INC-DC	08/04/82	08/04/82
D5AH2030402-21366	ROY F WESTON INC-PA	08/04/82	10/05/82
D5AH2030431-21367	SMC MARTIN INC-PA	08/04/82	10/04/82
D3C02090256-21368	ROCKWELL INTL CANOGA PARK CA	08/04/82	08/04/82
D5AH2100094-21369	CH2M HILL INC CORVALLIS OR	08/04/82	08/04/82
D5AH2090258-21370	SCS ENGINEERS LONG BEACH CA	08/04/82	08/04/82
D5AH2090259-21371	SCS ENGINEERS LONG BEACH CA	08/04/82	08/04/82
D5AH2090260-21372	TETRA TECH INC PASADENA CA	08/04/82	08/04/82
D5AH2090261-21373	TETRA TECH INC PASADENA CA	08/04/82	08/04/82
D5AH2090262-21374	TETRA TECH INC PASADENA CA	08/04/82	08/04/82
D5AH2090263-21375	PACIFIC ENVIR SERV S MONICA CA	08/04/82	10/05/82
D3A02030367-21376	DYNAMAC CORPORATION-MD	08/05/82	08/05/82
D3D02030060-21377	BIOSPHERICS INC-MD	08/05/82	09/09/82
D5AH2010234-21378	GCA CORP MA	08/05/82	08/05/82
D3A02010235-21379	RILEY STOKER CORP MA	08/05/82	
D3A02010236-21380	RILEY STOKER CORP MA	08/05/82	10/15/82

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D3C02010237-21381	ARTHUR D LITTLE INC MA	08/05/82	08/05/82
P2CW1010077-21382	GLASTONBURY CT	08/05/82	
D5AH2050474-21383	SVERDRUP & PARCEL ST LOUIS MO	08/05/82	10/13/82
S2CW1090097-21384	SACRAMENTO CA COUNTY OF	08/05/82	
D3B02080089-21385	DENVER UNIVERSITY OF CO	08/05/82	08/05/82
D5AH2090264-21386	PRC ENVIR MANAGEMENT MCLEAN VA	08/05/82	10/12/82
D3C02090265-21387	CULP/WESNER/CULP CAMERON PK CA	08/05/82	08/05/82
D3CW2090266-21388	CULP/WESNER/CULP CAMERON PK CA	08/05/82	08/05/82
P2CW0100074-21389	LINCOLN OR CITY OF	08/05/82	
E2CW2100016-21390	LAKEHAVEN SEW DIST FED WAY WA	08/05/82	10/05/82
E2CW2100051-21391	PARKER ID CITY OF	08/05/82	
S2CW0010209-21392	RAYNHAM MA	08/06/82	
D3AW2010238-21393	E C JORDAN CO ME	08/06/82	08/06/82
D3AW2010239-21394	E C JORDAN CO ME	08/06/82	08/06/82
D5AH2100096-21395	SHAPIRO AND ASOC SEATTLE WA	08/06/82	08/06/82
D3AO2090267-21396	ENGY & ENVIR RESERCH IRVINE CA	08/06/82	08/06/82
D3AO2090268-21397	ENGY & ENVIR RESERCH IRVINE CA	08/06/82	08/06/82
D3AO2090269-21398	ENGY & ENVIR RESERCH IRVINE CA	08/06/82	08/06/82
D3AO2090270-21399	ENGY & ENVIR RESERCH IRVINE CA	08/06/82	08/06/82
D5AH2030396-21400	WAPORA-MD	08/09/82	10/04/82
D5AH2030401-21401	WAPORA INC-MD	08/09/82	10/04/82
P3CA2020063-21402	HUDSON REGIONAL HEALTH COMM NJ	08/09/82	08/09/82
D5AH2020194-21403	ECOLOGY & ENVIRONMENT INC NY	08/09/82	08/09/82
D5AH2020193-21404	ECOLOGY & ENVIRONMENT NY	08/09/82	10/18/82
D5AH2020197-21405	BARRY LAWSON ASSOC INC MA	08/09/82	08/09/82

