

September 1999

**FY 1998
AUDITED FINANCIAL
STATEMENTS**



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Office of the Chief Financial Officer
Financial Management Division*

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MESSAGE FROM THE ADMINISTRATOR

I am pleased to present the U.S. Environmental Protection Agency's (EPA) Annual Financial Statements for Fiscal Year 1998. These statements summarize EPA's financial activities from October 1, 1997 through September 30, 1998, and highlight the successes achieved by the Agency's programs during this time.

I am proud that this year's financial statements received an unqualified opinion from the Agency's Inspector General. An unqualified opinion means that the principal financial statements contained in this report fairly present the Agency's financial position and results of operations as of September 30, 1998. This opinion also recognizes that the information presented in these statements is reliable and that the Agency uses sound financial management practices.

This nation has made great progress since it passed its major environmental laws more than 25 years ago. Our air is healthier, our water cleaner, our land freer from toxic chemicals. Today, America has some of the strongest environmental and public health protections in the world. But we still face tremendous challenges. One out of three Americans live in areas that do not meet EPA's standards for healthier air. Ten million children live within four miles of a toxic waste dump. A third of our surveyed rivers, lakes, and coastal waters are still too polluted for fishing and swimming. Global warming looms as a serious threat.

To meet these difficult challenges, EPA, in the 1998 fiscal year, has continued to take important actions to protect public health and the environment in the most cost effective, common sense ways possible. Here are a few highlights:

- We've taken steps to address polluted runoff with the President's new Clean Water Action Plan -- the nation's blueprint to finish the job of cleaning up and restoring the nation's waters.
- We've made Superfund toxic waste cleanups 20 percent faster and cheaper, with 90 percent of the sites either cleaned up or in the midst of cleanup.
- We've helped more than 300 cities and communities cleanup and redevelop abandoned industrial properties through the Brownfields Redevelopment Initiative.
- We've continued to expand the public's right to know about toxic pollution in their communities by providing more information about air and water pollution.

To make EPA programs more effective, the agency continued to change the way we conduct business and make decisions. Our Strategic Plan, issued in 1997, defines the Agency's strategic mission and establishes long term goals and objectives. The Plan also serves as EPA's framework for Agency managers to set annual goals, measure performance, and focus resources on the highest priority issues to ensure that we use taxpayer dollars to achieve environmental results. EPA's FY

1999 Annual Performance Plan and Budget integrates the Agency's budget with Annual Performance Goals and Performance Measures. EPA can use performance information to measure our progress toward meeting our FY 1999 goals and objectives, and to make smarter resource allocation decisions in the future.

Effective financial management remains a high priority for me. Our financial statements will continue to be an important means of ensuring that EPA is accountable to the American people and that the Agency continues to build on its accomplishments to provide all Americans with a cleaner, safer, and healthier environment.

Carol M. Browner
Administrator

OVERVIEW OF EPA

Background

The U.S. Environmental Protection Agency (EPA) was established in 1970 to lead the Nation's efforts to protect and preserve human health, and to safeguard the natural environment. EPA is working to achieve this mission by reducing risks to human health and the environment, preventing pollution, and simultaneously promoting economic development in an environmentally sound and cost-effective manner. EPA has made significant strides during the past 25 years towards achieving these goals, but the Nation still faces critical environmental challenges. Americans continue to live in areas where the soil is contaminated and is unsuitable to live or play on, the water is unsafe to drink, and the air is dangerous to breathe. Despite these challenges, EPA is committed to ensuring that the Nation's environment is made safe and clean for our next generation.

Congress provided EPA with **\$7.6 billion and 17,975 workyears** for FY 1998. During FY 1998, the Agency began advancing the environmental commitments made by the President and began implementing new environmental and public health standards. For example, EPA issued guidance and worked with states on implementing the improved air quality standards for ozone and particulate matter (July 1997 standards). EPA also accelerated Superfund cleanups of hazardous waste sites, and expanded Brownfields redevelopment efforts under the Brownfields Redevelopment Initiative. The Agency improved access to information about pollution in local communities consistent with its commitment to the public's right-to-know about toxic and hazardous chemicals in their neighborhoods. EPA increased assessments of health risks to children who may be vulnerable to the effects of toxic substances. The Agency assisted in the revitalization of urban areas, applied new research tools to the state of the environment, and ensured the safety of the Nation's water and food supplies. Also, EPA continued to promote environmental justice and urban environmental quality; improve Federal environmental management; empower states, tribes, communities, and the university research community; and develop a more dynamic enforcement program to enhance compliance, regulatory, and voluntary activities.

GPRA Implementation

In September 1997, EPA issued its first Strategic Plan required by the Government Performance and Results Act (GPRA). This plan describes EPA's mission, long-term goals, and identifies specific objectives the Agency would meet in achieving these goals. The Plan also serves as the framework by which the Agency is transitioning to performance-based planning and budgeting. EPA's FY 1999 Annual Performance Plan and Budget integrates resource requests with annual performance goals and measures. The performance results for these annual goals and measures will then be used to assess the contributions of the FY 1999 accomplishments towards achieving EPA's longer-term goals and objectives.

During FY 1998, EPA continued to develop other key mechanisms to strengthen the Agency's planning, budgeting, analysis, and accountability framework in cooperation with its partners and stakeholders. First, EPA initiated a new multi-year planning process in January 1998 to examine the links between the Annual Performance Goals (APGs) identified in EPA's FY 1999 Annual Performance Plan and Budget and the longer-term goals and objectives outlined in the Strategic Plan. Goal Teams, having a Regional Administrator and a National Program Manager as co-leaders, discussed plans with EPA's Deputy Administrator to improve the availability and quality of environmental information, and their plans for achieving environmental and programmatic results. For the first time, EPA's planning focus was based on the Agency's strategic goals and objectives rather than on the activities of individual program offices.

Second, EPA reviewed its FY 1999 APGs and Performance Measures and began work to improve its APGs and Performance Measures for the FY 2000 Annual Performance Plan and Budget. The Office of the Chief Financial Officer (OCFO) developed the criteria for establishing APGs and Performance Measures, and evaluated the Agency's ability to measure progress against its strategic objectives and sub-objectives.

Third, EPA developed the FY 1999 performance accountability process with advice from a broad range of partners and stakeholders including representatives of states and tribes. Approved by EPA's Deputy Administrator in June 1998, the FY 1999 process is centered on the creation of a basic framework to support the development of EPA's first Annual Performance Report under GPRA -- due to Congress in March 2000. The initial accountability process is part of a two-track strategy that recognizes FY 1999 as a learning year that will ultimately contribute to the development of a long-term accountability process for FY 2000 and beyond. Accomplishments to date include the development of an initial outline on the form and content of the Annual Performance Report, and the design and testing of a central accountability database to record performance information on APGs and Performance Measures.

Finally, EPA developed a major outreach effort to communicate the Agency's need and capacity to implement the GPRA. Accordingly, the OCFO conducted regional workshops to provide regional employees and managers with information concerning the Agency's planning, budgeting, analysis, and accountability processes. The OCFO also presented briefings to a number of EPA headquarters offices and to several external stakeholders.

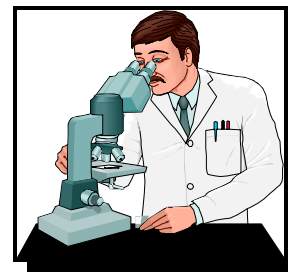
Protecting Communities from Toxic Pollution

The President made a national commitment to protect our Nation's communities from the dangers of toxic pollution. Accordingly, EPA began carrying out this promise by addressing four key areas:

- ◆ Began efforts to accelerate toxic waste cleanups at 900 of the Nation's worst toxic waste sites.
- ◆ Expanded the Brownfields Redevelopment Initiative to increase the number of grants provided by EPA to communities for site assessments, cleanups, and redevelopment planning of contaminated and abandoned urban properties.
- ◆ Enhanced the availability of right-to-know information to our Nation's citizens and communities by working with federal, state, and local agencies to develop a nationwide network that monitors key environmental health indicators relating to air, land, and water. Americans will have the ability to access timely health-related data needed to make informed choices affecting their health and information concerning the possible links between toxics and environmental health risks (e.g., cancer and reproductive risks).
- ◆ Continued to get tough on criminal polluters by helping prosecutors, police, and investigators develop better tools to protect our communities from the threat of toxic pollution. EPA also provided state and local law enforcement officers with training to enhance their abilities to investigate and detect environmental crimes.

Implementing New Environmental Laws

EPA continued to implement new requirements under the Safe Drinking Water Act (SDWA) Amendments of 1996 to ensure that our Nation's public water system provides safe drinking water. To achieve this goal, EPA has improved the way drinking water safety standards are established and regulations are developed, emphasized prevention programs such as protecting source waters, set regulatory priorities based on risk, and expanded consumer information about contaminants found in drinking water. EPA also provided technical and financial assistance to state and local governments to assist them in the operation of small drinking water systems, and EPA capitalization grants were issued to states for loans to local municipalities to improve their drinking water systems. EPA's drinking water research efforts strengthened the scientific basis for drinking water standards through the use of improved methods and new data to better evaluate the risks associated with exposure to chemical and microbial contaminants in drinking water.



EPA implemented the requirements of the Food Quality Protection Act (FQPA) of 1996 created to improve the safety of our Nation's food supply. To ensure that pesticides are safer, EPA reassessed existing pesticide tolerances, streamlined reviews of safer

pesticides, reviewed pesticide registration for new health concerns such as endocrine disruptors, and accelerated the review of existing pesticides. EPA also developed and distributed more useful information to the public to inform them of the risks posed from exposures to adverse pesticides. To help finance these new requirements, EPA increased the pesticide reregistration and tolerance fees. Finally, EPA initiated a major research effort to address critical science needs, such as cumulative exposure, identified under Titles III and IV of the Act.

Protecting Children from Environmental Threats

Assessing the health risks of our children from environmental pollutants is a primary concern of the President. In support of this policy, EPA initiated a research program to improve understanding of the unique health risks children face when exposed to pesticides and other environmental pollutants. Accordingly, EPA's Administrator established policy ensuring that all environmental health risks to children are explicitly and consistently evaluated as part of the Agency's risk assessments, risk characterizations, and environmental and public health standards pursuant to EPA's national agenda on children's environmental health issued in 1996. EPA continues to increase families' awareness of possible health threats to their children by way of public information and education under the Right-to-Know program. Also, EPA's enforcement efforts have focused on children through coordinated initiatives, case development, and litigation to protect them from the dangers of lead-based paint. To fulfill the President's commitment, EPA reassessed existing information and approaches used to determine health risks to children, and began revising national standards to provide our children with greater protection.

Revitalizing Cities

EPA is committed to making America's cities more livable through effective environmental protection. EPA continued to build new partnerships with urban communities by increasing urban revitalization efforts through an expanded Brownfields Redevelopment Initiative which promotes cleanup and redevelopment of abandoned and contaminated industrial and commercial properties (i.e., brownfields) across the Nation. In addition to redeveloping contaminated properties, the Brownfields Initiative provides communities with an increased tax base, creates additional jobs, and improves the overall quality of urban environments.

EPA produced guidelines for preventing polluted runoff that could threaten urban drinking water sources and for improving air quality in urban communities. EPA also provided support to cities for pilot projects in waste minimization outreach and through coordinated pollution prevention goals that reduce waste generation, energy usage, and water usage.

Applying Advanced Technology to Environmental Management

Recent technological developments in remote sensing, information systems, and computer technologies have created new and more effective ways for EPA to monitor and manage the environment. The Advanced Measurement Initiative (AMI) has enabled the identification, research, and application of advanced monitoring tools and technologies that provide more timely, accurate, comprehensive, and cost-effective monitoring information for assessing the status of the environment, human health, and ecosystems. Fundamental to AMI is the demand for effective partnerships with intra-agency and inter-agency (e.g., NASA and the Departments of Defense, Energy, Interior, and Commerce) organizations, including partnerships with communities, academia, and private industry. EPA will continue to leverage these vital partnerships while matching specific environmental monitoring needs with the appropriate technological solutions.

Regulatory Reinvention

EPA continued to support high-priority reinvention activities such as Project XL (i.e., excellence and leadership), the Common Sense Initiative (CSI), and the Sustainable Development Challenge Grant Program, while seeking alternatives to the current regulatory system.

Under Project XL, companies, states, and localities may redesign current EPA rules if they can formulate alternative systems that are both cheaper and cleaner for the environment. Through Project XL, EPA has successfully forged new and

challenging partnerships with businesses and communities interested in contributing new and innovative strategies for efficient and effective environmental management.

The CSI is central to EPA's ongoing efforts to improve the way it undertakes environmental missions. The CSI has enabled EPA to find cleaner, cheaper, and smarter solutions to help overcome the Nation's environmental problems. The CSI concept is based on the understanding that EPA should be uncompromising in achieving its health and environmental objectives, but flexible enough to provide regulated entities with cost-effective ways to meet their environmental regulatory objectives.

The Sustainable Development Challenge Grant Program awards funds to projects that leverage public and private community investment for the purpose of developing comprehensive environmental management plans. The program is designed to improve environmental quality and economic prosperity. Through open community involvement and investment, this program has challenged communities to meet their present environmental and economic needs without compromising the needs of future generations.

Finally, EPA's Environmental Leadership Program continued to work with Federal and state partners to initiate projects that will provide new and innovative approaches to compliance. EPA has provided funding to assist small businesses, including Small Business Compliance Assistance Centers that help small businesses in specific industries, comply with their environmental requirements. EPA's compliance with the Small Business Regulatory Enforcement Fairness Act has steadily increased the amount of consideration and accommodation afforded small business concerns in regulatory matters.

Strengthening State and Tribal Partnerships

EPA continued its efforts to build and support state, local, and tribal environmental protection programs. Since effective Federal/state/local/tribal partnerships are essential to fully realize our Nation's environmental laws, EPA continues to enhance its partnership efforts to implement, operate, and enforce these laws.

EPA continued to provide state and tribal governments with technical and financial assistance. Additional resources were provided to states for their air, water, and multimedia enforcement programs to assist them in addressing growing program requirements created by the FQPA, new clean air standards, and the need to review the quality of surface waters for Total Maximum Daily Loads. Increased resource levels also were provided to tribes to help them continue developing their own environmental protection programs. For example, resources were provided to tribes through Indian General Assistance Program grants. These resources enabled tribes to identify the scope of their environmental management needs, establish their program development priorities, and to continue building their individual environmental programs. These grants have provided EPA with its most effective means for building the tribal capacity necessary for making and implementing environmental management decisions.

Under the National Environmental Performance Partnership System, EPA has recognized the states' increasing capacity to operate their own environmental programs. Accordingly, EPA continued to explore new approaches that would provide its state and tribal partners with more flexibility in managing their environmental programs. For example, the Agency is attempting to formalize Tribal/EPA Environmental Agreements with every Federally recognized Indian tribe. Through these agreements, EPA can support its Indian partners in a manner that is consistent with both tribal priorities and various statutory requirements.

Performance Partnership Grants and Agreements

In 1996, Congress enacted the President's proposal to establish permanent authority for EPA to enter into Performance Partnership Grants with states and tribes. During 1998, EPA continued to work with states and tribes to combine individual categorical grants (e.g., air, water, hazardous waste, etc.) into one or more consolidated grants. Consolidating several individual grants into one has helped to streamline administrative burdens and has enabled states and tribes to direct valuable resources to their most pressing environmental problems. As states and tribes begin to realize the major benefits of these combined grants, a further increase in state and tribal participation is anticipated. Also, Performance Partnership Grants,

which are closely tied to the National Environmental Performance Partnership System (NEPPS), have allowed states to sign agreements with EPA which reduce oversight in exchange for strong state performance.

Enforcement and Compliance Assurance

EPA's enforcement program continued to emphasize a balanced approach between traditional activities of compliance monitoring, civil and criminal enforcement actions, and more recent approaches such as compliance assistance and compliance incentives. In 1998, the Agency carefully invested and redirected resources to support its dual role which requires the use of enforcement and compliance tools to ensure adherence to environmental regulations, particularly in high risk areas. Resources were subsequently redirected from relatively low risk areas, such as Hazardous Waste Enforcement, to programs that protect children's health from lead-based paint and pesticide misuse. The enforcement program also provided additional resources to protect public water systems and to address unique water pollution problems associated with concentrated animal feedlot operations.

Although the amount of Federal compliance assistance resources has been reduced as states assume greater responsibility, the enforcement program provided additional resources for compliance incentives to the regulated community. During 1998, the enforcement program emphasized and provided increased resources to establish the new self-audit policy as a way of achieving greater compliance levels at a lower cost to the public and private sectors, including industry and Federal agency partnerships.

EPA continues to direct resources to multimedia compliance. The enforcement program is enhancing compliance by providing compliance assistance to the regulated community, including Federal facilities, and by developing and implementing ways to encourage voluntary compliance with environmental regulations. One example of developing assistance tools for the regulated community is the Small Business Compliance Assistance Centers. These Centers provide one-stop shopping for all regulations for a given industry sector such as printing or metal finishing. The Centers provide plain-English guides to compliance requirements and technical assistance resources, assistance and training on treatment technologies, and methodologies for self-audits and compliance surveys.



The enforcement program completed the pilot phase of the Sector Facility Indexing Project (SFIP). The pilot SFIP makes it easier for the public to access a wide range of environmental information about regulated facilities. In the past, these records, although public, were very difficult for government and public users to access because they were spread across many different databases. Under SFIP, the Agency has integrated this information so that it can be viewed in one place, and can be used to better understand overall facility environmental records. SFIP, in its current pilot stage, will allow EPA to gauge the level of public interest in examining records regarding government oversight of regulated facilities, facility compliance with environmental laws, and the overall pollutant releases that are reported. SFIP currently contains records for five industry sectors that consist of a total of 653 facilities. The Agency publicly released the SFIP data on May 1, 1998, via the Internet. In September 1998, EPA made available a hard copy report of SFIP for those who do not have ready access to the Internet. In FY 1999, the Agency will evaluate the SFIP to determine future directions of the project.

The primary goal of EPA's Federal Facility Compliance Program is to ensure that all agencies reach a level of compliance with environmental requirements that equals or surpasses the rest of the regulated community. EPA uses a three-pronged approach: training and compliance assistance; compliance oversight and enforcement; and review of federal agency environmental plans and programs. This comprehensive approach is designed to help federal agencies develop appropriate compliance strategies and to request adequate funding to carry out those strategies. Environmental Reviews and multimedia inspections continue to be used for compliance assistance at federal facilities.

In FY 1998, the Environmental Justice Program (EJP) continued to emphasize public outreach efforts and focused on disadvantaged communities with a disproportionate number of polluting sources. A total of \$2.5 million in small grants up to \$20,000 each were awarded to 123 community organizations seeking solutions to local environmental problems. Also, a total of \$500,000 was awarded to states and tribes to provide financial assistance to state and environmental departments to address environmental justice issues. Finally, the National Environmental Justice Advisory Council held 18 meetings in FY 1998. The EJP will continue to develop tools for identifying impacted communities and to target enforcement actions in areas with the greatest risk from environmental hazards.

The enforcement and compliance assurance program continued to emphasize the review of environmental impacts of proposed major federal actions as required by the National Environmental Policy Act (NEPA); Section 309 of the Clean Air Act; Executive Order on Environmental Justice; Antarctic Science, Tourism, and Conservation Act. The program also focused on EPA's compliance with NEPA, the Endangered Species Act, the National Historic Preservation Act, and other relevant executive orders. EPA continued to fulfill the Nation's commitments under the legislation implementing the North American Free Trade Agreement, other international trade and environmental agreements and treaties, such as the General Agreement on Tariffs and Trade, and other international commitments.

The enforcement and compliance assurance programs continue to support the expansion of the American public's right-to-know by providing the public with access to information through a variety of avenues: 1) the enforcement DOCKET, a physical and electronic site where the public can access policies, guidance documents, and legal interpretations; 2) Integrated Data for Enforcement Analysis (IDEA) which integrates compliance data from individual databases available nationally in an interactive, on-line mode; and 3) the Sector Facility Indexing Project (SFIP), implemented in FY 1998, which provides the public with profiles of major regulated industries and information on industry demographic processes, pollution emissions, compliance history, pollution prevention, and regulatory requirements.

The enforcement and compliance assurance program deters noncompliance by maintaining levels of field presence and enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. The program used the following performance measures for assessing success in FY 1998:

<u>Key Performance Measures</u>	<u>1998 Goal</u>	<u>1998 Actual</u>
Hits to Several Web Sites	67,400 Documents	80,000 Documents
Lab Integrity Inspections	86 Inspections	96 Inspections
Lab Integrity Audits	230 Audits	277 Audits
Import/Export Notifications	2,300 Notices	1,700 Notices
Multimedia Inspections - Headquarter	15 Inspections	23 Inspections
Federal Facility Inspections	28 Inspections	82 Inspections
Other EPCRA Inspections	700 Inspections	700 Inspections
Administrative Orders Issued	90 Administrative Orders	84 Administrative Orders
Number of Small Entities Receiving Relief under Small Business Policy	10 Entities	5 Entities
Compliance Assistance Centers. in Operation	8 Centers	8 Centers
Compliance Tools Development	7 Sector Notebooks	3 Sector Notebooks
NEPA Compliance Actions	100% Documented	100% Documented

<u>Key Performance Measures</u>	<u>1998 Goal</u>	<u>1998 Actual</u>
Major Proposed Federal Actions, Draft Environmental Impact Statement (DEIS) Filed	325 DEIS	273 DEIS
DEIS Requiring EPA Follow-up	650 Impacts	655 Impacts
Impacts Requiring EPA Follow-up Successfully Mitigated	70% of Impacts	62% of Impacts
Federal Facilities Management Reviews	15 Reviews	26 Reviews
Environmental Justice Grants	100 Grants	114 Grants
CERCLA Environmental Justice Grants	27 Grants	20 Grants
Multimedia Inspections - Regions	120 Inspections	41 Inspections
Documents included in Enviro\$en\$e	4,200 Documents	4,126 Documents
Specialized Assistance and Training	100 Courses	72 Courses
Administrative Cases Concluded	80 Administrative Cases	97 Administrative Cases
Civil Judicial Cases Concluded	2 Civil Cases	2 Civil Cases
Criminal Cases Referred	310 Cases	266 Cases
Compliance Tools Development	4 Sector Guides	4 Sector Guides
Facilities that Self Disclosed Potential Violations as a Result of Targeted Agency Action	75 Facilities	710 Facilities
Facilities that Self Disclosed Potential Violations	330 Facilities	954 Facilities
Single Media Inspections - Field	14 Inspections	23 Inspections
Multimedia Inspections - Field	15 Inspections	10 Inspections

The criminal provisions of the nation's environmental statutes are enforced by EPA's criminal investigators. These special agents, located nationwide, conduct criminal investigations, support Department of Justice (DOJ) prosecutors, and coordinate with other law enforcement agencies to present a highly visible and effective component in the Agency's enforcement strategy. The goal of the criminal enforcement program is to bring to bear the most serious sanctions for the most significant environmental violations. By demonstrating to the regulated community that serious, knowing statutory violations will be met with harsh sanctions in terms of both fines and jail sentences, the program acts to forcefully deter violations of environmental laws and regulations in a way that civil judicial and administrative enforcement rarely can. Cases are referred to the U.S. Attorneys' Offices or DOJ for prosecution, with special agents serving as key witnesses in the judicial proceedings.

Performance Measures: Criminal cases, in all media, referred for prosecution.

This measure provides the number of criminal cases referred by EPA to the United States Attorneys and/or DOJ for prosecution. EPA is responsible for criminal investigations, while any decisions of a prosecutorial nature are made by DOJ in cases referred by EPA.

Results: In FY 1998, 266 cases were referred to DOJ. This number is lower than the estimated number of 310 referrals. This is due to two factors, an increase in the number of complex cases, consistent with program guidance, and the development of new agents hired at the end of FY 1997. The program had anticipated hiring all 200 agents, as mandated by the Pollution Prosecution Act. However, delays in hiring during FY 1997 meant that a portion of FY 1998 was spent training new staff. Now that the program is fully staffed and trained, it is anticipated that the Agency will be able to make the projected number in the future.

Reducing Uncertainties Through Research

During 1998, EPA continued its support of a vigorous research and development program focused on strengthening the Agency's understanding in areas having major environmental and human health uncertainties. Research priorities were developed by the Agency in accordance with the Office and Research Development's strategic plan which uses a risk-based priority process. One particular area identified as having great risk and major uncertainty is Particulate Matter (PM). PM is probably the largest single contributor to the adverse health effects caused by air pollution and cause, within an estimated range, thousands to tens of thousands of premature deaths each year. PM research has focused on mortality risks, exposure, and the mechanisms by which the particles affect human health.

EPA conducted research, in response to growing scientific concerns, on the unknown effects of environmental exposure to substances that interact with the endocrine system. Research in this area has characterized the effects of environmental exposure to various chemicals in two target populations, humans and wildlife. EPA also conducted research to gain a better understanding of the potential health risks associated with human exposure to drinking water disinfection by-products and microbial pathogens. EPA research developed a rapid response measure for recreational water quality. Typically, it takes 48 hours to estimate whether recreational water is contaminated with gastrointestinal bacteria. If contamination is present, this time period carries a high risk for illness, especially for children. EPA developed a method that only takes 24 hours, thereby cutting the time at risk in half.

Additional research focused on EPA's Mid Atlantic Integrated Assessment (MAIA), a cooperative geographic study conducted under the Environmental Monitoring and Assessment Program. The MAIA program has generated a number deliverables, including *An Inventory of Existing Programs*, *An Ecological Assessment of the United States Mid Atlantic Region: A Landscape Atlas*, and the *State of Estuaries Report for Mid Atlantic Estuaries*.

EPA's research program also includes the Superfund Innovative Technology and Evaluation (SITE) program. Recognizing the movement towards remediation and away from the removal of soil and groundwater (ex-situ), the SITE program has emphasized the development of technologies that treat contamination in place (in-situ). In FY 1998, in-situ groundwater, vadose zone-in-situ remediation, and containment technologies were developed. Work continued in phytoremediation evaluation processes along with system cost documentation.

Climate Change Action Plan

EPA continued to support the implementation of the Climate Change Action Plan (CCAP). The actions taken under the CCAP are the means by which the U.S. is striving to meet its commitment to reduce annual greenhouse gas emissions to 1990 levels by the year 2000. The heart of the CCAP relies heavily on voluntary partnerships between EPA and organizations, or individuals, that join to save energy and/or increase productivity while reducing greenhouse gases. EPA continued to develop new partnerships and to strengthen its on-going partnerships with entities such as states, cities, farmers, and large and small businesses.

Year 2000 (Y2K) Activities

FY 1998 was a critical year in positioning the Agency's information technology assets to successfully transition to the next millennium. The Agency strategy was to address mission critical assets first and systematically devolve through the remaining assets. EPA is on schedule to meet the government-wide compliance deadline of March 31, 1999 for mission critical systems -- already completed the Assessment, Renovation, and Validation phases. The agency has also implemented

an independent certification program: six systems have successfully completed third party review/testing, another eight are being reviewed/tested and the rest are being scheduled. The Agency also has made major progress in addressing potential Y2K vulnerabilities of servers, personal computers, networks, scientific equipment, and our base computing environments (i.e., mainframe, client/server, supercomputer), and our other than mission critical application systems. We are confident that all EPA-leased and owned buildings will be compliant by February 1999 and will request written confirmation of Y2K compliance from GSA for each building leased through them by no later than March 1, 1999.

The Agency has greatly expanded outreach efforts to ensure continuity of environmental services to the public. EPA is responsible for coordination and outreach for three sectors identified by the President's Council on Year 2000 Conversion: Water, Waste, and Chemicals. As the "sector coordinator," EPA coordinates federal agency efforts to address the Y2K issue with federal, state, local, and private sector organizations whose activities affect the protection of public health and the environment. EPA also has established internal environmental sectors for Air, Water, Waste, Chemicals, Pulp and Paper, Manufacturing/Metals, and Regulatory Compliance and Enforcement. EPA also developed detailed outreach plans that clearly identify constituent organizations/key stakeholders, define specific awareness raising events and opportunities, and developed plans to promote awareness and encourage assessment. EPA has issued a Y2K enforcement policy designed to encourage prompt testing of computer related equipment to ensure that environmental compliance is not impaired by the Y2K issue.

EPA's primary vehicle to ensure continuity of its core business functions is the Continuity of Operations Planning (COOP) process. EPA has an internal Agency Order which requires Regional and Headquarters offices' plans to address essential functions, safety and security, vital records, primary and alternate COOP planners, and responsibility for exercising and implementing the plans. Following completion of individual office plans, EPA will develop an overarching Agency plan in accordance with Presidential Decision Directive (PDD) #67 which addresses the need for Continuity of Operations Planning, and requires department and agencies to have an Agency COOP plan completed by October 1999. As part of this process we will be performing Business Continuity and Contingency Planning (BCCP) for our Y2K program. The Agency's Year 2000 Senior Council has directed that an interdisciplinary team be formed to develop the Y2K BCCP that will be an addendum to our overarching COOP Agency plans. Additionally, the Agency is coordinating milestones and activities of PDD #67 and Y2K to enhance the Critical Infrastructure Protection Plan (CIPP) required by PDD #63 - Critical Infrastructure Protection. Coordinating these concurrent efforts will eliminate redundancy and ensure that the Agency can meet its obligations to protect people and the environment.

The agency's schedule for BCCP development was:

<u>Date</u>	<u>Activities</u>
1/26/99	Establish BCCP Project Group Determine High-Level Core Business Functions Set Master Schedule and Milestones
3/15/99	Complete Initial Prioritization of Areas Assess Criticality of Potential Disruptions
4/22/99	Critical Infrastructure Protection Plan (PDD #63)
4/30/99	Perform Business Impact Analysis Assess Infrastructure Risks Define Minimum Acceptable Levels of Performance
5/31/99	Develop contingency Plans and Implementing Triggers Prepare Contingency Test Plans Establish Business Resumption Teams
9/30/99	Prepare and Execute Tests Update Disaster Recovery Plans and Procedures

Individual system specific plans will be developed as necessary consistent with the outcome of the above analysis.

The worst case scenario for Y2K is that all or many systems will not work and we will have to implement the procedures currently being developed in EPA's contingency plans (COOP, BCCP). The use of COOP plans to continue the Agency's essential functions in response to a Y2K failure is recognized by the Agency and we will continue to examine the use of this vehicle for Y2K contingencies. In the area of buildings and facilities, we are preparing contingency plans for each facility. We also are exploring the need for a contingency plan to support EPA programs if state data exchange partners are unable to provide data electronically and must resort to paper reporting of regulated environmental information.

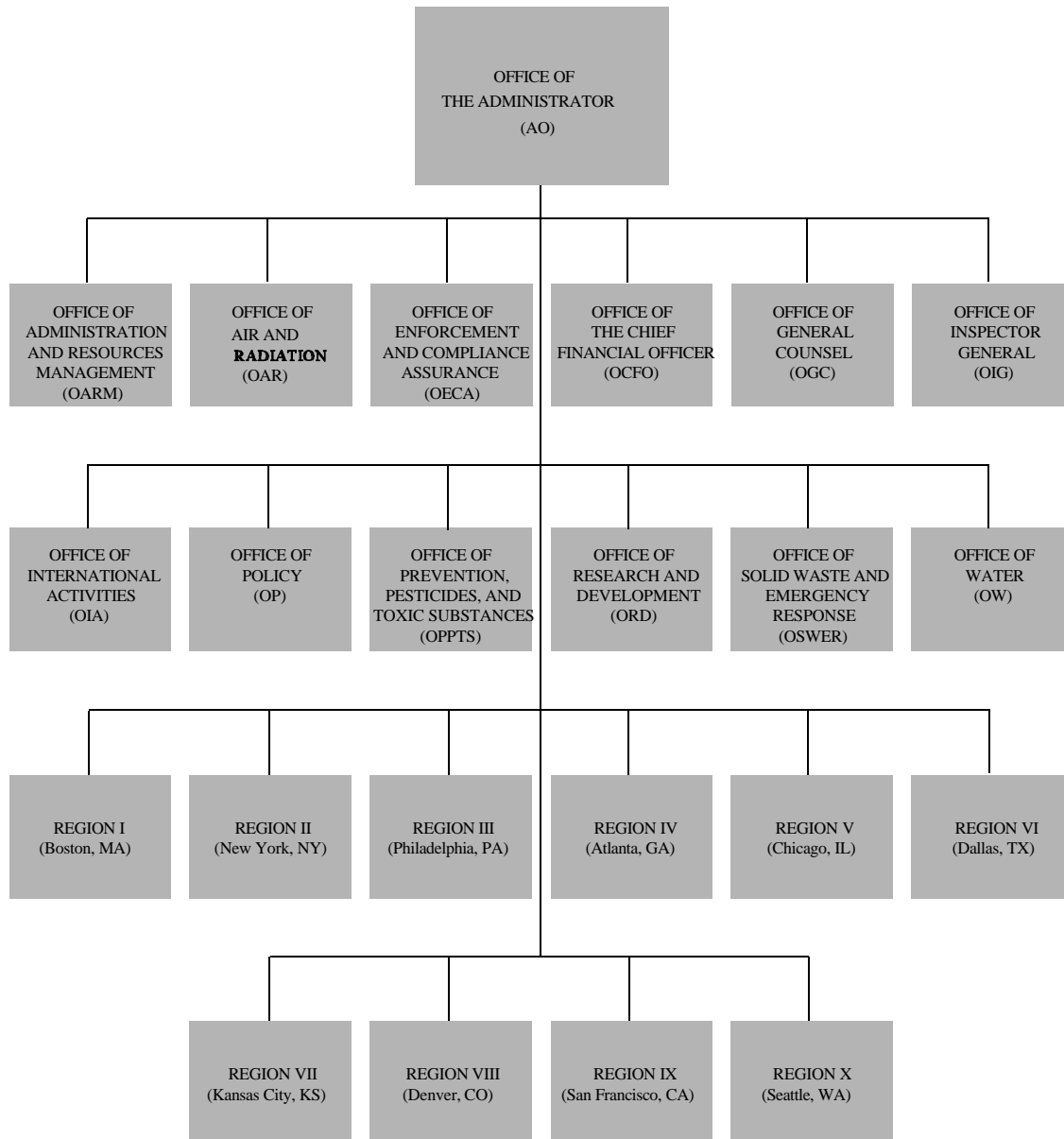
The agency estimates total expenditures of \$37.2M from FY 1996 through FY 2000 to support the Y2K program.

Summary

EPA is committed to protecting our Nation from environmental threats. EPA's increased focus on toxic pollution in 1998 has effectively paved the way for future generations of Americans to grow up in a cleaner and safer environment. By targeting those geographical areas hardest hit by pollution, EPA will ensure that the families living in environmentally disadvantaged communities have hope for a better future. Through these initiatives and programs, EPA continues to demonstrate that its investments are in tune with America's most demanding environmental priorities -- including a government that works for its people.

**EPA
PROGRAMS**

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)



AIR

Under the Clean Air goal, the Agency protects public health and the environment through programs to attain federal clean air standards, reduce air toxics emissions, and control acid rain. Under the Reducing Global Environmental Risks goal, the Agency develops and implements programs to help reduce greenhouse gas emissions and to return the stratospheric ozone layer to levels found prior to the development of the Antarctic ozone hole. Lastly, under the Preventing Pollution and Reducing Risk goal, the Agency works to ensure healthier indoor environments.

Air Program Description

EPA is required to set National Ambient Air Quality Standards (NAAQS) for air pollutants that endanger public health and welfare. EPA has set NAAQS for six air pollutants (particulate matter, sulfur dioxide, ozone, carbon monoxide, lead, and nitrogen dioxide). EPA strives to reduce these air pollutants in all areas of the country as well as to maintain clean air in areas that comply with the NAAQS. The NAAQS are attained and maintained primarily through state and local air pollution control programs aimed at controlling stationary and mobile source emissions. EPA directly provides emission controls for many of these sources, primarily through federal standards for motor vehicles, fuels, and new stationary sources.

EPA also is required to review the NAAQS every five years and revise them as necessary. The review process includes risk, health, and benefits analyses. In July 1997, EPA promulgated a new standard for fine particulate matter (PM_{2.5}) and revised the standards for ozone and coarse particulate matter (PM₁₀) after an extensive review of the science. FY 1998 was the first full year in which the new standards were in effect.

After a NAAQS is set, states are responsible for monitoring ambient air quality and developing state implementation plans (SIPs) to reduce pollution and bring areas into NAAQS attainment. EPA provides policy, guidance, and technical assistance for modeling and monitoring air quality and devising strategies available to states to include in their SIPs. EPA also plays a major role in helping states achieve the NAAQS through standard setting for vehicles, non-road engines, fuels, and stationary sources.



