SUPERFUND

System Enhancements Could Improve the Efficiency of Cost Recovery

August 1995
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United States
General Accounting Office
Washington, D.C. 20548

Accounting and Information Management Division

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August 25, 1995

The Honorable John Glenn
Ranking Minority Member
Committee on Governmental Affairs
United States Senate

Dear Senator Glenn:

Under the Superfund program, the Environmental Protection Agency (EPA) is responsible for recovering billions of dollars in costs associated with the cleanup of the nation's worst hazardous waste sites from responsible parties. Through EPA, the federal government has expended over $10.1 billion cleaning up nonfederal Superfund sites and collected nearly $1 billion of this amount through fiscal year 1994. In 1992, and again in 1995, we reported the Superfund program as a "high risk" area in the federal government, and that EPA lacked the information needed to adequately manage and support its cost recovery efforts.¹

In response to your request, we are reporting to you the results of our review of the adequacy of EPA's information systems to support the agency's Superfund cost recovery work. Specifically, our objectives were to determine (1) how well EPA's information systems support the Superfund cost recovery process and (2) the extent to which EPA's planned modifications to its information systems could improve the efficiency of cost recovery efforts.

EPA's cost recovery for Superfund is supported by several financial and records management systems. Because of limitations in these systems, cost recovery staff cannot fully rely on the systems to provide all the information needed for cost recovery. Instead, staff must perform excessive manual searches and reconciliations to ensure that the information supporting cost recovery cases is accurate, reliable, and complete.

EPA is aware of these limitations and has initiated efforts to address them. For example, planned modifications to the financial systems should result in more detailed cost data, thus reducing manual reconciliation efforts. However, additional actions could further ensure that EPA's systems

¹High-Risk Series: Superfund Program Management (GAO/HR-93-10, December 1992); and High-Risk Series: Superfund Program Management (GAO/HR-95-12, February 1995).
provide the best possible support for its cost recovery efforts. Specifically, EPA needs to implement its planned statistical testing of the reliability of cost recovery financial data, improve the documentation of its financial systems’ controls, assess how to best use technology to efficiently meet the records management needs of its cost recovery staff, and ensure that all risks associated with the collection and management of Superfund cost recovery receivables have been addressed.

**Background**

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This act, which created the Superfund program, was intended primarily to clean up those sites considered to be the most serious of the hazardous waste sites identified in the United States. As of March 7, 1996, EPA reported 15,723 sites in its inventory, of which 1,363 are considered the most hazardous.

EPA is authorized to compel parties responsible for causing the hazardous waste pollution, such as waste generators or haulers and site owners or operators, to clean up the sites. If these parties, known as potentially responsible parties (PRPs), cannot be found, or if a settlement cannot be reached, EPA can conduct the cleanup.

EPA uses funds from a trust fund established by CERCLA when it performs such cleanups. This trust fund, currently authorized at $15.2 billion, is financed primarily by a tax on crude oil and certain chemicals and by an environmental tax on corporations.

After completing a cleanup, EPA can take action against the responsible parties to recover costs and replenish the fund. These costs can cover such items as EPA cleanup studies, removal actions, and program administration, as well as costs incurred by other agencies, such as the Department of Justice, in helping to administer the Superfund program.

The process of recovering costs includes (1) conducting searches to identify the PRP(s) and assessing their liability and financial viability, (2) issuing both notice and demand letters to the PRP(s) for the recovery of costs, and (3) if warranted, initiating judicial action with the assistance of the Department of Justice, if the PRP(s) decide not to participate in negotiations to settle the case or if negotiations are unsuccessful. These
Site Cleanup Costs and Workload Are Substantial

EPA has reported expenditures of over $10.1 billion for cleaning up nonfederal Superfund sites through fiscal year 1994. Barring major changes to the program, we estimate that such sites may cost the federal government about $37 billion more between 1995 and 2019 (in 1993 discounted present-value dollars).\(^3\)

EPA’s cost recovery workload has grown substantially over the years as cleanups have been completed and recoveries of costs have been sought from responsible parties. As of January 1995, EPA reported it had pursued actions to recover costs for 1,625 sites. Through the end of fiscal year 1994, EPA reported that the Superfund program had about $1.4 billion in binding agreements from responsible parties to reimburse the federal government. About $934 million of this amount had actually been collected, including about $9 million in fines and penalties. The remaining $8.7 billion of Superfund past costs include costs such as those not pursued, unrecoverable costs, and costs currently being sought through litigation.