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D3C02020175-21406	SYRACUSE RESEARCH CORP NY	08/09/82	08/09/82
D3A02020186-21407	HYDROTECHNIC CORP NY	08/09/82	
D5AH2020169-21408	ENERGY RESOURCES INC NY	08/09/82	10/15/82
D5AH2020187-21409	ECOLOGY & ENVIRONMENT NY	08/09/82	10/18/82
D5AH2020190-21410	STONE & WEBSTER ENGR MR	08/09/82	08/09/82
D5AH2020191-21411	GCA CORP MA	08/09/82	08/09/82
D5AH2020188-21412	RECRA RESEARCH INC NY	08/09/82	08/09/82
D5AH2020195-21413	RECRA RESEARCH INC NY	08/09/82	10/18/82
D5AH2020196-21414	METCALF & EDDY INC MA	08/09/82	10/18/82
E2CW2040107-21415	POMPANO BEACH FL	08/09/82	
D5A02040252-21416	LAW ENGINEERING TESTING CO GA	08/09/82	10/04/82
D5A02040253-21417	ENVIRON SC & ENGINEERING FL	08/09/82	10/04/82
D5A02040255-21418	ENVIRONMENTAL SC & ENGR AL	08/09/82	10/15/82
P2CW2060053-21419	WALKER LA	08/09/82	09/02/82
D5A02060169-21420	BROWN & ROOT DEVELOPMENT TX	08/09/82	
D5A02060170-21421	INTERA ENVIRONMENTAL CONSUL TX	08/09/82	10/15/82
D3A02090271-21422	S-CUBED SAN DIEGO CA	08/09/82	08/09/82
D5AH2090272-21423	ROCKWELL INTL NEWBURY PARK CA	08/09/82	10/05/82
D5AH2090273-21424	ROCKWELL INTL NEWBURY PARK CA	08/09/82	10/05/82
D5AH2090274-21425	RALPH M PARSONS CO PASADENA CA	08/09/82	08/09/82
D5AH2090275-21426	RALPH M PARSONS CO PASADENA CA	08/09/82	08/09/82
D5AH2090276-21427	DAMES & MOORE LOS ANGELES CA	08/09/82	08/09/82
S2CW2090092-21428	JULIAN SAN DIST SAN DIEGO CA S	08/10/82	
D3A02090277-21429	BECHTEL GROUP SAN FRANCISCO CA	08/10/82	08/10/82
D3D02090278-21430	HOMITZ ALLEN & ASOC OAKLAND CA	08/10/82	08/10/82

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D5AH2090279-21431	ROCKWELL INTL NEWBURY PARK CA	08/10/82	10/05/82
D3CA2010240-21432	TRC-ENVIRONMENTAL CONSULT. CT	08/10/82	
D3CO2010241-21433	ARTHUR D LITTLE INC MA	08/10/82	08/10/82
D3CO2010242-21434	ARTHUR D LITTLE INC MA	08/10/82	08/10/82
D3CO2010243-21435	ARTHUR D LITTLE INC MA	08/10/82	08/10/82
D3DO2030439-21436	AMERICAN INST OF BIO SCI-VA	08/11/82	09/22/82
S2CW0090223-21437	NO SAN MATEO SAN DIST CA	08/11/82	
S2CW1090261-21438	CALPELLA CNTY WTR DIST CA	08/11/82	
S2BW2090045-21439	LIVERMORE CA	08/11/82	
S2CW2090190-21440	BIGGS CA CITY OF	08/11/82	
D3AO2030440-21441	ENVIRON CORPORATION-DC	08/11/82	08/11/82
D3DO2030441-21442	KENDRICK & COMPANY-DC	08/11/82	08/11/82
E1VW2020029-21443	REGION II NY	08/12/82	
D3CA2090282-21444	ENGERING & RESEARCH GARDENA CA	08/12/82	08/12/82
E2CW2100063-21445	WALLA WALLA WATER DIST NO 2 WA	08/12/82	
D3AD2030404-21446	ROY F WESTON INC-PA	08/12/82	08/12/82
D3AW2090283-21447	JACOBS ENGINEERING PASADENA CA	08/13/82	08/13/82
P2CW0100049-21448	DOUGLAS COUNTY ROSEBURG OREGON	08/13/82	
E2CW2040034-21449	JACKSONVILLE FL	08/16/82	
E2CW1040212-21450	NEWTON GA	08/16/82	
E2CW2040089-21451	TRENTON NC	08/16/82	08/16/82
D3DW2010193-21452	TIGHE & BOND/SCI MA	08/16/82	08/16/82
D3CO2010244-21453	TEMPLE BARKER & SLOANE INC MA	08/16/82	08/16/82
E5CH2050286-21454	GREAT LAKES ENV	08/16/82	
D3CO2070537-21455	MIDWESTRESINSTKANSASCITYMO	08/16/82	08/16/82