To determine whether areas are attaining the new PM_{2.5} standards, EPA is funding a 1,500 site PM_{2.5} monitoring network. By the end of FY 1998, grants were approved for 940 sites to be established by the end of calendar year 1998. By the end of calendar 1999, all sites will be established and fully instrumented. Three years of data will be available from the earliest monitors in the spring of 2001 and three years of data will be available from all monitors in 2004. Following this monitoring schedule and allowing time for data analysis, governors and EPA will be able to make the first determinations as to which areas should be designated non-attainment with the new PM_{2.5} standards in 2002. The data from the monitoring network also will provide the basis for EPA and states to further and better characterize the PM_{2.5} problem which in turn will help states develop attainment strategies.

To reduce emissions of hazardous air pollutants, EPA develops technology-based standards known as Maximum Achievable Control Technology (MACT) standards for 188 hazardous air pollutants from 174 industry categories. The standards are being developed on a phased schedule through the year 2000. After standards are implemented, EPA will determine whether the residual public health risk warrants additional regulation. EPA is developing other air toxic rules for combustion sources and developing and implementing strategies to reduce public health risk in urban areas, as well as reducing atmospheric deposition of toxic compounds to the Nation's water bodies, including the Great Lakes.

Title V of the CAA establishes an operating permit program in which a single permit contains all the applicable requirements for a major source of air pollution. Major industrial sources must file periodic reports identifying how they have complied with the requirements. These sources pay fees to the states and the fee revenues are to cover the cost of the state air pollution control program. EPA provides guidance and assistance to those states and tribes developing and

implementing permit programs. In FY 1998, EPA issued periodic monitoring guidance to aid state and local permitting authorities in evaluating whether each facility's air operating permit contained sufficient monitoring to assure compliance with regulations developed to meet CAA requirements; a Fugitive Emissions policy; and guidance on tracking Regional Office Federal Operating Permit Program Costs. A cross-agency workgroup completed work on the Indian Country Part 71 final rule.

The Agency pursues protection of human health and the environment in Indian country equal to that provided in state and local territories. The actions undertaken, in 1998, include working with tribes to assess air quality conditions in Indian country, and providing technical and financial support for the development of tribal capacity to address potential problems. A significant component of this capacity building is a training program, developed through a cooperative agreement with Northern Arizona University, that prepares tribal environmental professionals to take on the responsibility of air quality management in Indian country. In addition, EPA is drafting guidance documents to encourage tribes to develop their own tribal air programs. To support federal implementation of the CAA in Indian country in the interim, EPA began developing a number of regulatory tools, including a federal permitting rule to regulate construction and modifications of minor sources of air pollution in Indian country.

The Acid Rain Program, in Title IV, is a market-based incentive program for reducing annual sulfur dioxide (SO₂) emissions by ten million tons from 1980 levels (a 40% reduction). Title IV, along with efforts under Titles I and II, also will reduce nitrogen oxide (NO_x) emissions by over two million tons below 1980 levels. The Agency already has achieved significant SO₂ emission reductions of nearly five million tons of SO₂ annually from 1980 levels. These reductions were achieved by the 263 units affected by Phase I of the innovative market-based program that provides affected sources with flexibility in meeting required emission reductions at least cost (both to industry and government). The program features tradeable SO₂ allowances composed of one ton units. It ensures accurate and verifiable measurement of emissions, and a cap on total SO₂ emissions. The Acid Rain Program is a model for market-based efforts to control pollutants here and abroad. For example, the states in the Ozone Transport Region (OTR) have asked EPA to help develop and administer a NO_x emissions trading program for large combustion sources in the OTR. EPA offers a similar program to assist states in meeting their summertime NO_x emission budgets developed in the recent NO_x SIP call.

To restore the stratospheric ozone layer, EPA focuses on four areas: domestic and international phase-out of ozone-depleting chemicals (chlorofluorocarbons [CFCs], halons, and methyl chloroform), implementation of limitations on other ozone depleters (hydrofluorocarbons [HCFCs] and methyl bromide), more intensive recycling programs in the U.S. and abroad, and earlier voluntary phase-out of CFCs and HCFCs in developing countries.

To stabilize greenhouse gases, EPA promotes voluntary, partnership programs to prevent and reduce emissions of air pollution. By demonstrating the pollution prevention benefits of energy efficiency, the program educates manufacturers, designers, and consumers on the purchase, installation and use of energy efficient products in a manner that benefits the environment without imposing net costs on participating organizations. The Climate Change Action Plan also expands cooperative, non-regulatory programs to profitably capture and use methane and emissions of other potent greenhouse gases. Furthermore, EPA is working with the U.S. automobile industry to develop a "clean car," an affordable vehicle that would have three times the fuel efficiency of today's cars (representing a 67% reduction in carbon dioxide emissions) while preserving utility and comfort features and emitting very low levels of other air pollutants.

The Agency's primary strategy to reduce exposure to indoor air pollutants is to use voluntary partnerships to educate audiences from consumers to building managers about indoor air problems and solutions. The Agency develops guidance about ways to reduce the risk of indoor contaminants (such as radon, moisture and mold, environmental tobacco smoke, and emissions from building and consumer products) and works through partner organizations to create awareness and to influence consumer and institutional behavior.

Three program laboratories supported the Air Program. The labs carried out a broad range of policy, regulatory, and compliance functions needed to implement the CAA and fuel economy statutes. In addition, they provided technical understanding related to Agency responsibilities under the Indoor Radon Abatement and the CAA.

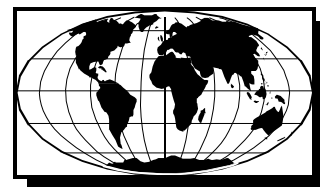
Research and Development Program Description

The Air Research and Development Program supports the development of air criteria and standards, as well as public policy decisions required for EPA to implement the CAA. The components of this program in FY 1998 included Air Toxics Research, Criteria Air Pollutants Research, and Global Change Research.

Air Toxics Research was conducted to address risks associated with major sources of hazardous air pollutants and their presence in the urban environment, address air toxics deposition to Great Waters, address the environmental risk to human health associated with indoor air pollution, and support motor vehicle emission characterization for exposure assessments.

The Criteria Air Pollutants Research Program supported EPA in its mandatory review of the NAAQS for ambient exposures to certain widespread air pollutants. The research pertained to the effects, exposure, risk assessment and risk management aspects of two major criteria air pollutants: particulate matter (PM) and tropospheric ozone.

The Global Change Research Program supported the Agency by providing research into the magnitude, timing, and regional patterns of climate change. As part of the effort to further understand global climate change, research was aimed at reducing uncertainties associated with ecosystem vulnerabilities to climate change and related impacts, such as the possible spread of waterborne diseases from changing climate patterns.



Enforcement and Compliance Assurance Program Description

The Stationary Source Enforcement and Compliance Assurance Program supports a national air enforcement and compliance assurance program. In FY 1998, Air Enforcement and Compliance Assurance Program priorities included implementation of the Title V operating permit program, carrying out the Title III hazardous air pollutant programs, enforcing the CFC program, evaluation of synthetic minor permits, and enforcement of the New Source Review/Prevention of Significant Deterioration (NSR/PSD) program.

There also is a national enforcement and compliance program for mobile sources. In FY 1998, the program continued to focus on all the Title II statutory provisions under its responsibility for fuels, vehicles and engine compliance with applicable federal requirements. While maintaining a federal presence in all statutory areas remained a priority for the program, there was one major compliance/enforcement action that dominated for much of the year which involved nearly industry-wide noncompliance by the manufacturers of heavy duty diesel engines. The emissions consequence of this noncompliance was enormous. Initial resolution of that action will occur in early FY 1999 although oversight will continue for several years.

Future Enforcement Trends

In FY 1999 and FY 2000, EPA will continue its commitment to maintaining a strong compliance and enforcement presence. In addition, EPA will continue to support compliance assistance activities to educate state and local permitting authorities on new requirements, educate and provide technical assistance to aid industries in achieving compliance, and target enforcement actions to deter noncompliance. EPA regions also will continue to implement strategies for addressing multi-state and multi-program violators and for corporate-wide patterns of noncompliance. Specific Agency enforcement and compliance priorities for FY 1999 and FY 2000 include Title V permits, synthetic minors, air toxics, CFC program enforcement, and NSR/PSD enforcement. In addition, air compliance and enforcement activities will concentrate on industries in the following sectors: coal-fired utilities, petroleum refineries, wood product facilities, and pulp and paper facilities.

In FY 1999 and FY 2000, the mobile source program will continue its range of compliance and enforcement activities under Title II of the Act. In addition to the early implementation and oversight of the agreements in the actions discussed above, there will continue to be a focus on the actual compliance of vehicles and engines with applicable emissions

standards. In addition to the existing vehicles and engines currently regulated, a new range of engines not previously regulated will be subject to emissions requirements and will be monitored closely over the next few years. These include lawn and garden machinery, marine and construction engines and locomotives. More stringent standards also will apply for existing motor vehicles and motor vehicle engines. With regard to motor vehicle fuels, the program will be monitoring industry closely for compliance with the new complex model requirements under the federal reformulated gasoline program utilizing sources of industry compliance data not previously scrutinized. The program also will review foreign refiner baseline petitions received pursuant to the World Trade Organization ruling and EPA's subsequently revised regulations, work with other agency offices in the development of an enforceable gasoline sulfur program to meet the new Tier 2 vehicle emissions requirements, and continue to enforce the gasoline and diesel fuel requirements through its nationwide program of downstream fuels inspections and refinery audits.

Highlights and Accomplishments

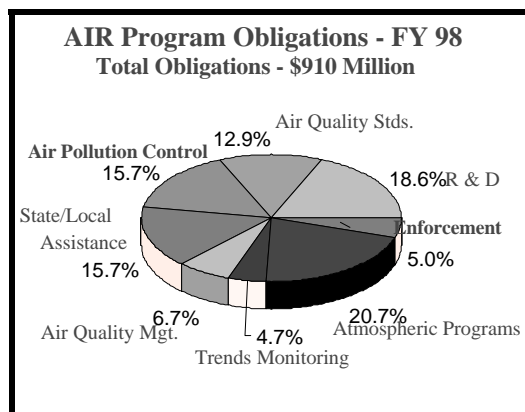
The Air Program regularly tracks real world accomplishments. FY 1998 highlights include:

Environmental Results/Reduced Health Risks

- ◆ Through the combined efforts of EPA and the states, 62 (22 in FY 1998) of the original 100 ozone (smog) classified areas have been redesignated to attainment or revoked (met original standard) ensuring an additional 7.9 million people in FY 1998 now breathe clean air. Additionally, nine of the 43 carbon monoxide non-attainment areas have been redesignated, providing healthier air in FY 1998 for nine million people.
- ◆ Under the Acid Rain Program, SO₂ emissions from the 263 Phase I units have been reduced dramatically to 4.8 million tons, or 32% below the 1996 allowable emission limit of 7.1 million tons. The SO₂ reduction by these sources from their 1980 baseline level (9.4 million tons) is about 4.6 million tons (48%). In addition, NO_x mass emissions, from sources affected by Title IV, decreased by about 180,000 tons from 1995 to 1996, despite the increase in fuel utilization.
- ◆ The over 2,700 participants in EPA's Energy Star Buildings and Green Lights Partnership have prevented the emission of 1.8 million metric tons of carbon equivalent (mmtce) during the past year, which is equivalent to taking over 1.4 million cars off the road. In FY 1998, these program partners also saved over \$580 million on their energy bills.
- ◆ As part of EPA's contribution to the Partnership for a New Generation of Vehicles, EPA has demonstrated preliminary results of fuel economy better than 60 miles per gallon (MPG).
- ◆ As a result of the Radon Program, 70% of the public is aware of the health risks from radon and ten million homes have been tested. About 1.5 million homes have reduced radon levels either through mitigation efforts or use of radon-resistant construction techniques.
- ◆ We have reached millions of people with the message of preventing involuntary exposure to Environmental Tobacco Smoke (ETS) and 83% of Americans know that ETS is harmful.

New Approaches

- ◆ In October 1997, EPA provided eastern states with proposed targets for reducing the emissions that create smog problems throughout the eastern United States. The new strategy was developed cooperatively with the members of the Ozone Transport Assessment Group (OTAG), 37 states and the District of Columbia. The final NO_x SIP call was



signed by the Administrator on September 24, 1998. It sets individual reduction targets for NO_x reductions for 22 eastern states ranging from a few percent to about half compared with projected emission levels in the year 2007.

- ◆ EPA stakeholders such as the Environmental Council of the States (ECOS), the National Governors Association (NGA), the State and Territorial Air Pollution Program Administrators (STAPPA), and the Association of Local Air Pollution Control Officials (ALAPCO) continue to be integral partners as we develop innovative ways to address environmental problems. In addition, the Federal Advisory Committee Act (FACA) process was used extensively in FY 1998 to gain stakeholder input and acceptance of rulemakings and implementation processes.
- ◆ EPA began approaching its air toxics program with a different strategy by gradually changing its emphasis from specific source category emission reductions to a health risk orientation. This new risk-based strategy will center on identifying the human health risks associated with individual toxic substances and establishing priorities for reducing those risks.
- ◆ EPA continues to work with industry, state, and local representatives to collect information on emissions and controls used by sources to determine what MACT would be if it were based on this information. EPA, state and local representatives, industry and environmentalists then determine if the information at hand is sufficient or if there is additional information needed. If the information is sufficient a Presumptive MACT is determined. On a limited basis, state and local partners can take the lead to complete a MACT standard which EPA subsequently approves or through a cooperative process EPA provides leaders in the development of a standard with one or more partners providing assistance.
- ◆ EPA also undertook another effort to simplify and streamline the MACT standard development process by developing procedures for generic MACT rules. The generic rule specifies MACT floor control levels for a broad range of pollutant scenarios thus establishing generic MACT groups into which individual source categories would be placed. Using these innovative approaches, EPA has initiated over 20 partnerships in FY 1998 to collaborate in MACT standard development.
- ◆ EPA solicited comments on two aspects of the New Source Review (NSR) Reform rulemaking: an alternative for determining the applicability of NSR to modifications under NSR and Prevention of Significant Deterioration (PSD); and review of plant-wide applicability limits (PALs). In addition, EPA issued the NSR Transitional Strategy Concept paper, guidance on interim implementation for PM_{2.5}, a potential to emit guidance (for major sources with the potential to emit large amounts of pollutants), and guidance on crediting MACT reductions for NSR netting and offsets were all issued.
- ◆ The Plain English regulation writing program continued. Three MACT rules and a guide to Title V Operating Permits were put into "Plain English" format. Teams working on rules took the Plain English course so that they could immediately apply the techniques.

Rulemakings/Standard Setting

- ◆ This year, EPA proposed 14 MACT standards and promulgated five MACTs. The MACT standards, once they are all implemented, are expected to reduce air toxic emissions by 13 % from 1993 levels.
- ◆ The Tribal Authority Rule implements the requirements of Section 301(d) of the CAA that authorize the Administrator of EPA to treat tribes in a manner similar to states. The rule identifies those provisions of the CAA for which it is appropriate to treat tribes as states, establishes eligibility requirements for tribes to be treated as states, and lays out procedures for approving tribal air programs. The rule was promulgated on February 12, 1998 and became effective on March 16, 1998.
- ◆ The Office of Mobile Sources finalized 13 rules during FY 1998 and proposed an additional nine new rules dealing with areas such as emissions standards, fuel and fuel additives, and on-board diagnostic devices. Some notable examples are listed below:

- Final Rulemaking (FRM) (April 16, 1998) - Emission Standards for Locomotives and Locomotive Engines. This rule marks the first time in the history of the CAA that regulations are established to control emissions from locomotive engines.
- Advanced Notice of Proposed Rulemaking (ANPRM) (May 22, 1998) - Control of Emissions of Air Pollution from New Compression Ignition (CI) Marine Engines at or Above 37 Kilowatts.
- FRM (May 4, 1998) - Inspection and Maintenance (IM) Program Requirement--On-Board Diagnostic Checks: Amendment to the Final Rule.
- FRM (December 31, 1997) - Regulation of Fuels and Fuel Additives: Modifications to Standards and Requirements for Reformulated and Conventional Gasoline.

Clean Air Program Implementation

- ◆ Work on enhancement of the air toxics infrastructure continued, including the completion of the national inventory for 40 urban Hazardous Air Pollutants (HAPs) to support the Urban Area Source Project. In addition, air toxics monitoring and emission inventory guidance for FY 1999 for regions and states was developed and communicated. A baseline inventory for MACT Emission Reduction Tracking was compiled.
- ◆ EPA continued transition to the new and revised Ozone & Particulate Matter Standards. The Office of Air Quality Planning and Standards (OAQPS) finalized the ozone revocation notice and proposed a second notice. Interim Implementation Guidance was issued for the states to implement the one-hour ozone standard and the pre-existing PM₁₀ NAAQS in order to make the transition to the new eight-hour ozone standard and the new PM_{2.5} standard. Of the 52 NAAQS implementation actions in the matrix of implementation actions (not all scheduled for FY 1998 completion), 25 have been issued and 6 have been proposed, working cooperatively with EPA regional offices, the state and local air agencies, and the stakeholder community. Examples of guidance developed include: guidance on attainment demonstrations for particulate matter and ozone, judging compliance with the new ozone standard, and data handling guidance for both the new ozone and particulate matter standards.



Education/Outreach/Information Sharing

- ◆ EPA's Radon Public Service Announcement campaign reached several million people this year. In addition, hotlines for radon and Indoor Air Quality (IAQ) fielded 125,000 calls and distributed over one million informational brochures this year.
- ◆ EPA's Office of Air and Radiation (OAR) has extensive information on its activities on the World Wide Web. The homepages for OAR and its program offices deal with issues that affect the quality of air including indoor and outdoor air quality, stationary and mobile sources of air pollution, radon, acid rain, stratospheric ozone depletion, global warming and pollution prevention. These web pages (see table below) and associated links contain a wealth of information of value for those affected directly by EPA regulations and EPA's partners as well as the general public.

Office Webpage	Address
OAR Main Homepage	http://www.epa.gov/oar/oarhome.html
Office of Air Quality Planning and Standards	http://www.epa.gov/oar/oaqps
Office of Atmospheric Programs: Acid Rain	http://www.epa.gov/acidrain/ardhome.html
Ozone Depletion	http://www.epa.gov/ozone
Global Warming	http://www.epa.gov/globalwarming
Office of Radiation and Indoor Air: Indoor Air	http://www.epa.gov/iaq
Radiation	http://www.epa.gov/radiation
Office of Mobile Sources	http://www.epa.gov/OMSWWW/omshome.htm

Strengthening Air Research and Regulatory Programs

- ◆ EPA's National Vehicle and Fuels Emissions Laboratory (NVFEL) continued to upgrade its equipment and other testing capabilities as part of a multi-year update program. This program is aimed at assuring that the NVFEL keeps up to date with the rapidly changing testing technology associated with changed emissions, emissions control technology, and its mission focus aimed at assuring in-use compliance with emission standards and advancing the state of the art for emissions reduction.
- ◆ EPA's analysis of Southern Oxidant Study (SOS) data from 1995 programs in the Nashville, Tennessee Region resulted in methods to measure and model ozone and its precursors. This research resulted in the publication of 31 journal articles, and provided observation-based methods to be used in planning FY 2000-2001 State Implementation Plans (SIPs). SIPs are required to carry out the new NAAQS for ozone.
- ◆ EPA released Models-3, the next generation of atmospheric chemistry models, with meteorological and emissions modules, to the public in June 1998. It is the first air quality modeling system to simulate the dynamics of different pollutants simultaneously. In addition, it will provide environmental managers greater speed and flexibility in finding solutions to environmental problems.
- ◆ The Agency identified and will continue to study in detail a hypothesis related to the role of transition metals in producing reactive oxygen species that produce oxidative stress and an inflammatory response, leading in turn to cardiopulmonary stress and, potentially, sudden death. The identification of biologically plausible hypotheses will improve confidence in the 2002 review of the NAAQS for particulate matter, leading to an improved basis for risk assessment and management of particulate matter.
- ◆ EPA completed risk assessments for beryllium, chromium, bentazon, and acetonitrile.
- ◆ In December 1997, EPA released an eight-volume report to Congress that evaluates the impacts of air emissions of mercury on human health and the environment.
- ◆ The Agency published The Carcinogenic Effects of Benzene: An Update (EPA/600/P-97/001F) in April 1998.
- ◆ EPA delivered the draft Health Risk Assessment Document for Diesel Engine Emissions to the Science Advisory Board and held a public review meeting on the document in May 1998.
- ◆ As part of the U.S. Global Change Research Program's National Assessment of "The Potential Consequences of Climate Change and Climate Variability on the United States," the Agency held regional workshops as a first step in conducting a regional assessment. The EPA held a Gulf Coast Workshop in Baton Rouge, LA in February 1998, a

Great Lakes Workshop in Ann Arbor, MI in May 1998, and a “problem formulation” workshop at Penn State University in June 1998 to begin the Mid-Atlantic Regional Assessment.

Enforcement and Compliance Assurance Program Performance Measures

The enforcement and compliance assurance program deters noncompliance by maintaining levels of field presence and enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. The program used the following performance measures for assessing their success in FY 1998:

<u>Key Performance Measures</u>	<u>1998 Goal</u>	<u>1998 Actual</u>
Mobile Sources Inspections	2,250 Inspections	2,665 Inspections
Stationary Source Inspections	2,100 Inspections	2,722 Inspections
Stationary Source Civil Referrals	70 Case Referrals	113 Case Referrals
Stationary Sources APO Complaints	90 APO Complaints	156 APO Complaints
Stationary Sources Compliance Orders	155 Compliance Orders	273 Compliance Orders

(Note: APO is Administrative Penalty Order.)

Diesel Engine Industry Enforcement

EPA and the Department of Justice settled with seven heavy duty engine diesel manufacturers in what is the largest Clean Air Act enforcement action in history. The manufacturers were charged with violating the Clean Air Act by installing devices that defeat emission controls in an estimated 1.3 million engines. In addition, the manufacturers, which comprise 95 percent of the U.S. heavy duty diesel engine market -- will spend more than one billion dollars and will pay an \$83.4 million civil penalty to settle charges that they illegally poured millions of tons of pollution into the air.

RADIATION

The EPA program to protect public health and the environment from adverse effects of radiation exposure is grounded in the following statutes: the Indoor Radon Abatement Act; the Clean Air Act (CAA) Amendments of 1990; the Waste Isolation Pilot Plant Land Withdrawal Act of 1992; Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1998; Title XIV of the National Defense Authorization Act of 1996 (Nunn-Lugar II); the Energy Policy Act of 1992; the Atomic Energy Act; the Public Health Service Act; the Uranium Mill Tailings Radiation Control Act; the Marine Protection, Research, and Sanctuaries Act; and the Superfund Amendments and Reauthorization Act. These laws authorize a wide range of regulatory, assessment, assistance, and research activities.

Radiation Program Description

The Radiation Program helps carry out the major environmental goal of Better Waste Management and Restoration of Abandoned Waste Sites. EPA's Radiation Program has two main objectives:

- ◆ Reducing adverse health effects and environmental impacts from radiation exposure through a program of standards and guidelines.
- ◆ Responding to radiation issues of serious public concern while maintaining the capability to respond to radiological emergencies, including collaborating on the development and testing of federal, state, and local plans for emergency response.

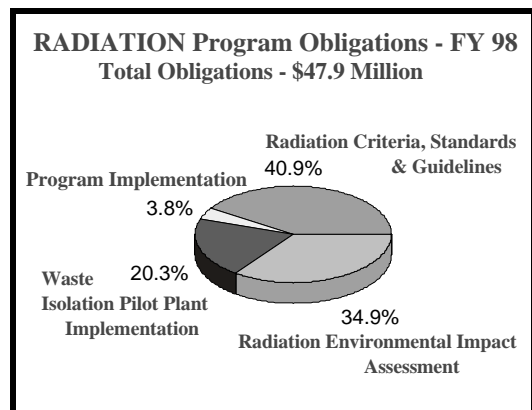
To accomplish these objectives, EPA assesses and regulates sources of airborne radionuclides, evaluates and regulates radioactive waste disposal, provides site assessments and radiochemical analyses of environmental samples, operates the Environmental Radiation Ambient Monitoring System, develops radiation cleanup and waste management standards, and responds to radiological emergencies.

Two program laboratories supported the Radiation Program by providing technical understanding related to Agency responsibilities under the Indoor Radon Abatement Act, the Waste Isolation Pilot Plant Land Withdrawal Act, the Energy Policy Act, and the Atomic Energy Act.

Highlights and Accomplishments

Highlights and accomplishments of this program in FY 1998 include the following:

- ◆ EPA certified that the Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP) in Carlsbad, NM, is a safe disposal site for defense-related nuclear waste and meets health-based environmental protection standards that will protect public health and the environment.
- ◆ EPA conducted three inspections of DOE waste generator sites to comply with the conditions of the WIPP certification in preparation for shipment to WIPP.
- ◆ The Agency currently is developing environmental radiation protection standards for the disposal of radioactive wastes at Yucca Mountain, NV, a potential site for a geologic repository for spent nuclear fuel and high-level radioactive waste.



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- ◆ As part of its ongoing radiological and emergency response program, EPA maintained its unique capability to respond to radiological events through participation in national and international exercises. EPA also provided radiation emergency response and counter-terrorism training courses for states and EPA regional offices. EPA conducted a Post-Emergency Response Recovery Conference which attracted over 300 participants from the U.S. and other nations.
 - ◆ EPA in partnership with other federal agencies published a site assessment manual, Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), and conducted training for federal and state employees involved in the cleanup of radioactively contaminated sites.
 - ◆ EPA published Draft Federal Guidance Technical Report No. 13 (Part 1) which provides consistency in assessments by federal agencies and others of the risks to health from radiation. This helps ensure that such assessments are based on sound scientific information.
 - ◆ In conjunction with the Conference of Radiation Control Program Directors, managers of the state radiation protection programs, EPA developed a program for the safe disposal of lost or abandoned industrial sources of radioactive materials to mitigate the potential detrimental health effects.
 - ◆ EPA participated in the successful launch of the plutonium-bearing Saturn Probe. EPA staff supported DOE's Advance Launch Support Group to prepare for the possibility of an accident and an EPA staff member served as a Senior Official at the Launch Support Center assisting the operation from the EPA perspective.
 - ◆ Office of Radiation and Indoor Air's (ORIA's) National Air and Radiation Environmental Laboratory (NAREL) provided analytical support to 16 Superfund sites via over 4,000 site clean-up and radiological analyses. Approximately 70% were independent analyses and 30% were for quality assurance. Approximately 80% were radiological and 20% dealt with mixed waste. This work was done for EPA's Regions 2, 4, 5, 8, 9, and 10.



DRINKING WATER

The Drinking Water Program was established to ensure that public water supplies are free of contaminants that may pose unacceptable human health risks and to protect our ground water resources. Safe drinking water is essential to human health. Contaminated drinking water can cause illness and even death as was the case in Milwaukee in 1993 as well as more recent occurrences in Las Vegas, NV; Austin, TX ; and Alpine, WY. Furthermore, contaminated drinking water poses a special risk to such populations as children and people with compromised immune systems. In 1994, 23 million people were provided water that violated drinking water health standards at least once during the year. An additional 23 million people were placed at increased risk because they were served by systems that had inadequate or no filtration treatment.

The Drinking Water Program was reauthorized on August 6, 1996 with the passage of the Safe Drinking Water Amendments of 1996, which further amended Title XIV of the Public Health Service Act (commonly known as the “Safe Drinking Water Act”).

Drinking Water Program Description

The responsibility for ensuring that 240 million Americans have safe drinking water rests with EPA and the states as mandated by the Safe Drinking Water Act (SDWA) and its 1996 Amendments. To carry out its portion of the responsibility, EPA must work with the states and tribes to provide protection for drinking water during each phase of the drinking water cycle – the raw source water, the water treatment plant, and the pipes that deliver the finished water from the treatment plant to the tap.

The 1996 SDWA Amendments improve the ability of states, water suppliers, and EPA to prepare for future drinking water safety challenges and assure sustained availability of safe drinking water. The Amendments center around four major areas of change:

- 1) improving the way that EPA sets drinking water safety standards and develops regulations that are based on good science and data, prioritization of effort, sound risk assessment, and effective risk management;
- 2) establishing new prevention approaches, including provisions for operator certification, capacity development, and source water protection;
- 3) providing better information to consumers, including consumer confidence/“right-to-know” reports; and
- 4) expanding funding for states and communities through the Drinking Water State Revolving Fund (DWSRF).

In addition, the 1996 Amendments increase the states’ flexibility to focus on public health-based priorities and make better use of resources, recognize the problems facing small systems and establish appropriate cost-effective approaches for such systems, and emphasize the role of stakeholders and partnerships as a key aspect of an effective national drinking water program.

Research Program Description

The occurrences of waterborne disease outbreaks demonstrate that drinking water supplies are still vulnerable to contamination. Drinking water research evaluates the effects of the pathogenic bacteria, parasites, and viruses that can cause serious illness and death. The SDWA Amendments of 1996 mandate that the EPA identify and regulate contaminants which may threaten human health. Among these contaminants are by-products formed during disinfection (disinfection by-products [DBPs]) by chlorination or alternative practices. Drinking water research also focuses on determining what levels of exposure to arsenic in drinking water are dangerous to human health.

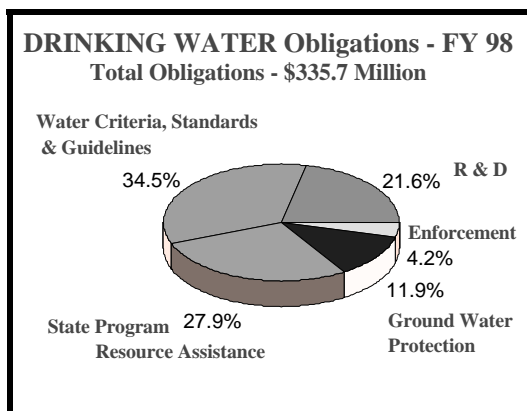
Several detailed health effects studies have been initiated to determine the overall human risk from exposure to waterborne pathogens, DBPs, and arsenic, as well as the ability to reduce any determined danger through effective risk management. These studies are critical in order to promulgate regulations that provide citizens with clean and safe drinking water.

Enforcement and Compliance Assurance Program Description

EPA is committed to a strong compliance and enforcement presence to ensure that drinking water supplies meet SDWA requirements and that underground injection practices are conducted in accord with applicable regulations to ensure the safety of underground sources of drinking water. In FY 1998, in the Public Water System Supervision (PWSS) Program, EPA continued to enforce the SDWA requirements and national primary drinking water regulations, with priority given to the Surface Water Treatment Rule (SWTR), total coliform, and lead and copper regulations. In the Underground Injection Control (UIC) Program, EPA enforced against all classes of wells, giving priority to those situations where there was endangerment or potential endangerment of groundwater. In addition, EPA worked to implement the 1996 SDWA amendments, including developing and promulgating the variance and exemption regulation by the statutory deadline of August 1998, and developing with the states and other stakeholders the first National Public Water System (PWS) Compliance Report.

Highlights and Accomplishments

In FY 1998, EPA continued its many implementation activities related to the 1996 SDWA Amendments. The partnership process, which the Agency instituted in 1997, with its drinking water program stakeholders is considered a model within the Agency and the federal government and has been strengthened and expanded. EPA held over 60 formal stakeholder meetings on regulatory development issues for specific contaminants, including unregulated contaminants, as well as on the science and data needed to support the regulation of these contaminants. For Stage 1 Disinfection By-Products (DBPs) and the Interim Enhanced Surface Water Treatment (IESWT) rules that will be promulgated by November 1998, the Agency held both informational and public comment meetings on the final drafts. Moreover, a *safewater* web site has been created and provides to drinking water stakeholders the single best source of information about drinking water rules. In addition, two new stakeholder workgroups have been created under the auspices of the National Drinking Water Advisory Council. One has been established to focus on Class V underground injection wells/source water protection and one that will help us implement the right-to-know provisions of SDWA.



In the second year of its implementation, the Agency has strengthened the scientific underpinnings for its statutorily-required rulemaking by conducting studies focusing on health risks to sensitive subpopulations, such as children. EPA also developed risk assessment methodologies applicable to infants, children, pregnant and lactating women, and individuals with chronic disease as consumers of drinking water. In addition, EPA has continued to be successful in meeting all of its statutory deadlines. The Agency completed the following activities:

- 1) published the Contaminant Candidate List (CCL), the basis for which regulatory determinations on at least five contaminants will be made by August 6, 2001, as mandated by the 1996 SDWA amendments;
- 2) collaborated with the Centers for Disease Control and Prevention and issued studies on waterborne disease occurrence;

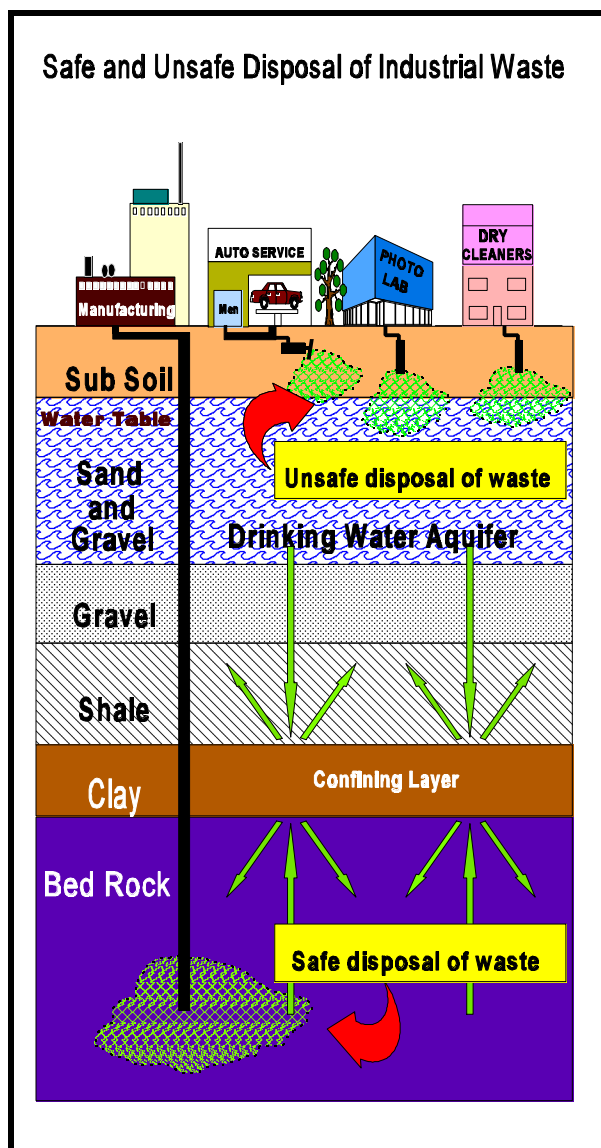
- 3) promulgated the consumer confidence report regulations that require public water systems to issue an annual right-to-know report to all their customers (these reports must contain information on the source of public water systems' supply, the level of detected contaminants, data on the health effects of contaminants found above the drinking water standard, as well as information on unregulated contaminants in the water supply);
- 4) issued the variances and exemptions rule;
- 5) published operator certification requirements;
- 6) provided Public Water System (PWS) definitions guidance;
- 7) disseminated information to assist states in developing affordability criteria;
- 8) reviewed existing monitoring requirements;
- 9) circulated guidance on capacity development;
- 10) published the annual national compliance report; and
- 11) issued a small system technologies list.

Furthermore, the Agency completed the supporting risk analyses for promulgation of the Stage 1 DBP and the IESWT rules, published Notices of Data Availability in the *Federal Register*, and promulgated these rules in November 1998, as stipulated by the 1996 SDWA amendments. The Agency completed supporting risk and risk-reduction benefit analyses for radon levels in drinking water.

All FY 1997 DWSRFs, which totaled over \$1.2 billion, were awarded to the 50 states and Puerto Rico before the September 30, 1998 deadline for these funds to be committed/obligated. In addition, 30 awards were made in FY 1998 using FY 1998 funds.

The first state source water assessment program (SWAP) was approved in September 1998 (six months before the deadline for state submittal) after EPA successfully negotiated revisions with State of Kentucky officials. SWAPs are the centerpiece of the 1996 SDWA Amendment's preventive focus. They give states and communities the tools they need to prevent contamination in the source of the drinking water supply, and thus comprise one of the multiple barriers to drinking water contamination, along with treatment. Source water assessments identify the source(s) of a community's drinking water and the potential threats to which a source is susceptible.

The preamble and regulatory language for the proposed Class V underground injection control (UIC) rule was published in July 1998, meeting its court-imposed deadline. Also, final drinking water primacy regulations were promulgated in April 1998.



Drinking Water Research

EPA's research and development program increased the Agency's understanding of environmental processes and our capability to assess environmental risks – not only to human health, but also to ecosystems. This research supported EPA efforts to identify the most important sources of risk to human health and the environment, and thereby guides priorities, policies, development of environmental regulations, and deployment of resources. In addition, Agency research endeavored to provide the understanding and technologies needed to detect, abate, and avoid environmental problems. In the future, environmental problems will be dealt with using those features of the current system that have proven effective and by designing and testing fundamentally new tools and approaches that utilize the latest advances in scientific knowledge and technology.