Although Superfund was enacted 15 years ago, the bulk of EPA’s cost recovery settlements has occurred in the last 7 years. For example, during the first 8 years of the program, cost recovery activities resulted in binding cost recovery agreements totaling about $104 million. In contrast, such binding agreements in fiscal year 1994 alone totaled about $207 million.

EPA’s cost recovery workload to recover cleanup costs is likely to increase because the number of Superfund sites is expected to grow. In November 1994, we reported that between 2,500 and 2,800 nonfederal sites could be added to the then inventory of about 1,200 sites that were considered to be the most serious.\(^4\)

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\(^2\)Under CERCLA’s statute of limitations provisions, EPA must generally file suit to recover costs within 3 years after it completes a removal action, a short-term cleanup action requiring an immediate response; or within 6 years after it starts a remedial action, a long-term action to remove threats to public health, welfare, or the environment.

\(^3\)Our estimate was based on Congressional Budget Office data used in preparing its January 1994 report entitled The Total Costs of Cleaning Up Nonfederal Superfund Sites.

\(^4\)Superfund: Estimates of Number of Future Sites Vary (GAO/RCED-95-18, Nov. 29, 1994).
EPA's Automated Information Systems Are Vital to Effective Cost Recovery

After EPA has identified PRPs that are liable and able to pay, the success of EPA's cost recovery efforts depends in large part on the ability of staff to access accurate and complete cost data and related supporting documentation. For a typical cost recovery case, EPA may amass thousands of pages of (1) documents identifying work that was authorized and performed, referred to as work-performed documents and (2) financial documents, including travel vouchers and contract-related documents, showing site costs that were invoiced, approved, and paid.

EPA has a number of financial and records management information systems to help support its cost recovery efforts. For instance, EPA operates two financial information systems to maintain Superfund cost data and two more to generate reports:

- the Integrated Financial Management System (IFMS), the agency's official financial information system, which contains all of the agency's core financial data since March 1989;
- the Financial Management System (FMS), the predecessor system to IFMS, which contains financial data both before and after the implementation of IFMS in March 1989.
- the Management and Accounting Reporting System, which is used to produce reports from IFMS data; and
- the Software Program for Unique Reports, the reporting system for FMS, which generates reports containing both IFMS and FMS data.

According to EPA officials, the functionality of the Financial Management System and the Software Program for Unique Reports will be completely replaced by IFMS and the Management and Accounting Reporting System as of October 1, 1995.

EPA also has two information management systems developed specifically to support Superfund cost recovery:

- the Superfund Cost Recovery Image Processing System (SCRIPS), which allows cost recovery staff to electronically capture, store, display, and print images of original Superfund financial documents, such as contract invoices, travel vouchers, and payroll records; and
- the Superfund Cost Organization and Recovery Enhancement System, which is designed to organize and edit financial information into easy-to-read cost summaries.
Past Concerns With Management of Superfund Cost Recovery

EPA's Office of Solid Waste and Emergency Response has overall responsibility for the Superfund program. Other key EPA organizations with Superfund responsibilities include (1) the Office of Enforcement and Compliance Assurance, which is responsible for enforcement actions, and (2) the Office of Administration and Resources Management, which is responsible for financial management activities and the development of supporting information systems.

EPA also has ten regional offices that have lead responsibility for carrying out the program within their geographical jurisdiction. These responsibilities include conducting or overseeing cleanup activities and pursuing cost recovery, including assembly of supporting documentation; negotiating settlements with PRPs; and collecting amounts owed the government.