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D3C02070538-21456	MIDWESTRESINSTKANSASCITYMO	08/16/82	08/16/82
D3A02050539-21457	ROCKY MTN ANALYT LAB CHGO HTS	08/16/82	09/17/82
D5A02060175-21458	SOUTHWEST RESEARCH INST TX	08/17/82	10/15/82
H3A02060174-21459	EAST CENTRAL UNIV FDN INC OK	08/17/82	09/28/82
N3G02040263-21460	METRO DADE COUNTY	08/17/82	
C3E02060177-21461	METROPLAN COG LITTLE ROCK AR	08/17/82	10/04/82
C3F02060176-21462	METROPLAN COG LITTLE ROCK AR	08/17/82	08/17/82
S2BW2010191-21463	CHARLES RIVER POLLUTION CON MA	08/17/82	
S2CW2090068-21464	ATWATER CA CITY OF	08/18/82	
D3A02050486-21465	COLEJOHN MECH COR CLEVELAND OH	08/19/82	
D3D02050540-21466	REXNORD INC MILWAUKEE WI	08/19/82	08/19/82
D3C02050551-21467	UNIV OF ILLINOIS URBANA IL	08/19/82	08/19/82
E2CW1100078-21468	OROVILLE WASHINGTON TOWN OF	08/20/82	
P2CW2100036-21469	VALDEZ ALASKA CITY OF	08/20/82	
H3C02040254-21470	UNIV OF ALA BIRMINGHAM AL	08/20/82	08/20/82
P2CW2060075-21471	HOPE ARK	08/20/82	09/28/82
P2CW2040075-21472	HAVELOCK N C	08/20/82	
D3A02040265-21473	ENVIRONMENTAL SC & ENGR FL	08/20/82	10/13/82
E2CW2080032-21474	THOMPSON ND CITY OF	08/23/82	08/23/82
E2CW2080048-21475	N DAVIS CTY SEWER DISTRICT UT	08/23/82	08/23/82
E2CW2100040-21476	HAUPIN OR CITY OF	08/23/82	08/23/82
E2CW2080033-21477	MOBRIDGE SD CITY OF	08/23/82	
P2BW1090149-21478	KENNEDY JENKS ENGINEERS SF CA	08/23/82	
D2BW2050410-21479	GLOBETROTTERS ENG	08/23/82	08/23/82
D3AA2020203-21480	METEOROLOGICAL EVAL NY	08/23/82	08/23/82

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E2CW2070193-21506	BUTLER MO	08/30/82	
P2CW1030126-21507	ABINGDON TOWN-VA	08/30/82	
S2CW0090194-21508	ORANGE CTY SD FOUNTAIN VAL CA	08/30/82	
D3A02050458-21509	AUTO TESTING LAB E LIBERTY OH	08/30/82	08/30/82
E2BW0020166-21510	JOSEPH S WARDS & ASSOC NY	08/31/82	
E5CH2110023-21511	T&A EXCAVATING & HAULING-SF-VA	09/01/82	
E5CH2110022-21512	CHEMICAL CLEAN-SUPERFUND-VA	09/01/82	
D3CA2080091-21513	H E CRAMER CO SALT LAKE CTY UT	09/01/82	09/01/82
D3D02090289-21514	TRW INC REDONDO BEACH CA	09/01/82	09/01/82
D3A02090290-21515	ENGY & ENVIR RESERCH IRVINE CA	09/01/82	09/01/82
D3AR2090291-21516	ENGY & ENVIR RESERCH IRVINE CA	09/01/82	09/01/82
D3CN2090292-21517	CULP/WESNER/CULP EL DORADO CA	09/01/82	09/01/82
E3C01030033-21518	INDUSTRIAL GAS CLEANING INS-VA	09/01/82	09/22/82
S3BW1030138-21519	PA DEPT OF ENVIRO RESOURCES	09/01/82	
D3A02020205-21520	NKRE ENGINEERS NY	09/02/82	
N3GW2050570-21521	EAST-WEST GATEWAY ST LOUIS MO	09/02/82	09/02/82
D3C02030371-21522	IBM CORPORATION-MD	09/07/82	09/07/82
D3D02030486-21523	HYDROTECHNIC CORP-NY	09/07/82	
E2CW2090293-21524	EAST BAY MUD OAKLAND CA	09/07/82	09/07/82
D3D02090294-21525	LOCKHEED ENGR & MGMT SER TEXAS	09/07/82	09/07/82
D3A02090295-21526	KVB INC IRVINE CA	09/07/82	09/07/82
D3AS2090296-21527	KVB INC IRVINE CA	09/07/82	09/07/82
D3C02090297-21528	SCIENCE APPLICATION LA JOLA CA	09/07/82	09/07/82
E5BH2030026-21529	REGION III SUPERFUND PA	09/08/82	
D5AH2030466-21530	PRC/ENVIRONMENTAL MGMT INC-VA	09/08/82	10/13/82