- ◆ EPA developed methods for two disinfection by-products classes, aldehydes and bromates, culturable viruses and *Cryptosporidium*, and investigated the occurrence of *Mycobacterium* in drinking water to assess the risk due to exposure.
- ◆ EPA issued a report on the evaluation of membrane technology to control oocysts. The data indicate that this type of technology has the potential to control *Cryptosporidium* oocysts.
- ◆ EPA issued a report on Meta-Analysis of Epidemiologic Studies on Cancer and Chlorinated Drinking Water which will be used in support of the development of the Regulatory Impact Analysis (RIA) for addressing the costs and benefits of Stage I of the DBP Rule. This report provides information on the appropriateness of using these published studies as the basis for a risk assessment when analyzed via a meta-analysis method.

Drinking Water Enforcement Performance Measures

The enforcement and compliance assurance program deters and reduces noncompliance and achieves environmental and human health improvements by maintaining a strong, timely and active enforcement presence. EPA directs enforcement actions to maximize compliance and address human health problems. Specific measures include noncompliance rates, measurement of average length of time for violators to return to compliance or enter enforceable agreements, and the number of administrative, civil, and criminal judicial actions. The data for some of these measures is reported in the Water Quality Enforcement Performance Measures section. (See page33.)

These measures count the number of enforcement actions in the drinking water program and also measure how successful compliance and enforcement programs have been by looking at the length of time for significant noncompliers to return to compliance or have an enforcement action taken against them. Addressing significant noncompliers constitutes a major portion of the base program. Moreover, dealing with priority regulations (SWTR, total coliform, and lead and copper) will result in improvements to human health as these contaminants have the greatest potential for direct health effects.

Future Trends

With its partners, EPA will continue to implement the 1996 SDWA Amendments. Requirements that will be met in FY 1999, in accordance with statutory deadlines are:

- ◆ Promulgate Stage I Disinfectants and Disinfection By-Products and Interim Enhanced Surface Water Treatment rules.
- ◆ Publish health risk reduction benefits and cost analysis for potential radon standards.
- ◆ Propose radon standard.
- ◆ Publish Final Class V UIC rule.

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- ◆ Publish unregulated contaminant monitoring rule.
 - ◆ Establish National Occurrence Database. Solicit recommendations for inclusion of additional contaminants.
 - ◆ Publish guidelines specifying minimum standards for certification and recertification of operators .
 - ◆ Complete UIC study on remaining Class V wells.
 - ◆ Determine if states have legal authorities or other means in place to ensure new system capacity.
 - ◆ Complete sulfate study with the Centers for Disease Control (CDC) to establish a reliable dose-response relationship.
 - ◆ Evaluate state ground water protection programs.

In addition, the Agency will continue to focus on Right-to-Know activities. This includes working with water systems to develop consumer confidence reports, developing tools to increase consumer knowledge of drinking water issues, and proposal of revisions to the Public Notification Rule. Also, the Agency will implement various components of the data reliability action plan to address data quality issues in the Safe Drinking Water Information System (SDWIS) and ensure that SDWIS provides the best source of national compliance information on the supply of drinking water to all Americans.

EPA will continue its commitment to maintaining a strong compliance and enforcement presence. Agency priorities for FY 1999 and FY 2000 include compliance assistance/enforcement for the microbial and lead/copper regulations, follow-up on the recommendations in the Compliance Report, SDWIS support and implementation (critical for compliance analysis and for measuring progress in meeting environmental and public health goals), implementation of SDWA Amendments of 1996, and compliance monitoring/enforcement against owners and operators of Class V wells. In addition, the compliance and enforcement program will develop compliance and enforcement strategies and implement appropriate compliance/enforcement activities for the regulations promulgated in FY 1998, the Consumer Confidence Rule, and the FY 1999 Interim Enhanced SWTR and Disinfection By-Products rules.

WATER QUALITY

Since the passage of the Clean Water Act (CWA) in 1972, the United States has had tremendous success in reducing pollution entering our surface waters from factories and municipal sewage plants. However, in spite of the great strides that have been made, more than six billion pounds of toxic industrial pollution are still being discharged annually into our rivers, lakes and streams. The National Water Quality Inventory 1996 Report to Congress indicates that 16% of assessed rivers and streams and 35% of assessed lake acres are not safe for fish consumption; 20% of assessed rivers and streams and 25% of lake acres are not safe for recreational activities (e.g, swimming); and 16% of assessed rivers and streams and 8% of lake acres are not meeting drinking water uses. While this is a dramatic improvement over conditions thirty years ago, much work remains before we meet our long-term goal of clean and safe water for all Americans.

The Water Quality Program is mandated by the CWA, as amended. Major amendments to the CWA were enacted in the Water Quality Act of 1987. This Act enhanced water quality management and improved the Agency's partnerships with the states. This Act also authorized the development of new standards and guidelines to prevent and control water quality pollution and authorized new approaches to deal with nonpoint sources of pollution. Other statutory mandates for this program are in the Great Lakes Critical Programs Act (GLCPA); Water Resources Development Act (WRDA); the Marine Protection, Research and Sanctuaries Act (MPRSA); the Shore Protection Act (SPA); the Marine Plastics Pollution Research and Control Act (MPPRCA); and the Coastal Zone Act Reauthorization Amendments (CZARA).

Water Quality Program Description

The Water Quality Program has broadened its emphasis over the years to consider all sources of water quality pollution by looking at entire watersheds, including oceans, which are the ultimate receiving waters for all watersheds. This broader "place-based" approach considers critical ecosystems affected, stakeholders involved, strong science and data available, and pollution prevention strategies in developing effective solutions. In this way, both point source and nonpoint source problems -- such as wet weather runoff from farms, streets, lawns, construction sites, and atmospheric deposition of pollutants -- will be addressed. This is critical since nonpoint source pollution has become the Nation's most significant remaining water quality problem.

EPA's Water Quality Program faces three main challenges: improving the quality of our surface water, protecting groundwater resources, and reducing wetlands loss. First, the Agency seeks to prevent surface water pollution, control pollution sources, and restore degraded areas. Second, the Agency must protect groundwater from pollution and help the public better understand the ways to prevent the groundwater from becoming polluted. Finally, EPA is seeking to continue the trend toward reduced wetlands loss, with the long-term goal of ultimately realizing a net gain in wetland acreage through efforts to create new wetlands and protect, improve, and better understand wetlands conditions.

Research Program Description

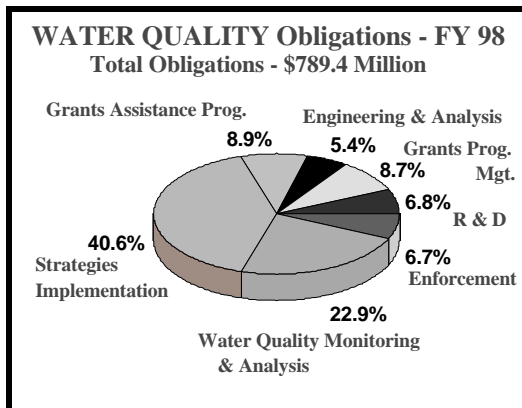
The Water Quality Research Program develops and analyzes scientific data and technologies to protect and enhance the designated uses of our Nation's waters and related ecosystems by providing technical assistance to EPA regulatory programs, states, and municipalities. The goal of the program is to minimize environmental risks from pollutant discharges, environmental stressors and disturbances. Scientific understanding and techniques are being developed for integrated ecological risk assessment and ecosystem protection for fresh, estuarine and marine waters, wetlands, contaminated sediments, aquatic ecocriteria, nonpoint sources, habitat/biodiversity, wastewater, and sludge. This requires improving analytical methods for quantifying pollutants. EPA's Ecosystem Protection Research Program also contributes to these efforts by focusing on areas such as measuring and reporting on surface water quality, including research on the further development of ecological and biological criteria; improved designs for monitoring surface water quality; new indicators to assist in diagnosing degraded streams, rivers and estuaries; and better measures of condition to report on success.

Enforcement and Compliance Assurance Program Description

In FY 1998, EPA promoted a comprehensive watershed approach to water quality compliance and enforcement. The Water Quality Enforcement and compliance assurance program ensures compliance with permits issued under National Pollutant Discharge Elimination System (NPDES) as well as taking actions for discharges into U.S. waters without a permit. In FY 1998, EPA targeted its resources on wet weather discharges (e.g., sanitary sewer overflows, combined sewer overflows, and stormwater). In addition, EPA focused attention on the development and implementation of the Concentrated Animal Feeding Operations (CAFO) Compliance Assurance Implementation Plan and participated in the development of the draft Unified Strategy for Animal Feeding Operations (AFO). These areas pose substantial risks to human health and the environment. Moreover, the program emphasizes the importance of identifying significant noncompliers and taking an appropriate enforcement action or returning them to compliance in a timely manner.

Highlights and Accomplishments

The Agency continued to place a heavy emphasis in FY 1998 on expanding efforts to promote understanding of the condition of aquatic resources in geographic terms -- on a watershed basis. The President's *Clean Water Action Plan*, announced in February 1998, calls for more than 100 specific key actions by EPA and by many other federal agencies with either water quality responsibilities or activities that have an impact on water quality. These key actions cover most aspects of the water program at EPA. The Action Plan mobilizes federal, state, and local agencies to achieve the Nation's clean water goals through the watershed approach; brings a sharp focus to the critical actions that are required; and establishes deadlines for meeting these commitments over the next several years.



The Action Plan calls upon states and tribes to work in cooperation with federal, interstate, and local agencies, watershed-based organizations, and the public to identify watersheds most in need of restoration and to develop watershed restoration action strategies. In June, EPA, U.S. Department of Agriculture (USDA), and other federal agencies developed a framework to assist states and tribes in preparing their watershed assessments. States were encouraged to draw from existing water quality data in assessing overall watershed conditions. Forty-six states and territories and 44 tribes submitted draft Unified Watershed Assessments (UWAs) on August 1. After receiving feedback from an interagency workgroup and the public, 54 states/territories and the District of Columbia as well as 13 tribes submitted final UWAs as of October 9. A key next step will be to map the results of these UWAs.

In support of these efforts, the Agency strengthened the Watershed Academy to provide training for watershed managers and others implementing the watershed approach. The Academy includes training courses, state facilitations in which the Academy assists states and tribes in reorienting their programs to implement watershed approaches, an information transfer series, and a web site. In FY 1998, the Watershed Academy also developed numerous Internet distance learning training modules to serve those who cannot attend the live courses.

EPA completed a number of efforts to provide to states and tribes improved tools with which to carry out their water quality standards programs. The Agency published guidance documents on a methodology for deriving ambient water quality criteria for the protection of human health and completed water quality criteria documents for four chemicals of concern -- Ammonia-revision, 1,3-Bichloropropne (1,3-BCP), Hexachlorobutadiene (HCBD), and Acrylonitrile. EPA published a National Strategy for the Development of Regional Nutrient Criteria and began to assist states and tribes in adopting numeric nutrient criteria in their water quality standards. The Agency also published a national Contaminated Sediment Management Strategy and submitted the National Sediment Inventory to the Congress.

The Agency reviewed and approved state and tribal standards submissions and provided guidance, technical assistance, and training to states and tribes. In FY 1998, EPA promulgated federal water quality standards for two states, Alabama and

California. Due to state action, EPA was able to withdraw the federal human health criteria for arsenic in the State of Alaska. EPA enhanced its user-friendly geographic information system, BASINS, with additional geo-referenced data and released a sediment quality modeling package to enable states, tribes, and local agencies to conduct watershed-based environmental assessments. Training and on-line user support services, including a BASINS web site, further increased access to and use of the model. The Agency also began design of a nationwide survey to identify the presence and extent of persistent bioaccumulative toxics in fish tissue.

EPA continued its efforts to look at the future direction of the water quality criteria and standards program by publishing an Advance Notice of Proposed Rulemaking (ANPRM) to consider revisions to the existing water quality standards regulations. The ANPRM seeks feedback on changes that would allow states and tribes to tailor their own regulations to local conditions and to address biological health as well as human health in developing solutions to water quality problems. EPA conducted two of three large public meetings to encourage public dialogue and nationwide consistency in water quality standards programs.

EPA launched a new program to support states, tribes, and local communities in assessing water quality at bathing beaches. The Beaches Environmental Assessment, Closure, and Health (BEACH) Program, designed ultimately to reduce exposure to microbial contamination at bathing beaches, will assist states and local governments to better monitor and inform the public of risks associated with exposure to contaminated waters at beaches. EPA made information on specific beaches available on the BEACH Watch web site that includes beach monitoring and closure information for the public to use in assessing risks that selected beaches may pose.

The Total Maximum Daily Load (TMDL) Program is authorized by Section 303(d) of the CWA. Section 303(d) requires states to identify and list waters for which existing pollution controls are not stringent enough to achieve state water quality standards, and to establish TMDLs for these waterbodies. A TMDL specifies the amount of a particular pollutant that may be present in a waterbody such that water quality standards still are attained or maintained, and allocates allowable pollutant loads among sources, thus providing the basis for taking actions needed to restore impaired waterbodies. During FY 1998, the TMDL Federal Advisory Committee Act (FACA) committee completed its deliberations and submitted a final report to the EPA Administrator containing over 100 recommendations for improving the effectiveness and efficiency of the TMDL program.

Also during FY 1998, EPA initiated efforts to propose revisions to the current TMDL program regulations and guidance. EPA will consider the TMDL FACA committee recommendations as it develops these proposed revisions. The proposed regulatory revisions are scheduled for publication in the Federal Register in the Spring of 1999. Consistent with the current TMDL program regulations, states were required to submit lists of impaired and threatened waters to EPA in April 1998. As of the end of the fiscal year, most states had submitted final lists to EPA for review and approval/disapproval action; other states were in the process of developing final lists for submission to EPA. The EPA Regions, in consultation with Headquarters, are carefully reviewing the final state lists and making appropriate approval/disapproval decisions.

The Agency made significant advances toward the goal of providing to our state, local, and private partners accurate information on the quality of our Nation's waters. EPA's efforts to develop appropriate indicators of environmental health, to support monitoring programs, and to store and provide data are critical to maintaining the ability to identify and understand remaining high-risk problems, develop appropriate solutions, and evaluate if and when environmental results are being achieved.



The Agency continued to improve and update the Index of Watershed Indicators (IWI), a major project intended to facilitate decision-making within the watershed protection framework. IWI configures existing information from multiple sources to display the condition and vulnerability of the Nation's 2,111 watersheds. Many of the original 15 indicators have been updated with more recent data. Additionally, new candidate indicators dealing with living resources (e.g., biological integrity and terrestrial condition), ground water, and air deposition have been added to the redesigned web site. IWI is available on *Surf Your Watershed*, an Internet community-based information system for organizing, locating, and sharing water quality information critical for understanding problems and developing solutions.

The team tasked with development of a new generation STORET, the Nation's primary water quality data storage and retrieval system, rolled out Version 1.0 of the production system on September 3, 1998. Since the release, approximately 300 copies of the system have been distributed. The system is available for either the desktop or a Local Area Network (LAN) application. EPA initiated a training program for using the new system.

EPA is placing increased emphasis on protecting ocean and coastal waters. The Agency was a key participant in the National Oceans Conference, held in June 1998 in recognition of the International Year of the Ocean. At the conference the President made numerous commitments that will involve EPA action, including efforts to protect coral reefs, improve beach and coastal water quality, ready our ports for expanded use in the 21st century, and develop recommendations for a federal ocean policy.

The Agency also worked on several fronts to build partnerships to more effectively protect and restore coastal ecosystems. The Partners for Smart Growth Conference succeeded in bringing developers, local government officials, and financiers together to discuss how growth and development can complement environmental protection efforts and can create more liveable communities. EPA and the National Oceanic and Atmospheric Administration (NOAA) held a meeting with state coastal program managers and National Estuary Program directors to discuss common issues such as habitat loss and nutrient over-enrichment. EPA has been working with NOAA and other federal agencies to provide technical assistance to states responding to and mitigating the impacts of toxic *Pfiesteria* outbreaks and other harmful algal blooms. A national contingency plan has been prepared to provide emergency federal response to *Pfiesteria* outbreaks and other harmful algal blooms in cases where state response capabilities are exceeded. Our National Estuary Program is one of the Water Quality Program's foremost community-based, stakeholder-oriented efforts, with 17 programs successfully implementing their Comprehensive Conservation and Management Plans.

The Water Program continued to examine the effects of air deposition of chemicals, heavy metals, nutrients, and other pollutants in the Nation's surface waters. EPA's goal is to characterize and manage air deposition effects on downwind waters by building upon ongoing programs, primarily under the Clean Air Act (CAA) and the CWA. Studies have confirmed the need for more stringent air controls by demonstrating residual benefits to water quality. The Office of Water (OW) Air Deposition Initiative partnered with the Office of Air and Radiation (OAR) to ensure the effective use of CAA tools to protect water quality by incorporating water quality benefits and issues into air regulations and policy. In 1998, this included analysis of the benefits to certain water bodies as a result of the NOx State Implementation Plan (SIP) Call rule issued by OAR. The partnership also has expanded, with more joint meetings held and being planned for the future. In addition, the Initiative has launched an effort to pilot the development of a TMDL under the CWA that considers the air loadings of mercury to the impaired water body.

The Agency continued its approach to protecting the environment from urban wet weather pollution sources. Following the Phase I Storm Water rule covering industries and large municipalities, EPA published a proposed rule to regulate smaller municipalities and construction storm water sources. This rule was based on detailed discussion with the Urban Wet Weather Flows Federal Advisory Committee, other outside stakeholders, and internal EPA stakeholders. In addition, EPA continued to work with stakeholders on ways to incorporate controls on combined sewer overflows, sanitary sewer overflows, and storm water into a watershed approach, in order to better control those sources. This approach recognizes the need for flexibility in implementing any controls that go beyond a minimum set of technology-based controls, identifies the relative roles of government in implementing a watershed approach, and recognizes that monitoring on a watershed basis is an important focus of the effort.

As part of the effort to reduce nutrient loadings, the Agency began to more actively address issues related to animal agriculture. EPA published a draft "Strategy for Addressing Environmental and Public Health Impacts from Animal Feeding Operations." This draft strategy delineates EPA's short-term and long-term efforts to comprehensively address the environmental and public health problems associated with animal feeding operations. Later in the year, EPA and the USDA published a draft "Unified National Strategy for Animal Feeding Operations." The draft strategy is one of more than 100 actions President Clinton directed as part of the Clean Water Action Plan, and proposes a variety of voluntary and regulatory approaches for minimizing environmental threats posed by animal agriculture. EPA also participated in dialogues with representatives of the poultry and hog production industry, state agricultural and environmental agencies, local communities and USDA to find ways to improve environmental controls applicable to poultry and hog production.

The Agency also conducted training in its permitting programs. EPA continued its partnership with the Water Environment Federation to present wastewater pretreatment training in five cities. EPA also continued providing the basic NPDES permit writers course, which was offered more frequently and to a much wider audience due to agreements with the Department of the Navy and Department of Energy. EPA also funded eight whole effluent toxicity training courses through a cooperative agreement with the Society for Environmental Toxicology and Chemistry.

The Agency continued its reinvention of the NPDES permitting program. EPA published a rule to streamline the State Sewage Sludge Management regulations. EPA also published a notice requesting proposals for pretreatment pilot programs based on environmental results, and received eight applications. Within the Metal Finishing sector of the Common Sense Initiative (CSI), EPA developed training videos that focus on program implementation, inspections, and sampling; developed innovative measures to increase environmental compliance; and addressed innovative ways to decrease reporting burden.

In FY 1998, the Water Program completed “modernization” of the Clean Water Needs Survey which is the government’s primary gauge of national wastewater infrastructure needs. The survey will now facilitate the collection of information on a watershed and estuary basis including needs for Publicly Owned Treatment Works to control traditional “point” source pollution, and needs for control of storm water and “nonpoint” source pollution such as agricultural runoff. The survey will now link to other agency databases such as “STORET,” and will enable states to more holistically assess their water quality pollution control needs and prioritize them.

The Water Program also issued guidelines for water conservation plans for water conservation systems. States may require water systems to submit a water conservation plan consistent with these guidelines as a condition of receiving a loan from the Drinking Water State Revolving Fund (DWSRF).

The Water Program developed an agreement with the states on a major new direction in the national Nonpoint Source (NPS) program. The states agreed to review and upgrade their NPS programs to assure that they address critical elements, while EPA committed to streamlining and refocusing the grants issuance and reporting process to maximize efficiency.

EPA continued to carry out the Administration’s commitment to protect and manage the Nation’s wetland resources during FY 1998. As part of the President’s Plan to make the federal wetlands program more flexible, fair, and effective, EPA worked with the U.S. Army Corps of Engineers and other agencies to develop appropriate revisions to the Section 404 Nationwide Permit program. EPA also continued to spearhead the interagency development of a new Agricultural Wetlands Memorandum of Agreement, to provide farmers with clear and reliable wetland determinations for CWA and Food Security Act purposes. The Inland Testing Manual was issued, which is used to evaluate proposed discharges of dredged material. The Agency is working to implement the wetlands and water provisions of the Transportation Equity Act for the 21st Century (TEA-21). A study of locally sponsored wetlands mitigation banks was undertaken in order to provide technical assistance to local governments. The Agency continued to promote development of the hydrogeomorphic approach for assessing wetland functions. As part of our wetlands restoration commitments under the Clean Water Action Plan, the Agency initiated the Five Star Restoration Program to provide challenge grants, facilitate technology/information transfer and partner collaboration, and support peer-to-peer communication programs in an effort to promote community-based wetland and restoration projects.



Water Quality Research

The Water Quality Research Program increased understanding of landscape characteristics and ecosystem structure and function, and supported EPA efforts to reduce uncertainty surrounding the effects of chemical, biological, and physical stressors on aquatic ecosystems. In addition, this research endeavored to develop diagnostic tools to evaluate the exposures to toxic constituents of wet weather flows, and develop and validate effective watershed management strategies for controlling these flows. Water quality research also sought to develop and provide effective beach evaluation tools necessary to make timely and informed decisions on beach advisories and closures. One goal of EPA’s water quality research is to develop and release the Multimedia Integrated Modeling System (MIMS), a common software framework for computation

of nutrient, toxics, pesticides, sediments, and pathogen loadings into surface waters for determination of TMDLs including alternative management solutions.

- ◆ EPA developed a rapid response measure for recreational water quality. Typically, it takes 48 hours to estimate whether recreational water is contaminated with gastrointestinal bacteria. If contamination is present, this time period carries a high risk for illness, especially for children. The Agency developed a method that only takes 24 hours, thereby cutting the time at risk in half.
- ◆ EPA published the Landscape Atlas of the mid-Atlantic region. The Atlas ranks 125 watersheds based on patterns of land cover and land use.
- ◆ EPA published reports on Big Darby Watershed (located in central Ohio) - Phase 1 Analysis and Problem Formulation. Specific case studies developed for Big Darby will have application for other watersheds and regional assessments of ecological impacts. This information will provide data and methods for conducting regional ecological risk assessments and setting risk management options.

Water Quality Enforcement Performance Measures

The enforcement and compliance assurance program deters and reduces noncompliance and achieves environmental and human health improvements by maintaining a strong, timely and active enforcement presence. EPA directs enforcement actions to maximize compliance and address human health problems. Specific measures include noncompliance rates, measurement of average length of time for violators to return to compliance or enter enforceable agreements, number of administrative, civil, and criminal judicial actions.

These measures count the number of enforcement actions and the number of inspections in the Water Quality Enforcement and Compliance Assurance Program and also measure how successful compliance and enforcement programs are by looking at the length of time for significant noncompliers to return to compliance or have an enforcement action taken. Addressing significant noncompliers is a major portion of the base program. Moreover, dealing with priority areas (wet weather, CAFOs) will result in improvements to human health and the environment as these sources are some of the most significant uncontrolled water quality areas.

The program used the following performance measures for assessing their success in FY 1998:

<u>Key Performance Measures</u>	<u>1998 Goal</u>	<u>1998 Actual</u>
NPDES Inspections	2,400 Inspections	2,135 Inspections
UIC/PWSS Inspections	5,700 Inspections	7,760 Inspections
CWA Section 313 Inspections	600 Inspections	500 Inspections
NPDES Civil Referrals	50 Case Referrals	53 Case Referrals
UIC/PWSS Civil Referrals	20 Case Referrals	14 Case Referrals
NPDES APO Complaints	150 APO Complaints	227 APO Complaints
UIC/PWSS APO Complaints	60 APO Complaints	65 APO Complaints
NPDES Compliance Orders	505 Compliance Orders	770 Compliance Orders
UIC/PWSS Compliance Orders	300 Compliance Orders	287 Compliance Orders
Wetlands Compliance Orders	40 Compliance Orders	74 Compliance Orders

(Note: APO is Administrative Penalty Order.)

Future Trends

The Water Quality Program will continue to build on the approaches described in the *Clean Water Action Plan*. New resources provided in 1999 for *Plan* support will be available to implement watershed restoration action strategies targeted to watersheds not meeting clean water and other natural resource goals. Watershed strategies will be developed for priority watersheds to invest new spending in appropriate and cost-effective projects. A key source of funding for action strategy implementation will be the CWA Section 319 nonpoint source state grant program. EPA will work with states to upgrade their nonpoint source pollution control programs to ensure effective use of the funds.

EPA and many other federal agencies are conducting critical research which will help us understand the human health and environmental effects of *Pfiesteria* outbreaks and the environmental factors (nitrogen, phosphorous, and other factors) which contribute to *Pfiesteria* outbreaks. Further reducing the levels of nitrogen and phosphorous in our Nation's waters is imperative in order to prevent risks to human health, as well as the associated environmental degradation and economic impacts, caused by *Pfiesteria* outbreaks and other harmful algal blooms (HABs). EPA will continue to work with states and tribes to collect data and develop site-specific control strategies for nutrients, which will result in control of these HAB outbreaks.

The Agency will continue its longstanding trend toward common sense, place-based approaches that build on the solid foundation for the basic water programs. In keeping with the commitments in the Clean Water Action Plan, EPA will work with stakeholders to assure that water quality standards and fish consumption advisory programs are implemented consistently across the country. In particular, we will revise existing water quality criteria and encourage states and tribes to adopt and implement biocriteria that enhance aquatic life.

EPA will continue to assist stakeholders in incorporating a risk-based approach, investigate newly-identified environmental problems, and provide increased support for tribal water quality programs. The Agency will also issue guidance and informational materials to provide the public and responsible officials with accurate up-to-date information about the risks, especially to children, from consuming contaminated fish and exposure to contaminated recreational waters.

The Administration and both houses of Congress support the development of a National Ocean Policy -- a coherent, comprehensive, and long-range national policy regarding the exploration, protection, and use of ocean and coastal resources. Implementation of activities stemming from the National Oceans Conference will continue. In addition, the Agency is developing a Coastal Watershed Protection Strategy to more effectively protect and restore coastal ecosystems by transferring the lessons learned and experiences from the National Estuary Program to other coastal watersheds. We intend to work with regions and states to encourage the use of Comprehensive Conservation and Management Plans as Clean Water Action Plan Watershed Restoration Action Strategies, and to target our resources and activities to the needs identified by coastal states. Interagency coastal monitoring and coastal research strategies will also be developed, consistent with the Clean Water Action Plan.

Finally, through state and tribal program assistance, EPA will continue to pursue its strategy of building state and local capacity to implement and enforce the Nation's environmental laws. One approach will be to encourage states and tribes, under the new authority of Performance Partnership Grants (PPGs), to group categorical grant funds into PPGs so they can address their own unique environmental priorities. EPA's role will be to help those who need our assistance and strive to make sure that federal financial assistance brings the Nation the best possible return on its investment in a cleaner, safer environment.

EPA will continue its commitment to maintaining a strong compliance and enforcement presence. Priority areas for FY 1999 and FY 2000 include implementation of the enforcement commitments in the Clean Water Action Plan. Specifically, EPA will focus additional resources on wet weather discharges (CSOs, SSOs, and stormwater) as well as on implementing the CAFO Compliance Assurance Implementation Plan and the draft national Unified AFO Strategy. EPA will continue to emphasize a strong base enforcement program focusing on conducting inspections and taking timely and appropriate action against significant noncompliers.

TOXIC SUBSTANCES

The Toxic Substances Program, administered by the Office of Pollution Prevention and Toxics (OPPT), is responsible for environmental programs carried out under six major statutes. The Toxic Substances Control Act (TSCA) is designed to protect human health and the environment from risks associated with the manufacture, processing, distribution, use, or disposal of toxic chemical substances. Title X of the Residential Lead-based Paint Hazard Reduction Act of 1992, now codified as Section IV of TSCA, requires EPA to provide a comprehensive national approach to dealing with lead-based paint in the Nation's housing stock. The Pollution Prevention Act of 1990 (PPA) encourages cooperative efforts between EPA and the private and public sectors to prevent toxic chemical pollution. Section 313 of Title III of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) requires facilities that emit certain toxic materials to report those emissions to EPA and requires EPA to collect and provide the data to the public. The Asbestos Hazard Emergency Response Act (AHERA) requires inspection for and abatement of asbestos in all public and private schools, and directs EPA to examine asbestos exposure issues in public and commercial buildings. Finally, the Asbestos School Hazard Abatement Act (ASHAA) authorizes EPA to provide loans or grants to local education agencies to conduct asbestos abatement projects in public and private school buildings.

A key feature of the Toxic Substances Program is the concept of pollution prevention. Preventing pollutants from entering the environment, as compared to costly risk management and remediation efforts that deal with pollutants already in the environment, has provided society with an effective, cost-conscious approach to protecting public and environmental health. The pollution prevention program concentrates on eliminating or reducing the use of toxic substances in chemical manufacturing processes and reducing other downstream uses of such chemicals. In cooperation with various stakeholders, OPPT proposes or develops strategies incorporating market incentives, technological innovation, and other assistance to help the adoption of pollution prevention practices. However, to be most effective, the pollution prevention ethic must be applied voluntarily by industry, business, and consumers.

Toxic Substances Program objectives involve identifying chemicals that may be harmful to human health or the environment, preventing these chemicals from reaching the marketplace, and the mitigating harmful effects of toxic chemicals already present in commerce. The Toxic Substances Program strives to accomplish this without impeding or creating unnecessary barriers to technological innovation. The traditional regulatory approaches of the core TSCA programs (i.e., the New and Existing Chemicals programs) to managing chemical risks are increasingly being complemented by voluntary compliance and market based programs emphasizing pollution prevention as the strategy of first choice. Chemical testing and scientific analysis, used to gain knowledge about the environmental and health effects of toxic chemicals, promote sound chemical assessment and management.

Within the context of the Government Performance and Results Act (GPRA), the Toxic Substances Program is organized around three of the Agency's primary environmental goals: Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems; Reduction of Global and Cross-Border Environmental Risks; and Expansion of Americans' Right to Know About Their Environment. The principal programs found under these three goals are described below.

Toxic Substances Program Description

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Key areas under this goal are the New and Existing Chemicals Programs, the Lead Program, National Chemicals Program (e.g., asbestos, polychlorinated biphenyls [PCBs], and dioxin), and the Pollution Prevention Program.

The New Chemicals Program, which includes biotechnology-based applications, identifies and manages the risk of new chemicals entering the market place. Manufacturers must submit a premanufacture notice (PMN) to EPA for evaluation before new chemical substances and biotechnology products can be manufactured commercially. EPA may prohibit or

restrict the commercial manufacture and use of the chemical or request additional information from the manufacturer if it determines the chemical or product may present unreasonable risks to human health or the environment. There are several exemptions to the PMN process, including those for low volume production quantities and polymers. EPA collects fees up to \$2,500 (\$100 for small businesses) for each PMN submission, generating annual revenues of about \$2 million which are deposited into the General Fund of the U.S. Treasury.



The Existing Chemicals Program identifies risks associated with the approximately 70,000 chemicals currently in commerce, assesses alternative chemicals, and identifies pollution prevention opportunities through the screening of chemicals, groups of similar chemicals (clusters), processes and use patterns. The program emphasizes both voluntary agreements with industry and, if necessary, regulatory approaches to mitigate risk.

Serious health effects can result from exposure to lead contamination in paint, dust, soil and drinking water. The Lead Program seeks to reduce lead exposure, especially for children, and to identify the most serious exposure sources. The Lead Program addresses past, current and new uses of lead and educates the public about the dangers of lead exposure. The Agency is responsible for administering over 30 mandates contained in the Lead-Based Paint Hazard Reduction Act of 1992 ("Title X").

The National Chemicals Program concentrates on risk management activities for asbestos, PCBs, dioxin, and other toxic chemicals of national concern and impact. Asbestos and other hazardous fibers are commonly found as indoor air contaminants. The National Chemicals program supports the development and implementation of asbestos control and management programs by the federal, state, and local governments and the private sectors. PCB efforts work to reduce the risks from PCB contaminants in residential, school, and workplace settings. The program regulates PCB use in electrical equipment and other products; directs appropriate clean-up of spills, leaks and other releases of PCBs to the environment; and approves permits for facilities for the storage and disposal of PCB wastes. The program ensures PCBs are managed in an environmentally sound manner while they are in use and requires the safe disposal of PCBs. OPPT continues to address the health and environmental hazards of and exposures to dioxin, a toxic chemical that accumulates in the environment.

Reduction of Global and Cross-Border Environmental Risks

Pollution has no respect for political boundaries and many risks to human health and the environment in the U.S. originate outside our borders. Chemicals that are persistent, toxic, and bioaccumulative and that pose threats to human health and the environment are of particular concern to OPPT when these chemicals cross international borders. OPPT is actively involved in an international cooperative effort to harmonize test guidelines, i.e., coordinating and standardizing methods for testing chemicals and chemical substances to assess hazard or toxicity. Test guideline harmonization reduces the burden on domestic chemical companies of repetitive or duplicative testing requirements and expands the universe of toxic chemicals for which testing information is available. Harmonization also encourages international information exchange and mutual international acceptance of test data. OPPT also contributes to international efforts to establish emissions inventories, generically termed pollutant release and transfer registries (PRTRs), similar to EPA's Toxic Release Inventory (TRI).



Expansion of Americans' Right to Know About Their Environment

An essential component of a comprehensive national approach to environmental protection is the full participation by the American public in environmental priority-setting, risk reduction and remediation, and short- and long-term environmental planning. Informed citizens are better equipped to consider the relative severity of environmental risks, the opportunities for prevention or remediation, and the trade-offs and uncertainties that accompany many environmental decisions.

The TRI administered by OPPT, provides the public with valuable information about chemical releases in their communities. Mandated by Section 313 of EPCRA, the TRI program collects and provides the public with information annually about releases of certain toxic chemicals at manufacturing and federal facilities. Section 6607 of PPA expanded the type of pollution prevention information included in TRI reports. OPPT makes TRI information available to the public in various formats, including via the Internet.

Research Program Description

Toxic substances research provides an understanding of basic mechanisms and processes that are useful to regulatory program analysts in the interpretation of data submitted by industry in response to TSCA regarding risks arising from the manufacture, processing, distribution, and use or disposal of new or existing chemical substances. In addition, research efforts as part of the Children's Agenda focused on assessing children's health risks from exposure to toxic chemicals and other toxic substances. The products of these research efforts are intended to support human and environmental risk assessments, which are the basis for implementation of these laws. Toxic substances research was carried out in such areas as ecosystems protection, human exposure, health effects, and health risk assessment methods. The information developed from application of these methods will significantly improve our understanding of the extent of human exposure to specific toxic substances. The Agency will incorporate these methods into its battery of testing guidelines under which industry will be required to submit data to the Agency on toxic substances as regulated under TSCA.

Enforcement and Compliance Assurance Program Description

The Toxic Substances Enforcement and Compliance Assurance Program conducts compliance monitoring inspections, with emphasis on asbestos worker protection and high-risk PCB's. EPCRA has emphasized data quality. EPA also is promoting compliance and enforcement of Section 1018 of TSCA, the lead-based paint notification and disclosure requirements.

EPA's grant support to states' toxic substances program emphasizes meeting asbestos worker protection safety standards and PCB standards, and managing state lead risk reduction and abatement programs. In FY 1998, states continued to conduct compliance monitoring inspections on toxic substances requirements. During 1998, EPA emphasized continuing partnerships with the states to foster comprehensive toxic substances enforcement authorities at the state level.

EPA will continue its commitment to maintaining a strong compliance and enforcement presence in the core TSCA program and other programs under TSCA. Agency priorities for FY 1999 and FY 2000 include compliance assistance/enforcement for lead based paint (including the Real Estate Notification and Disclosure Rule and the lead abatement, certification, and training requirements in TSCA Sections 402/404/406) and commencement of the national PCB phase-out initiative. This PCB initiative targets facilities voluntarily removing PCB containing transformers and capacitors. The TSCA Enforcement and Compliance Assurance Program will continue to use EPA incentive policies to increase the number of facilities that self-police and self-correct environmental problems.