In December 1992, and again in February 1995, we reported that EPA's management of the Superfund program was a high-risk area and noted that EPA had recovered only a fraction of the cleanup costs from responsible parties. We have also previously reported that the low priority EPA has given to the cost recovery program had resulted in a backlog of cost recovery cases.\(^5\) EPA also recognizes its problems with Superfund cost recovery, having reported it as a material weakness in its fiscal year 1994 Federal Managers' Financial Integrity Act Report to the President and Congress.\(^6\) Concerning IFMS, EPA's Office of Inspector General (OIG) reported in 1991 and 1994 deficiencies with the agency's development and implementation of the system, such as problems with the integrity of payroll data and inadequate system development and user documentation. Also, IFMS has been on the Office of Management and Budget's (OMB) high-risk list since 1990.

Scope and Methodology

Our work was performed at several offices at EPA headquarters including the Office of Solid Waste and Emergency Response; Office of Enforcement and Compliance Assurance; Office of Inspector General; and the Financial Management Division in the Office of Administration and Resources Management. These offices are located in Washington, D.C., and Arlington, Virginia. We also performed work at (1) EPA regional offices in New York,


New York; Philadelphia, Pennsylvania; Chicago, Illinois; and San Francisco, California; (2) the Department of Justice in Washington, D.C.; and (3) the office of Leonard G. Birnbaum and Company in Springfield, Virginia.

We conducted our review from January 1994 to July 1995, in accordance with generally accepted government auditing standards. We requested comments on a draft of this report from the Administrator, Environmental Protection Agency. In August 1995, we received the agency's response from the Comptroller, the Director of the Financial Management Division, and the Director of the Policy and Program Evaluation Division. We have incorporated their comments where appropriate. Additional details on our scope and methodology are provided in appendix I.

Information System Limitations Make Cost Recovery Time-Consuming and Labor-Intensive

The automated information systems that EPA has in place fall short of providing the information and support that staff need to efficiently perform Superfund cost recovery work. Data in the central financial systems are insufficiently detailed, and are sometimes inaccurate or incomplete. Further, the records management systems do not provide for the efficient retrieval of supporting cost and work-performed documentation, which, if not located, can result in unrecovered costs. In addition, efforts to collect costs from responsible parties is more difficult, in part because the agency's financial system, IFMS, is not sufficiently sophisticated to address the complexity of the repayment agreements. As a result of these limitations, the cost recovery process is often longer and more tedious than necessary and must be supported by manual searches and ad hoc information systems.

Data in Financial Systems Must Be Augmented by Manual Efforts

Having sufficiently detailed financial information is essential for preparing and supporting cost recovery actions. The Chief Financial Officers Act of 1990 requires that an agency's Chief Financial Officer develop and maintain an integrated agency accounting and financial management system that provides for (1) complete, reliable, consistent, and timely information that is responsive to the financial information needs of agency management and (2) the development and reporting of cost information. Further, the Joint Financial Management Improvement Program states that financial data reporting should be of proper scope, level of detail,
timing, content, and presentation format to provide information of real value to users.\(^7\)

EPA currently operates two financial management systems for maintaining Superfund cost data, IFMS and FMS. However, neither system currently records cost information at a level of detail that is often needed by EPA staff to prepare cost recovery packages. Specifically, EPA regions divide large or complex cleanup sites into smaller components called operable units.\(^8\) Cost recovery staff said that in order to properly assign the correct amount of costs to the appropriate PRP, they need to be able to trace\(^9\) detailed costs to these operable units.

Because EPA systems do not currently record costs at the operable unit level, identifying which costs were incurred at different operable units becomes a time-consuming and tedious task. During the course of a cleanup, which often lasts for years, thousands of individual transactions are processed and stored, including payroll and travel costs for EPA employees, as well as contractor cleanup costs and costs incurred by other agencies, such as the Department of Justice and the U.S. Army Corps of Engineers. To trace these costs to individual operable units, EPA staff must identify all costs that have been recorded and accumulated by site, and then manually segregate the costs by operable unit.