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D3AM2020199-21481	FRONTIER TECH ASSOC NY	08/23/82	08/23/82
D3AO2020201-21482	FRED C HART NY	08/23/82	
D3AM2020204-21483	FRONTIER TECH ASSOC NY	08/24/82	08/24/82
P2CH1030123-21484	MCKENNEY TOWN-VA	08/25/82	
D3AO2030349-21485	BIONETICS CORPORATION-VA	08/25/82	10/18/82
D3CO2030311-21486	WESTON ROY F-PA	08/25/82	09/14/82
D3AO2030436-21487	ELECTRONIC DATA SYSTEMS-MD	08/25/82	09/17/82
E2BW2090001-21488	SAN FRANCISCO CA CITY & CTY OF	08/25/82	
P2CH1030139-21489	PLUM BOROUGH-PA	08/26/82	
P2BW2030232-21490	PLUM BOROUGH-PA	08/26/82	
P2CH1030055-21491	YOUNGSTOWN BOROUGH-PA	08/26/82	
E1Z02040129-21492	REG IV REVIEW OF DELIN DBTS GA	08/26/82	08/26/82
D3AO2040271-21493	ENVIRONMENTAL SC & ENGR FL	08/26/82	
D5AO2040274-21494	ENVIRONMENTAL SC & ENGR FL	08/26/82	10/15/82
O3CO2040275-21495	EAST TENN STATE UNIV TN	08/26/82	08/27/82
P2CH1030172-21496	WESTMINSTER-MD	08/26/82	
E2CH2100024-21497	CONCONULLY MA CITY OF	08/26/82	08/26/82
P3CS0020115-21498	NEW JERSEY DEP NJ	08/26/82	
E2BW0020167-21499	JOSE A CALDERON & ASSOC PR	08/26/82	
D3CO2030065-21500	AMERICAN PUBLIC HLTH ASSN-DC	08/24/82	09/09/82
P2BW1060070-21501	DALLAS TX	08/27/82	
P2BW0040247-21502	VALDOSTA GA	08/27/82	
P2CH2040068-21503	PADUCAH KY	08/27/82	
E5CA2040185-21504	NORTH CAROLINA (STATE OF) NC	08/27/82	
D3CO2010246-21505	ARTHUR D LITTLE INC MA	08/27/82	08/27/82