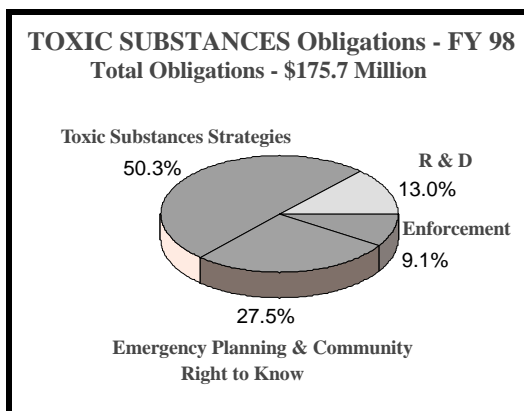
The EPCRA Program targets inspections and enforcement actions at companies with data quality and data reporting violations. The program also conducts compliance inspections to detect companies and federal facilities that have failed to report toxic chemical emissions. Executive Order 12856 authorizes EPA to conduct reviews and inspections to monitor compliance with EPCRA Sections 301 and 313 at federal facilities. Agency priorities for FY 1999 and FY 2000 will include targeting sector or "priority pollutants", inspecting and enforcing for violations of TRI data quality, and leading a national enforcement initiative for high risk chemicals of concern or priority sectors for the Community Right to Know, EPCRA Sections 311 and 312. The EPCRA Enforcement and Compliance Assurance Program will continue to use EPA incentive policies to increase the number of facilities that self-police and self-correct environmental problems.

Highlights and Accomplishments

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

During FY 1998, OPPT received 1,553 TSCA Section 5 notices, including PMNs, low-volume exemptions and test marketing exemptions. The number of notices received is about 10% greater than in recent years. OPPT's scientific staff continued to develop assessment tools, collect data, and issue guidance for the New Chemicals and Biotechnology Program.

The Existing Chemicals Program continued initial chemical screening to determine the potential human health and environmental effects posed by chemicals currently in commerce. Additionally, the program examined control options, conducted detailed risk management reviews, and implemented risk control measures where appropriate. OPPT continued its chemical testing activities as part of the overall Existing Chemicals Program, concentrating both on chemicals designated by the Interagency Testing Committee (ITC) and also on multi-chemical rules identified through non-ITC sources. The continued use of multi-chemical test rulemaking resulted in an acceleration of the number of chemicals handled in the rulemaking process. Additional testing candidates were identified for inclusion on the Agency's Master Testing List. The chemical testing program continues to play a major international role in the accumulation of test data for high production volume chemicals. An important new and developing component of this program is the Community Right to Know concept. In this area, EPA seeks to find ways to share its broad knowledge of chemical toxicity and exposure with citizens and communities, fostering better public understanding of environmental risk and facilitating well-informed local decisions on environmental quality and protection.



The Lead Program made important progress in the development of lead regulations during FY 1998. OPPT published the final TSCA Section 406(b) rule, involving lead abatement activities in housing renovation; promulgated the renovation information rule; and developed a rule establishing the fee charged by EPA to accredit training providers and to certify lead-based paint professionals. OPPT also proposed a rule under TSCA Section 403 establishing regulatory standards for identifying lead-based paint hazards, lead-contaminated dust, and lead-contaminated soil; and forwarded to the Office of Management and Budget for review a proposed rule under TSCA Section 402 establishing management and disposal standards for lead-based paint debris. The Lead Program also published an important new resource document for parents concerned about lead and their children entitled Lead In Your Home: A Parent's Reference Guide.

In FY 1998, OPPT published a final rule on PCB disposal. OPPT continued to assist the states in improving their asbestos accreditation programs, as required under the AHERA, and completed evaluations of awarded ASHAA loan and grant projects.

OPPT continued its dioxin assessment activities in FY 1998. Assessment findings support scientific evidence that dioxin is a major environmental pollutant although OPPT still has insufficient knowledge of dioxin sources, transport, and exposure to support sound policy and program development. OPPT continued its cross-media efforts to characterize human exposure to, and sources of, dioxin through a variety of surveys, studies, and tests to determine the level of dioxin exposure in the United States. OPPT completed and published the results of surveys for dioxin in milk and food, and implemented the first phase of a national monitoring network to detect dioxin in ambient air.

Reduction of Global and Cross-Border Environmental Risks

In FY 1998, OPPT continued its involvement in negotiations to complete a legally binding protocol for the elimination and/or control of specified persistent organic pollutants. These negotiations are being conducted under the auspices of the United Nations Economic Commission for Europe (UNECE) Convention on Long-Range Transboundary Air Pollution.

OPPT similarly participated in the process of completing a legally binding convention, known as Prior Informed Consent, that will delineate requirements for the export and import of selected banned or restricted chemicals. Serving as a major source of scientific expertise and review in updating guidelines, OPPT continued its close cooperation with other federal agencies and the Organization for Economic Cooperation and Development (OECD) in test guideline harmonization activities. OPPT also provided financial and technical assistance to support the development of PRTRs.

Expansion of Americans' Right to Know About Their Environment

The original TRI reporting requirements were limited to the manufacturing sector, and included approximately 320 chemicals and chemical categories. The list of chemicals subject to TRI reporting has more than doubled since 1986 to 600-plus chemicals, with over 31,000 facilities now submitting annual TRI reports. This total includes federal facilities that became subject to TRI reporting under Executive Order 12856. Reporting facilities submitted a total of 101,145 TRI reports in FY 1998.

An important accomplishment for the TRI program in FY 1998 was the development of a rule to add certain persistent bioaccumulative toxics (PBTs) to the TRI reporting list. In addition, the TRI program lowered reporting thresholds for new PBTs, as well as for PBTs already on the reporting list. Work is underway to expand TRI reporting requirements to additional industries, specifically the oil and gas industries, and airports. Other key activities in FY 1998 included conducting public outreach meetings on the use of TRI reporting forms and developing new industry sector technical guidance manuals to assist the regulated community. OPPT continues to review comments received during 1997 as a result of an Advance Notice of Proposed Rulemaking on the possible expansion of the types of data collected under TRI to determine whether to collect materials accounting data, worker exposure information and data on toxic chemicals in products.

Also in FY 1998, OPPT produced the annual national TRI data release, which included expanded data analyses. OPPT information management activities concentrated on data quality, public data access, and expansion of the use of TRI data by state and local governments, other EPA offices, private industry, and the general public. OPPT continues to develop tools to facilitate public access to, and the use of, chemical information and strives to put in place improved technology which will ease the reporting burden on industry for submitting TRI reports.

Within the overall framework of the Right to Know goal, OPPT actively promotes the concept of community-based environmental programs (CBEP). CBEP is a community-based approach to environmental protection and economic development in which environmental issues are addressed from the perspective of the local neighborhood. CBEP fosters consideration of a detailed level of information often missed when policy is made at national or state levels, incorporating the community's knowledge and thereby making it possible to address effects on the local environment from multiple sources. CBEP empowers local communities to take the lead in addressing environmental issues while utilizing government as a source of information and technical assistance. Building consensus at the local level unites the community around voluntary pollution prevention efforts that may go beyond statutory requirements.

Reducing Exposure through Human Health Protection Research

EPA's research and development program increased the Agency's understanding of environmental processes and our capability to assess environmental risks – not only to human health, but also to ecosystems. This research supported EPA efforts to identify the most important sources of risk to human health and the environment, and thereby guide priorities, policies, development of environmental regulations, and deployment of resources. In addition, Agency research sought to provide the understanding and technologies needed to detect, abate, and avoid environmental problems. In the future, environmental problems will be dealt with using those features of the current system that have proven effective and by designing and testing fundamentally new tools and approaches that utilize the latest advances in scientific knowledge and technology.

- ◆ EPA continued to develop and evaluate biologically based dose response (BBDR) models to describe the underlying mechanisms of toxicity and to facilitate extrapolation from animal studies. These models will foster improved estimation of human risks from exposure to compounds such as methanol, dibromochloromethane, arsenic, acrylamide, and dioxin.

- ◆ EPA published the Exposure Factors Handbook (paper copy). The Internet version was available in April 1998. The Exposure Factors Handbook is the primary reference in the Agency for information on factors used in exposure assessment relating to human characteristics and behaviors.
- ◆ EPA performed research that will lead to the development of improved testing guidelines for predicting the human health effects of prenatal and perinatal exposures to toxic substances. Improved testing guidelines and health effects methods and models will enhance the Agency's ability to characterize toxic effects in children.
- ◆ EPA continued research that provides data needed to develop and further define models that predict the human health outcome of exposures to toxicants, including pesticides and industrial chemicals. These models are used by the Agency to screen and prioritize new and existing chemicals and toxic substances for further regulatory action.

Enforcing Toxic Substances and EPCRA Laws

- ◆ In FY 1998, EPA Headquarters issued 15 administrative complaints to companies for TSCA violations. Two of the complaints were for penalties of over \$1 million. Also, approximately 700 compliance inspections were conducted under the EPCRA Enforcement and Compliance Assurance Program and compliance assistance outreach was provided to chemical facilities that use, manufacture or process potentially harmful chemicals.
- ◆ The enforcement and compliance assurance program deters noncompliance by maintaining levels of field presence and enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. The program used the following performance measures for assessing their success in FY 1998:

<u>Key Performance Measures</u>	<u>1998 Goal</u>	<u>1998 Actual</u>
Toxic APO Complaints	185 APO Complaints	214 APO Complaints
TSCA Inspections	1,100 Inspections	1,542 Inspections
State Toxics Inspections	1,000 Inspections	1,136 Inspections
Toxics Civil Referrals	2 Case Referrals	0 Case Referrals
EPCRA Civil Referrals	10 Case Referrals	11 Case Referrals
EPCRA APO Complaints	200 APO Complaints	233 APO Complaints
EPCRA Compliance Orders	3 Compliance Orders	4 Compliance Orders

(Note: APO is Administrative Penalty Order.)

HAZARDOUS WASTE

The Hazardous Waste Program was established to address the prevention, management and disposal of hazardous and municipal solid wastes generated nationwide. Hazardous wastes are produced by large businesses and industries, such as chemical and manufacturing plants, and small businesses. The Resource Conservation and Recovery Act (RCRA) of 1976, as revised by the Hazardous and Solid Waste Amendments (HSWA) of 1984, provides the legislative mandate for a nationwide program to protect human health and the environment from the risks of improper management of hazardous and solid wastes. The goals of the Act are to minimize the generation of waste, ensure adequate and safe management practices from generation to disposal of wastes, and prevent and detect leakage from underground storage tanks.

CEPPO Program Description

Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also known as the Emergency Planning and Community Right-to-Know Act (EPCRA), helps state and local officials address risk posed by hazardous chemicals present in their communities. This program gives state and local governments tools they need to develop response plans to protect and inform the public in the event of a chemical release emergency. The Clean Air Act (CAA) of 1990 accidental release provisions require facility owner/operators to prepare risk management plans to prevent, detect, and respond to chemical accidents. These CAA provisions also mandate the investigation of major chemical accidents to assess root causes.

Public awareness of the potential danger of accidental releases of hazardous substances has increased over the years as serious chemical accidents have occurred around the world. In response to public concern about chemical accidents, in 1986, EPA integrated its Chemical Accident Prevention and Chemical Emergency Preparedness programs into the Chemical Emergency Preparedness and Prevention Office (CEPPO). CEPPO is responsible for implementing Title III of SARA, as well as Section 112(r) of the CAA.

Title III requires states to establish State Emergency Response Commissions (SERCs) and Local Emergency Planning Committees (LEPCs) to develop emergency response plans for each community. Title III also requires chemical facilities to provide information on hazardous chemicals to the public.



Section 112(r) of the CAA requires facilities that produce, process, handle or store certain hazardous substances to prepare and submit risk management plans (RMPs) to EPA by June 1999. The RMPs will contain very specific information on the risks of chemicals in communities. CEPPO has established a strategy to provide facilities with the information needed to meet the Section 112(r) requirements and ensure public access to useful information about chemical risks.

UST Program Description

The goal of the Underground Storage Tank (UST) Program is to prevent, detect, and address leaks from underground storage tanks containing petroleum and hazardous substances. The UST program objectives are to stimulate development and implementation of comprehensive state, local and tribal regulatory programs with prevention requirements (i.e., installation, upgrade, leak detection, and technical operating standards); improve implementation and enforcement performance; develop effective state corrective action programs; and provide ongoing technical information, assistance, and training. These objectives directly support the Agency's guiding principle of partnerships through building strong state, local, and tribal UST programs.

RCRA Program Description

The Agency continues to refine program strategies to direct both private and public resources towards the greatest environmental risk in all areas of the program, including corrective action stabilization and permit work. Additionally, the RCRA program will continue ongoing efforts to develop risk-management standards for hazardous waste.

Large and small businesses and manufacturers annually generate approximately 270 million tons of hazardous waste, including wastewater, and more than 7.6 billion tons of industrial non-hazardous waste. The U.S. generates about 210 million tons of municipal solid waste per year, or 4.3 pounds per person per day. Without proper management and disposal, hazardous, non-hazardous industrial, and municipal solid wastes pose short- and long-term environmental and human health hazards.

EPA's Office of Solid Waste (OSW) continues to direct its resources to address the greatest environmental and human health risks. In this regard, the RCRA Program seeks to correlate the stringency of waste management and disposal standards with the degree of risk posed by individual wastes. Regulatory improvements include more tailored and flexible standards and reduced reporting burden on industry while still targeting priority sites. For example, the proposed combustion rule will reduce amounts of priority contaminants, such as heavy metals and dioxins, that enter the air when hazardous wastes are burned. Permitting and corrective action increasingly are risk-based. The permit program is developing streamlined procedures for regulating lower risk facilities, and the corrective action program continues its strong commitment to addressing highest risk releases first. OSW also is working with states to develop comprehensive guidance on the proper management of non-hazardous industrial solid wastes.

Research Program Description

The Agency's research objective seeks to reduce uncertainties in the risk analyses used in environmental management decisions. In the RCRA Program, research was targeted at reducing uncertainties in exposure estimates and providing technical assistance to regional and headquarters scientists.

The primary functions of Waste Risk characterization research are predicting the fate and transport of hazardous waste constituents and estimating exposure. Special emphasis will be placed on providing technical support.

Enforcement and Compliance Assurance Program Description

In support to EPA's goals of reducing noncompliance in priority areas of the program, EPA continues its commitment to maintaining a strong compliance monitoring and enforcement program with a particular emphasis on demonstrated patterns of national noncompliance by particular companies or industrial sectors. EPA uses its audit and small business policies to provide incentives to businesses to bring their facilities into compliance as well as supporting compliance assistance activities to educate small businesses on achieving compliance.

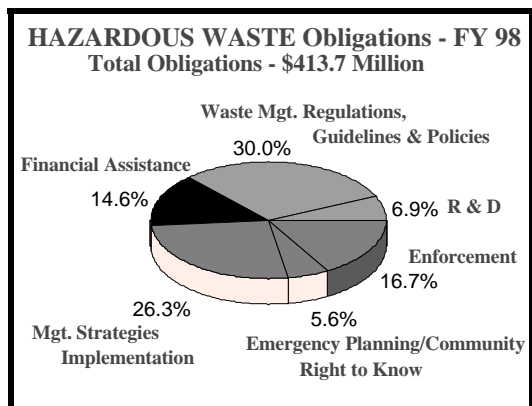
In support of the Agency's goal to prevent waste and harmful chemical releases, EPA continues to use all available tools to ensure that facilities managing hazardous waste and other hazardous chemicals (including hazardous waste combustion and recycling facilities) are operated safely and in compliance with all applicable requirements. The enforcement and compliance assurance program continues to use enforcement and compliance tools to ensure that federal, state, and locally owned facilities that store, treat, and/or dispose of hazardous wastes are in compliance with federal environmental laws. The enforcement and compliance assurance program continues to work with states to enhance their inspection and enforcement activities and to develop voluntary compliance programs. In addition, we will provide resources to tribal governments to assist in building their capability to enforce solid waste regulations.

Highlights and Accomplishments

CEPPO

Worked to Ensure Access to Chemical Risk Information

CEPPO has continued developing computer systems to facilitate collection and provision of RMP information to the public. "RMP*Info" is a central database of RMP information. "RMP*Submit" is a user-friendly system designed for industry to submit its RMPs. In FY 1998, the beta version of the RMP* systems was available for review and comment. Also, definitions and design documents for RMP*Info and RMP*Submit were completed. At the 1998 Hazardous Materials Spills Conference, the prototype of the RMP*Info and RMP*Submit were demonstrated along with RMP*Comp. RMP*Comp is an electronic tool used to perform the off-site consequence analysis required under the Risk Management Program rule.



Facilitated Implementation of RMPs by Industry

The RMP Implementation Workgroup continued its role of reviewing and commenting on tools currently available to assist industry in developing RMPs and developing recommendations for additional tools needed to implement the RMP program. In FY 1998, CEPPO, working with appropriate stakeholders, published and distributed RMP Implementation Guidance to assist states implement the RMP program. CEPPO also completed over 100 outreach and technical assistance workshops to states, LEPCs, and industry to assist them in understanding and implementing the RMP program. As a result of this and other CEPPO efforts with the states, a total of 15 states agreed to implement the RMP program. CEPPO also worked with states and industry associations to develop industry guidance and five model RMPs to assist industry in meeting Section 112(r) requirements. CEPPO also published and distributed a factsheet on Funding Sources for RMP implementation.

Provided Information Resources to the Public

In FY 1998, CEPPO approved grants to 34 states to implement RMP programs and integrate preparedness and prevention activities at the state and local level. CEPPO also is revising their web page to ensure that SERCs, LEPCs, and other stakeholders have easy and continuous access to EPA's emergency planning and accident-risk information. CEPPO also developed and posted on the web site, an RMP matrix to explain existing and planned tools. Additionally, CEPPO provided hardcopies of emergency planning and accident risk information directly to those SERCs and LEPCs that do not have access to the Internet. EPA distributed Computer Aided Management of Emergency Operations (CAMEO) to SERCs and LEPCs, through a cooperative agreement with the George Washington University. CAMEO assists SERCs and LEPCs to organize the information collected under community right-to-know regulations and coordinate activities. A survey of CAMEO users found that 70% of the SERCs and LEPCs are using the system and find it very beneficial and efficient in meeting their needs. The survey also determined that many of the non-users intend to implement CAMEO when they have the proper hardware and training.

Established and Conducted EPA/OSHA Accident Investigation Activities

In FY 1998, CEPPO completed and issued four final chemical accident investigation reports: Napp; Pennzoil; Powell-Duffryn; and Shell Surpass Chemical. In addition, CEPPO published and distributed chemical alerts for ammonium nitrate and ammonia refrigeration based on information discovered from EPA/OSHA accident investigations.

Also, in FY 1998, the Chemical Accident Investigation Board was established. Since that time, CEPPPO has been working closely with the Board to establish appropriate roles and responsibilities and exchange expertise and lessons learned.

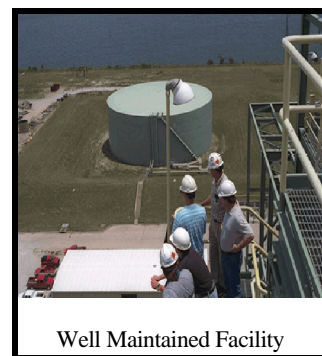
Prepared State and Local Governments for Counter-Terrorism

Recent legislation (Nunn-Lugar II) authorized the federal government to assist state and local governments to address potential terrorist incidents that may involve weapons of mass destruction (i.e. nuclear, biological, and chemical). EPA, through the leadership of CEPPPO, has been recognized as one of the six federal agencies to design and implement this newly created Counter-Terrorism program in the United States. Additionally, CEPPPO and the Defense Department visited 21 cities to determine their training needs to respond to such incidents and established a program to provide that training. These federal agencies also provided training to 31 cities as well as completed chemical weapons table-top exercises in 30 cities, chemical weapons functional exercises in five cities, and biological weapons table-top exercises in ten cities. CEPPPO also chairs and manages an Anti-Terrorism Strategy Workgroup, utilizing the Agency's National Incident Coordination Team, which developed an Agency Anti-Terrorism Strategy and leveraged resources across Office of Solid Waste and Emergency Response (OSWER) and the Agency to ensure the overall success of the program using existing agency emergency planning and response structures (National Response System) for implementation.

UST

Assisting State UST Programs

The Office of Underground Storage Tanks (OUST) is working with states to ensure that all owners and operators of USTs comply with EPA requirements as quickly as possible. EPA's goal is to prevent and detect releases of petroleum products and certain hazardous substances from USTs to the environment. In order to achieve this goal, one of EPA's objectives has been and will continue to be to ensure that UST owners/operators comply with the requirements to close, upgrade, or replace older tanks as of December 1998. As of the end of FY 1998, approximately 55% of UST systems were equipped to meet EPA/State 1998 requirements for spill containment, overfill prevention, and corrosion protection.



States have the primary responsibility for ensuring that UST facilities (except those in Indian country) are brought into compliance. EPA provides several kinds of technical and financial support to state UST programs. In FY 1998, OUST:

- ◆ Provided more than 270,000 documents in both printed and electronic form to help educate UST owners and operators (the OUST web site generated an average of 2,000 hits per month);
- ◆ Conducted UST inspection and enforcement initiatives jointly with states, and provided technical materials and training programs to help state inspectors assess compliance with requirements for leak detection and corrosion protection;
- ◆ Developed an EPA enforcement strategy and worked with states to develop state-specific enforcement plans;
- ◆ Worked with states to assess the validity of third-party evaluations of leak detection methods;
- ◆ Supported information exchange among states;
- ◆ Helped states explore and use alternatives to traditional inspection programs; and
- ◆ Provided financial support to states through UST state grants and supported improvements to state programs including inspection and enforcement, data collection and management, and staff development and training.

EPA has been working with states over the past several years to reduce cleanups yet to be completed. The Agency helped states streamline their corrective action processes; educated state staff about appropriate uses of innovative cleanup technologies; and provided technical manuals, computer software, and other tools and training. In FY 1998, the Agency continued its efforts to help states design and implement risk-based corrective action (RBCA) programs. As of October 1998, 14 states were implementing RBCA programs and 27 were designing such programs. For the 14 states that are implementing RBCA programs, EPA's focus is to assist in the refinement and documentation of the corrective action process, as well as to assist the states in streamlining their corrective action programs. EPA also is assisting the 27 states in the design phase of their corrective action programs. A public-private partnership involving EPA, states, the American Society for Testing and Materials, and six petroleum industry sponsors provides most of the training and implementation assistance to states. The six companies have contributed significant financial and technical resources to the undertaking.

EPA is working with five states to establish RBCA performance measures. Pilot projects began in 1998. EPA and these five states have established pre-RBCA baselines and RBCA performance measures. EPA will analyze each program after one or two years to measure the extent to which RBCA improves their performance.

Helping UST Owners and Operators Comply with the 1998 Deadline

As of December 22, 1998, USTs installed before December 22, 1998 that do not comply with EPA technical standards aimed at preventing releases must be upgraded, replaced, or closed. In 1998, the EPA Administrator confirmed that the Agency would not extend this deadline.

Throughout FY 1998, OUST continued its efforts to educate UST owners and operators about the December 1998 deadline. OUST provided compliance assistance materials in response to requests, and conducted mass mailings to trade associations that serve UST owners and operators. OUST also prepared letters from the OUST Director to state governors as well as owners and operators to remind them of the 1998 deadline and to emphasize that it will not be extended.

In May 1998, EPA regions and states conducted inspections to confirm compliance with existing release detection requirements, and to remind owners and operators about the 1998 requirements. In August 1998, EPA, after consultation with the states, publicly issued its enforcement strategy for the 1998 deadline.

Indian Country

EPA has the primary responsibility for implementation of the UST program in Indian country. In FY 1998, EPA regional offices continued to educate owners and operators about the UST requirements, conduct inspection and enforcement activities, and maintain a database of information on USTs located in Indian country. OUST continued to use demonstration grants under RCRA Section 8001 to help tribes develop the capability to administer UST programs.

RCRA

OSW works to achieve two of the Agency goals as outlined in the new Strategic Plan: better waste management and pollution prevention. Measuring environmental progress achieved in the RCRA Program has been the primary focus of OSW's strategic planning effort. OSW's FY 1998 accomplishments substantially advanced EPA's efforts to achieve these two goals.

Targeting Risk

The corrective action program supports the waste management goal by cleaning up releases of waste from active hazardous waste facilities, reducing current exposure risks to people and to the environment. In FY 1998, the program continued to stabilize (prevent from further contamination) releases at high-priority sites. By the end of FY 1998, stabilizations were implemented at 704 sites or units; human exposures were controlled at 290 sites or units; and groundwater releases were controlled at 234 sites or units. Further, the corrective action program sponsored a substantial number of RCRA's community-based environmental projects. Regulatory and policy efforts in FY 1998 centered on a final

Hazardous Waste Identification Rule for Media, a final Post Closure rule; and examination by EPA and stakeholders of ways to streamline corrective action procedures.

OSW targets the control of contamination from hazardous and non-hazardous industrial waste management facilities by defining the pollutants and the appropriate management and disposal standards. Furthering the goal of better waste management means establishing standards based on multipathway risk assessment. Multipathway risk assessment considers not only pollutants and their environmental and health impacts, but also the amount of the pollutants, risk of exposure, and specific industry practices. OSW has been working with the Office of Research and Development (ORD) to develop a multi-media/multiple pathway model to characterize human and ecological health risks of exposure to hazardous constituents. In FY 1998, OSW and ORD completed the analytical strategy for the Hazardous Waste Identification Rule (HWIR) rulemaking effort and initiated the multi-faceted peer review steps for the model and its application. The model is an integral part of the HWIR, a major reinvention effort intended to exempt low-risk wastes from RCRA regulation.

The Air Characteristics Study is a new area of risk analysis for the RCRA Program, addressing the questions of whether some industrial wastes should be classified as hazardous because of risks posed by their air emissions. Other efforts to improve the Agency's understanding of risk include RCRA's portion of the initiative to improve the Integrated Risk Information System (IRIS) database and an exploration of mercury treatment standards and alternatives to the Land Disposal Restrictions (LDR) program.

Significant FY 1998 Rulemakings

In FY 1998, the RCRA Program promulgated several key environmentally protective rulemakings, including the final rule on the management of used oil and the completion of Phase IV of the LDR which addressed treatment standards for newly identified toxicity characteristic metal wastes and formerly exempt mineral processing wastes. The Post Closure rule will provide flexibility to EPA and authorized states by eliminating the requirement to obtain a permit for the post-closure period and allowing the use of other available authorities to address post-closure needs.

Under the Hazardous Minimization and Combustion Strategy, EPA is working on two rulemakings that will address hazardous waste combustion in incinerators, boilers, and industrial furnaces and also will address the risks posed by indirect exposure to dioxins, furans, and toxic metals. To reduce burden on the regulated industry, both of these rules will be promulgated under both the Clean Air Act and RCRA. In 1998, significant progress was made on the Phase I combustion rule; this rule will be finalized in 1999. The proposed rule provides for public involvement and allows for extensions of the compliance period to promote the use of cost-effective pollution prevention technologies. The proposal also exempted waste-derived fuels from RCRA, an example of regulatory reinvention

OSW provided several Notices of Data Availability (NODAs) that provide public access to information and analysis being used in ongoing development of regulatory alternatives. OSW also issued rules in 1998 addressing regulatory alternatives under the definition of Solid Waste for the petroleum listings and for the primary metal processing industry. The RCRA Program participated in a number of important Common Sense Initiatives in support of EPA efforts to make complying with environmental requirements a more holistic process for a particular industry or business. Examples of these efforts include the successful completion of an agreement on Cathode Ray Tube recycling and the issuance of a proposed rule on extended generator storage limits for metal-finishers who employ pollution prevention techniques.

Increased Safety, Flexibility, Efficiency

The RCRA Program is working to have approved controls in place at 95% of the hazardous waste facilities by 2005. A total of 992 operating hazardous waste permits were issued by the end of September 1998 out of a universe of 1,480 operating facilities. OSW, EPA regions, and states are continuing to work together to enter additional activities and ensure accuracy in these numbers. The pace of ongoing permitting efforts will be enhanced by improvements to the permit process. In FY 1998, the focus was on the development of Standardized Permits, as recommended by the Permits Improvement Team, as well as participation in Project XL proposals.

For facilities that produce industrial non-hazardous waste, pollution controls will be based on voluntary guidance rather than permits. OSW is writing the voluntary guidance in partnership with states, based on input from stakeholders including industry, environmental groups, and tribes. In FY 1998, OSW also focused on individual chapters and development of a CD-ROM that will be used as one of the electronic means of distribution, along with the Internet. Electronic distribution will allow industry easy access to the tools and reference materials associated with the guidance that will streamline implementation. These voluntary guidelines are expected to be issued in FY 1999 and will address a range of issues, including groundwater contamination, air emissions, and alternatives to waste disposal.

The Municipal Waste Landfill Permit Program is administered by the states, with a target of 100% of facilities having approved controls in place by 2005. OSW also promulgated the Flexibility Rule for Small Municipal Solid Waste Landfills, which will assist the states in implementing landfill controls. The majority of the Agency's efforts in the Municipal Solid Waste Program, as well as some work under the Hazardous Waste Program, contribute to the pollution prevention goal and center on source reduction and recycling. The RCRA Program continued its support for the Jobs Through Recycling program, issuing \$1.4 million in grants to regional and local organizations to build markets for reusables and recyclables. The WasteWise program continued its effort to build innovative voluntary partnerships to assist and encourage businesses in taking cost-effective action to reduce solid waste. WasteWise successfully expanded in FY 1997 to include states and local governments. Currently, WasteWise has over 800 partners plus an additional 60 endorser organizations which promote the program to their members. In the program's fourth year, WasteWise partners prevented 816,000 tons of waste and recycled nearly 6.9 million tons, in addition to saving many millions of dollars through their solid waste reduction efforts.

The Hazardous Waste Minimization Program saw a significant accomplishment in FY 1997 when the Waste Minimization Prioritization Tool (WMPT) was made available for public and industry use. This software tool assists interested businesses in ranking chemicals to establish priorities for waste minimization programs according to persistence, bioaccumulation and toxicity. During FY 1998, OSW worked with EPA regions and states to provide technical assistance in working with the WMPT. Encouraging and assisting voluntary waste minimization programs, as well as those established as part of permitting, is the main vehicle for achieving the program's target of a 50% reduction in the most persistent, bioaccumulative, and toxic chemicals in hazardous waste streams by 2005. A draft list of the RCRA Waste Minimization Persistent, Bioaccumulative and Toxic (PBT) Chemical List will be issued in early FY 1999.

The Waste Information Needs initiative is another major reinvention effort that seeks to streamline and screen the data collected by the states and EPA for purposes of hazardous waste program management. In FY 1998, significant progress was made on migrating two major databases (Resource Conservation and Recovery Information System [RCRIS] and Biennial Reporting Systems [BRS]) from Focus to Oracle. The majority of this work was done in-house. Additionally, the first program area under Waste Information Needs (WIN)/INFORMED completed its data gathering and analysis. EPA will issue the final report in the first quarter of FY 1999. This report will identify data elements needed for planning and evaluation and will include recommendations for business process improvements. Other information management accomplishments include redesigning the permitting program accomplishments report to make the report easier to read and more useful, deciding to privatize the BRS implementer software, and developing a prototype of WEB software.

Research

Reducing Uncertainties Through Waste Risk Characterization Research

- ◆ EPA produced research results, models, and reports on innovative surface-based geophysical characterization technologies for predicting location and migration of contaminants. These new technologies permit more rapid, accurate, cost-effective characterizations and subsequent cleanups of waste sites.
- ◆ The Agency provides technical support to regional permit writers and risk assessors through the Combustion Technical Assistance Center (CTAC).
- ◆ EPA's Hazardous Waste Identification Rule (HWIR) research teams have developed a number of draft products, including a research plan, assessment strategy, technology design document, modeling components (for an open architectural, object-oriented, multimedia modeling system framework -- FRAMES), and several volumes of the

15-volume set describing the HWIR-FRAMES Technology Software System. These products are intended to develop a systems approach to modeling and data management in order to facilitate the consistent and scientifically credible assessment of multimedia-based human and ecological exposure to chemical stressors.

Enforcement

Enforcement Performance Measures

The enforcement and compliance assurance program deters noncompliance by maintaining levels of field presence and enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. The program used the following performance measures for assessing their success in FY 1998:

<u>Key Performance Measures</u>	<u>1998 Goal</u>	<u>1998 Actual</u>
RCRA Inspections	1,100 Inspections	2,659 Inspections
RCRA Civil Referrals	12 Case Referrals	49 Case Referrals
RCRA APO Complaints	64 APO Complaints	155 APO Complaints
RCRA Compliance Orders	20 Compliance Orders	49 Compliance Orders

(Note: APO is Administrative Penalty Order.)

EPA will continue its commitment to maintaining a strong compliance and enforcement presence. In FY 1999, we will conduct over 1,100 inspections, bring over 64 administrative penalty actions, and refer at least 12 actions to the Department of Justice for filing in federal district court. We also expect to issue at least 20 administrative orders designed to abate conditions that may present an imminent and substantial endangerment to human health and the environment. In addition, the Hazardous Waste Enforcement and Compliance Assurance Program will make significant contributions to the Agency's goal of obtaining 75 self-disclosed violations from targeted programs and 330 overall voluntary disclosures.

Agency priorities for FY 1999 compliance assistance, monitoring and enforcement activities include facilities generating hazardous waste in priority sectors and community-based areas, combustion/fuel blenders, volatile organic air emissions from RCRA regulated facilities, and RCRA Subtitle I facilities (Underground Storage Tanks).

SUPERFUND

EPA administers the Superfund Program under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act, 1986 (SARA) and the Omnibus Budget Reconciliation Act of 1990. The Office of Solid Waste and Emergency Response (OSWER) and the Office of Enforcement and Compliance Assurance (OECA) provide primary management of the program. In this section, Headquarters Superfund references will include OSWER and OECA unless otherwise noted.

Superfund Program Description

The Superfund Program was enacted on December 11, 1980 to address public health and environmental threats from spills of hazardous materials and from abandoned hazardous waste sites. It established a comprehensive program to identify and clean up these spills and sites.

The law also created the “Hazardous Substance Response Trust Fund” known now as the Hazardous Substance Superfund or Superfund. CERCLA is predicated on a “polluter pays” principle. As such, EPA works first to compel potentially responsible parties (PRPs) to respond and conduct site cleanups. When this is not possible because an agreement cannot be reached or because of an emergency, EPA may use the Trust Fund dollars to address and clean up hazardous waste sites.

Cleaning up a Superfund site is often a multi-stage and multi-year process. In fact, it takes seven to ten years after site discovery to start cleanup at the average site. Superfund site cleanup includes site assessment, removal, remedial, and enforcement activities. Prior to placing a site on the National Priorities List (NPL), EPA conducts a preliminary assessment of the site. This is the beginning of the site assessment phase of site cleanup. Where warranted, this is followed by a site investigation. The conclusion of this phase of site cleanup could be a removal action to stabilize the site and/or listing the site on the NPL.



Removal actions are a critical phase of addressing and cleaning up sites. They are conducted at NPL and at non-NPL sites. Since 1980, EPA has started more than 3,600 short-term removal actions at 3,167 non-NPL sites (238 actions at 191 non-NPL sites in FY 1998 alone, excluding federal facilities). These short-term responses address an immediate threat posed by the uncontrolled release of a hazardous substance, such as from a newly discovered dump, transportation accident, or fire.

Early actions also are a part of the overall removal action phase of site cleanup. Early actions are similar to removals but are usually non-time critical and can be performed under removal or remedial program authority. An example of an early action is implementing interim controls to contain/stabilize a plume of contamination in groundwater.

Sites that require a long-term, permanent cleanup remedy become part of the remedial action pipeline and enter the remedial phase of cleanup. These sites represent circumstances where the risk to human health and the environment also warrants placing the site on the NPL. Once a site is listed on the NPL, EPA works with responsible parties, the community, and other stakeholders around the site to plan the long-term cleanup with a detailed study of the site and an evaluation of cleanup options. The planning process can take up to four years with an average cost of \$1.4 million per site.

The actual cleanup (construction) work itself averages between \$12 and \$13 million per site. Because of the high cost of construction and limited Superfund resources, EPA’s Superfund Enforcement and compliance assurance program emphasizes compelling PRPs to conduct a majority of the cleanup actions and to reimburse the federal government for cleanup actions financed by the Trust Fund. PRPs currently fund approximately 72% of new remedial actions at NPL sites.

While Superfund responsibilities cannot be delegated, at some sites the state or local government or Indian tribe takes the lead in managing the site cleanup. At other sites, the state or local agency cooperates with EPA on handling a site cleanup.