Staff in EPA’s regions told us that this data limitation has resulted in wasted staff resources. For example, one region we contacted was managing a site with 18 operable units, involving $2.8 million in cost recovery. In order to identify costs at the operable unit level, three staff had to work full time for over 4 months to manually allocate the costs. This required them to go through numerous records, including individual time sheets and travel records. Similarly, a staff person in another region estimated that about 10 percent of his time was spent manually allocating costs, which he believed could be avoided if costs were recorded in greater detail. The independent public accounting firm’s report on EPA’s fiscal year 1993 financial statements for the Superfund Trust Fund stated that the system limitation may adversely impact EPA’s ability to account for costs at Superfund sites and projects. The report noted that this could result in the failure to identify and recover these costs in cost recovery actions.


\(^8\)EPA data show that, as of April 7, 1996, of 1,363 sites considered the most hazardous, 670 had two or more operable units.

\(^9\)Tracing is a process that assigns direct costs to a designated cost object, such as an operable unit.
Data Problems Impede the Efficiency of Cost Recovery

EPA staff need accurate and complete financial data to efficiently and effectively pursue cost recovery actions. OMB Circular A-127 specifies that federal agencies should have financial management systems in place to process and record financial events effectively and efficiently and to provide complete, timely, and consistent information. It also states that these systems should have consistent internal controls over data entry, transaction processing, and reporting to ensure the validity of information and protection of federal government resources.

Concerns exist about the integrity of data in IFMS. For example, in its 1994 report on IFMS, the OIG raised concerns about data integrity, including inaccuracies and omissions in the data.\(^\text{10}\) In our discussions with cost recovery staff, they too stated that they had encountered instances of inaccurate and incomplete data, including critical cost and site identification information, in the agency's financial information systems. Several of the examples cited by these staff are described below.

- Staff in three regions stated that they had identified instances of duplicative data. For example, during initial negotiations, one region initially overstated costs for a PRP by about $822,000. While staff identified and corrected this overstatement prior to final negotiations, they determined that the error was largely due to a cost figure that had been duplicated in the financial system. EPA staff were unsure whether this was a random problem or a systemic one.

- One region discovered, while attempting to support a cost summary it had provided to a PRP, that approximately $23,000 had been erroneously charged to a site. The overcharge occurred because contract lab costs that should have been charged to a site in another EPA region had instead been charged to this site, possibly due to a data entry error.

- Five regions expressed concerns that certain costs associated with work performed at individual sites, under national contracts, were not being recorded by site in the agency's financial management systems. For example, one EPA region reported in 1994 that about $90 million in technical assistance team contract charges associated with one of two national contracts could not be traced to specific sites through the agency's financial systems. According to EPA, most of these costs were incurred for non site-specific activities and are recovered from responsible parties as indirect costs through the annual allocation process. However, the regional analysis concluded that some of the costs that were site-specific in nature were not reflected in individual site accounts in IFMS.

• Two regions provided examples of missing or invalid data in the site/project identification field. This was corroborated by a report generated by EPA's Financial Management Division showing about 10,500 transactions, totaling about $129 million in expenditures, for which, according to EPA officials, the site/project identification field was missing.11

These examples are not intended to be representative of the overall integrity of data in the financial systems. However, EPA staff told us that as a result of these types of problems, they have to spend excessive time and effort in researching, reconciling, and correcting financial data needed to support cost recovery actions.

EPA has no assurance that its application controls are sufficient to prevent these data quality problems. Such controls are critical for ensuring accurate data input, processing, and output. The independent public accounting firm that reviewed EPA's financial statements for the Superfund Trust Fund for fiscal year 1993 noted that weaknesses with the internal controls governing data entry made it possible for inaccurate or incomplete account numbers to be entered into IFMS. For example, they found there was no error check control of the site/project code portion of IFMS' account code.

EPA officials believe IFMS contains adequate application controls. However, because these controls are not documented in accordance with federal policies, such as OMB Circular No. A-127 and the Joint Financial Management Improvement Program, we could not assess these controls to determine if they are sufficient to prevent data integrity problems. The lack of documentation for application controls was identified in the OIG's February 1995 report,12 in which the OIG stated that it could not assess application processing controls due to a lack of technical system documentation. The OIG reported that such an internal control weakness could adversely affect EPA's ability to ensure that (1) obligations and costs were in compliance with applicable laws, (2) funds, property, and other assets were safeguarded against unauthorized use or disposition, and (3) transactions were properly recorded to permit the preparation of reliable financial statements.