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D3A02030453-21531	SOBOTKA & COMPANY-DC	09/08/82	
D3B02030485-21532	HYDROTECHNIC CORPORATION-NY	09/08/82	09/08/82
D3C02030476-21533	BOOZ ALLEN & HAMILTON INC-MD	09/08/82	09/08/82
S3BW9030339-21534	SUSQUEHANNA RIV BAS COMM - PA	09/08/82	09/08/82
D3DW2050408-21535	GREELEY AND HANSEN ENGRS IL	09/08/82	10/21/82
S2CW1090121-21536	KINGS CA COUNTY OF	09/08/82	
C3F02040256-21537	DEKALB COUNTY	09/09/82	09/09/82
P2CW1040092-21538	PLANT CITY FL	09/09/82	
P2BW1040193-21539	LOGANVILLE GA	09/09/82	
H3C02040293-21540	FLA DEPT HLTH & REHAB SVCS FL	09/09/82	09/09/82
P2CW2060074-21541	HATFIELD ARK	09/09/82	
P2CW2060029-21542	MILL CREEK PUBLIC WKS AUTH OK	09/09/82	
P2CW2060022-21543	STILLWATER OKLA	09/09/82	
P2CW2060107-21544	LAHAR ARK	09/09/82	
D3A02040288-21545	RESEARCH 7 EVALUATION ASSOC NC	09/09/82	
D3A02040289-21546	RESEARCH 7 EVALUATION ASSOC NC	09/09/82	
S2CW1090153-21547	SEWER AUTH MID-COASTSID HMB CA	09/09/82	
H3B02080095-21548	NAT JEW HOSPT RESCH DENVER CO	09/09/82	09/09/82
P2CW1030054-21549	MIDLAND MUNICIPAL AUTH-PA	09/10/82	
P2CW1030178-21550	MILLERSTOWN MUN AUTH-PA	09/10/82	
P2BW0100105-21551	PACIFIC CITY SD OREGON	09/10/82	
E5CH2100090-21552	ENV EMERGENCY SERVICES OR	09/10/82	
E3BW2090222-21553	JOHN MUIR INSTITUTE NAPA CA	09/10/82	09/10/82
D3A02030462-21554	JACK FAUCETT ASSOCIATES INC-MD	09/13/82	09/13/82
D3A02030488-21555	ENERGY & ENVIRONMENTAL ANAL-VA	09/13/82	09/13/82

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D3C02030487-21556	SYSTEM SCIENCES INC-MD	09/13/82	09/13/82
D3D02030463-21557	L MIRANDA & ASSOC-MD	09/13/82	
D3C02030461-21558	ARTHUR YOUNG & CO-DC	09/13/82	09/13/82
D3C02030358-21559	IBM CORPORATION-MD	09/14/82	09/14/82
D3A02030361-21560	FEIN-MARQUART ASSOCIATES-MD	09/14/82	10/14/82
D3A02030373-21561	CENTEC-VA	09/14/82	09/14/82
D5AH2030389-21562	JRB ASSOCIATES-VA	09/14/82	10/13/82
D3A02030423-21563	BENDIX FIELD ENGINEERING-MD	09/14/82	09/14/82
E2CH1100052-21564	COLFAX MA CITY OF	09/14/82	
D3C02030302-21565	O.R.I. INC.-MD	09/14/82	10/03/82
D3A02030377-21566	CENTEC CORPORATION-VA	09/14/82	09/14/82
D3A02030403-21567	JACA CORP-PA	09/14/82	
D3A02030455-21568	CLEMENT ASSOC INC-VA	09/14/82	09/14/82
D3A02030458-21569	AMERICAN MGMT SYSTEMS-VA	09/14/82	09/14/82
D3A02030360-21570	NATIONAL DEMO WATER PROJECT-DC	09/14/82	
E1UM1110038-21571	CHANGE ORDERS UNDER CON GRANT	09/21/82	09/21/82
D3A02010255-21572	CRITICAL FLUID SYSTEMS INC MA	09/15/82	09/15/82
D3AA2010256-21573	GCA CORP TECHNOLOGY DIV MA	09/15/82	09/15/82
D3A02010257-21574	ENERGY RESOURCES CO INC MA	09/15/82	
D3A02010258-21575	ARTHUR D LITTLE INC MA	09/15/82	09/15/82
D3C02010259-21576	A D LITTLE INC MA	09/15/82	09/15/82
D3A02010260-21577	STONE & WEBSTER ENGR CORP MA	09/15/82	09/15/82
D3AA2010261-21578	ATLANTIC ENVIRONMENTAL ASSOC M	09/15/82	
D3A02010262-21579	ENVIRONMENTAL RESEARCH TECH MA	09/15/82	
S2CW0090140-21580	FAIRFIELD CA CITY OF	09/15/82	