Superfund Federal Facilities Program Description

Across the country, thousands of federal facilities are contaminated with hazardous waste, unexploded ordnance, radioactive waste, fuels and a variety of other toxic contaminants. These facilities include many different types of sites, such as abandoned mines, nuclear weapons production plants, fuel distribution areas, and landfills. The Superfund Federal Facilities Response Program is responsible for providing oversight of Superfund environmental restoration work at federal facilities on the NPL. At the end of FY 1998, there were 162 proposed and final federal facility NPL sites.

Brownfields Program Description

Through its Brownfields Program, EPA's Outreach and Special Projects Staff (OSPS) promotes cleanup and redevelopment of abandoned and contaminated industrial and commercial properties (Brownfields). Across the country Brownfields sites plague virtually every community in the Nation. The Administration believes strongly that environmental protection and economic progress are inextricably linked, and has designed a comprehensive program based on community empowerment and strong partnerships among all stakeholders.

The initial Brownfields Action Agenda outlined four key areas for returning Brownfields to productive reuse:

- 1) awarding Brownfields Assessment Demonstration Pilots,
- 2) building partnerships and expanding outreach,
- 3) clarifying liability and cleanup issues, and
- 4) fostering local workforce development and job training initiatives.

In addition to these four key areas, EPA's new Action Agenda for FY 1998 and FY 1999 continues to focus on partnerships between EPA and fifteen other federal agencies. These partnerships are designed to leverage resources from nonprofit and private organizations, and eliminate duplicative efforts at the local level. EPA has established partnerships with nonprofit groups, such as the Trust for Public Land and the U.S. Conference of Mayors, and with private organizations, such as the Heinz Endowments and the James T. Irvine Foundation. These partnerships will further identify, strengthen, and improve the commitments EPA and its colleagues can make to Brownfields communities across the country. Sixteen Showcase Communities were selected to serve as models of Brownfields success as a result of these partnerships in FY 1998. In addition, 11 job training pilots were selected to enhance workforce development in Brownfields communities.

Research Program Description

Improved assessments of the potential threats to human health posed by each waste site is a goal prescribed by Superfund. Superfund research attempts to improve our understanding of the underlying science of exposure, risk assessment, and remediation. Risk management techniques are utilized to focus on the remediation of both surface and subsurface contaminated soils, sludge, sediments, and groundwater.

The focus of Waste Management and Site Remediation research is groundwater treatment, bioremediation, and the Superfund Innovative Technology Evaluation (SITE) Program. These efforts involve fundamental research to understand the processes that influence soil and groundwater contaminants, the initiation of development and testing of new remediation methods, and process evaluation research to evaluate the cost-effectiveness of full-scale remediation technologies.

Enforcement and Compliance Assurance Program Description

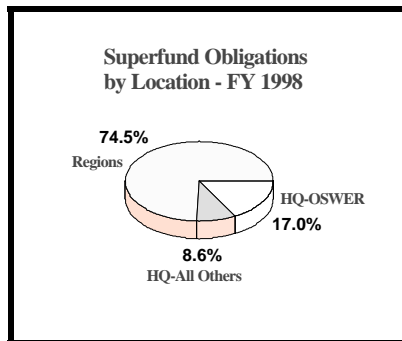
The Superfund Enforcement and Compliance Assurance Program seeks to maximize PRP participation in conducting and/or funding response actions while working to assure fair treatment for all PRPs. PRPs are financing approximately 72% of new remedial actions at NPL sites, thereby conserving the Superfund Trust Fund for sites at which there are no liable, viable responsible parties.

Nationally, the Superfund Enforcement and Compliance Assurance Program is implementing a series of reforms to improve Superfund by increasing enforcement fairness and reducing transaction costs. These reforms include compensating settlers for a portion of the orphan share at a site; reducing PRP oversight, where appropriate; settling with small volume contributors of waste; and using special accounts which ensure that settlement funds will be dedicated to specific sites.

Highlights and Accomplishments

Financial Perspective

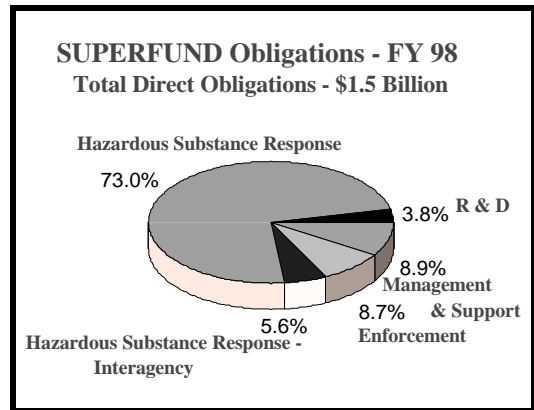
At the end of FY 1998, the Trust Fund reflected an unappropriated balance of \$2.1 billion. In FY 1998, Congress appropriated \$1.5 billion for the Superfund Program. Superfund Response Program disbursements through FY 1998 total \$16 billion. Parties responsible for contaminating Superfund NPL sites are conducting and paying for more of the cleanup work at their sites, reserving the Trust Fund resources for those sites where parties are unable to contribute. Approximately 72% of new remedial actions are now financed by PRPs. The Agency's goal is to maintain or increase that level of participation.



appropriating language, are No-Year Appropriations which are available for obligation without fiscal year limitation. They remain available until expended, rescinded, or otherwise withdrawn. In FY 1998, EPA processed almost \$1.5 billion in direct obligations (against appropriated funds) and \$72 million in reimbursable obligations.

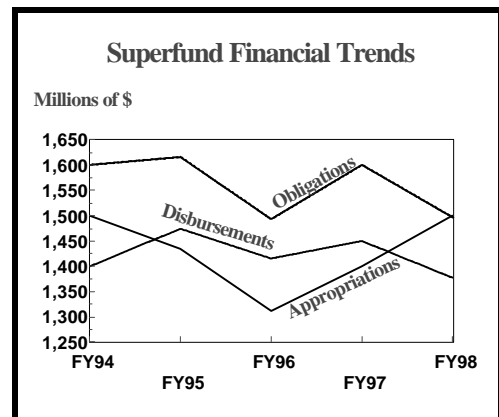
Superfund

As part of measuring the impact of site cleanup efforts, EPA established Environmental Indicators for the Superfund Program to document its progress in protecting people and the environment. These indicators serve to describe the condition of the environment before, during and after cleanup. There are three indicators: A, B, and C. Indicator A, *Populations Protected*, measures the program's efforts to protect people and the environment from immediate threats. The indicator measures the number of sites



Much of the operational responsibility for direct Superfund activities resides in the EPA Regions. The chart depicts FY 1998 obligations broken out by Regions, Headquarters (HQ)-OSWER, and HQ-All Others.

The line chart depicts Superfund financial trends from FY 1993 through FY 1998. The appropriation line reflects new obligational authority only and does not include prior year carryover of appropriations. Appropriations for Superfund, as specified in the



and people served by the following actions at NPL and non-NPL sites: site security, populations relocated, alternate water supplied, and immediate actions (removals). Indicator B, *Progress Toward Cleanup*, measures the program's incremental progress to clean up sites and to address persistent threats. The indicator measures sites where cleanup goals as listed in the ROD have been fully, or partially achieved; sites with direct contact threats addressed; and possible site candidates for partial deletions. Indicator C, *Cleanup Technologies Applied*, measures the program's efforts to apply appropriate or innovative treatment and containment technologies to clean up sites. The indicator measures the following at NPL and non-NPL sites technology counts, organized by treatment and containment, and volumes of wastes handled as a result of using these technologies. By combining the level of goal attainment with the volume of waste handled, the public can achieve a better sense on the extent of work that needs to be done to make them safe from pollution at the site.

These Environmental Indicators show that in FY 1998 EPA continued making progress in hazardous waste cleanup. Data gathered through June 1998 shows that Superfund continues to fulfill its environmental mission and is gradually reducing the risks to human and ecological health posed by dangerous chemicals in the air, soil, and water.

Through 1991, cleanup systems had been constructed and completed at a total of 61 Superfund NPL sites. By the end of FY 1998, more than nine times that number, 568 non-federal facility sites, have been completed. There were 84 non-federal facility construction completions in FY 1998. In addition, assessment and cleanup is now underway at 663 sites on the NPL.

The Superfund Program addresses both immediate threats to populations living near hazardous waste sites as well as long-term cleanup actions at these sites. To address immediate threats, short-term (removal) actions often are taken to control critical situations and ensure the safety of communities until long-term (remedial) actions can remove or permanently clean up hazardous contamination. The critical actions that Superfund takes to protect public health are:

- ◆ Emergency removals of contaminated materials or media;
- ◆ Permanent and temporary alternative drinking water supplies;
- ◆ Permanent and temporary population relocation;
- ◆ Institutional controls (deed restrictions, restrictions on fishing); and
- ◆ Site security (including fences and guards) to restrict access to the site.

The Superfund Program has conducted response actions (remedial or removal) at 3,019 non-NPL sites to ensure the safety of the surrounding community from critical emergencies caused by hazardous waste. Since inception of the Superfund Program in 1980, EPA has achieved all cleanup goals for all media (groundwater, soil, surface water, etc) at 179 sites. In addition, the Agency has achieved all cleanup goals for at least one medium at 165 sites. Sites where all cleanup goals for all media have been achieved are candidates for deletion from the NPL. At some sites, remediation of specific media is fully completed before cleanup for the entire site is finished. When a medium at a site requires no further cleanup activity, the site is a candidate for partial deletion.

Through June 1998, the Superfund Program has supplied over 350,000 people at NPL and non-NPL sites with alternative water supplies in order to protect them from contaminated groundwater and surface water. Over 14,300 people at NPL and non-NPL sites have been relocated in instances where contamination posed the most severe immediate threats.

To prohibit certain types of land uses at sites, institutional controls such as deed and fishing restrictions, have been implemented at over 800 NPL sites. Site security measures, such as fencing and guards, to restrict access have been implemented at over 560 NPL sites.

Through June 1998, the Superfund program has cleaned over 132 million cubic yards of hazardous soil, solid waste, and sediment and over 341 billion gallons of hazardous waste liquid-based waste, groundwater, and surface water.

Each year the program has increased the total number of Superfund sites that had their cleanup goals met through remediation activities. In the last seven years, the total number of NPL sites achieving all cleanup goals for at least one area of contamination has more than tripled. A great deal has been learned about the nature and extent of contamination, the risk to human health and the environment, and the technologies necessary to reduce the risks. With further development of

initiatives such as innovative technologies and presumptive remedies, the Superfund Program can make even greater strides in meeting the challenges of the future.

The direct beneficiaries of Superfund cleanups are those people living in the vicinity of the cleanup sites. Indirect beneficiaries include those living further from the sites who might suffer degradation of their groundwater, drinking water, or air if these programs did not alleviate the risk of contamination before it became more widespread. Early action to contain impacted areas also lessens the potential liability of parties responsible for the contamination.

During FY 1998, the Superfund Program spent approximately \$6.5 million to respond to ongoing efforts to address methyl parathion misuse. This supplements past expenditures of \$65 million spent in FY 1997 in Mississippi and Louisiana, and \$19.1 million spent for the Lorain County, OH, and Detroit, MI, responses during FY 1994/95. EPA does not anticipate spending any resources on remediation in FY 1999. EPA is planning outreach and communication programs with pesticide applicators, the agricultural community, and residential and small business communities. For 1999, EPA is requesting \$1 million for EPA regions to implement a multimedia initiative focusing on these issues. The regions will enlist the cooperation of manufacturers, distributors, producers, and state certification officials.

The Superfund Program is working to ensure the most efficient, most protective response within limited resources. EPA continued its effort to protect human health and the environment through both the second and third rounds of Administrative Reforms. There were many noteworthy Administrative Reform achievements in FY 1998 which include:

- 1) archiving over 30,900 CERCLIS sites;
- 2) issuing notices of intent to delete clean parcels at one site and deleting clean parcels at 11 sites;
- 3) establishing Community Advisory Groups (CAGs) at 43 sites;
- 4) publishing CAG Guidance/Reference sheet in English and Spanish;
- 5) issuing final guidance on implementing the risk sharing initiative;
- 6) signing Memorandum of Agreement (MOA) for State/EPA cooperation with 11 states under the Voluntary Cleanup Program;
- 7) signing agreements with 12 states under the Integrated Federal/State/Tribal Site Management Program;
- 8) issuing annual progress report for the National Remedy Review Board;
- 9) issuing Technical Approach to Risk Assessment for planning, reporting, and reviewing risk assessments;
- 10) issuing final guidance on lead regulator for federal facilities;
- 11) conducting ongoing public outreach and mediation training; and
- 12) issuing final report documenting obstacles in awarding and utilizing Superfund resources for the State/Tribal Superfund Block Funding. Class regulatory deviations have been requested to fully implement this reform. Twelve pilots are underway.

The successes realized throughout Superfund during FY 1998 place the Agency in a uniquely positive position to achieve and expand Superfund accomplishments in FY 1999.

To meet the requirements of the Government Performance and Results Act (GPRA) of 1993, the Superfund Program established 11 goals to assess performance in its major program areas: response, enforcement, federal facilities, and Brownfields redevelopment. The goals will enable the program to align planning, budgeting, and accountability functions for better management for environmental outcomes.

Performance Measures

Under the Superfund Response Program's sub-objective Respond to Superfund Hazardous Waste Sites, by 2005, EPA and its state, tribal, and federal partners will reduce the risks that Superfund sites pose to public health and the environment by: completing construction at a total of 1,200 NPL sites; conducting 2,400 additional removal actions; determining if Superfund cleanup is needed at 85% of the sites entered into the Superfund site data base (CERCLIS); maximizing PRP participation in conducting/funding response actions; and meeting statutory deadlines for federal facility activities. EPA will collaborate with states and Indian tribes to enhance the federal, state, and tribal Superfund program, reduce overlap among the programs, and leverage public and private resources to promote cost-effective, efficient cleanups of Superfund sites.

Under this sub-objective, three key performance measures were developed which are measurable and quantifiable. The performance measures are:

- ◆ Site Assessment: The number of final Superfund site assessment decisions to: place a site on the NPL; defer a site to another federal program, state, or tribe for action under their legal authority; take no further remedial action at a site based on current information; or aggregate a site into an existing NPL site. In FY 1998, the Superfund Response program made 471 site assessment decisions.
- ◆ Removal: The number of removal response action starts per year. In FY 1998, the Superfund Response program conducted 286 removal response actions.
- ◆ Construction Completions: The number of construction completions per year (this represents all program accomplishments, including federal facilities). In FY 1998, the Superfund Response Program achieved 87 construction completions for a total of 585.

The purpose of this section of the financial statements is to relate program performance to Trust Fund expenditures. Since the funds used to clean up federal facility sites do not come from the Trust Fund, accomplishments attributable to EPA's Federal Facilities Program have been excluded from this section.

OSWER has used the following five performance measures for assessing the success of the Superfund Program during FY 1998.

Cleanup: For site cleanup we measure not only the completion stage but also the critical steps in the cleanup process. Because the cleanup process can take a number of years, it is important to look at the "pipeline" of activities to get an accurate sense of progress. Note that in Cleanup/Response Measures 1-5, the cumulative totals reflect current information and methodology refinements and may not reconcile with previous annual reports. Part of this difference in comparing cumulative totals is attributable to the conversion of a site from Fund-lead to state-lead and the point in time when that conversion is captured in the state and Agency systems.

Cleanup/Response Measure 1: Number of non-federal sites on the NPL where EPA has started the first cleanup or investigation compared to the total number of non-federal sites on the NPL.

Activities captured under this measure are short-term removal actions and the remedial investigation/feasibility study which assesses the nature and extent of contamination at the site and analyzes cleanup alternatives so that a remedy can be selected.

Results: In FY 1998, EPA started the first cleanup or investigation at nine sites. Cumulative performance to date is 1,181 cleanups or investigations begun compared to 1,265 non-federal NPL sites.

The number of cleanups started to decline in FY 1991, relative to earlier years, as the Superfund Program's emphasis shifted to the later stages of the cleanup effort needed to complete work at a site. Also, cleanup has begun at nearly all sites on the NPL. The remaining sites have been evaluated for immediate threat, even though cleanup action has not yet begun.

Cleanup/Response Measure 2: The number of non-NPL sites with hazardous releases where EPA has begun a cleanup action.

Sites with confirmed hazardous releases, which do not score high enough to be included on the NPL or where an emergency exists, are eligible for a short-term Superfund removal action if they meet certain regulatory criteria. This measure counts the number of sites where EPA has started a removal action.

Results: In FY 1998, EPA began cleanup actions at 191 non-NPL sites, bringing the total number of sites addressed through such actions since program inception to 3,167 non-NPL sites.

Cleanup/Response Measure 3: The number of non-federal sites on the NPL where EPA made a decision about how to proceed with the cleanup of at least a significant portion of the site compared to the total number of non-federal sites on the NPL.

Activities counted under this measure include the documentation of how to proceed with the remedial action -- the signing of a Record of Decision (ROD) -- or the documentation of the selection and authorization of a removal -- an Action Memorandum. The ROD identifies the remedy that has been chosen for remediating the site (or a portion of the site) and summarizes the site problems, the alternative remedies considered, and the public's involvement in the decision. The Action Memorandum substantiates the need for removal action, identifies the proposed action, and explains the rationale for the particular type of removal action selected.

Results: EPA made cleanup decisions for 26 sites in FY 1998, resulting in a total to date of 1,049 sites of the 1,265 non-federal sites on the NPL.

Cleanup/Response Measure 4: Number of non-federal sites on the NPL where EPA completed remedial action for at least a significant portion of the site compared to the total number of non-federal sites on the NPL.

This measure counts those NPL sites (or portions thereof) which have progressed through the remedial action phase. At this stage, the construction work to implement the remedy is complete, and EPA has conducted a final inspection to determine that the remedy is functioning properly and performing as designed.

As indicated above, a site may have more than one remedial action.

Results: In FY 1998, 32 sites (or significant portions thereof) progressed through the Remedial Action cleanup phase. This brings the total number of such sites to 502 of the 1,265 non-federal sites on the NPL.

Cleanup/Response Measure 5: The number of non-federal sites on the NPL where cleanup construction is completed compared to the total number of non-federal sites on the NPL.

This measure counts the sites for which EPA has declared cleanup construction complete. Sites qualify for construction completion when:

- ◆ any necessary physical construction is complete whether or not final cleanup levels or other requirements have been achieved,
- ◆ EPA determines that the response action does not involve construction, or
- ◆ the site qualifies for deletion from the NPL.

Additional clarification on the definition of site cleanup is described in the Federal Register, March 2, 1993.

Results: During FY 1998, EPA completed cleanup at 84 non-federal facility sites. The continuing cumulative increases in completions reflect management's increasing focus on completions, the maturing of sites already in the pipeline, and the streamlining of documentation requirements. Cumulative results for the program to date are 568 sites with cleanup construction completed of the 1,265 non-federal sites on the NPL.

OECA has used the following five enforcement/cost recovery performance measures for assessing the success of the Superfund Enforcement and compliance assurance program during FY 1998.

Enforcement: In FY 1998, EPA's enforcement and compliance assurance program continued seeking settlement with those parties potentially responsible for contaminating Superfund sites and pursuing recovery of monies EPA expended from the Trust Fund.

Under the Enforcement Program's sub-objective, EPA will continue to maximize the participation of potentially responsible parties in conducting/funding response actions at Superfund sites while promoting fairness during the enforcement process. Based on the urgency of the situation and/or the capabilities of the PRPs, EPA will optimize PRP removals. More than 70% of the long-term cleanup actions are now financed by PRPs, and EPA's goal is to maintain or increase that level of participation. EPA will do this through orphan share compensation, de minimis settlements, cash-out, mixed funding, mixed work, alternative dispute resolution, ability-to-pay settlements, PRP oversight, and interest bearing special accounts where applicable. At sites where EPA decides to issue unilateral administrative orders (UAOs), EPA will issue, or document non-issuance of UAOs, to 100 percent of non-settling parties (except UAOs for time critical or emergency removal actions). In addition, EPA will address cost recovery at 100 percent of all NPL and non-NPL sites with total past costs equal to or greater than \$200,000 which need to be addressed prior to the expiration of the Statute of Limitations (SOL). Under this subobjective the following performance measures were developed which are measurable and quantifiable:

- ◆ Maintain 70% PRP participation in the long-term cleanup actions: In FY1998, approximately 72% of new remedial action starts at NPL sites were initiated by potentially responsible parties.
- ◆ Orphan Share Offers: In FY 1998, EPA made offers at all eligible RD/RA and removal sites.
- ◆ De Minimis Settlements: In FY 1998, EPA negotiated 34 de minimis settlements to resolve the potential liability of over 2,200 small parties.
- ◆ Cost Recovery: Address cost recovery at all SOL sites with total past costs > \$200K. In FY 1998, EPA addressed all of the FY 1998 SOL cases (where past costs exceeded \$200,000) prior to the expiration of the SOL.
- ◆ Prospective Purchaser Agreement Requests Assessed: EPA signed 24 Prospective Purchaser Agreements in FY 1998.

The Superfund Enforcement Program used the following five enforcement/cost recovery performance measures for assessing the success of the program during FY 1998.

Cleanup/Enforcement Measure 1: The number of enforcement actions taken at NPL sites to have PRPs conduct or participate in response activities compared to the total number of sites on the NPL. The percentage and estimated value of PRP commitments to response activities at non-federal facility sites on the NPL.

This measure counts the number of legal actions taken to involve PRPs in site study and cleanup at NPL sites (including proposed sites). This measure includes all administrative and judicial settlements, judicial actions, and administrative orders for removals, site studies, and remedial design and remedial actions (RD/RA). It includes those instances where parties have voluntarily entered into a settlement, as well as those instances where unilateral enforcement order authority was used to compel PRPs to conduct work and the PRPs have agreed to comply with the order.

Results: During FY 1998, 110 enforcement actions for site study and cleanup were taken at 88 sites on the NPL. 63 of these actions were settlements for RD/RA (37 consent decrees referred to the Department of Justice (DOJ) and 26 unilateral administrative orders in compliance).

Since the inception of the Superfund Program, PRPs have committed to conduct site response at 856 sites (68%) of the 1,265 non-federal facility sites on the NPL, with an estimated cumulative value of over \$11.6 billion. In FY 1998, PRPs committed to conduct response work at 88 (7%) of the 1,265 NPL sites, with an estimated value of approximately \$694 million.

Cleanup/Enforcement Measure 2: The total value of cost recovery settlements and judicial actions achieved.

This measure provides the amount of cost recovery that has been achieved to date. A number of factors limit EPA's ability to recover its past costs. The first limitation is that EPA only can recover money that has been spent. A significant

portion of EPA's budget is obligations for future years. These funds will be eligible for cost recovery after they are actually expended. EPA's ability to recover money that has been spent is also limited. A number of factors, including bankruptcy of PRPs, other litigation concerns, the inability to identify financially viable PRPs, and the exclusion of certain indirect costs make 100% cost recovery not realistic.

Results: Through FY 1998, EPA has achieved settlement for approximately \$2.4 billion with \$230 million of this amount achieved in FY 1998 and is seeking an additional \$1.8 billion in ongoing cost recovery actions.

EPA has been very effective in addressing past costs for Statute of Limitation (SOL) cases at sites where the past costs exceeded \$200,000. The SOL requires EPA to address cases by certain dates. EPA addresses these cases by negotiating a settlement, referring the case to DOJ for trial, or writing the case off when no financially viable PRP can be found. In FY 1998, the number of cost recovery cases addressed was 194 with a total value of \$378 million. EPA addressed all of the FY 1998 SOL cases (where past costs exceeded \$200,000) prior to the expiration of the SOL.

Cleanup/Enforcement Measure 3: The amount of money EPA has collected from PRPs compared to the total amount achieved in cost recovery settlements and judicial actions.

This compares the total value of cost recoveries, penalties, and damages collected to-date to the total amount of cost recoveries achieved through settlements and judicial actions.

There is frequently a delay between the date the settlement is reached (the day cost recovery is considered to be achieved) and the date the funds are collected. Delays are not uncommon because of the time required to file the necessary documents with the courts, and because in some cases settlement payments are received in installments. As a result, settlements may be reached in one fiscal year, and the settlement payment collected in a later fiscal year.

Results: In FY 1998, the Agency collected approximately \$320 million in cost recovery and reached settlements for the recovery of \$230 million. Since the inception of the program, the Agency has collected approximately \$2.1 billion in cost recoveries. This represents approximately 87% of the total value of cost recovery settlements (approximately \$2.4 billion) reached by the program to-date.

Cleanup/Enforcement Measure 4: The estimated amount of money PRPs have committed legally to site cleanup compared to the total amount of funds obligated by the Superfund Enforcement and Compliance Assurance Program.

This measure compares the estimated dollar value of cleanups PRPs have agreed to perform at NPL and non-NPL sites to the enforcement obligations EPA has incurred achieving settlements. The estimate of the value of PRP work to be performed is derived from sources such as the Record of Decision, the Remedial Design, enforcement settlement document (i.e., Administrative Order on Consent [AOC], Unilateral Administrative Order [UAO]), or other relevant source (i.e., Action Memorandum, Engineering and Evaluation Cost Analysis). The estimate of PRP work to be performed is then compared to the amount of funds obligated from the Trust Fund for enforcement activities. This provides an order-of-magnitude contrast between EPA and DOJ enforcement obligations versus the estimated value of private party settlements for site response (recognizing that the actual outlay of funds by PRPs may take place over several years). The resulting ratio is a measure of enforcement effectiveness.

Results: In FY 1998, the Agency reached settlements with PRPs valued at over \$1 billion (\$806 million in response settlements and \$230 million in cost recovery settlements) for NPL and non-NPL sites. EPA's FY 1998 enforcement obligations (including DOJ obligations) were \$173.5 million. The resulting ratio of approximately 6 to 1 indicates that PRPs have committed approximately \$6 for every dollar obligated for Superfund enforcement. This ratio varies from year to year for a variety of reasons, such as the number and/or value of the settlements completed in a given year.

Over the life of the Superfund Program, the Agency reached settlements with an estimated value of \$15.5 billion (\$13.1 billion in response settlements and \$2.4 billion in cost recovery settlements) for NPL and non-NPL sites. EPA's

enforcement obligations over this period were approximately \$2.3 billion. The resulting ratio of approximately 7 to 1 indicates that PRPs have committed \$7 for every dollar obligated for Superfund enforcement.

Cleanup/Enforcement Measure 5: The number of *de minimis* settlements, potential value of these settlements, and the estimated number of settlors.

EPA continues to seek enforcement fairness by entering into *de minimis* settlements with PRPs who have contributed only a very small amount of waste to a site. EPA may consider parties who have contributed only a small amount of waste to a site to be *de minimis* parties if their contribution of waste is minimal compared to the other waste at the site. In recognition of their relatively small contribution of waste, and to help ensure that these *de minimis* parties do not get drawn into lengthy and expensive private party lawsuits, EPA may offer a special type of settlement to these parties known as a *de minimis* settlement. Although the amount a *de minimis* settlor may pay varies from site to site, in general, the amount paid in the settlement is a combination of a basic payment (based on cleanup costs and waste contribution by the *de minimis* party) and a premium payment.

This measure counts the total number of administrative and judicial settlements reached with PRPs that qualify as *de minimis* settlors under Section 122(g) of SARA. This measure also counts the potential value of these settlements and the estimated number of settlors.

Results: In FY 1998, the Agency achieved 34 de minimis settlements valued at approximately \$60 million with over 2,200 de minimis settlors at 26 sites. Through FY 1998, the Agency achieved over 400 de minimis settlements with over 18,000 settlors.

Superfund Federal Facilities

In FY 1998, there were 162 NPL federal facilities. The program started 31 Remedial Investigation and Feasibility Studies, signed 81 Records of Decision, started 60 Remedial Actions, completed 68 Remedial Actions, started 47 Removals, and completed 46 Removals. By the end of FY 1998, 17 federal facilities achieved site construction completions.

Brownfields

Brownfields Pilots are Encouraging Redevelopment Through Site Assessment

The Brownfields Assessment Demonstration Pilots form a major component of the Brownfields Action Agenda. EPA increased the number of site assessment pilots to a total of 227 at the end of FY 1998. Grantees may use up to \$200,000 for site characterization, site assessment, and site inventory work. These activities help communities determine if a property is contaminated and the extent of the contamination.

Brownfields Revolving Loan Fund Pilots Boost Cleanup

The Brownfields Revolving Loan Fund (BRLF) Pilots enable eligible states, cities, towns, counties, territories, and Indian tribes to capitalize revolving loan funds to safely cleanup and sustainably reuse Brownfields. In FY 1997, EPA awarded 23 demonstration pilots to Brownfields site assessment demonstration pilot “graduates.” In FY 1998, EPA was restricted from signing cooperative agreements to capitalize BRLFs. This restriction has been lifted for FY 1999.

Brownfields National Partnership Leverages Resources

- ◆ The Brownfields National Partnership represents a \$300 million investment in Brownfields communities including more than 100 commitments from more than 15 federal agencies. This Partnership will help communities cleanup and redevelop up to 5,000 properties by leveraging \$5 billion in public funds to attract \$28 billion in private investment.

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- ◆ The Centerpiece of the Brownfields National Partnership was the selection of 16 Brownfields Showcase Communities in FY 1998. Showcase Communities serve as national models to demonstrate successful public-private partnerships in support of the Brownfields Program.
 - ◆ Federal resources include additional Brownfields pilots from EPA; redevelopment funds from Housing and Urban Development (HUD) and Economic Development Administration (EDA); job training efforts by Labor, Health and Human Services (HHS), Education, and Veterans Affairs.

Supported Department of Treasury's Efforts on Brownfields Tax Incentive

This three-year tax incentive plan will reduce the cost of cleaning up thousands of contaminated, abandoned sites in economically distressed areas. It is anticipated that this \$1.5 billion tax incentive will leverage more than \$6 billion in privately funded cleanups at an estimated 14,000 Brownfields sites.

Local Job Training Efforts Support Brownfields Pilot Communities

Through its cooperative agreement with EPA, the Hazardous Materials Training Institute conducted workshops on how to implement environmental training programs in over 20 community colleges located near Brownfields pilot sites as of the end of FY 1997. These workshops enable local communities to participate in the cleanup process. In FY 1998, EPA selected 11 job training pilots which are designed to enhance workforce development in Brownfields communities.

Released Draft Voluntary Cleanup Guidance

To encourage partnerships with states and tribes, EPA issues draft guidance to promote state voluntary cleanup programs. The draft guidance sets out baseline criteria that EPA will use to evaluate state voluntary cleanup programs. In FY 1998, EPA funded cooperative agreements with approximately 45 states to support new and existing state voluntary cleanup programs.

Sponsored Sixth Annual EPA Teachers Institute at Morgan State University

Experts taught over 40 teachers from across the U.S. how to be effective community advocates. These teachers live or teach near contaminated property in minority or disadvantaged neighborhoods, representing over 20 Superfund and Brownfields sites.

Building Tribal Capacity

In FY 1998, EPA funded a cooperative agreement with the Tribal Association on Solid Waste and Emergency Response. The Association uses the funds to build tribal capacity and assist tribes in establishing and managing their environmental programs. Furthermore, EPA continued to provide technical and financial assistance to the four tribal integrated waste pilots, and selected six tribal applications for Brownfields assessments.

Brownfields Success Stories

In Emeryville, CA, \$644 million in private investment has been leveraged so far, while 10,600 jobs are expected to be created over the next five years. Local tax coffers have increased by \$6.4 million as a result of their Brownfields Pilot and other public and private activities.

Dallas, TX, enjoys new prosperity, thanks in part to its Brownfields efforts. Private investment has increased \$43.5 million through \$8.4 million leveraged by the public sector. Tax base improvements reflect a \$32 million increase, with 163 jobs created so far and 700 jobs total anticipated. Sports figure Larry Johnson donated \$1 million to create a youth activity center on a Brownfields site in his old neighborhood.

Bridgeport, CT, a community devastated by high unemployment and a lack of economic vitality, is turning itself around with the help of its EPA Brownfields demonstration pilot and other state and federal agencies. At this very early stage in its cleanup and redevelopment process, Bridgeport has already attracted \$15 million in private investment and \$133 million in public investment. This investment has created 400 jobs and led to a \$250 thousand increase in the tax base.

Research

Improving Science Through Waste Management and Site Remediation Research

- ◆ EPA completed the SITE Annual Report and submitted it to Congress in September 1998. This report is required in the SARA legislation, which authorizes the SITE Program.
- ◆ The Agency and its external research partners completed a draft project report that covers performance aspects of RCRA-compliant waste containment facilities, focusing on hydraulic containment, physical stability, and long-term performance, and will be published under EPA title in 1999.

Reducing Uncertainties Through Waste/Site/Risk Characterization Research

- ◆ The Agency developed research results and reports on how to evaluate the toxicological properties of complex mixtures of contaminants, along with an upgrade of the Exposure Factors Handbook. These references will provide up-to-date scientific data on key characteristics of potentially exposed populations.
- ◆ EPA produced research results on innovative geophysical characterization technologies for determining subsurface structure and location of contaminants, especially non-aqueous phase liquids (NAPLs). These new technologies permit more rapid and cost-effective characterizations and subsequent cleanups of Superfund and other hazardous waste sites.

Enforcement

Parties responsible for contaminating Superfund sites continue to conduct and pay the cost of cleanup, preserving the Trust Fund monies for those sites where parties are unable to contribute. While implementing previous Administrative Reforms, EPA continues to improve the Superfund Enforcement and Compliance Assurance Program.

Policy for Municipality and Municipal Solid Waste CERCLA Settlements at NPL Co-Disposal Sites *(February 5, 1998)*

This document states EPA's continued policy of not generally identifying generators and transporters of municipal solid waste (MSW) as potentially responsible parties at NPL sites. In recognition of the strong public interest in reducing contribution litigation, however, the policy identifies a settlement methodology for MSW generators and transporters who seek to resolve with the U.S. their CERCLA liability, thereby protecting themselves from third party litigation. In addition, the MSW policy identifies a presumptive settlement range for municipal owners and operators of co-disposal sites on the NPL who desire to settle their Superfund liability. This policy is intended to reduce transaction costs, including those associated with third party litigation, and to encourage global settlements at sites.

Memorandum of Understanding among the Environmental Protection Agency, United States Coast Guard, Department of Commerce, Department of the Interior, Department of Agriculture, Department of Defense, Department of Energy, and Department of Justice Concerning the Exercise of Authority under Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act *(February 10, 1998)*

In addition to EPA and the Coast Guard, other federal agencies have significant responsibilities and substantial programs for responding, or requiring others to respond, to releases and threatened releases of hazardous substances. Such agencies include the Departments of Agriculture, Commerce, Defense, Energy, and Interior ("Federal Resource Managers"). The

Federal Resource Managers have been delegated the authority under Section 106 of CERCLA to issue administrative orders or seek judicial relief with respect to a release or threatened release of a hazardous substance affecting either natural resources under a Federal Resource Manager's trusteeship, or a vessel or facility subject to the Federal Resource Manager's jurisdiction, custody, or control. Federal Resource Managers are required to obtain EPA or the Coast Guard's concurrence before each use of Section 106 authority. Federal Resource Managers also are prohibited from using this authority at any vessel or facility where EPA or the Coast Guard is the lead federal agency for the conduct or oversight of a response action. This Memorandum of Understanding is intended to ensure that the signatories exercise their authority in a cooperative and integrated fashion, and in a manner to ensure interagency coordination that enhances efficiency and effectiveness.

Fact Sheet: Using Supplemental Environmental Projects to Facilitate Brownfields Redevelopment (Issued September 1998)

In April 1998, EPA issued the final "Supplemental Environmental Projects (SEPs) Policy." In that policy, EPA encourages the use of SEPs in the settlement of environmental enforcement actions. In September EPA issued a fact sheet, entitled "Using Supplemental Environmental Projects to Facilitate Brownfields Redevelopment," to address specifically the use of SEPs at Brownfields. The fact sheet explains how the legal requirements identified in the SEP Policy relate to SEPs performed at Brownfields, and describes the two categories of SEPs that are appropriate for use at Brownfields: environmental quality assessments and environmental restoration. The fact sheet includes an analysis of two hypothetical projects submitted for Brownfield sites.

Guidance on Administrative Response Cost Settlements under Section 122 (h) of CERCLA and Administrative Cashout Settlements with Peripheral Parties under Section 122 (h) of CERCLA and Attorney General Authority (March 24, 1998)

EPA and the Department of Justice (DOJ) jointly issued the CERCLA §122(h) guidance and five model settlement documents. The guidance announces a new type of expedited "cashout" settlement for "peripheral parties." Peripheral parties are those parties who, although not technically *de minimis* or *de micromis*, are not the focus of CERCLA enforcement activities. They include ability to pay parties, parties for whom unresolved CERCLA liability is an "extreme burden," and other parties as defined on a case-by-case basis. For qualifying "peripheral parties," a "cashout" settlement that resolves the settlor's liability at the site is possible under the terms outlined in the guidance. The guidance and model agreements offer the possibility of increasing the efficacy and consistency of CERCLA administrative settlements nationally.