11We could not determine the accuracy of the information contained in the report provided by EPA.

The previously mentioned example of missing site identification data for technical assistance team costs could have been prevented had additional controls been in place. Such controls would have alerted senior financial managers that these costs had been approved and paid, but were at risk of being excluded from cost recovery actions because they had not been allocated, where possible, to a specific Superfund site.

Until EPA addresses the need for documented controls, data integrity problems could continue to adversely affect the efficiency of performing cost recovery. In addition, when site/project codes are missing, EPA may lose the opportunity to recover related costs in specific cost recovery actions.

Cost Recovery Documentation Not Readily Accessible

To successfully defend its claims for cost recovery, EPA must be able to substantiate each cost item. To do this, the agency locates and provides a wide-range of supporting financial documents, such as invoices and travel vouchers, and supporting work-performed documents, such as contracts, contractor work assignments, and progress reports pertaining to a site. Such documents are needed to provide proof to PRPs and the courts that Superfund-led work to clean up hazardous waste sites was authorized, performed, invoiced, and paid.

Despite the importance of these documents, EPA staff in regional offices believe that the difficulty in locating and retrieving supporting documents was a major contributor to the amount of time and effort required to assemble the packages detailing costs to be recovered. According to these staff, almost all financial documents generated since 1991 are available through the SCRIPS imaging system. However, most of the contract-related financial documents created prior to this time are not available from SCRIPS because the system was not operational until 1991. Pre-1991 contract-related financial documents are stored in EPA's financial management center in Research Triangle Park, North Carolina, and must be manually retrieved for inclusion in the cost recovery packages. Cost recovery staff said that it usually takes about 20 working days to retrieve these documents once identified, and that the time required to assemble the requisite financial documents could be substantially decreased if these documents could also be retrieved using SCRIPS.

Staff also noted that the situation is worse for work-performed documents. There are estimated to be over 11 million pages of work-performed documents occupying about 6,000 linear feet of shelf space in EPA's ten
The regional offices maintain these work-performed documents as hard copy in various locations—some in off-site storage, some in records management centers, and some in working files maintained by EPA staff responsible for managing or overseeing the cleanup process. In many cases, cost recovery staff have to rely on their memories to identify which contractors were used at a site and where relevant documents might be located. Cost recovery staff also noted that if the documents cannot be found in EPA's offices, they must then try to obtain replacements from the contractors' files. Staff in several regions said that assembling work-performed documents from various locations inside and outside of the agency is a time-consuming or labor-intensive process. For example, in one region it typically takes 2 months to assemble such documents. Another region said it takes about 4 months to identify, retrieve, and review work-performed documents.

Although locating supporting documentation can be labor-intensive, the effect of not locating needed documentation can be worse. According to cost recovery staff, if supporting documents cannot be located or otherwise supported, the corresponding cost items are removed from the cost recovery summary, even though these costs may be recoverable. We could not determine the amount that EPA has lost because of such missing documentation because EPA does not track this information. While EPA maintains a record showing the reasons why costs are excluded from final settlements with PRPs, costs excluded from initial negotiations due to missing documentation are not a part of this record.

Financial System Does Not Efficiently Support Management of Superfund Cost Recovery Receivables

EPA regional offices are primarily responsible for managing accounts receivable after the government reaches cost recovery settlements with responsible parties. This requires EPA to establish accounts receivable in a timely manner, collect interest, accurately record collections, and identify and take action on delinquencies.

OMB Circular A-127 requires that an agency's financial management systems provide reliable and timely information on amounts owed the government. It also requires that agency financial systems satisfy the core financial system requirements developed by the Joint Financial Management Improvement Program, including a variety of functions to support the establishment, management, and collection of accounts receivable. These functions include calculating and generating customer

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13These figures, provided by EPA, do not include (1) the entire holdings of one EPA region or (2) the work-performed documentation from four regions that is maintained in active site files.
bills, tracking receivables to be paid for under an installment plan, and accurately identifying receivables that are past due.