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E5C02040223-21581	RESOURCE RECYCLING TECH TN	09/15/82	
H3C02060183-21582	TEXAS TECH UNIV LUBBOCK TX	09/15/82	09/15/82
P2CW2060045-21583	POTTSBORO TX	09/15/82	
E2CW2040175-21584	LARGO FL	09/15/82	
H3C02040297-21585	MED UNIV OF SOUTH CAROLINA SC	09/15/82	09/15/82
D3A02030489-21586	CLEMENT ASSOCIATES-VA	09/16/82	09/16/82
H3C02060182-21587	TEXAS TECH UNIV LUBBOCK TX	09/15/82	09/16/82
S2BW9090312-21588	VENTURA REGIONAL CSD CA	09/16/82	
P2CW2040113-21589	RUSSELLVILLE	09/16/82	
E3CH2090226-21590	CALIF SWRCB SACRAMENTO CA	09/16/82	
D3AA2080098-21591	DENVER UNIVERSITY OF DENVER	09/16/82	09/16/82
D3C02030379-21592	SCOTT ENVIRONMENTAL TECH-PA	09/16/82	09/16/82
D3A02030438-21593	PATHOLOGY ASSOCIATES INC-MD	09/17/82	09/17/82
03AW2020218-21594	ASSOCIATED INDUST	09/17/82	09/17/82
D3A02020217-21595	BURNS & ROE NJ	09/17/82	09/17/82
D3D02010263-21596	MANAGEMENT ANALYSIS CENTER MA	09/20/82	09/20/82
03BW2010264-21597	NO MIDDLESEX AREA COMM MA	09/20/82	09/20/82
D3B02010265-21598	RDP INC MA	09/20/82	09/20/82
E1UW2030025-21599	REGION III CONTRACT C.O.-PA	09/22/82	
D3B02030323-21600	SYNERGY INC-DC	09/29/82	09/29/82
D3A02090306-21601	ENGY & ENVIR RESERCH IRVINE CA	09/21/82	09/21/82
D3C02090307-21602	ENGINEERING SCIENCE ARCADIA CA	09/21/82	09/21/82
D3A02080099-21603	EXCEL SERVICES PARKER CO	09/21/82	09/21/82
S2BW9090313-21604	VENTURA REGIONAL CSD CA	09/21/82	
S2BW9090350-21605	VENTURA REGIONAL CSD CA	09/21/82	

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S2CW0090137-21606	VENTURA REGIONAL CSD CA	09/21/82	
D3AO2030464-21607	WHITESCARVER ASSOC INC-VA	09/21/82	
D3AO2030405-21608	ROGERS GOLDEN HALPERN-PA	09/22/82	09/22/82
D3CO2030510-21609	VERSAR INC-VA	09/22/82	09/22/82
D3AO2030511-21610	VERSAR INC-VA	09/22/82	09/22/82
D3CO2050592-21611	FORD MOTOR CO DEARBORN MI	09/22/82	09/22/82
D3CO2050593-21612	RALTECH SCIENTIFIC MADISON WI	09/22/82	09/22/82
D3AO2050594-21613	BATTELLE MEMORIAL COLUMBUS OH	09/22/82	09/22/82
D3CO2030162-21614	INFORMATICS INC MD	09/23/82	09/23/82
D3AO2060187-21615	SOUTHWEST RESEARCH INST TX	09/23/82	
P2CW2060023-21616	HOT SPRINGS SEWER IMP DIST ARK	09/23/82	
P2CW2060018-21617	BELL CO WCID #1	09/23/82	09/23/82
D3AO2070560-21618	MIDWEST RES INST KANSAS CTY MO	09/23/82	
D3AO2050558-21619	BATTELLE MEM INST COLUMBUS OH	09/23/82	09/23/82
S2BW2090298-21620	VENTURA REGIONAL CSD CA	09/22/82	
S2CW2090135-21621	ARCATA CA CITY OF	09/23/82	
D3AO2090319-21622	ROCKWELL INTL NEWBURY PARK CA	09/23/82	09/23/82
P2BW1090062-21623	HARDISON & KOMATSU SAN FRAN CA	09/23/82	
P3CW0090116-21624	VENTURA REGIONAL CSD CA	09/23/82	
P2BW2050015-21625	PORTAGE LAKE WSA MI	09/24/82	
D3CO9020028-21626	EXXON RESEARCH&ENGINEERING NJ	09/24/82	09/24/82
P3CO2020014-21627	INTERSTATE SANITATION COMM NY	09/24/82	09/24/82
P3CW1020086-21628	INTERSTATE SANITATION COMM NY	09/24/82	09/24/82
P2CW1010092-21629	BRUNSWICK SEWER DIST ME	09/27/82	
D3CO2010267-21630	BOLT BERANER NEWMAN INC MA	09/27/82	09/27/82