Guidance for Implementing Superfund Reform Initiative 9a: Risk Sharing (March 24, 1998)

Estimates of the eventual cost of cleaning up the Nation's hazardous waste sites highlight the need to support the development of more cost-effective cleanup technologies. PRPs are sometimes reluctant to implement new technologies due to concerns about having to "pay twice" if the innovative approach fails to achieve the required levels of cleanup. As part of the Superfund Reform Initiatives, EPA's guidance identifies a program designed to share the risk of using selected innovative technologies. The purposes of this initiative are: 1) to encourage the demonstration and use of innovative technologies with the potential to lower costs and/or improve performance at a particular site and at other Superfund sites, and to document these early applications to assist future selection of response actions; 2) to support developers of promising technologies, especially small businesses, by enhancing contracting opportunities with PRPs; and 3) to encourage PRPs to assume a more active role in the development of new technologies for site remediation.

Superfund Oversight Billing

Under Superfund, the Agency is required to monitor the cleanup of hazardous waste sites by responsible parties. Any oversight costs incurred by the Agency are recoverable from the responsible parties. In FY 1998, the Agency made billing of oversight a priority. EPA implemented actions to improve the management and timeliness of oversight billings and to become current in oversight billings by the end of the fiscal year. The Office of Site Remediation Enforcement (OSRE) and the Office of the Comptroller (OC) developed a methodology to resolve this issue and to improve oversight billing efficiency.

OIL SPILLS

EPA's Oil Program is administered by the Office of Solid Waste and Emergency Response (OSWER) and uses the Oil Spill Liability Trust Fund (OSLTF) to finance the cost of cleaning up spills and damages in cases where the responsible party cannot or will not pay for the cleanup. OSWER's Office of Emergency and Remedial Response (OERR) provides assistance to Regional On-Scene Coordinators during oil spill incidents and for implementation of the Oil Program. Support for enforcement activities is provided by EPA's Office of Enforcement and Compliance Assurance (OECA).

Oil Program Description

The goal of the Oil Program, which is authorized by the Clean Water Act (CWA) and has been in effect for over twenty years, is to protect public health and the environment from hazards associated with a discharge or substantial threat of a discharge of oil or hazardous substances into navigable waters, adjoining shorelines, and exclusive economic zones of the United States. The program was strengthened by the Oil Pollution Act of 1990 (OPA) which was passed in response to increasing frequency and severity of accidental oil discharges into the environment, such as the Ashland Tank Collapse and the Exxon-Valdez spill.

Under the CWA and OPA, EPA protects inland waterways through oil spill prevention, preparedness, response, and enforcement activities associated with about 450,000 non-transportation-related oil storage facilities. These facilities, which range from hospitals and apartment complexes storing heating oil to large tank farms, include any oil storage facility with a single aboveground storage tank larger than 660 gallons, total aboveground storage capacity greater than 1,320 gallons, or underground storage greater than 42,000 gallons.

The Oil Program establishes requirements to prevent and prepare for spills at oil storage facilities subject to its regulations, and respond to all spills in inland waterways. EPA has established the regulatory framework under which it will proceed with its OPA-mandated responsibilities. This framework includes the Oil and Hazardous Substances National Contingency Plan (40 CFR Part 300); the Oil Pollution Prevention regulation or Spill Prevention, Control and Countermeasures (SPCC) regulation (40 CFR Part 112); and the Facility Response Plan (FRP) regulation.



Wisconsin Fire -- Oil Spill

All regulated oil storage facilities must prepare SPCC plans. In addition, certain high-risk oil storage facilities must prepare Facility Response Plans (FRPs) to identify and ensure the availability of resources to respond to a worst case discharge, establish communications, identify an individual with authority to implement removal actions, and describe training and testing drills at the facility. In the event of a spill, the National Contingency Plan (NCP) is the Nation's blueprint for the federal response to releases of oil and hazardous substances. Both the revised NCP and FRP regulations were published in the Federal Register in mid-summer 1994.

The OPA also requires area committees (comprised of state, local and federal officials) to develop Area Contingency Plans (ACPs). These plans detail the responsibilities of those parties involved in planning the response process, describe unique geographical features of the area covered, and identify available response equipment and its location.

Current Oil Program prevention efforts focus on continued implementation of SPCC regulations. Preparedness efforts focus on periodic review of FRPs and on development of ACPs. Response efforts include monitoring or responding to all spills within the inland waterways.

Headquarters efforts include strengthening the response infrastructure and policy and program guidance development for preventing harmful releases of oil and other petroleum products; improving nationwide capability to respond to threats of discharge of oil or other petroleum products; improving nationwide capability for containment and removal of releases

that occur in navigable waters; coordinating with other federal agencies on Facility Response Plan (FRP) requirements, review, and approval; minimizing the resulting environmental damage from releases; and fully utilizing enforcement authority to compel responsible parties to clean up spills, provide a strong economic incentive to invest in preventive measures, and comply with regulations.

In addition, Headquarters supports field operations through operational guidance, technical bulletins, and demonstrations of new technologies. Headquarters also supports the OPA-mandated FRP process, chiefly through the development of approval criteria for the responsible parties.

A major component of the regions' work is monitoring, directing, or performing oil spill cleanups. In addition to responding to oil spills, the EPA regions conduct oil storage facility inspections to ensure compliance with the SPCC regulations. EPA inspects hundreds of these facilities each year, including site visits and/or plan reviews. EPA regions also conduct periodic equipment inspections and unannounced area drills. The regions take administrative actions against facility operators for failure to comply with SPCC and FRP requirements, and refer a limited number of actions for judicial action. Administrative and judicial actions also are brought as a result of oil and hazardous substance spills. EPA regions also assist the Federal Emergency Management Agency (FEMA) at major disasters and participate in response training of state and local staff.

The beneficiaries of the Oil Pollution Prevention Program are those people living in the vicinity of confirmed spills when cleanup actions are taken either by EPA, state or local responders, or the responsible party (RP). People living near regulated facilities benefit from the increased safety measures incorporated into the FRPs which quicken response time for spills and lessen the resulting environmental damage done by a spill.

Research Program Description

For the Agency's Oil Spill Prevention and Response Program, the Office of Research and Development conducts research on new approaches to cleaning up oil spills. As a member of the International Coordinating Committee on Oil Spill Research, as mandated by OPA, the Agency has primary responsibility for research on the use of bioremediation to remediate spilled oil, the use of dispersants and other chemical agents, mechanical cleanup on fast flowing streams, and debris disposal. Bioremediation is the primary focus. The goal of this research program is to provide the federal on-scene coordinators with the technical information they require to allow them to make decisions on the best cleanup procedure to be used on any given spill. Additionally, the information produced is required by EPA to periodically revise the NCP and its annexes.

Enforcement and Compliance Assurance Program Description

The Oil Spills Enforcement and Compliance Assurance Program's primary focus is petroleum storage facilities that fail to comply with oil pollution SPCC regulations and facility response plan requirements as well as those facilities which had a spill of oil or hazardous materials. The Agency's enforcement and compliance assurance program provides national guidance and direction in implementing enforcement, regulations, and strategies for civil, administrative, and criminal enforcement responses, including cost recovery and inspection issues; spill prevention penalty policies, and enforcement and compliance agreements with the U.S. Coast Guard. The program brings civil judicial enforcement case referrals and administrative actions against facilities for failure to comply with oil pollution SPCC regulations and with FRP regulations. The program also provides assistance to help facilities comply with these regulations.

The enforcement and compliance assurance program will continue to maintain a strong presence. Since this is a federally run program, EPA will emphasize enforcement of the SPCC regulations and will work with the regions to streamline processes, where possible, for taking enforcement actions. In addition, EPA will develop an enforcement management system for CWA Section 311 violations. This system will set out the appropriate enforcement actions and timeframes. This infrastructure improvement will make this program more consistent with the other programs under the CWA.

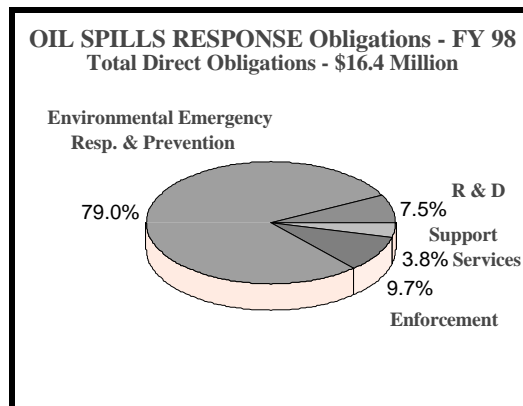
Highlights and Accomplishments

Financial Perspective

Since the beginning of the Oil Spill Trust Fund's existence through FY 1998, Congress has appropriated a total of \$125.2 million to the Agency. In FY 1998, EPA received a budget authority of \$15 million to implement the Oil Pollution Prevention Program. In FY 1998, the Agency processed \$16.4 million in direct obligations (against appropriated funds) and \$25.4 million in reimbursable obligations for oil spill response activities and \$16 million in net disbursements.

Performance Measures

Since last year, EPA has introduced a new Oil Program measure, "Facilities Brought Into Compliance", to reflect more accurately program accomplishments as required by the Government Performance and Results Act (GPRA).



Measure 1: FRP Reviews, SPCC Inspections, and Facilities Brought into Compliance

To ensure continued compliance with the OPA and consistency with the FRP regulation, EPA will continue to review FRPs on a periodic basis. This typically includes review of written plans, evaluation of response resources, communication with facilities, and site visits, leading to an overall evaluation of plan adequacy and facility preparedness. To ensure compliance with the prevention portions of the SPCC regulation, EPA conducts inspections of SPCC-regulated facilities each year. This typically includes review of written SPCC plans, interviews of facility personnel, and inspection of facilities and equipment on site.

Facilities brought into Compliance is a new measure, this is a transition year, but it will include verification of SPCC compliance by the facility as a result of the EPA interaction either through enforcement action or compliance assistance and outreach.

Results: About 150 facilities received FRP approval in FY 1998, and a few additional facilities were identified or received approval since then. In FY 1998, EPA conducted about 750 reviews of Facility Response Plans. EPA regulates about 450,000 facilities under the SPCC regulation. In FY 1998, EPA inspected about 1,060 SPCC-regulated facilities. Over 300 facilities were brought into compliance in FY 1998.

Measure 2: Oil Spill Cleanups and On-Scene Monitoring of Potentially Responsible Party (PRP) Lead Cleanups.

This measure counts the number of oil spills cleaned up by EPA using OPA funds and the number of times EPA monitors cleanup actions done by state or local responders, or the RP. EPA monitors a cleanup when another party such as a state or local government, or the RP responds to the spill to ensure adequate cleanup takes place.

Results: 127 oil spills cleanups were started in FY 1998 using OPA funds. EPA monitored 165 responsible-party oil spill cleanups in FY 1998. Since program inception through FY 1998, 418 oil spills have been cleaned up using OPA funds. For that same period, EPA monitored 1,487 responsible-party cleanups.

Measure 3: Administrative Actions and Judicial Penalty Enforcement Actions for spill violations and prevention regulation violations.

This measure counts the number of administrative and judicial enforcement actions resulting from prohibited spills and violations of the regulations of the CWA as amended by OPA. These two actions account for a significant portion of the resources used in the Oil Program and indicate significant achievements in compliance. An administrative complaint is counted on the date it is issued to the respondent. A judicial case is counted on the date of the referral letter/cover memo to the Department of Justice (DOJ).

Results: 84 administrative cases were filed and 16 judicial enforcement actions were referred to the DOJ in FY 1998.

Improving Science Through Waste Management and Site Remediation Research

The Agency continued efforts on the evaluation of screening tests for oil spill chemical countermeasures, including dispersant agents. This was used towards improving the protocols, thereby assuring better oil spill response decisions.

LEAKING UNDERGROUND STORAGE TANK

Subtitle I of the Resource Conservation and Recovery Act of 1984 (RCRA) established a State-EPA program to prevent, detect, and clean up leaks from underground storage tanks (USTs). EPA estimates that there are about 900,000 regulated USTs buried at about 300,000 sites nationwide. Regulated USTs contain petroleum products (except heating oil for on-premise consumption) or potentially hazardous substances. Leaking underground storage tanks (LUSTs) can cause contamination of soil and groundwater, endangering human health and the environment. LUSTs may also ignite or explode.



In 1986, to support LUST cleanup programs, Congress established the LUST Trust Fund, financed by a 0.1 cent tax on each gallon of motor fuel sold in the U.S. Taxing authority for the Trust Fund expired December 31, 1995, but Congress reinstated it on October 1, 1997, with a new expiration date of March 31, 2005. As of the end of FY 1998, the Trust Fund had accumulated about \$1.8 billion in taxes and interest (on unappropriated funds). Congress establishes the amount of the Fund that EPA may use by issuing annual and supplemental appropriations. Through FY 1998, the Congress appropriated \$730.8 million to EPA, 87% of which was provided to the states. At the end of FY 1998, the Trust Fund reflected a balance of \$1.2 billion, a portion of which is available for future Congressional appropriation.

LUST Program Description

EPA supports state programs through cooperative agreements funded by the LUST Trust Fund. States use LUST Trust Fund dollars largely to administer their corrective action programs, oversee cleanups by responsible parties, and undertake necessary enforcement actions. States also may use the Trust Fund money to pay for cleanups in cases where a responsible party cannot be found or is unwilling or unable to pay for a cleanup. Such cases have accounted for less than 1% of all LUST releases.

Research Program Description

Research to support the LUST Program is authorized under Subtitle I of the Hazardous and Solid Waste Amendments of 1984, as amended by the Superfund Amendments and Reauthorization Act of 1996. The Office of Research and Development conducts research on new approaches for leak detection and remediation at LUST sites. This includes identifying information needed on the subsurface environment, released petroleum products therein, and how the information can be used to select appropriate corrective action technologies. Technical support is provided to the Office of Underground Storage Tanks, EPA regions, state and local agencies, and practicing professionals implementing the LUST Program. This effort includes providing scientific expertise on low-cost approaches for the assessment of site contamination and evaluation of remedial technologies.

Enforcement and Compliance Assurance Program Description

The LUST Enforcement and Compliance Assurance Program continues to target responsible parties to finance or conduct corrective actions. Agency staff provides assistance to state personnel to enhance voluntary compliance with corrective actions and financial responsibility requirements.

Highlights and Accomplishments

Financial Perspective

In FY 1998, EPA obligated approximately \$65 million to implement the LUST Program. The Office of Solid Waste and Emergency Response (OSWER) supported the LUST Program by obligating \$62.1 million, while approximately \$2.9 million was obligated by non-OSWER offices in Headquarters and the Regions. Responsible parties conducted nearly all of the cleanups with state oversight.

Protecting Human Health and the Environment Through Cleanups

Under the supervision of state or local agencies (or EPA in Indian country), UST owners and operators undertake nearly all corrective action. EPA's performance goal for the LUST cleanup program is to ensure that UST releases are detected and cleaned up promptly and cost effectively to protect human health and the environment.

Progress in the LUST Program is measured by comparing the number of cleanups initiated and cleanups completed to the number of confirmed releases. Cumulatively, through FY 1998, there were 371,387 confirmed releases; 314,965 cleanups initiated; and 203,247 cleanups completed.

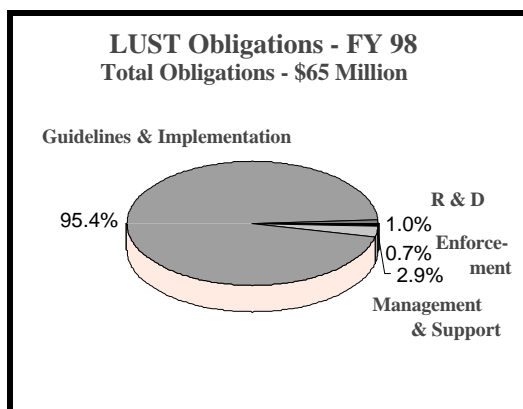
For FY 1998, EPA's performance goals were to initiate 24,000 cleanups and complete 20,000 cleanups. During FY 1998, 29,614 LUST releases were confirmed; 22,519 cleanups were initiated; and 24,950 cleanups were completed.

Indian Country

Through FY 1998, the cumulative total of LUST activity on Indian lands came to 1,024 confirmed releases, 767 cleanups initiated, and 427 cleanups completed. EPA anticipates that it will take several more years to clean up all known and undiscovered releases in Indian country. In collaboration with tribes, EPA is developing a risk-based corrective action (RBCA) process for LUST sites in Indian country.

Improving Science Through Waste Management and Site Remediation Research

EPA provided recommendations on improvements to the risk-based corrective action (RBCA) approach to remediation option selection. These recommendations helped to insure optimal application of available LUST corrective action remediation alternatives.



PESTICIDES

The Agency's Pesticides Program was established pursuant to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) to protect public health and the environment. The law requires the Agency to balance public health and environmental concerns with the expected economic benefits derived from pesticides. The guiding principles of the Pesticides Program are to reduce risks from pesticides in food, the workplace, and other exposure pathways and to prevent pollution by encouraging the use of new and safer pesticides.

In accordance with FIFRA and the Federal Food, Drug and Cosmetic Act (FFDCA), the Pesticides Program administers the Revolving Fund for Certification and Other Services (Tolerance Fund) and the Pesticides Reregistration and Expedited Processing Fund (FIFRA Fund).

Tolerance Program Description

As part of its authority to regulate pesticides, EPA is responsible for setting "tolerances." If the pesticide is being considered for use on a food or feed crop or as a food or feed additive, the applicant must petition EPA for establishment of a tolerance (or exemption from a tolerance) under authority of the FFDCA. A tolerance is the maximum legal limit of a pesticide residue on food commodities and animal feed. Tolerances are set at levels that ensure that the public is protected from health risks posed by eating foods that have been treated with pesticides in accordance with label directions.

In 1954, Congress authorized the collection of fees for the establishment of tolerances for raw agricultural commodities (Section 408 of FFDCA). Congress, however, did not authorize the collection of fees for food additive tolerances (Section 409 of FFDCA). EPA, therefore, does not collect fees for food additive tolerances. The Agency also does not collect fees for Agency-initiated actions such as the revocation of tolerances for previously canceled pesticides. Fees collected for tolerances for raw agricultural commodities were deposited to the U.S. Treasury General Fund until 1963 when Congress established the Tolerance Fund. Specific fees are contained in 40 CFR 180.33 and range from \$3,725 to \$65,600 depending on the type of tolerance action requested. Waivers and/or refunds are granted for minor use pesticides submitted under the Inter-Regional Research Project Number 4 (IR-4 Program), public interest, such as reduced-risk pesticides, and economic hardship. The fee schedule is changed annually by the same percentage as the percent change in the federal General Schedule (GS) pay scale. Fees were increased 2.45% in 1998.

In 1996, the Agency supported pesticide reform legislation which included provisions for additional fees to support reregistration activities. Passage of the Food Quality Protection Act (FQPA) of 1996 requires tolerances to be reassessed as part of the reregistration program. Effective January 1997, all fees related to tolerance activities are deposited in the FIFRA Fund.

Pesticide Reregistration Program Description

As part of its authority to regulate pesticides, EPA is responsible for re-registering existing pesticides. The FIFRA legislation, requiring the registration of pesticide products, was originally passed in 1947. Since then, health and environmental standards have become more stringent and scientific analysis techniques are much more precise and sophisticated. In the 1988 amendments to FIFRA (FIFRA '88), Congress mandated the accelerated reregistration of all products registered prior to November 1, 1984. The amendments established a statutory goal of completing reregistration eligibility decisions by 1997. The legislation allows for various time extensions which can extend the deadline by three years or more. The current goal for the completion of reregistration is 2002.

Congress authorized the collection of two kinds of fees to supplement appropriated funds for the program: an annual maintenance fee and a one-time reregistration fee. Maintenance fees are assessed on registrants of pesticide products and are structured to collect approximately \$14 million per year. Reregistration fees are assessed on the manufacturers of the active ingredients in pesticide products and are based on the manufacturer's share of the market for the active ingredient. In fiscal years 1992 through 1998, approximately 14% of maintenance fees collected, up to \$2 million each year, were used

for the expedited processing of old chemical and amended registration applications. Fees are deposited to the FIFRA Revolving Fund. By statute, excess monies in the FIFRA Fund may be invested. Waivers and/or refunds are granted for minor use pesticides, antimicrobial pesticides, and small businesses.

In 1996, the Agency supported pesticide reform legislation which included provisions for additional fees to support reregistration activities. Passage of the FQPA of 1996 implements the following changes in the Pesticide Reregistration Program: reauthorizes collection of fees through 2001 to complete the review of older pesticides to ensure they meet current standards (increases annual fees from \$14 million to \$16 million per year for 1998, 1999, and 2000 only); requires tolerances to be reassessed as part of the reregistration program. Tolerance fees received will be deposited and reported in the FIFRA Fund.

The reregistration process is being conducted through reviews of groupings of similar active ingredients called cases. There are five major phases of reregistration:

- ◆ Phase 1 - Listing of Active Ingredients. EPA publishes lists of active ingredients and asks registrants whether they intend to seek reregistration. Completed in FY 1989.
- ◆ Phase 2 - Declaration of Intent and Identification of Studies. Registrants notify EPA if they intend to reregister and identify missing studies. Completed in FY 1990.
- ◆ Phase 3 - Summarization of Studies. Registrants submit required existing studies. Completed in FY 1991.
- ◆ Phase 4 - EPA Review and Data Call-Ins (DCIs). EPA reviews the studies, identifies and "calls-in" missing studies by issuing a DCI. A "DCI" is a request to a pesticide registrant for scientific data to assist the Agency in determining the pesticide's eligibility for reregistration. Completed in FY 1994.
- ◆ Phase 5 - Reregistration Decisions. EPA reviews all studies and issues a Reregistration Eligibility Decision (RED) for the active ingredient(s). A "RED" is a decision by the Agency defining whether uses of a pesticide active ingredient are eligible or ineligible for reregistration. The registrant complies with the RED by submitting product specific data and new labels. EPA reregisters or cancels the product. Pesticide products are re-registered, based on a RED, when it meets all label requirements. This normally takes 14 to 20 months after issuance of the RED.

Research Program Description

Pesticides research focused on providing scientifically valid, cost effective methods for evaluating risks associated with pesticide use, manufacture, and release into the environment. These research efforts included studying the effects of environmental stressors on human health and ecosystems, measuring the exposure of children to pesticides, elucidating the mechanisms of neurotoxicity, and assessing the immunotoxicity and reproductive toxicity risks presented by pesticides. The information developed from application of these methods will significantly improve our understanding of the extent of human exposure to specific pesticides. The Agency will incorporate these methods into its battery of testing guidelines under which industry will be required to submit data to the Agency on pesticides as regulated under FIFRA. In addition, efforts included research on agricultural and residential exposure and effects, with particular emphasis on research in support of the Children's Agenda, which included efforts to assess children's risk from exposure to pesticides and other toxins, and research on the special susceptibilities of infants and children from exposure to pesticides. The products of these research efforts are intended to support human and environmental risk assessments.

Enforcement and Compliance Assurance Program Description

The Pesticides Enforcement and Compliance Assurance Program focuses on problems relating to urban pesticide misuse, ineffective antimicrobial products, food safety, adverse effects, and pesticide worker safety protection. The enforcement and compliance assurance program provides compliance assistance to the regulated community through

seminars, guidance documents, brochures, and other forms of communication to ensure knowledge of and compliance with environmental laws.

EPA's grant support to states' pesticides programs emphasizes pesticide worker protection standards, high risk pesticide activities including antimicrobials, pesticide misuse in urban areas, and the misapplication of structural pesticides. In FY 1998, states continued to conduct compliance monitoring inspections on core pesticides requirements.

EPA will continue its commitment to maintaining a strong compliance and enforcement presence. Agency priorities for FY 1999 and FY 2000 include enforcement for products making illegal public health claims, including unregistered and ineffective products, such as ineffective hospital disinfectants; enforcement of worker protection standards, including inspecting and enforcing against misuse violations and labeling requirements violations; and continued focus on urban pesticides control and enforcement.

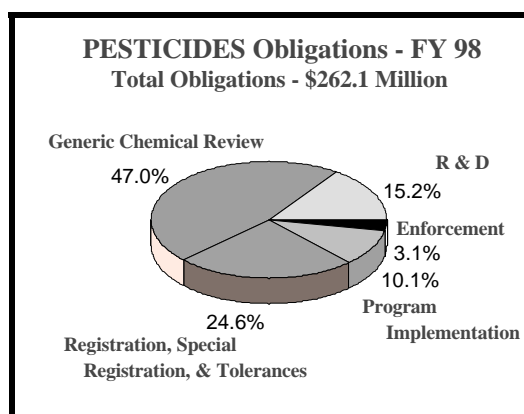
Highlights and Accomplishments

Tolerance Performance Measures

Tolerance fees collected in FY 1998 were approximately \$1.6 million and obligations were \$2.5 million.

Measure: Tolerance re-evaluations.

Results: In FY 1998, EPA set 258 tolerances and exemptions from tolerance. Of these, 240 were for conventional pesticides, 16 were for biopesticides, and 2 were for antimicrobial pesticides. In FY 1998, 1,646 tolerances were re-evaluated, of which 821 were revoked, 486 reassessed as part of reregistration, and 339 reassessed for registration actions.¹ FQPA requires that EPA reassess within ten years over 9,700 tolerances to ensure that the tolerances meet the federal safety standard of a reasonable certainty of no harm. In developing the reassessment schedule, EPA is placing a priority on pesticides that appear to pose the greatest potential risk to the public (these include organophosphate, carbamates, probable and possible human carcinogens, organochlorine pesticides, and high-hazard inert ingredients).



Reregistration (FIFRA) Financial Perspective

During FY 1998, the Agency's obligations charged against the FIFRA Fund for the cost of the reregistration and expedited processing programs were almost \$18.2 million and 202 workyears. Of these amounts, the Office of Pesticide Programs obligated \$16.8 million of this cost and funded the 202 workyears.

Appropriated funds are used in addition to FIFRA revolving funds. In FY 1998, approximately \$19.1 million in appropriated funds were obligated for reregistration and expedited processing program activities. The unobligated balance in the Fund at the end of FY 1998 was \$15.5 million. This is a decrease of \$500,000 compared to the FY 1997 year-end balance of \$16 million.

The Fund has two types of receipts: fee collections and interest earned on investments. Of the \$17.2 million in FY 1998 receipts, approximately 96% were fee collections. The fee collections are slightly more in FY 1998 compared to FY 1997.

¹ A tolerance is considered scientifically reassessed and counted the day a RED or other decision document is signed, and in most cases when there is a revocation, the day the final rule is signed. A final FR notice to implement 698 of the 821 tolerance revocations was published in FY 1999 (October 26, 1998).

Reregistration Program (FIFRA) Performance Measures

The following measures support the program's strategic goals of Food Safety and Safer Pesticides as contained in the FY 1998 President's budget.

Measure 1: Number of Reregistration Eligibility Documents (REDs) completed.

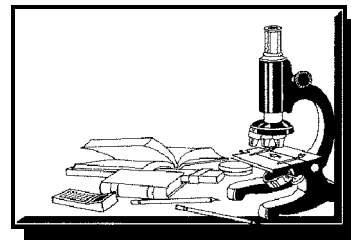
Results: The number of Reregistration Eligibility Decisions (REDs) completed was 13, a decrease of 10 from FY 1997 when 23 were completed. This decrease is the result of adapting the reregistration and tolerance reassessment process to the more stringent requirements realized with the passing of the FQPA. There are approximately 382 chemical cases (representing 3,822 chemicals), of which 184 REDs have been completed.

Measure 2: Number of products reregistered, canceled, or amended. Approximately 19,000 products are subject to reregistration. Many products, however, contain more than one active ingredient. Since products are reassessed separately for each active ingredient, EPA will conduct approximately 38,000 product reviews.

Results: FY 1998, 221 products were reregistered², 53 were amended and 337 were cancelled. The combined 611 decisions were achieved versus a target of 750. In addition, 135 products were forwarded to the EPA Office of Compliance Monitoring for suspension. The cumulative totals at the end of FY 1998 were 2,020 products cancelled³, 109 products amended, and 1,152 products reregistered.

Reducing Exposure through Human Health Protection Research

- ◆ EPA completed analysis of data from the National Human Activity Patterns Survey (NHAPS). NHAPS addresses a vital human exposure research need by providing comprehensive activity and location information on a national level. In addition to providing robust data, NHAPS will be especially valuable to exposure modelers who previously had to rely on assumed exposure scenarios rather than on distributions of reported data.
- ◆ EPA completed the National Human Exposure Assessment Survey (NHEXAS) pilot scale multipathway studies. These studies measured human exposures to multiple chemicals, and human exposures from multiple pathways and media, for representative population samples. These studies provide unique information on the ranges of actual exposures in the general population for use as benchmarks for site-specific investigations and for health risk assessments.
- ◆ The Agency completed a peer-reviewed protocol for the Agricultural Health Study. A series of statistical design analyses were performed and a draft revised protocol was developed for internal review. From this study, farmer-applicators will be selected for exposure measurements and to determine the most significant exposure factors resulting from pesticides handling and application practices. Spouse and child biomarker measurements will be performed to measure the extent to which these practices result in exposure to applicator family members.



² Product reregistrations include federally registered products and special local needs registrations issued by states pursuant to Section 24(c) of FIFRA.

³ A product cancellation is reported as a reregistration decision when a voluntary cancellation request is received, when the annual maintenance fee is not paid, or when a notice of intent to cancel due to unreasonable adverse effects is issued. In the case of a voluntary cancellation request, the process of finalizing the cancellation required by Section 6(f) of FIFRA may take about six months after receipt of the request to complete.

- ◆ EPA assembled children's activity pattern data for incorporation into the first generation exposure model. The Consolidated Human Activity Database (CHAD) provides consistent, comprehensive, and quality-assured activity data, facilitating assessments by providing more than 17,000 person-days of activity to modelers in an easy-to-use format. This data will be used to support the effort to reduce the risks to children's health caused by exposure to environmental toxics.
- ◆ EPA continued to develop and evaluate biologically based dose response (BBDR) models to describe the underlying mechanisms of toxicity and to facilitate extrapolation from animal studies. These models will foster improved estimation of human risks from exposure to compounds such as methanol, dibromochloromethane, arsenic, acrylamide, and dioxin.
- ◆ The Agency's research on biomarkers resulted in the validation of the use of single strand DNA breaks as a marker for oxidant exposure, use of mutation spectra from short-term tests for common mechanisms, development of markers of toxicity for use in low dose effects, and development of a consistent approach for measuring cholinesterase. Development of biomarkers provides validation of exposure and also provides for a more biologically defensible approach to quantifying risk of cancer and non-cancer health effects.

Pesticides Enforcement Performance Measures

The enforcement and compliance assurance program deters noncompliance by maintaining levels of field presence and enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. In FY 1998, EPA Headquarters issued 14 administrative penalty complaints for FIFRA violations, including several for violations of labeling for making false public health claims. The program used the following performance measures for assessing their success in FY 1998:

<u>Key Performance Measures</u>	<u>1998 Goal</u>	<u>1998 Actual</u>
FIFRA APO Complaints	80 APO Complaints	187 APO Complaints
FIFRA Inspections	125 Inspections	237 Inspections
FIFRA Civil Referrals	3 Case Referrals	4 Case Referrals
FIFRA Compliance Orders	10 Compliance Orders	18 Compliance Orders

(Note: APO is Administrative Penalty Order.)

WATER INFRASTRUCTURE FINANCING

The Clean Water State Revolving Fund (CWSRF) Program provides financial assistance to states, localities, and Indian tribes to protect the Nation's water resources by meeting the requirements of the Federal Water Pollution Control Act (FWPCA), commonly known as the Clean Water Act (CWA). With the passage of the Safe Drinking Water Amendments of 1996, the Drinking Water State Revolving Fund (DWSRF) has been authorized at \$9.6 billion. This fund is designed to provide federal financial assistance to the states, localities, and Indian tribes to protect the Nation's drinking water resources. The DWSRF provides capitalization grants to state and tribal governments, funding low-interest loans for local drinking water systems that need to install or improve their drinking water treatment facilities. The fund is also used for source water protection, operator certification, and other priority activities.

Program Description

Water Infrastructure Financing consists of the following: the CWSRF, DWSRF, the U.S./Mexican Border Integrated Border Environmental Plan, grants for communities facing extraordinarily high needs and user charges, and wastewater infrastructure needs of Alaskan Native Villages. The State Revolving Fund (SRF) Programs provide federal financial assistance to states, localities, and Indian tribes to protect the Nation's water resources by providing funds for the construction of wastewater treatment and drinking water facilities. The SRFs are two of the Agency's premier tools for building the financial capacity of our partners.

The Special Needs Program provides focused grant assistance to areas facing extraordinarily high needs in relation to household income (e.g., Boston Harbor and New Orleans), while the U.S./Mexican Border Program provides funds to support the planning, design and construction of high priority wastewater treatment projects along the U.S./Mexican Border and in the U.S. Colonias -- low-income communities located within 100 kilometers of the border, which are generally unincorporated and lack basic services (i.e., safe drinking water, wastewater treatment facilities). The goal of this program is to reduce the incidence of waterborne diseases along the Mexican border and in the U.S. Colonias.

Highlights and Accomplishments

In FY 1998, the Agency obligated \$2.8 billion for Water Infrastructure Financing. Under the CWSRF Program, EPA provides grants or "seed money" to all 50 states and Puerto Rico to capitalize state loan funds. The states, in turn, make loans to communities, individuals, and others for high-priority water quality activities. As money is paid back into the revolving fund, new loans are made to other recipients that need help in maintaining the quality of their water. States have contributed the required 20% match and, in some cases, leveraged their funds in the bond market to increase the total amount available for loans. Because of the funds' revolving nature, the federal investment can result in the construction of up to four times as many projects over a 20-year period as a one-time grant. Through 1998, EPA has invested approximately \$15 billion to capitalize the 51 CWSRFs. As of June 30, 1998, states reported they had issued 6,806 loans worth \$22.9 billion for wastewater, storm water, combined sewer overflow, and nonpoint source projects. This includes approximately 800 loans to communities with populations of more than 100,000. In addition, states have issued approximately 6,000 loans to medium and small communities.

A major benefit for municipalities and other loan recipients is the substantial financial savings they realize. When funded by a loan from this program, a project typically costs much less than it would if funded through the bond market. Many states offer low-interest loans to small and disadvantaged communities, providing an additional boost to get projects started. For example, a state can make a zero-percent loan to a community for 20 years, saving the community 50% of the total project costs over a similar loan at 7.5%. The SRF Program's primary mission is to promote water quality. Aside from the financial savings, loan recipients realize significant environmental benefits, including protection of public health and conservation of local watersheds.

The Safe Drinking Water Act (SDWA) Amendments of 1996 (Public Law 104-182) authorize a DWSRF to assist public water systems to finance the cost of infrastructure needed to achieve or maintain compliance with SDWA requirements and

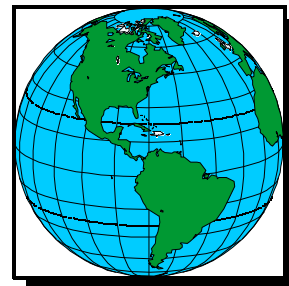
protect public health. Section 1452 authorizes the Administrator of EPA to award capitalization grants to states, which in turn can provide low cost loans and other types of assistance to eligible systems.

In addition to authorizing the infrastructure fund, the SDWA Amendments also place strong emphasis on preventing contamination problems through source water protection and enhanced water systems management. That emphasis transforms the previous law from a largely after-the-fact regulatory oriented program into a statute that can provide for the sustainable use of water. Central to this emphasis is the development of state prevention programs, including source water protection, capacity development and operator certification. States may use a portion of their capitalization grants to fund these eligible activities. The success of these activities will act to safeguard the DWSRF funds that are provided for improving system compliance and public health protection and help determine whether the new law's potential as a preventive environmental statute is realized.

The DWSRF program will help ensure that the nation's drinking water supplies remain safe and affordable, that drinking water systems that receive funding will be properly operated and maintained, and that permanent institutions will exist in each state to provide financial support for drinking water needs for many years to come. Congress has placed particular emphasis on assisting smaller drinking water systems and those serving less affluent populations by providing greater funding flexibility for these systems under the DWSRF, to ensure that these systems have adequate technical, managerial, and financial resources to come into or maintain compliance and provide safe water.

All FY 1997 DWSRF monies, which totaled over \$1.2 billion, were awarded to the 50 states and Puerto Rico before the September 30, 1998 deadline for these funds to be committed/obligated. In addition, 30 awards were made in FY 1998 using FY 1998 funds.