IFMS does not meet these requirements. Although IFMS includes an accounts receivable module, which EPA began using in 1989, the module does not meet the special requirements needed to manage the settlement agreements reached with PRPs. It lacks the capabilities to compute compound interest and manage installment payments. This module also lacks the ability to produce accurate aging reports for Treasury and EPA management.

EPA has recognized that it has a receivables problem. It has reported this problem as a material weakness in its fiscal year 1994 Federal Managers' Financial Integrity Act Report. This weakness is very significant, especially given that EPA data show that uncollected Superfund cost recovery receivables totalled about $498 million at the end of fiscal year 1994.

Because EPA has not yet resolved its problem with receivables, some regional offices have developed their own automated systems or manual procedures to overcome these limitations. For example, four regional offices have developed local PC-based systems to provide some of these accounts receivable capabilities, while another region uses a combination of manual procedures and IFMS capabilities. Staff in these regions pointed out that the locally developed systems or procedures give them the capability to perform basic debt-servicing functions that IFMS does not support.

Planned Changes to Information Systems Could Be Enhanced

EPA has initiated efforts to address its information system limitations. These efforts include (1) reporting cost data in greater detail, (2) using a statistical tool to test the integrity of financial data, and developing a capability to require that the site/project field is complete and valid, (3) implementing and testing an imaging system to improve the agency's identification and retrieval of Superfund work-performed documentation, and (4) developing a PC-based information system to better manage accounts receivable. However, additional actions are needed to fully address the limitations and ensure that the agency obtains the best possible systems support for its cost recovery efforts.
Expansion of Account Code Structure Should Result in More Detailed Cost Data

To address the need for more detailed cost data, in October 1995, EPA plans to begin using an expanded 41-digit account code structure in IFMS. This expanded structure should provide the capability to record costs in greater detail, such as by site operable unit, and thus better support EPA’s cost recovery efforts.

Statistical Testing and Improved Documentation of Application Controls Should Help to Improve Data Integrity

To assess financial data reliability, EPA’s Financial Management Division has recently developed an automated statistical sampling tool. The Division instructed the regions and finance centers in March 1995 to begin using this statistical tool as part of the agency’s internal control evaluations. In August 1995, EPA officials stated that the results of the initial testing are currently being reviewed. In response to our concerns, EPA officials told us they intend to issue guidance for automated statistical testing of the integrity of financial data needed for cost recovery.

Regarding application controls, EPA officials acknowledged that the capability to require that the site/project field be completed when financial transactions are entered into IFMS would be beneficial. They said that a new project cost accounting subsystem of IFMS, scheduled for implementation by October 1995, should provide this capability. With respect to the requirement that financial systems be documented in accordance with federal policies, EPA officials also reported that they intend to work with the OIG in improving the documentation of application controls in IFMS.

Additional Use of Technology Could Enhance Records Management Systems Used for Cost Recovery

As noted earlier, difficulties in locating and retrieving financial and work-performed documentation has been a major contributor to the amount of time and effort required to assemble cost recovery packages. Although EPA has two efforts underway that may improve certain aspects of its records management capabilities, neither project, as currently planned, will address the agency’s difficulties in locating pre-1991 financial documents, or millions of work-performed documents that occupy growing amounts of space in EPA locations nationwide.

One project involves the development of an imaging system, called the Superfund Document Management System (SDMS). SDMS is intended to provide a number of advanced capabilities, such as full-text indexing, electronic redaction, and security controls. The system is being tested in EPA’s regional office in San Francisco, California, using documents related to its largest Superfund site. This site accounts for about 25 percent of the
region's Superfund documents. Although SDMS may provide an effective means for locating Superfund-related program documentation, EPA has not assessed the use of SDMS for cost recovery in other regions.