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D3C02010268-21631	BOLT BERANER NEWMAN INC MA	09/27/82	09/27/82
E3C02030071-21632	ASSN OF METRO SEWERAGE-DC	09/27/82	09/27/82
E3DW9050529-21633	HARRY O HEFTER ASSOCIATES INC	09/27/82	
P2CW1050053-21634	HYMERA IN	09/27/82	
S2CW1090043-21635	RAINBOW MND FALLBROOK CA	09/27/82	
O3AA2020230-21636	FOSTER WHELLER NJ	09/27/82	09/27/82
P2CW1030141-21637	MALL BOROUGH	09/27/82	
D3A02030456-21638	JRB ASSOC-VA	09/28/82	09/28/82
D3A02030495-21639	OMEGA GROUP-DC	09/28/82	
P3DW1050223-21640	WILLIAMS & WORKS GR RAPIOS MI	09/28/82	
D3D02050599-21641	HARZA ENGINEER COCHICAGO IL	09/28/82	09/28/82
P2CW1050065-21642	OMRO MI	09/28/82	
P3D01050183-21643	J.C.ZIMMERMAN GREENDALE WI	09/28/82	09/28/82
P3DW1050219-21644	WILLIAMS & WORKS GR RAPIOS MI	09/28/82	
S2BW0090323-21645	SANTA MARIA CA CITY OF	09/28/82	
S2CW1090071-21646	CONTRA COSTA CSD #15 CA	09/28/82	
P2BW1090272-21647	GILLETT-HARRIS-DURANCEAU YC CA	09/28/82	
P2CW2040156-21648	CLARKSDALE MS	09/28/82	
P2CW2040098-21649	SOUTHHAVEN UTILITY DISTRICT MS	09/28/82	09/28/82
E5B02040212-21650	MIAMI DRUM - MIAMI	09/28/82	
D3B02040314-21651	CLAUDE TERRY & ASSOC GA	09/28/82	09/28/82
D3D02040315-21652	CLAUDE TERRY & ASSOC GA	09/28/82	
D3A02060197-21653	RADIAN CORP TX	09/28/82	
D3D02060200-21654	K W BROWN & ASSOCIATES TX	09/28/82	
H3C02060199-21655	UNIV OF ARKANSAS AR	09/28/82	09/28/82

SEMI-ANNUAL AUDIT REPORTS ISSUED - SECTION I

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PERIOD ENDING 09/30/82

DATE: 10/23/82

AUDIT CONTROL NUMBER	AUDITEE	FINAL REPORT ISSUED	DATE CLOSED
P2CH1040213-21656	ALBANY GA	09/28/82	
N3G02060181-21657	NO CENTRAL TEXAS COG TX	09/28/82	09/28/82
E2CH1100073-21658	UNION GAP WA CITY OF	09/29/82	

SEMIANNUAL STATUS REPORT ON
RESOLUTION OF AUDITS
PERIOD ENDING SEPTEMBER 30, 1982

<u>Audit Reports in Followup System</u>	<u>Beginning of Period (4/1/82*)</u>	<u>Audit Reports Issued During Period</u>	<u>Audit Reports Closed During Period</u>	<u>End of Period (9/30/82)</u>
<u>Less Than Six Months</u>				
Number of Reports	217	953	669	284
Federal Share Questioned	\$20,872,982	\$79,851,552	\$ 14,798,414	\$65,275,728
Federal Share Sustained			2,426,231	
Federal Share Forgiven			12,372,183	
<u>6-12 Months</u>				
Number of Reports	35		196	40
Federal Share Questioned	\$55,636,946		\$24,930,980	\$12,860,300
Federal Share Sustained			12,239,474	
Federal Share Forgiven			12,691,506	
<u>12-18 Months</u>				
Number of Reports	10		4	12
Federal Share Questioned	\$ 5,205,595		\$ 7,680,933	\$40,384,500
Federal Share Sustained			3,772,014	
Federal Share Forgiven			3,908,919	
<u>Over 18 Months</u>				
Number of Reports	26		17	19
Federal Share Questioned	\$ 7,587,546		\$ 4,266,674	\$ 8,526,467
Federal Share Sustained			798,386	
Federal Share Forgiven			3,468,288	
<u>Total</u>				
Number of Reports	288	953	886	355
Federal Share Questioned	\$ 98,303,069	\$79,851,552	\$51,677,001	\$127,046,995
Federal Share Sustained			19,236,105**	
Federal Share Forgiven			32,440,896	

*Any difference in numbers of reports and Federal share of costs questioned between this report and our previous semiannual reports results from corrections made in data in our audit tracking and control system.