Special Infrastructure projects were appropriated \$393 million in FY 1998, including \$253 million for Special Infrastructure Needs, \$15 million for Rural and Alaskan Native Villages, \$50 million for Colonias, and \$75 million for the Mexican Border. The Agency has developed and issued guidance on how to award the \$253 million in Special Infrastructure Needs funding for the 68 special projects authorized by the Department of Veterans Affairs, Housing and Urban Development, and Independent Agencies Appropriations Act of 1998, and awarded grants for approximately half of the projects by the end of the fiscal year.



To support wastewater infrastructure development on Indian Lands, the Agency allocated an additional \$12 million to the Border Region for tribal water and wastewater projects along the Mexican border for a total of \$22 million. In addition, EPA continues to use Indian Health Services (IHS) as a primary mechanism of field level support for many Indian Lands projects.

Future Trends

To further the Agency's goal of providing an economical source of capital for the states to address their environmental problems, EPA proposes continued capitalization of the CWSRF at a level that will enable states to finance \$2 billion annually in loan activity for several more decades. This level of funding helps to ensure that a long-term, low-cost source of financing is available to meet the \$139.5 billion in wastewater infrastructure needs that have been documented throughout the United States.

EPA will continue to encourage states to expand the availability of their CWSRF for a broader array of water quality infrastructure projects. EPA also will continue to encourage states to provide loans to small and disadvantaged communities which have difficulty constructing complex infrastructure projects or participating in the financial markets. One of EPA's efforts to assist small communities, such as tribes, is the Indian Set-Aside Program, funded through the CWSRF, which helps address the serious health problems some tribes face due to the lack of basic sewage treatment. EPA will continue to work with the Council of State Community Development Agencies and other federal agencies to facilitate the use of the CWSRF by small communities.

Serious public health problems due to water contamination and communicable waterborne diseases continue to be prevalent along the U.S./Mexican Border, as untreated domestic and industrial wastes flow into the rivers contaminating both sides of the Border. EPA will continue to support the U.S./Mexican Border Plan and North American Free Trade Agreement (NAFTA) through wastewater treatment projects along the U.S./Mexican Border. In cooperation with the NAFTA Border Environment Cooperation Commission (BECC), EPA will help set priorities for funding wastewater infrastructure projects along the Border. In addition, EPA is working to provide the final appropriations provided in FY 1998 to the State of Texas to help finance wastewater projects in U.S. Colonias communities. EPA also will provide federal grants to the State of Alaska, subject to an appropriate cost share as determined by the Administrator, for necessary wastewater infrastructure projects in Native Alaskan Villages.

In addition, EPA proposes continued capitalization of the DWSRF at a level that will enable states to finance \$500 million annually in loan activity over the long term. This level of funding helps to ensure that a long-term, low-cost source of financing is available to meet the \$138 billion in drinking water infrastructure needs that have been documented throughout the United States.

MESSAGE FROM THE CHIEF FINANCIAL OFFICER

I am pleased to present the Agency's Annual Financial Statements for Fiscal Year (FY) 1998. All of us in the Office of the Chief Financial Officer (OCFO) share the Administrator's pride in announcing the unqualified opinion that we received for the second year in a row from the Inspector General on our Agency-wide financial statements. These Statements provide Agency managers, the Congress and other interested parties with information to assess the financial condition of EPA's operating programs.

The Agency's financial statements are submitted in accordance with the requirements of the Chief Financial Officers Act of 1990 (CFO Act) and the Government Management Reform Act of 1994 (GMRA). The CFO Act was enacted to bring about improvements in Federal agency accounting systems, financial management activities and internal controls. In recent years, EPA has made great progress toward attaining the goals of the Act. GMRA expanded the scope of the annual financial statements, and EPA now prepares annual financial statements for all of its operating programs. In the preparation of the financial statements, EPA also followed supplementary guidance issued by the Office of Management and Budget (OMB) and by the Federal Accounting Standards Advisory Board (FASAB).

Our financial statements have a new look this year and include additional information to further assist the Congress and other interested parties in understanding the financial position of the Agency's operating programs. These changes were made to meet FASAB's Statement of Federal Financial Accounting Standard Number 7 (SFFAS 7), "*Accounting for Revenue and Other Financing Sources*" and Statement of Federal Financial Accounting Standard Number 4 (SFFAS 4) "*Managerial Cost Accounting Concepts and Standards for the Federal Government*." The Statement of Operations has been replaced by two new statements, the Statement of Net Cost and the Statement of Changes in Net Position. We have also prepared three new required statements -- the Statement of Custodial Activity, the Statement of Budgetary Resources and the Statement of Financing. The financial statement schedules are separated between Superfund and all other Agency funds.

The statements, including the Overview and the accompanying audit report from EPA's Inspector General, also assist the Agency in identifying where improved information systems, management controls and accountability are needed. The accompanying CFO Analysis provides the highlights both of the Inspector General's report and opinion and of the actions we have taken to address issues raised by the Inspector General.

In our FY 1997 Annual Financial Statements, I identified a number of resource management initiatives that we planned to focus on during fiscal year 1998. I am very pleased with the progress we have made in those areas. For example, we restructured EPA's budget along the lines of Agency goals and objectives, consistent with the GPRA, rather than by function and media. Consistent with the restructured budget, we implemented cost accounting to better support our GPRA initiative to better link budgeting, planning and accountability. During FY 1998 we began modifications to our key financial systems to meet Y2K requirements, to meet GPRA

requirements and our new budget structure and to better support the financial management of EPA's programs overall. Those modifications have since been implemented for our core financial management and accounting software as well as for our personnel and payroll system. We also made preparations to implement the new GSA Travel and Purchase Cards, which staff throughout the Agency rely on to efficiently carry out their duties. The new Card program is now in place.

Among our major initiatives and ongoing projects to improve financial management in EPA are:

- Performing analyses and developing plans to move our financial and payroll systems to later generation software and hardware platforms;
- Further automating and streamlining a number of administrative processes, such as travel;
- Further enhancing cost accounting capabilities to meet the needs of managers and others.
- Continuing to improve the quality, content and presentation of the Annual Performance Plan;
- Continuing to assure that we are carrying out the fiduciary responsibilities of the Agency effectively, efficiently and in a manner consistent with statutory requirements;
- Developing solid performance information and data to monitor and assess our annual performance; and
- Revising our policies and procedures to incorporate changes required by new legislation and central agency directives.

We will continue to identify other ways to improve financial management functions in EPA. A strong financial management program is one of the underpinnings of the Agency's ability to carry out its statutorily directed activities effectively and ensures that the taxpayers' dollars are used as efficiently as possible to carry out our mission.

The preparation of the financial statements and supplementary material has been a collaborative effort between my office, the Office of the Inspector General and the Agency's Program and Administrative Offices. I want to thank everyone who worked so very hard to prepare these financial statements over the past several months.

Sallyanne Harper
Chief Financial Officer

**CFO
ANALYSIS**

Chief Financial Officer's Analysis of the FY 1998 Audited Financial Statements

INTRODUCTION

The *Chief Financial Officers Act of 1990* (CFO Act), as amended by the *Government Management Reform Act of 1994* (GMRA), requires EPA to prepare agency-wide financial statements. The Agency has categorized its appropriations for presentation in the FY 1998 financial statements as follows:

- Hazardous Substance Superfund Trust Fund (Superfund), and
- All Other Appropriations (All Others)

STRUCTURE OF CFO'S ANALYSIS

This analysis is organized into the following sections:

- Highlights of significant program information;
- Summary of auditor's reports, including plans for correcting problems;
- Impediments to correcting problems; and
- Progress in correcting previously identified problems.

HIGHLIGHTS OF EPA'S SIGNIFICANT PROGRAM INFORMATION

In FY 1998, EPA received a \$7.6 billion appropriation and 17,975 workyears. During FY 1998, the Agency began advancing the environmental commitments made by the President and began implementing new environmental and public health standards. For example, EPA accelerated Superfund cleanups of hazardous waste sites, and expanded Brownfields redevelopment efforts under the Brownfields Redevelopment Initiative. The Agency improved access to information about pollution in local communities consistent with its commitment to the public's right-to-know about toxic and hazardous chemicals in their neighborhoods. EPA increased assessments of health risks to children who may be vulnerable to the effects of toxic substances. The Agency assisted in the revitalization of urban areas, applied new research tools to the state of the environment, and ensured the safety of the Nation's water and food supplies. Also, EPA continued to promote environmental justice and urban environmental quality; improve Federal environmental management; empower states, tribes, communities, and the university research community; and develop a more dynamic enforcement program to enhance compliance, regulatory, and voluntary activities.

EPA is proud of the advancements and the many accomplishments attained by its program offices during FY 1998. Key accomplishments achieved during the year are highlighted below:

- ◆ In October 1997, EPA provided eastern states with proposed targets for reducing the emissions that create smog problems throughout the eastern United States. The new strategy was developed cooperatively with the members of the Ozone Transport Assessment Group (OTAG), 37 states, and the District of

Columbia. The final NO_x SIP call was signed by the Administrator on September 24, 1998. It sets individual reduction targets for NO_x reductions for 22 eastern states ranging from a few percent to about half compared with projected emission levels in the year 2007.

- ◆ Over 2,700 participants in EPA's Energy Star Buildings and Green Lights Partnership have prevented the emission of 1.8 million metric tons of carbon equivalent (mmtce) during the past year, which is equivalent to taking over 1.4 million cars off the road. In FY 1998, these program partners also saved over \$580 million on their energy bills.
- ◆ As part of EPA's contribution to the Partnership for a New Generation of Vehicles, EPA has demonstrated preliminary results of fuel economy better than 60 miles per gallon (MPG). The inventiveness of the program has resulted in the awarding of nine patents to it, with several more pending.
- ◆ EPA certified that the Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP) in Carlsbad, NM, is a safe disposal site for defense-related nuclear waste and meets health-based environmental protection standards that will protect public health and the environment.
- ◆ The President's *Clean Water Action Plan* was announced on February 19, 1998. The Plan calls for more than 100 specific key actions by EPA and by many other federal agencies with either water quality responsibilities or activities that impact water quality. The Action Plan mobilizes federal, state, and local agencies to achieve the Nation's clean water goals through the watershed approach; brings a sharp focus to the critical actions that are required; and establishes deadlines for meeting these commitments over the next several years.
- ◆ EPA published a draft *Strategy for Addressing Environmental and Public Health Impacts from Animal Feeding Operations* on March 19, 1998. The draft strategy delineates EPA's short-term and long-term efforts to comprehensively address the environmental and public health problems associated with animal feeding operations. In September 1998, EPA and the USDA published a draft *Unified National Strategy for Animal Feeding Operations*. The draft strategy is one of more than 100 actions President Clinton directed as part of the Clean Water Action Plan, and proposes a variety of voluntary and regulatory approaches for minimizing environmental threats posed by animal agriculture. EPA also participated in dialogues with representatives of the poultry and hog production industry, state agricultural and environmental agencies, local communities and USDA to find ways to improve environmental controls applicable to poultry and hog production in an effort to curb nutrient loadings.
- ◆ The Agency promulgated the consumer confidence report regulations that require public water systems to issue an annual right-to-know report to all their customers (these reports must contain information on the source of public water systems' supply, the level of detected contaminants, data on the health effects of contaminants found above the drinking water standard, as well as information on unregulated contaminants in the water supply).
- ◆ The Pesticides program registered 14 safer pesticides and biopesticides, as well as 13 conventional pesticides. In addition, 258 tolerances and exemptions from tolerances were set, and 1,646 tolerances were re-evaluated under the new FQPA requirements.
- ◆ The Endocrine Disruptor Screening and Testing Advisory committee completed its analysis and published a final report. The Agency is working to implement the recommendations and science guidelines as it develops the new endocrine disruptor program.

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- ◆ The Toxics program issued a proposed rule establishing standards for identifying hazards from lead-based paint, lead-contaminated dust, and lead-contaminated soil. A final rule for PCB disposal provides significant burden reduction for industry.
 - ◆ In December 1997, EPA released the *Mercury Study Report to Congress*, an eight-volume report mandated by the Clean Air Act Amendments of 1990 to evaluate the magnitude of the mercury problem. A multi-year effort, the Report provides an assessment of US mercury emissions by source, a full scientific assessment of how these emissions might affect human health and the environment, and the availability and cost of technologies to control mercury emissions. The Report affirms EPA's 1995 guidance on safe levels of mercury.
 - ◆ In May 1998, EPA published the final *Guidelines for Ecological Risk Assessment*. The *Guidelines* were developed over the past nine years to increase consistency and improve the quality of ecological risk assessments within EPA and ultimately will contribute to risk management decisions that better protect the environment. In addition, EPA published the final *Guidelines for Neurotoxicity Risk Assessment*. The guidelines are the Agency's first statement on setting principles to guide EPA scientists in evaluating environmental contaminants that may pose neurotoxic risks and are intended to develop a sound scientific basis and promote consistency in conducting neurotoxicity risk assessments. By improving the quality and consistency of EPA risk assessments, EPA anticipates that the guidelines ultimately will contribute to risk management decisions that better protect public health.
 - ◆ In April 1998, EPA published an update to a national Inventory of Sources of Dioxin. The inventory provides a technically sound and reliable basis for determining trends in dioxin releases to the environment from man-made sources over time. The inventory can be used to observe actual improvements in reducing dioxin releases from sources, provides a reliable basis for ranking sources based on annual dioxin releases into the environment, and identifies sources that may need to be tested for emissions or require regulatory action.
 - ◆ In July 1998, the Office of Research and Development developed a computer software tool entitled *Program for Assisting the Replacement of Industrial Solvents* (PARIS) to further the goal of pollution prevention by providing direct assistance to designers, producers, and end-users of solvents. This software will allow these individuals to evaluate both the effectiveness and the environmental impacts of various solvent substitutes, and will provide a tool to develop custom solvents that meet specific industrial needs.
 - ◆ EPA and the Department of Justice settled with seven heavy duty engine diesel manufacturers in what is the largest Clean Air Act enforcement action in history. The manufacturers were charged with violating the Clean Air Act by installing devices that defeat emission controls in an estimated 1.3 million engines. In addition, the manufacturers, which comprise 95 percent of the U.S. heavy duty diesel engine market, will spend more than one billion dollars and will pay an \$83.4 million civil penalty to settle charges that they illegally poured millions of tons of pollution into the air.
 - ◆ The Enforcement program completed the pilot phase of the *Sector Facility Indexing Project* (SFIP). The SFIP is a pilot project that makes it easier for the public to access a wide range of environmental information about regulated facilities. In the past, these records, although public, were very difficult for government and public users to access because they were spread across many different databases. Under SFIP, the Agency has integrated this information so that it can be viewed in one place, and can be used

to better understand overall facility environmental records. SFIP, in its current pilot stage, will allow EPA to gauge the level of public interest in examining records regarding government oversight of regulated facilities, facility compliance with environmental laws, and the overall pollutant releases that are reported. SFIP currently contains records for five industry sectors that consist of a total of 653 facilities. The Agency publicly released the SFIP data on May 1, 1998, via the Internet. In addition to releasing the data electronically, EPA has also made available in September, 1998, a hard copy report of SFIP for those who do not have ready access to the Internet. In FY 1999, the Agency will evaluate the SFIP to determine future directions of the project.

- ◆ The Superfund Enforcement Program seeks to maximize Potentially Responsible Party (PRP) participation in conducting and/or funding response actions while working to assure fair treatment of all PRPs. Potentially Responsible Parties are financing approximately 72% of new remedial actions at National Priority List (NPL) sites, thereby, conserving Trust Fund resources for sites at which there are no liable, viable responsible parties. Since the inception of the Superfund Program, PRPs have committed to conduct site response at 856 of the 1,265 non-Federal facility sites on the NPL, with an estimated cumulative value of \$11.6 billion of which approximately \$694 million of this amount was achieved in FY 1998. EPA has achieved cost recovery settlements of approximately \$2.4 billion with \$230 million of this amount achieved in FY 1998. Over the life of the Superfund program, the Agency has reached settlements with an estimated value of approximately \$15.5 billion (\$13.1 billion in response settlements and \$2.4 billion in cost recovery) for NPL and non-NPL sites. EPA's enforcement obligations over this period were approximately \$2.3 billion. The resulting ratio of approximately 7 to 1 indicates that PRPs have committed \$7 for every dollar obligated for Superfund enforcement.
- ◆ EPA's Resource Conservation and Recovery Act Corrective Action Program supports the Agency's waste management goal by cleaning up releases of waste from active hazardous waste facilities, reducing current exposure risks to people and to the environment. In FY 1998, stabilizations to prevent further contamination were implemented at 704 sites or units; human exposures were controlled at 290 sites or units; and groundwater releases were controlled at 234 sites or units.
- ◆ The Superfund Program continues to emphasize cleanup as a means of protecting local populations and sensitive environments from the effects of uncontrolled releases. FY 1998 accomplishments include: achieving 87 construction completions for a cumulative total of 585; conducting 286 removal response actions; and making 471 site assessment decisions.
- ◆ Through its Brownfields Program, EPA promotes cleanup and redevelopment of abandoned and contaminated industrial and commercial properties (i.e., "brownfields"). As part of the Brownfields Program, EPA uses Federal grants and loans to leverage other Federal funds and private investment to clean up and redevelop brownfields. In FY 1998, EPA increased the number of site assessment pilots to a total of 227.
- ◆ In FY 1998, EPA's Oil Program continued to focus its prevention efforts on periodic reviews of Facility Response Plans (FRPs), and continued to implement Spill Prevention Control and Countermeasures (SPCC) regulations. In FY 1998, EPA reviewed about 750 FRPs, inspected about 1,060 SPCC-regulated facilities, and brought over 300 facilities into SPCC compliance.
- ◆ Progress in the LUST Program is measured by comparing the number of cleanups initiated and cleanups completed to the number of confirmed releases. Cumulatively, through FY 1998, there were 371,387 confirmed releases; 314,965 cleanups initiated; and 203,247 cleanups completed. For FY 1998, EPA's

performance goals were to initiate 24,000 cleanups and complete 20,000 cleanups. During FY 1998, 29,614 LUST releases were confirmed; 22,519 cleanups were initiated; and 24,950 cleanups were completed.

SUMMARY OF AUDITORS REPORT AND OPINIONS

The Agency prepared the following FY 1998 Financial Statements: Statement of Financial Position, Statement of Changes in Net Position, Statement of Net Cost, Statement of Budgetary Resources, Statement of Financing, and the Statement of Custodial Activity. The OIG found that the Agency's FY 1998 financial statements were fairly presented, i.e., all of these statements received an unqualified opinion. Further, the OIG reported that they did not identify any material discrepancies between the Overview and the financial statements.

REPORT ON INTERNAL CONTROLS

The OIG identified as a material weakness the Agency's submission of the FY 1998 financial statements after OMB's March 1, 1999, deadline for submitting these statements. The OIG attributed the delay to the Office of the Chief Financial Officer's (OCFO) difficulties in obtaining information from other Agency and external offices and problems in implementing the new financial standards and OMB reporting requirements.

We disagree with the position that the delayed submission for the financial statements was a material weakness. Management's goal is to prepare reliable, timely financial statements. When problems arose during the audit, the OCFO in collaboration with the OIG, OMB, and GAO decided that it was better to submit financial statements with unqualified audit opinions after March 1, 1999, rather than to submit unreliable statements on time. We are pleased to report that we successfully achieved our reliability objective as evidenced by the unqualified audit opinions issued on the FY 1998 Financial Statements.

The primary focus of both audit findings was on making improvements to accomplish our timeliness objective and we agree with the OIG's recommendations in this regard. As issues were identified in preparing the FY 1998 financial statements, OCFO and OIG staff worked closely together to resolve the issues as promptly as possible. However, there were issues with obtaining information from external sources and with preparing one statement, the Statement of Budgetary Resources, before March 1, 1999. We have taken steps to address these specific issues in the future. Moreover, we have developed a comprehensive strategy for the FY 1999 financial statements, which will facilitate our meeting the March 1, 2000, deadline. We plan to update our policies and procedures on preparing financial statements and we are strengthening our coordination and quality control process to ensure that we meet the Reform Act's deadline for submitting financial statements to OMB.

COMPLIANCE WITH LAWS AND REGULATIONS

Compliance with the Federal Financial Management Improvement Act (FFMIA)

The OIG states in the report that EPA does not substantially comply with the FFMIA. The OIG did not report substantial noncompliances with applicable accounting standards or with the Standard General Ledger at the transaction level. However, the OIG states that the financial management systems under development or operational had no approved security plans for seven financial or mixed financial systems, and the approved security plans for the remaining eight systems did not comply with the requirements of OMB Circular A-130, Management of Federal Information Resources. In June 1999, the Center for Applied Financial Management,

U.S. Department of Treasury reviewed nine of EPA's financial systems for compliance with OMB Circular A-130, Management of Federal Information Resources and the results of the review indicated that the systems reviewed were in compliance with OMB Circular A-130's requirements in all material respects.

The OIG also found EPA not in substantial compliance with the FFMIA requirements because of weaknesses in the Agency's financial statements process. For the reasons discussed earlier, we disagree with this finding. Although the Agency was delayed in submitting those reports to OMB, we do not believe that delay constitutes a substantial noncompliance.

Other Noncompliance Issues

The OIG did not find any instances of noncompliance with applicable laws and regulations that would result in material misstatements to the audited financial statements. However, the OIG did report two issues under the category of compliance with laws and regulations that, while not material, they still considered to be significant.

The first concerned Agency practices for recording disbursements against grants funded with more than one appropriation. In these instances EPA obligates grant funds from different source appropriations in proportion to the benefit accruing to each appropriation. However, the Agency may record disbursements against these obligations on a "first in, first out" basis pending final accounting to the source appropriations. We disagree with the OIG that this is a significant issue. The affected grants may be less than 1% of all grants and the Grants Administration Division has taken steps to discourage multiple appropriation funded grants in the future. In addition, EPA has issued new accounting policy to meet Government Performance and Results Act requirements, and that policy will address the OIG's concerns for virtually all newly awarded grants.

The second noncompliance concerned the Agency not meeting the Government Management and Reform Act's deadline for submission of its financial statements to OMB. We agree that the report was late, but as noted earlier, we have developed a plan to meet the deadline for the FY 1999 statements.

IMPEDIMENTS TO CORRECTING PROBLEMS

We experienced delays in obtaining information from external sources, specifically for the grant accruals and deferred maintenance. These delays occurred as we collected needed information from various entities inside and outside of the Agency. Our current process is cumbersome and imposes a reporting burden that we would like to avoid in the future. OCFO will meet with the OIG to develop a more efficient methodology for FY 1999.

OMB had two new significant reporting requirements this year for agencies to submit: the Statement of Budgetary Resources and the Statement of Financing. We are implementing a new automated reporting procedure to reflect budget execution using the Standard General Ledger which will expedite the preparation of the Statement of Budgetary Resources.

PROGRESS IN CORRECTING PREVIOUSLY IDENTIFIED PROBLEMS

One of the substantial noncompliance issues from last year's audit concerned the Financial Management Division's conformance to existing EPA System Life Cycle Management policy on decision papers for Y2K modifications. We worked with OIG staff to resolve the substantial noncompliance issue within OMB's guidance. EPA successfully implemented IFMS and EPAYS/TAPP Y2K System requirements.

We also made other major improvements in systems this year. We issued Internal Operating Procedures for managing the IFMS, MARS and CPARS systems. The purpose of these procedures is to define the responsibilities for the management of the operations, maintenance and modification of the Agency's core financial systems. We also prepared and developed security plans for the IFMS, MARS, and CPARS systems. These plans substantially comply with applicable requirements.

In the past the OIG identified a problem with reports on the status of Superfund Receivables. We enhanced the reporting system to include the capability of aging accounts receivables based on the collection due date and have increased our efforts to collect delinquent receivables.

We appreciate the OIG's assistance during the preparation of the financial statements to resolve the issues raised during the FY 1998 audit and to improve the presentation of the financial statements. We look forward to continued cooperation with the OIG as we meet the challenges of the FY 1999 Financial Statement requirements.

**PRINCIPAL
FINANCIAL
STATEMENTS**

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EPA Hazardous Substance Superfund Trust Fund and All Other Funds
Consolidating Statement of Financial Position
As of September 30, 1998
(Dollars in Thousands)

	Superfund Trust Fund	All Others	Combined Totals	Intra-agency Eliminations	Consolidated Totals
ASSETS					
Entity Assets:					
Intragovernmental Assets:					
Fund Balance with Treasury (Note 2 and Note 3)	\$ 43,693	\$10,227,484	\$10,271,177	\$ ---	\$10,271,177
Investments (Note 4)	5,074,520	1,191,538	6,266,058	---	6,266,058
Accounts Receivable, Net (Note 5)	53,406	71,880	125,286	---	125,286
Advances and Prepayments	<u>2,448</u>	<u>72,353</u>	<u>74,801</u>	<u>(2,181)</u>	<u>72,620</u>
Total Intragovernmental Assets	<u>5,174,067</u>	<u>11,563,255</u>	<u>16,737,322</u>	<u>(2,181)</u>	<u>16,735,141</u>
Accounts Receivable, Net (Note 5)	592,065	99,160	691,225	---	691,225
Advances and Prepayments	---	2,088	2,088	---	2,088
Loans Receivables and Related Foreclosed Property, Net (Note 6)	---	111,821	111,821	---	111,821
Cash and Other Monetary Assets (Note 3)	---	4,964	4,964	---	4,964
Inventory and Related Property, Net (Note 7)	---	74	74	---	74
Marketable Securities Equity (Note 4)	5,146	---	5,146	---	5,146
General Property, Plant and Equipment, Net (Note 8)	<u>6,560</u>	<u>266,511</u>	<u>273,071</u>	---	<u>273,071</u>
Total Entity Assets	<u>5,777,838</u>	<u>12,047,873</u>	<u>17,825,711</u>	<u>(2,181)</u>	<u>17,823,530</u>
Total Assets	<u>\$5,777,838</u>	<u>\$12,047,873</u>	<u>\$17,825,711</u>	<u>(\$2,181)</u>	<u>\$17,823,530</u>
LIABILITIES					
Liabilities Covered by Budgetary Resources:					
Intragovernmental Liabilities:					
Accounts Payable	\$ 159,299	\$ 39,569	\$ 198,868	\$ ---	\$ 198,868
Debt (Note 9)	---	37,922	37,922	---	37,922
Other (Note 10)	<u>3,606</u>	<u>8,335</u>	<u>11,941</u>	<u>(2,181)</u>	<u>9,760</u>
Total Intragovernmental Liabilities	<u>162,905</u>	<u>85,826</u>	<u>248,731</u>	<u>(2,181)</u>	<u>246,550</u>
Accounts Payable	134,252	424,815	559,067	---	559,067
Other (Note 10)	<u>394,516</u>	<u>198,449</u>	<u>592,965</u>	---	<u>592,965</u>
Total Liabilities Covered by Budgetary Resources	<u>691,673</u>	<u>709,090</u>	<u>1,400,763</u>	<u>(2,181)</u>	<u>1,398,582</u>
Liabilities not Covered by Budgetary Resources:					
Lease Liabilities (Note 11)	---	38,653	38,653	---	38,653
Federal Employee and Veterans' Benefits (Note 12)	5,279	21,497	26,776	---	26,776
Other (Note 10)	<u>16,618</u>	<u>93,539</u>	<u>110,157</u>	---	<u>110,157</u>
Total Liabilities not Covered by Budgetary Resources	<u>21,897</u>	<u>153,689</u>	<u>175,586</u>	<u>0</u>	<u>175,586</u>
Total Liabilities	<u>713,570</u>	<u>862,779</u>	<u>1,576,349</u>	<u>(2,181)</u>	<u>1,574,168</u>
NET POSITION					
Unexpended Appropriations (Note 13)	2,805,960	9,827,800	12,633,760	---	12,633,760
Cumulative Results of Operations	<u>2,258,308</u>	<u>1,357,294</u>	<u>3,615,602</u>	---	<u>3,615,602</u>
Total Net Position	<u>5,064,268</u>	<u>11,185,094</u>	<u>16,249,362</u>	<u>0</u>	<u>16,249,362</u>
Total Liabilities and Net Position	<u>\$5,777,838</u>	<u>\$12,047,873</u>	<u>\$17,825,711</u>	<u>(\$2,181)</u>	<u>\$17,823,530</u>

NOTE: The accompanying notes are an integral part of these statements.

**EPA Hazardous Substance Superfund Trust Fund and All Other Funds
Consolidating Statement of Net Cost
As of September 30, 1998
(Dollars in Thousands)**

	Superfund Trust Fund	All Others	Combined Totals	Intra-agency Eliminations	Consolidated Totals
COSTS:					
Intragovernmental	\$ 429,357	\$ 346,182	\$ 775,539	\$ ---	\$ 775,539
With the Public	1,071,029	5,249,111	6,320,140	(265,699)	6,054,441
Expenses from Other Appropriations (Note 21)	5,542	(5,542)	0	---	0
Expenses of the Trust Fund Incurred by Treasury (Note 14)	<u>35</u>	<u>(125)</u>	<u>(90)</u>	<u>---</u>	<u>(90)</u>
Total	<u>1,505,963</u>	<u>5,589,626</u>	<u>7,095,589</u>	<u>(265,699)</u>	<u>6,829,890</u>
Less:					
Income from Other Appropriations (Note 21)	5,542	(5,542)	0	---	0
Earned Revenues	<u>538,903</u>	<u>157,054</u>	<u>695,957</u>	<u>(15,699)</u>	<u>680,258</u>
Total	<u>544,445</u>	<u>151,512</u>	<u>695,957</u>	<u>(15,699)</u>	<u>680,258</u>
Net Program Costs	<u>961,518</u>	<u>5,438,114</u>	<u>6,399,632</u>	<u>(250,000)</u>	<u>6,149,632</u>
DEFERRED MAINTENANCE (Note 20)	---	---	---	---	---
NET COST OF OPERATIONS	<u>\$ 961,518</u>	<u>\$ 5,438,114</u>	<u>\$ 6,399,632</u>	<u>(\$250,000)</u>	<u>\$ 6,149,632</u>

NOTE: The accompanying notes are an integral part of these statements.

EPA Hazardous Substance Superfund Trust Fund and All Other Funds
Consolidating Statement of Changes in Net Position
As of September 30, 1998
(Dollars in Thousands)

	Superfund Trust Fund	All Others	Combined Totals	Intra-agency Eliminations	Consolidated Totals
Net Cost of Operations	\$ 961,518	\$ 5,438,114	\$ 6,399,632	(\$250,000)	\$ 6,149,632
Financing Sources (Other Than Exchange Revenues):					
Appropriations Used	1,407,531	5,381,299	6,788,830		6,788,830
Taxes (and Other Non-Exchange Revenues)	81,658	88,515	170,173	---	170,173
Trust Fund Revenue Collected by Treasury (Note 14)	5,044	136,213	141,257	---	141,257
Trust Fund Income Earned by Treasury (Note 14)	291,816	60,935	352,751	---	352,751
Trust Fund Appropriation Received (Note 14)	250,000	---	250,000	(250,000)	0
Donations (Non-Exchange Revenue)	---	44	44	---	44
Imputed Financing	30,155	161,853	192,008	---	192,008
Transfers-In	---	32	32	---	32
Other Interest	1,473	---	1,473	---	1,473
Other Financing Sources (Note 30)	<u>(1,623,393)</u>	<u>(109,501)</u>	<u>(1,732,894)</u>	<u>---</u>	<u>(1,732,894)</u>
Net Results of Operations	(517,234)	281,276	(235,958)	0	(235,958)
Prior Period Adjustments	<u>257</u>	<u>28,645</u>	<u>28,902</u>	<u>---</u>	<u>28,902</u>
Net Changes in Cumulative Results of Operations	(516,977)	309,921	(207,056)	0	(207,056)
Increase (Decrease) in Unexpended Appropriations	<u>(68,285)</u>	<u>752,735</u>	<u>684,450</u>	<u>---</u>	<u>684,450</u>
Change in Net Position	(585,262)	1,062,656	477,394	0	477,394
Net Position - Beginning of Period	<u>5,649,530</u>	<u>10,122,438</u>	<u>15,771,968</u>	<u>---</u>	<u>15,771,968</u>
Net Position - End of Period	<u>\$ 5,064,268</u>	<u>\$11,185,094</u>	<u>\$16,249,362</u>	<u>\$ 0</u>	<u>\$16,249,362</u>

NOTE: The accompanying notes are an integral part of these statements.

EPA Hazardous Substance Superfund Trust Fund and All Other Funds
Combined Statement of Budgetary Resources
As of September 30, 1998
(Dollars in Thousands)

	Superfund Trust Fund	All Others	Combined Totals
Budgetary Resources:			
Budget Authority	\$1,421,999	\$6,142,594	\$ 7,564,593
Unobligated Balances - Beginning of Period	805,627	1,948,038	2,753,665
Spending Authority from Offsetting Collections	(30,225)	283,984	253,759
Adjustments (Note 25)	<u>(375)</u>	<u>(64,140)</u>	<u>(64,515)</u>
Total Budgetary Resources	<u>\$2,197,026</u>	<u>\$8,310,476</u>	<u>\$10,507,502</u>
Status of Budgetary Resources:			
Obligations Incurred	\$1,495,558	\$6,592,535	\$ 8,088,093
Unobligated Balances - Available (Note 26)	<u>701,468</u>	<u>1,717,941</u>	<u>2,419,409</u>
Total, Status of Budgetary Resources	<u>\$2,197,026</u>	<u>\$8,310,476</u>	<u>\$10,507,502</u>
Outlays:			
Obligations Incurred	\$1,495,558	\$6,592,535	\$ 8,088,093
Less: Spending Authority from Offsetting Collections and Adjustments	104,403	257,694	362,097
Obligated Balance, Net - Beginning of Period	2,536,709	7,950,031	10,486,740
Less: Obligated Balance, Net - End of Period (Note 27)	<u>2,550,841</u>	<u>8,750,289</u>	<u>11,301,130</u>
Total Outlays (Note 28)	<u>\$1,377,023</u>	<u>\$5,534,583</u>	<u>\$ 6,911,606</u>

NOTE: See Note 24 for reconciliation of the Statement of Budgetary Resources to the Budget of the United States.

NOTE: The accompanying notes are an integral part of these statements.

**EPA Hazardous Substance Superfund Trust Fund and All Other Funds
Combined Statement of Financing
As of September 30, 1998
(Dollars in Thousands)**

	Superfund Trust Fund	All Others	Combined Totals
Obligations and Nonbudgetary Resources			
Obligations Incurred	\$1,495,558	\$ 6,592,535	\$ 8,088,093
Less: Spending Authority for Offsetting Collections and Adjustments	(104,403)	(257,694)	(362,097)
Financing Imputed for Cost Subsidies	30,155	161,853	192,008
Transfers-In (Out) and Donations	---	76	76
Exchange Revenue Not in the Budget	<u>(434,500)</u>	<u>86,746</u>	<u>(347,754)</u>
Total Obligations as Adjusted and Nonbudgetary Resources	<u>\$ 986,810</u>	<u>\$ 6,583,516</u>	<u>\$ 7,570,326</u>
Resources that Do Not Fund Net Cost of Operations			
Decrease (Increase) in Amount of Goods, Services, and Benefits Ordered but Not Yet Received or Provided	(\$ 24,870)	(\$ 729,505)	(\$ 754,375)
Costs Capitalized on the Balance Sheet	(2,479)	(92,995)	(95,474)
Loans Receivable	---	12,737	12,737
Inventory	---	117	117
Liabilities (If Net Decrease) (Note 29)	---	(23,853)	(23,853)
Financing Sources that Fund Costs of Prior Periods	<u>(3,517)</u>	<u>(326,312)</u>	<u>(329,829)</u>
Total Resources that Do Not Fund Net Cost of Operations	<u>(\$ 30,866)</u>	<u>(\$1,159,811)</u>	<u>(\$1,190,677)</u>
Costs that Do Not Require Resources			
Depreciation and Amortization	\$ 2,403	\$ 21,170	\$ 23,573
Bad Debt Expense (Note 5)	324	11,729	12,053
Other Gains and Losses	---	(1)	(1)
Loss on Disposition of Assets	---	392	392
Other	<u>(999)</u>	<u>(18,881)</u>	<u>(19,880)</u>
Total Costs that Do Not Require Resources	<u>\$ 1,728</u>	<u>\$ 14,409</u>	<u>\$ 16,137</u>
Financing Sources Yet To Be Provided (Note 29)	<u>\$ 3,846</u>	<u>\$ 0</u>	<u>\$ 3,846</u>
Net Cost Of Operations	<u>\$ 961,518</u>	<u>\$ 5,438,114</u>	<u>\$ 6,399,632</u>

NOTE: The accompanying notes are an integral part of these statements.