A second project, initiated in 1993, involves microfilming over a million pages of documentation pertaining to 60 expired nationally-managed contracts and creating an automated index of these documents. The project, which is being funded by EPA and implemented by the Department of Justice, is intended to overcome difficulties that EPA regions and Justice have experienced in obtaining copies of this documentation. This effort may substantially improve the accessibility and retrievability of work-performed documents related to the expired national contracts. However, EPA has no plans to assess whether this effort should be expanded to include other region-specific work-performed documents that are used extensively in cost recovery, such as documents pertaining to contracts managed by EPA regions.

Although SCRIPS provides electronic access to financial documents generated since 1991, an EPA official in the Financial Management Division told us that the agency had not evaluated the costs or benefits of expanding this system to include pre-1991 financial documents, or included such a project in the agency's Five-Year Plan. Agency officials explained that this has not been a high priority.

**Evidence Lacking to Support EPA Assessment of Risks and Controls for Accounts Receivable System**

Recognizing that IFMS' accounts receivable management capabilities needed improvement, EPA has initiated plans to strengthen these capabilities beginning in early fiscal year 1996. The agency plans to implement a Cost Recovery Collection Tracking System (CTS), which is being developed in EPA's Chicago, Illinois, regional office. CTS will run on personal computers that are connected to a local area network in the region. The system is intended to provide (1) a demand letter billing capability for actions initiated subsequent to an administrative or judicial order, (2) timely collection information to EPA managers, (3) tracking reports concerning cost recovery collections, and (4) direct uploading of collections data to IFMS. EPA's Financial Management Division plans to have CTS designed, developed, and tested in the Chicago regional office by September 30, 1995, and plans to distribute CTS to all of its regional offices by December 31, 1995.

Given that the development of receivables management capabilities could affect the collection of and accounting for billions of dollars, it is critical
that EPA implement a system that effectively safeguards these public assets. As outlined in OMB Circulars A-123, A-127, and A-130, agencies are required to (1) perform an assessment of the potential risks associated with the operation of a system and (2) provide some assurance that appropriate controls are in place to reduce risks such as data entry errors and fraudulent manipulation of accounts receivable data. Although EPA officials told us that risk assessment was an inherent part of the development of CTS, they could not provide us with documentation demonstrating that the agency had performed a risk assessment or ensured that necessary controls will be in place.

Conclusions

EPA's financial and records management systems do not efficiently support cost recovery, a critical business process that is vital to the continued existence of the Superfund program. Because of limitations in these systems, cost recovery staff cannot fully rely on them to provide the information needed for cost recovery. Instead, they laboriously search and reconcile paper records to ensure that the information supporting cost recovery cases is accurate, reliable, and complete.

Aware of these limitations, EPA is taking steps to improve support for cost recovery. However, the agency could further ensure that it is obtaining the best possible support for cost recovery by (1) implementing its planned automated statistical testing of the integrity of financial data needed for cost recovery and developing a baseline on the extent of any integrity problems; (2) improving the documentation of its financial systems' application controls; (3) assessing how best to use records management systems to meet cost recovery users' needs; and (4) ensuring that all risks associated with the collection and management of receivables have been addressed. These additional actions could further improve EPA's efforts to recover billions of Superfund dollars through cost recovery actions, make cost recovery more efficient, and lower the risks of losing recoverable dollars.

Recommendations

To improve EPA's ability to recover costs associated with cleaning up hazardous waste sites, we recommend that the Administrator of the Environmental Protection Agency take steps to ensure that cost recovery data and supporting documentation are complete and accurate by
- implementing planned automated statistical testing of the integrity of financial data needed for cost recovery and developing a baseline on the extent of any integrity problems identified,
- improving the documentation of financial systems' application controls to help ensure accurate data input, processing, and output,
- assessing whether efforts to improve records management systems for cost recovery should be expanded, including evaluating how best to improve the retrieval of pre-1991 financial documents, and
- performing a risk assessment and determining if additional controls are needed for accounts receivable.

Agency Comments and Our Evaluation

EPA officials, including the Comptroller, the Director of the Financial Management Division, and the Director of the Policy and Program Evaluation Division, provided comments on a draft of this report. Overall, the officials agreed with our recommendations and with our conclusions that the agency's systems supporting cost recovery needed improvement. The agency provided additional information on the status of its improvement activities, which we have incorporated where appropriate.