**The Federal share of costs questioned and sustained may be broken down as follows:

Amounts to be Recovered	\$18,418,161
Cost Avoidances	817,944
Total	<u>\$19,236,105</u>

Appendix 5

ANALYSIS OF AUDIT WORKLOAD

<u>Type of Audit</u>	<u>Total Workload (Estimated Staff Years Needed)</u>
Internal and Management	188.3
Construction Grants	
Preawards	3.6
Interims	368.1
Finals	215.2
Total Construction Grants	586.9
Contracts and Other Grants	
Preawards	2.6
Interims	3.7
Finals	33.6
Indirect Cost	24.1
Total Contracts and Other Grants	64.0
Superfund	
Internal	10.8
Preward	12.8
Interims	3.6
Finals	2.5
Total Superfund	29.7
Total Years of Workload	868.9

AUDIT RESOURCES AVAILABLE

	<u>Staff Years</u>
EPA Staff (Direct)	104
Part-Time/Intermittent	14
Contract Services	45
Total	163

ANALYSIS OF OIG PERMANENT FULL-TIME STAFFING
AS OF September 30, 1982

Organization	Serves	OIG Resources		Support Staff*	Authorized	On-Board
		Direct Staff	Indirect Staff		Staff	10/1/82
Office of the Inspector General			6	3	4	4
Office of Management Technical Assessment			1	1	2	2
Administration Branch				3	3	3
Quality Control--Audits		4			4	4
Quality Control--Investigations		1			1	1
Subtotal, Office of Management and Technical Assessment		5	1	4	10	10
Office of Audits						
Headquarters		10	3	3	16	15
Internal Audits	Headquarters Audits	13	1	2	16	15
	Regions 1, 2, ME, VT, NH, MA, CT, RI, NJ, NY, PR, VT	18	1	2	21	21
Eastern Division	Region 3, PA, DE, MD, VA, WV, DC	10	1	1	12	12
Mid-Atlantic Division	Regions 4, 6, KY, TN, NC, SC, GA, FL, AL, MS, AR, LA, OK, TX, NM	15	1	2	18	18
Southern Division	Regions 5, 7, OH, IN, MI, IL, WI, MN, IA, MO, KS, NE	21	1	1	23	20
Northern Division	Regions 8, 9, 10, ND, SD, MT, WY, CO, UT, AZ, WA, OR, ID, NV, CA, AK, HI, Guam, Amer. Samoa, Trust Territories	17	1	1	19	19
Western Division						
Subtotal, Office of Audits		104	9	12	125*	120**
Office of Investigations						
Headquarters			2	3	5	4
	Regions 1, 2, ME, VT, NH, MA, CT, RI, NJ, NY, PR, VI	3	1		4	2
Eastern Division	Headquarters, Region 3, PA, DE, MD, VA, WV, DC	10	1	1	12	12
Mid-Atlantic Division	Regions 4, 6, KY, TN, NC, SC, GA, FL, AL, MS, AR, LA, OK, TX, NM	4	1		5	
Southern Division	Regions 5, 7, OH, IN, MI, IL, WI, MN, IA, MO, KS, NE	3	1		4	4
Northern Division	Regions 8, 9, 10, ND, SD, MT, WY, CO, UT, AZ, WA, OR, ID, NV, CA, AK, HI, Guam, Samoa, Trust Territories	2	1		3	3
Western Division						
Subtotal, Office of Investigations		22	7	4	33	29
Total, Office of the Inspector General		131	18	23	172*	163**

*Includes 22 superfund positions.

**Includes 21 superfund positions.

The Administrator of EPA has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Agency. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through April 1, 1987.