As arranged with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the date of this letter. At that time, we will send copies to the Administrator of the Environmental Protection Agency, Director, Office of Management and Budget, and interested congressional committees. Copies will also be made available to others upon request.

Please call me at (202) 512-6253 if you or your staff have any questions concerning this report. Other major contributors are listed in appendix II.

Sincerely yours,

Joel C. Willemsen
Director, Information Resources
Management/Resources, Community and Economic Development
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Abbreviations

CERCLA    Comprehensive Environmental Response, Compensation, and Liability Act
CTS       Cost Recovery Collection Tracking System
EPA       Environmental Protection Agency
FMS       Financial Management System
GAO       General Accounting Office
IFMS      Integrated Financial Management System
OIG       Office of Inspector General
OMB       Office of Management and Budget
PRP       Potentially Responsible Party
SCRIPS    Superfund Cost Recovery Image Processing System
SDMS      Superfund Document Management System
Appendix I

Scope and Methodology

To evaluate how well EPA’s information systems support the Superfund cost recovery process, we used a structured interview document to discuss cost recovery efforts with staff from five of EPA’s ten regional offices: Region 2 (New York), Region 3 (Philadelphia), Region 5 (Chicago), Region 7 (Kansas City); and Region 10 (Seattle). We chose regions 2, 3, and 5 because they had the highest levels of direct expenditures on cleanups. We chose regions 7 and 10 because they provided geographical diversity. We analyzed numerous documents related to cost recovery from each of these regions. Because integrity of data in EPA’s financial systems has a direct impact on how well these systems support cost recovery, we sought information from cost recovery staff on the extent of problems with the financial data. However, because these staff were unable to provide quantified information on the extent of such problems, we relied on their oral responses and some documented instances in reaching our conclusions. We also contacted by phone records management officials in all ten EPA regions concerning the volume of documentation maintained and researched for supporting cost recovery.

We met with representatives and analyzed workpapers and documents from the three firms involved in the audit of EPA’s fiscal year 1993 financial statements for the Superfund Trust Fund. These firms were Leonard G. Birnbaum and Company; KPMG Peat Marwick; and American Power Jet Company. We met with officials from EPA’s OIG and reviewed its past and current reports related to Superfund and cost recovery. We also met with officials in the Department of Justice’s Environment and Natural Resources Division concerning the quality of the cost recovery documentation that it receives from EPA and uses to pursue cost recovery actions.

To evaluate the extent to which EPA’s planned information systems modifications could improve the efficiency of cost recovery efforts, we (1) applied relevant segments of the information systems audit methodology published by the EDP Auditors Foundation,1 (2) interviewed officials from several EPA headquarters offices in Washington, D.C., and from EPA regional offices involved in developing new information systems or modifications to existing systems, and (3) reviewed and analyzed documents on EPA’s actions, including documentation on users’ requirements, feasibility, costs, benefits, and detailed specifications pertaining to the agency’s efforts to enhance and develop system capabilities to support cost recovery. We also reviewed EPA planning

documents, including the agency's Five-Year Plan, and Strategy and Master Work Plan for IFMS.

Our work was performed at several offices at EPA headquarters including the Office of Solid Waste and Emergency Response, Office of Enforcement and Compliance Assurance, Office of Inspector General, and the Financial Management Division in the Office of Administration and Resources Management. These offices were located in Washington, D.C., and Arlington, Virginia. We also worked at (1) EPA regional offices in New York, New York; Philadelphia, Pennsylvania; Chicago, Illinois; and San Francisco, California; (2) the Department of Justice in Washington, D.C.; and (3) the office of Leonard G. Birnbaum and Company in Springfield, Virginia.

We conducted our review from January 1994 to July 1995, in accordance with generally accepted government auditing standards. We requested comments on a draft of this report from the Administrator, Environmental Protection Agency. In August 1995, we received the agency's response from the Comptroller, the Director for the Financial Management Division, and the Director for the Policy and Program Evaluation Division. We have incorporated these comments where appropriate.
Appendix II

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