EPA Hazardous Substance Superfund Trust Fund and All Other Funds
Statement of Custodial Activity
As of September 30, 1998
(Dollars in Thousands)

	<u>All Others</u>	<u>Agency-Wide</u>
Sources of Collections:		
Cash Collections (by Type of Tax or Duty)		
Interest and Penalties, Net	(\$77,184)	(\$77,184)
Other Custodial Revenue	<u>74,752</u>	<u>74,752</u>
Net Collections	(2,432)	(2,432)
Accrual Adjustments	<u>1,063</u>	<u>1,063</u>
Total Revenue	<u>(1,369)</u>	<u>(1,369)</u>
Disposition of Collections:		
Transferred to Others Net of Refunds (by Recipient)	(12,481)	(12,481)
Increase (Decrease) in Amounts To Be Transferred	(92,258)	(92,258)
Retained by the Entity	<u>103,370</u>	<u>103,370</u>
Total Disposition of Revenue	<u>(1,369)</u>	<u>(1,369)</u>
Net Custodial Activity	<u>\$ 0</u>	<u>\$ 0</u>

NOTE: The accompanying notes are an integral part of these statements.

EPA Hazardous Substance Superfund Trust Fund and All Other Funds Notes to Financial Statements (Dollars in Thousands)

Note 1. Summary of Significant Accounting Policies:

A. Basis of Presentation

These consolidating financial statements have been prepared to report the financial position and results of operations of the Environmental Protection Agency (Agency) for the Hazardous Substance Superfund (Superfund) Trust Fund and All Other Funds, as required by the Chief Financial Officers Act of 1990 and the Government Management Reform Act of 1994. The reports have been prepared from the books and records of the Agency in accordance with "Form and Content for Agency Financial Statements," specified by the Office of Management and Budget (OMB) in Bulletin 97-01, and the Agency's accounting policies which are summarized in this note. These statements are therefore different from the financial reports also prepared by the Agency pursuant to OMB directives that are used to monitor and control the Agency's use of budgetary resources.

B. Reporting Entities

The Environmental Protection Agency was created in 1970 by executive reorganization from various components of other Federal agencies in order to better marshal and coordinate Federal pollution control efforts. The Agency is generally organized around the media and substances it regulates -- air, water, land, hazardous waste, pesticides and toxic substances. For FY 1998 the reporting entities are grouped as Hazardous Substance Superfund and All Other Funds.

Hazardous Substance Superfund

In 1980, the Hazardous Substance Superfund, commonly referred to as the Superfund Trust Fund, was established by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) to provide resources needed to respond to and clean up hazardous substance emergencies and abandoned, uncontrolled hazardous waste sites. The Superfund Trust Fund financing is shared by Federal and state governments as well as industry. The Agency allocates funds from its appropriation to other Federal agencies to carry out the Act. Risks to public health and the environment at uncontrolled hazardous waste sites qualifying for the Agency's National Priorities List (NPL) are reduced and addressed through a process involving site assessment and analysis, and the design and implementation of cleanup remedies. Throughout this process, cleanup activities may be supported by shorter term removal actions to reduce immediate risks. Removal actions may include removing contaminated material from the site, providing an alternative water supply to people living nearby, and installing security measures. NPL cleanups and removals are conducted and financed by the Agency, private parties, or other Federal agencies. Through 1998, construction of cleanup remedies were completed at a total of 585 NPL sites (includes Federal and non-Federal sites). Superfund includes the Treasury collections and investment activity. The Superfund Trust Fund is accounted for under Treasury symbol number 8145.

All Other Funds

All Other Funds include Trust Fund appropriations, General Fund appropriations, Revolving Funds, Special Funds, the Agency Budgetary Clearing accounts, Deposit Funds, General Fund Receipt accounts, the Environmental Services Special Fund Receipt Account, the Miscellaneous Contributed Funds Trust Fund, and General Fund appropriations transferred from other Federal agencies as authorized by the Economy Act of 1932. Trust Fund appropriations are to the Leaking Underground Storage Tank (LUST) Trust Fund and the Oil Spill Response Trust Fund. General Fund appropriations are to State and Tribal Assistance Grants (STAG), Science and Technology (S&T), Environmental Programs and Management (EPM), Office of Inspector General (IG), Buildings and Facilities (B&F), and Payment to the Hazardous Substance Superfund. General Fund

appropriations that no longer receive current appropriations but have unexpended authority are the Asbestos Loan Program, Program and Research Operations (PRO), and Energy, Research and Development. Revolving Funds include the FIFRA Revolving Fund and Tolerance Revolving Fund which receive no direct appropriations; however, they do collect fees from public industry as a source of reimbursement for the services provided. In addition to FIFRA and Tolerance, a Working Capital Fund (WCF) was established and designated as a franchise fund to provide computer operations support and postage service for the Agency. A Special Fund was established to collect the Exxon Valdez settlement as a result of the Exxon Valdez oil spill. All Other Funds are as follows:

The LUST Trust Fund was authorized by the Superfund Amendments and Reauthorization Act of 1986 (SARA) as amended by the Omnibus Budget Reconciliation Act of 1990. The LUST appropriation provides funding to respond to releases from leaking underground petroleum tanks. The Agency oversees cleanup and enforcement programs which are implemented by the states. Funds are allocated to the states through cooperative agreements to clean up those sites posing the greatest threat to human health and environment. Funds are used for grants to non-state entities including Indian tribes under section 8001 of the Resource Conservation and Recovery Act. The program is financed by a 0.1 cent a gallon tax on motor fuels which will expire in 2005, and is accounted for under Treasury symbol number 8153.

The Oil Spill Response Trust Fund was authorized by the Oil Pollution Act (OPA) of 1990. The Oil Spill Response Trust Fund was established in FY 1993 and monies were appropriated to the Oil Spill Response Trust Fund. The Agency is responsible for directing, monitoring and providing technical assistance for major inland oil spill response activities. This involves setting oil prevention and response standards, initiating enforcement actions for compliance with OPA and Spill Prevention Control and Countermeasure requirements, and directing response actions when appropriate. The Agency carries out research to improve response actions to oil spills including research on the use of remediation techniques such as dispersants and bioremediation. Funding of oil spill cleanup actions is provided through the Department of Transportation under the Oil Spill Liability Trust Fund and reimbursable funding from other Federal agencies. The Oil Spill Response Trust Fund is accounted for under Treasury symbol number 8221.

The State and Tribal Assistance Grants (STAG) appropriation provides funds for environmental programs and infrastructure assistance including capitalization grants for State revolving funds and performance partnership grants. Environmental programs and infrastructure supported are Clean and Safe Water; Capitalization grants for the Drinking Water State Revolving Funds; Clean Air; Direct grants for Water and Wastewater Infrastructure needs, Partnership grants to meet Health Standards, Protect Watersheds, Decrease Wetland Loss, and Address Agricultural and Urban Runoff and Storm Water; Better Waste Management; Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems; and Reduction of Global and Cross Border Environmental Risks. STAG is accounted for under Treasury symbol 0103.

The Science and Technology (S&T) appropriation finances salaries; travel; science; technology; research and development activities including laboratory and center supplies; certain operating expenses; grants; contracts; intergovernmental agreements; and purchases of scientific equipment. These activities provide the scientific basis for the Agency's regulatory actions. In FY 1998 Superfund research costs were appropriated in Superfund and transferred to S&T to allow for proper accounting of the costs. Scientific and technological activities for environmental issues include Clean Air; Clean and Safe Water; Americans Right to Know About Their Environment; Better Waste Management; Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces, and Ecosystems; and Safe Food. The Science and Technology appropriation is accounted for under Treasury symbol 0107.

The Environmental Programs and Management (EPM) includes funds for salaries, travel, contracts, grants, and cooperative agreements for pollution abatement, control, and compliance activities and administrative activities of the operating programs. Areas supported from this appropriation include Clean Air; Clean and Safe Water; Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces, and Ecosystems; Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response; Reduction of Global and Cross Border Environmental Risks; Americans' Right to Know About Their Environment; Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems; a Credible Deterrent to Pollution and Greater Compliance with the Law; and Effective Management. The Environmental Programs and Management appropriation is accounted for under Treasury symbol 0108.

The Office of Inspector General appropriation provides funds for audit and investigative functions to identify and recommend corrective actions on management and administrative deficiencies that create the conditions for existing or potential instances of fraud, waste and mismanagement. Additional funds for audit and investigative activities associated with the Superfund Trust Fund and the Leaking Underground Storage Tank Trust Fund are appropriated under those Trust Fund accounts and are transferred to the Office of Inspector General account. The audit function provides contract audit, internal and performance audit, and financial and grant audit services. The Office of Inspector General appropriation is accounted for under Treasury symbol 0112 and includes expenses incurred and reimbursed from the appropriated trust funds being accounted for under Treasury symbols 8145 and 8153.

The Buildings and Facilities appropriation provides for the construction, repair, improvement, extension, alteration, and purchase of fixed equipment or facilities that are owned or used by the Environmental Protection Agency. The Buildings and Facilities appropriation is accounted for under Treasury symbol 0110.

The Payment to the Hazardous Substance Superfund appropriation authorizes appropriations from the General Fund of the Treasury to finance activities conducted through Hazardous Substance Superfund. Payment to the Hazardous Substance Superfund is accounted for under Treasury symbol 0250.

The Asbestos Loan Program was authorized by the Asbestos School Hazard Abatement Act of 1986 to finance control of asbestos building materials in schools. Funds have not been appropriated for this Program since FY 1993. For FY 1993 and FY 1992, the program was funded by a subsidy appropriated from the General Fund for the actual cost of financing the loans, and by borrowing from Treasury for the unsubsidized portion of the loan. The Program fund disbursed the subsidy to the Financing fund as loans were made, and disbursed administrative expenses to the providers. The Financing fund received the subsidy payment, borrowed from Treasury and disbursed loans and collects the asbestos loans. The Asbestos Loan Program is accounted for under Treasury symbol 0118 for the subsidy and administrative support, under Treasury symbol 4322 for loan disbursements, loans receivable and loan collections on post FY 1991 loans, and under Treasury symbol 2917 for pre FY 1992 loans receivable and loan collections.

The Program and Research Operations appropriation provides salaries and travel associated with administering the operating programs within the Environmental Protection Agency. It incorporated personnel, compensation and benefit costs and travel, exclusive of the Hazardous Substance Response Trust Fund, the Leaking Underground Storage Tank Trust Fund, the Office of Inspector General and the Oil Spill Response Trust Fund. In FY 1996, Congress restructured the Agency's accounts. The Program and Research Operations appropriation was eliminated. Activity remaining from prior fiscal year appropriations is accounted for under Treasury symbols 0200 and 0201.

The FIFRA Revolving Fund was authorized by the Federal Insecticide, Fungicide and Rodenticide Act Amendments of 1988, as amended by the Food Quality Protection Act of 1996. Fees are paid by industry to offset costs of accelerated reregistration, expedited processing of pesticides, and establishing tolerances for pesticide chemicals in or on food and animal feed. The FIFRA Revolving Fund is accounted for under Treasury symbol number 4310.

The Tolerance Revolving Fund was authorized in 1963 for the deposit of tolerance fees. Fees are paid by industry for Federal services of pesticide chemicals in or on food and animal feed. Effective January 2, 1997, fees collected are now being deposited in the Reregistration and Expedited Processing Revolving Fund (4310). The fees collected prior to this date are accounted for under Treasury symbol number 4311.

The Working Capital Fund (WCF) includes two activities: computer support services and postage. WCF derives revenue from these activities based upon fee for services. WCF's customers currently consist solely of Agency program offices. Accordingly, revenue generated by WCF and expenses recorded by the program offices for use of such services, along with the related advances/liabilities, are eliminated on consolidation. The WCF is accounted for under Treasury symbol 4565.

The Exxon Valdez Settlement Fund has funds available to carry out authorized environmental restoration activities. Funding is derived from the collection of reimbursements under the Exxon Valdez settlement as a result of the oil spill. The Exxon Valdez Settlement fund is accounted for under Treasury symbol number 5297.

Appropriations transferred to the Agency from other Federal agencies include funds from the Appalachian Regional Commission and the Department of Commerce which provide economic assistance to state and local developmental activities, the Agency for International Development which provides assistance on environmental matters at international levels, and from the General Services Administration which provides funds for rental of buildings, and operations, repairs, and maintenance of rental space. The transfers appropriations are accounted for under Treasury symbols 0200, 1010, 1021, 2050, and 4542.

Clearing Accounts include the Budgetary suspense account, Deposit in Transit differences, Unavailable Check Cancellations and Overpayments, and Undistributed and Letter of Credit differences. Clearing accounts are accounted for under Treasury symbols 3875, 3878, 3879, and 3880.

Deposit funds include Fees for Ocean Dumping, Nonconformance Penalties, Suspense and payroll deposits for Savings Bonds, and State and City Income Taxes Withheld. Deposit funds are accounted for under Treasury symbols 6050, 6264, 6265, 6275, and 6875.

General Fund Receipt Accounts include Hazardous Waste Permits; Miscellaneous Fines, Penalties and Forfeitures; General Fund Interest; Interest from Credit Reform Financing Accounts; Fees and Other Charges for Administrative and Professional Services; and Miscellaneous Recoveries and Refunds. General Fund Receipt accounts are accounted for under Treasury symbols 0895, 1099, 1435, 1499, 2410, 3200, and 3220.

The Environmental Services Receipt account was established for the deposit of fee receipts associated with environmental programs, including radon measurement proficiency ratings and training, motor vehicle engine certifications, and water pollution permits. Receipts in this special fund will be appropriated to the S&T appropriation and to the EPM appropriation to meet the expenses of the programs that generate the receipts. Environmental Services are unavailable receipts accounted for under Treasury symbol 5295.

The Miscellaneous Contributed Funds Trust Fund includes gifts for pollution control programs that are usually designated for a specific use by the donor and deposits from pesticide registrants to cover the costs of petition hearings when such hearings result in unfavorable decisions to the petitioner. Miscellaneous Contributed Funds Trust Fund is accounted for under Treasury symbol 8741.

The accompanying financial statements include the accounts of all funds described in this note. Superfund may charge some administrative costs directly to the fund and charge the remainder of the administrative costs to the All Other Funds in the Agency-wide appropriations. The administrative costs funded by Agency-wide appropriations for Superfund for FY 1998 was \$5.5 million. These amounts are included in the Income from Other Appropriations and Expenses from Other Appropriations on the Statement of Net Cost.

The Superfund Trust Fund is allocated general support services costs (such as rent, communications, utilities, mail operations, etc.) that were initially charged to the Agency's S&T and EPM appropriations. During the year, these costs are allocated from the S&T and EPM appropriations to the Superfund Trust Fund based on a ratio of direct labor hours, using budgeted or actual full-time equivalent personnel charged to these appropriations, to the total of all direct labor hours. Agency general support services cost charges to the Superfund Trust Fund may not exceed the ceilings established in the Superfund Trust Fund appropriation. The related general support services costs charged to the Superfund Trust Funds was \$47.5 million for FY 1998.

C. Budgets and Budgetary Accounting

Superfund

Congress adopts an annual appropriation amount to be available until expended for the Superfund Trust Fund. A transfer account for the Superfund Trust Fund has been established for purposes of carrying out the program activities. As the Agency disburses obligated amounts from the transfer account, the Agency draws down monies from the Superfund Trust Fund at Treasury to cover the amounts being disbursed.

All Other Funds

Congress adopts an annual appropriation amount for the LUST Trust Fund and for the Oil Spill Response Trust Fund to remain available until expended. A transfer account for the LUST Trust Fund has been established for purposes of carrying out the program activities. As the Agency disburses obligated amounts from the transfer account, the Agency draws down monies from the LUST Trust Fund at Treasury to cover the amounts being disbursed. The Agency draws down all the appropriated monies from the Treasury's Oil Spill Liability trust fund to the Oil Spill Response Trust Fund when Congress adopts the appropriation amount. Congress adopts an annual appropriation for STAG, Buildings and Facilities, and for Payments to the Hazardous Substance Superfund to be available until expended; adopts annual appropriation for S&T, EPM and for the Office of the Inspector General to be available for two fiscal years. When the appropriations for the General Funds are enacted, Treasury issues a warrant to the respective appropriations. As the Agency disburses obligated amounts, the balance of funds available to the appropriation is reduced at Treasury.

The Asbestos Loan Program is a commercial activity financed by a combination from two sources: one for the long term cost of the loan and another for the remaining non-subsidized portion of the loan. Congress annually adopts a one year appropriation, available for obligation in the fiscal year for which it is appropriated, to cover the estimated long term cost of the Asbestos loans. The long term costs are defined as the net present value of the estimated cash flows associated with the loans. The portion of each loan disbursement that does not represent long term cost is financed under a permanent indefinite borrowing authority established with the Treasury. The annual appropriation bill limits the amount of obligations that can be made for direct loans. A permanent indefinite appropriation is available to finance the costs of subsidy re-estimates that occur after the year in which the loan is disbursed. No appropriation was adopted by Congress for FY 1998; therefore, there was no new financing available to the Asbestos Loan Program for FY 1998.

Funding of the FIFRA and the Tolerance Revolving Funds is provided by fees collected from industry to offset costs incurred by the Agency in carrying out these programs. Each year the Agency submits an apportionment request to OMB based on the anticipated collections of industry fees.

Funding of the WCF is provided by fees collected from other Agency appropriations collected to offset costs incurred for providing the Agency administrative support for computer support and postage.

Funds transferred from other Federal agencies is funded by a non expenditure transfer of funds from the other Federal agencies. As the Agency disburses the obligated amounts, the balance of funding available to the transfer appropriation is reduced at Treasury.

Clearing accounts, Deposit accounts, and Receipt accounts receive no budget. Rather amounts are recorded to the Clearing and Deposit accounts pending further disposition. Amounts recorded to the Receipt accounts capture amounts receivable to or collected for the General Fund of the Treasury.

D. Basis of Accounting

Superfund and All Other Funds

Transactions are recorded on an accrual accounting basis and on a budgetary basis (where budgets are issued). Under the accrual method, revenues are recognized when earned and expenses are recognized when a liability is incurred, without regard to receipt or payment of cash. Budgetary accounting facilitates compliance with legal constraints and controls over the use of Federal funds. All interfund balances and transactions have been eliminated.

E. Revenues and Other Financing Sources

Superfund

The Superfund receives most funding needed to support the program through appropriations that may be used within statutory limits, for operating and capital expenditures (primarily equipment). Additional financing for the Superfund Trust Fund is obtained through reimbursements from other Federal agencies, from States for State Cost Share, and from potentially responsible parties (PRPs) for future costs. Revenues collected through cost recovery are deposited with the Trust fund at Treasury.

All Other Funds

The majority of All Other Funds receive funding needed to support programs through appropriations, which may be used, within statutory limits, for operating and capital expenditures. Under Credit Reform provisions, the Asbestos Loan Program received funding through appropriations to support the subsidy cost of loans which may be used within statutory limits. The Asbestos Direct Loan Financing fund, an off-budget fund, receives additional funding to support the loan disbursements through collections from the Program fund for the subsidized portion of the loan and through borrowing from Treasury for the non-subsidized portion. The last year Congress provided appropriations for this fund was 1993, accordingly no new funding has been available for this program. The FIFRA and the Tolerance Revolving Funds receive funding, which is now deposited with the FIFRA Revolving Fund, through fees collected for services provided. The FIFRA Revolving Fund also receives interest on invested funds. The WCF receives revenue through fees collected for services provided to Agency program offices. Such revenue is eliminated with related Agency program expenses on Consolidation. The Exxon Valdez Settlement Fund received funding through reimbursements.

Appropriations are recognized as Other Financing Sources when earned, i.e., when goods and services have been rendered without regard to payment of cash. Other revenues are recognized when earned, i.e., when services have been rendered.

F. Funds with the Treasury

Superfund and All Other Funds

The Agency does not maintain cash in commercial bank accounts. Cash receipts and disbursements are handled by Treasury. The funds maintained with Treasury are Appropriated Funds, Revolving Funds and Trust Funds. These funds have balances available to pay current liabilities and finance authorized purchase commitments.

G. Investments in U.S. Government Securities

All Other Funds

Investments in U.S. Government securities are maintained by Treasury and are reported at amortized cost net of unamortized discounts. Discounts are amortized over the term of the investments and reported as interest income. The FIFRA Revolving Fund, which is included in All Other Funds, holds the investments to maturity, unless they are needed to finance operations of the fund. No provision is made for unrealized gains or losses on these securities because, in the majority of cases, they are held to maturity.

H. Marketable Equity Securities

Superfund

During FY 1993 and FY 1996, the Agency received marketable equity securities, valued at a total \$5.1 million, which are still held, from a company in settlement of Superfund cost recovery actions. The Agency records marketable securities

at cost as of the date of receipt. Marketable securities are held by Treasury, and reported at their cost value in the financial statements until sold.

I. Accounts Receivable and Interest Receivable

Superfund

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) provides for the recovery of costs from potentially responsible parties (PRPs). However, cost recovery expenditures are expensed when incurred since there is no assurance that these funds will be recovered.

It is the Agency's policy to record accounts receivable from PRPs for Superfund site response costs when a consent decree, judgment, administrative order, or settlement is entered. These agreements are generally negotiated after site response costs have been incurred. It is the Agency's position that until a consent decree or other form of settlement is obtained, the amount recoverable should not be recorded. The allowance for uncollectible PRP accounts receivable is determined on a specific identification basis as a result of a case-by-case review of receivables at the regional level, and a general reserve for those not specifically identified.

The Agency also records accounts receivable from states for a percentage of Superfund site remedial action costs incurred by the Agency within those states. As agreed to under Superfund State Contracts (SSCs), cost sharing arrangements under SSCs may vary according to whether a site was privately or publicly operated at the time of hazardous substance disposal and whether the Agency response action was removal or remedial. SSC agreements are usually for 10% or 50% of site remedial action costs. States may pay the full amount of their share in advance, or incrementally throughout the remedial action process. Allowances for uncollectible state cost share receivables have not been recorded, because the Agency has not had collection problems with these agreements.

All Other Funds

The majority of receivables for All Other Funds represent interest receivable for Asbestos and FIFRA and both accounts receivable and interest receivable to the General Fund of the Treasury.

A summary of accounts receivable as of September 30, 1998 is contained in Note 5.

J. Loans Receivable

All Other Funds

Loans are accounted for as receivables after funds have been disbursed. The amount of Asbestos Loan Program loans obligated but not disbursed are disclosed in Note 6. Loans receivable resulting from obligations on or before September 30, 1991 are reduced by the allowance for uncollectible loans. Loans receivable resulting from loans obligated on or after October 1, 1991 are reduced by an allowance equal to the present value of the subsidy costs associated with these loans. The subsidy cost is calculated based on the interest rate differential between the loans and Treasury borrowing, the estimated delinquencies and defaults net of recoveries offset by fees collected and other estimated cash flows associated with these loans.

K. Appropriated Amounts Held by Treasury

Superfund and All Other Funds

For the Superfund and LUST Trust Funds, and for amounts appropriated to the Office of Inspector General from the Superfund and LUST Trust Funds, cash available to the Agency that is not needed immediately for current disbursements remains in the respective Trust Funds managed by Treasury. At the end of FY 1998 approximately \$2.9 billion remained

in the Treasury managed Superfund Trust Fund and approximately \$73.2 million remained in the LUST Trust Fund to meet the Agency's disbursement needs.

L. Advances and Prepayments

Superfund and All Other Funds

Advances and prepayments represent funds advanced or prepaid to other entities both internal and external to the Agency for which a budgetary expenditure has not yet occurred.

M. Property, Plant, and Equipment

Superfund and All Other Funds

The Fixed Assets Subsystem (FAS) implemented in FY 1997 maintains EPA-held personal and real property records. The FAS automatically generates depreciation entries monthly based upon the acquisition date. Purchases of EPA-held and contractor-held personal equipment are capitalized if the equipment is valued at \$25 thousand or more and has an estimated useful life of at least two years. Prior to implementing FAS, depreciation was taken on a modified straight-line basis over a period of six years depreciating 10% the first and sixth year, and 20% in years two through five. All EPA-held personal equipment purchased before the implementation of FAS was assumed to have an estimated useful life of five years. New acquisitions of EPA-held personal equipment are depreciated using the straight-line method over the specific assets' useful lives, ranging from two to 15 years.

Real property consists of land, buildings, and capital and leasehold improvements. Real property, other than land, is capitalized when the value is \$75 thousand or more. Land is capitalized regardless of cost. Buildings are valued at an estimated original cost basis, and land is valued at fair market value. Depreciation for real property is calculated using the straight-line method over the specific assets' useful lives, ranging from 10 to 102 years. Leasehold improvements are amortized over the lesser of their useful lives or the unexpired lease terms. In addition to property and improvements not meeting the capitalization criteria, expenditures for minor alterations, and repairs and maintenance are expensed as incurred.

N. Liabilities

Superfund and All Other Funds

Liabilities represent the amount of monies or other resources that are likely to be paid by the Agency as the result of a transaction or event that has already occurred. However, no liability can be paid by the Agency without an appropriation or other collection of revenue for services provided. Liabilities for which an appropriation has not been enacted are classified as unfunded liabilities and there is no certainty that the appropriations will be enacted. Liabilities of the Agency, arising from other than contracts, can be abrogated by the Government acting in its sovereign capacity.

O. Borrowing Payable to the Treasury

All Other Funds

Borrowing payable to Treasury results from loans from Treasury to fund the Asbestos direct loans described in part B and C of this note. Periodic principal payments are made to Treasury based on the collections of loans receivable.

P. Interest Payable to Treasury

All Other Funds

The Asbestos Loan Program makes periodic interest payments to Treasury based on its debt to Treasury. At the end of FY 1998, there was no outstanding interest payable to Treasury since payment was made through September 30.

Q. Annual, Sick and Other Leave

Superfund and All Other Funds

Annual, sick and other leave is expensed as taken during the fiscal year. Sick and other leave earned but not taken is not accrued as a liability. Annual leave earned but not taken as of the end of the fiscal year is accrued as an unfunded liability. Accrued unfunded annual leave is included in the Statement of Financial Position as a component of "Liabilities not Covered by Budgetary Resources: Other Governmental Liabilities". As of September 30, 1998 the unfunded annual leave liability for the Superfund Trust Fund was \$16.6 million and for All Other Funds was \$78.8. The difference in the year-end accruals for unfunded annual leave is reported as "Unfunded Expense" in the Statement of Net Cost.

R. Retirement Plan

Superfund and All Other Funds

The majority of the Agency's employees participate in the Civil Service Retirement System (CSRS), to which the Agency makes matching contributions equal to 7% of pay.

On January 1, 1987, the Federal Employees Retirement System (FERS) went into effect pursuant to Public Law 99-335. Most employees hired after December 31, 1983, are automatically covered by FERS and Social Security. Employees hired prior to January 1, 1984 were allowed to either join FERS and Social Security or remain in CSRS. A primary feature of FERS is that it offers a savings plan to the Agency employees which automatically contributes 1 percent of pay and matches any employee contribution up to an additional 4 percent of pay. For most employees hired after December 31, 1983, the Agency also contributes the employer's matching share for Social Security.

With the issuance of "Accounting for Liabilities of the Federal Government" (SFFAS-5), which was effective for the FY 1997 financial statements, accounting and reporting standards were established for liabilities relating to the Federal employee benefit programs (Retirement, Health Benefits and Life Insurance). SFFAS-5 requires that employing agencies recognize the cost of pensions and other retirement benefits during their employees' active years of service. SFFAS-5 requires that the Office of Personnel Management, as administrator of the Civil Service Retirement and Federal Employees Retirement Systems, the Federal Employees Health Benefits Program, and the Federal Employees Group Life Insurance Program, provide EPA with the 'Cost Factors' to compute EPA's liability for each program.

Note 2. Fund Balances with Treasury:

The Treasury maintains EPA's fund accounts and processes all of EPA's receipts and disbursements.

	<u>Entity Assets</u>	<u>Non-Entity Assets</u>	<u>Total</u>
Trust Funds:			
Superfund	\$43,693	\$ —	\$43,693
Lust	4,203	—	4,203
Oil Spill	62	—	62

	<u>Entity Assets</u>	<u>Non-Entity Assets</u>	<u>Total</u>
Revolving Funds:			
FIFRA	5,216	—	5,216
Tolerance	155	—	155
Working Capital Fund	41,040	—	41,040
Appropriated Funds	10,180,516	—	10,180,516
Other Fund Types	<u>(3,708)</u>	<u>—</u>	<u>(3,708)</u>
Total	<u>\$10,271,177</u>	<u>\$ 0</u>	<u>\$10,271,177</u>

Note 3. Cash, Foreign Currency and Other Monetary Assets:

	<u>Entity Assets</u>	<u>Non-Entity Assets</u>
Cash:		
Superfund	\$ 43,693	\$ —
All Others	<u>10,227,484</u>	<u>—</u>
Total Cash	<u>\$10,271,177</u>	<u>\$ 0</u>
Other Monetary Assets:		
All Others	\$ 4,964	\$ —
Total Other Monetary Assets	<u>\$ 4,964</u>	<u>\$ 0</u>
Total Cash and Other Monetary Assets	<u>\$10,276,141</u>	<u>\$ 0</u>

Note 4. Investments:

-----Amounts for Balance Sheet Reporting-----

Superfund	Cost	Amortized Method	Unamortized (Premium) Discount	Market Value	Investments, Net	Required Market Value Disclosure
Intragovernmental Securities:	\$5,295,501		\$220,981	\$5,074,520	\$5,074,520	
Governmental Securities:						
Uniroyal Tech	\$ 5,146		\$ ---	\$ 3,615	\$ 3,615	\$3,615
All Others						
Intragovernmental Securities:	\$1,243,052		\$ 51,514	1,191,538	\$1,191,538	

CERCLA, as amended by SARA, authorizes EPA to recover monies to clean up Superfund sites from responsible parties

(RP). Some RP's file for bankruptcy under Title 11 of the U.S. Code. In bankruptcy settlements, EPA is an unsecured creditor and is entitled to receive a percentage of the assets remaining after secured creditors have been satisfied. Some RPs satisfy their debts by issuing marketable securities in the reorganized company. The Agency does not intend to exercise ownership rights related to these securities, and instead will convert these securities to cash as soon as practicable.

Note 5. Accounts Receivable:

	Superfund	All Others
Intergovernmental Assets:		
Accounts & Interest Receivable	\$ 53,406	\$ 71,880
Less: Allowance for Doubtful Accounts	<u>—</u>	<u>—</u>
Total	<u>\$ 53,406</u>	<u>\$ 71,880</u>
Governmental Assets:		
Unbilled Accounts Receivable	\$ 80,483	\$ 8
Accounts & Interest Receivable	861,225	166,644
Less: Allowance for Doubtful Accounts	<u>(349,643)</u>	<u>(67,492)</u>
Total	<u>\$ 592,065</u>	<u>\$ 99,160</u>

The agency has incurred bad debts in relation to it's collection efforts for Superfund and All Others as follows:

	Superfund	All Others
Bad Debt Expense	\$ 146,522	\$ 12,035
Contra Bad Debt Expense	<u>(146,198)</u>	<u>(306)</u>
Net Bad Debt Expense	<u>\$ 324</u>	<u>\$ 11,729</u>

The Allowance for Doubtful Accounts is determined on a specific identification basis as a result of a case-by-case review of receivables at the regional level, and a reserve on a percentage basis for those not specifically identified.

Note 6. Loans Receivable, Net - Non-Federal:

For the Asbestos Loan Program, loans disbursed from obligations made prior to FY 1992 are net of an allowance for estimated uncollectible loans, if an allowance was considered necessary. Loans disbursed from obligations made after FY 1991 are governed by the Federal Credit Reform Act. The Act mandates that the present value of the subsidy costs (i.e., interest rate differentials, interest subsidies, anticipated delinquencies, and defaults) associated with direct loans be recognized as an expense in the year the loan is made. The net present value of loans is the amount of the gross loan receivable less the present value of the subsidy.

An analysis of loans receivable and the nature and amounts of the subsidy and administrative expenses associated entirely with Asbestos Loan Program loans is provided in the following sections.

	Loans Receivable, Gross - 1998	Allowance for 1998 *	Loans Receivable, Net - 1998
Pre-Credit Reform	\$ 76,074	\$ ---	\$ 76,074
Post Credit Reform	<u>56,086</u>	<u>(20,339)</u>	<u>35,747</u>
Total	<u>\$132,160</u>	<u>\$(20,339)</u>	<u>\$111,821</u>

* Allowance for Pre-Credit Reform loans = Allowance for Estimated Uncollectible Loan
 Allowance for Post Credit Reform loans = Allowance for Subsidy Cost (present value)

Subsidy Expenses for Post Credit Reform Loans:

	Total	Interest Differential	Expected Defaults	Fee Offsets
Current Year's Loans:	<u>\$121</u>	<u>\$121</u>	<u>\$---</u>	<u>\$---</u>
Total Direct Loan Expenses:	<u>\$2,731</u>	<u>\$2,731</u>	<u>\$---</u>	<u>\$---</u>

Other Information: At the end of FY 1998, \$4.4 million for loan obligations established after credit reform remained unpaid and were canceled, because the subsidy appropriated for these loans was also canceled. No expenses were incurred for subsidy reestimates.

Note 7. Inventory and Related Property:

	Superfund	All Others
Operating Materials and Supplies Held for Use in Normal Operations	\$ ---	\$ 74
Total	<u>\$ ---</u>	<u>\$ 74</u>

Note 8. Property, Plant and Equipment - Net

Superfund property, plant and equipment, consists of personal property items held by contractors and the Agency. EPA also has property funded by various other Agency appropriations. The property funded by these appropriations are presented in the aggregate under "All Others" and consists of real, EPA-Held and Contractor-Held personal, and capitalized-leased property.

Purchases of EPA-Held and Contractor-Held personal property are capitalized if the equipment is valued at \$25 thousand or more and has an estimated useful life of at least two years. The Agency depreciates EPA-Held personal property using a straight-line method over the asset's useful life ranging from two to 15 years. Contractor-Held personal property is depreciated over five years using a modified straight-line method. Real property, other than land, is capitalized when the value is \$75 thousand or more and is depreciated using the straight-line method over the specific asset's useful life ranging from 10 to 102 years. Leasehold improvements are amortized over the lesser of their useful lives or the unexpired lease term.

Late in fiscal 1997, the Agency implemented a new property accounting and accountability system entitled the "Fixed Assets Subsystem (FAS)". FAS replaced the Personal Property Accountability System (PPAS) and manually-maintained spreadsheets to account for EPA-held personal and real property respectively. Historical data was converted to the FAS. In fiscal 1998, a mass transfer of property was executed to the WCF from other appropriations.

The fiscal 1997 ending balances for real property was adjusted because an accounting omission in fiscal 1997 caused real property to be understated by \$435 thousand for the All Others appropriation. This resulted in an adjustment to property, plant and equipment for All Others, with a corresponding adjustment to the capital asset component of equity. There was no effect to the Statement of Operations and Changes in Net Position.

Schedule of Property, Plant, and Equipment by Fund

	Superfund			All Others		
	Acquisition Value	Accumulated Depreciation	Net Book Value	Acquisition Value	Accumulated Depreciation	Net Book Value
EPA-Held Equipment	\$21,191	\$(16,981)	\$4,210	\$136,372	\$(97,462)	\$38,910
Contractor-Held Equipment	10,179	(7,829)	2,350	48,780	(44,240)	4,540
Land and Buildings	---	---	---	258,367	(68,142)	190,225
Capital Leases (Note 11)	---	---	---	40,913	(8,077)	32,836
Total PP&E			<u>\$6,560</u>			<u>\$266,511</u>

Note 9. Debt:

Other Debt - All Others

	Beginning Balance	Net Borrowing	Ending Balance
Debt to Treasury	<u>\$ 37,922</u>	<u>\$ —</u>	<u>\$ 37,922</u>
Classification of Debt:			
Intragovernmental Debt			<u>\$ 37,922</u>
Total Debt			<u>\$ 37,922</u>

Note 10. Other Liabilities:

Other Liabilities Covered by Budgetary Resources:

	Non-Current	Current	Total
Intragovernmental - All Others			
WCF Advances	\$ —	\$2,181	\$2,181
Other	—	<u>6,154</u>	<u>6,154</u>
Total	<u>\$ 0</u>	<u>\$8,335</u>	<u>\$8,335</u>
Intragovernmental - Superfund			
Other	\$ —	<u>\$3,606</u>	<u>\$3,606</u>
Total	<u>\$ —</u>	<u>\$3,606</u>	<u>\$3,606</u>

	Non-Current	Current	Total
All Others			
Accrued Funded Payroll & Benefits	\$46,258	\$10,254	\$56,512
Custodial Liability	129,304	944	130,248
Other Liabilities	<u>—</u>	<u>11,689</u>	<u>11,689</u>
Total	<u>\$175,562</u>	<u>\$22,887</u>	<u>\$198,449</u>
Superfund			
Cash Out - Non Federal	\$324,622	\$57,899	\$382,521
Resources Payable to Treasury	10,872	2,321	13,193
Other	<u>13,784</u>	<u>(14,982)</u>	<u>(1,198)</u>
Total	<u>\$349,278</u>	<u>\$45,238</u>	<u>\$394,516</u>

Other Liabilities Not Covered by Budgetary Resources:

	Non-Current	Current	Total
All Others			
Contingent Liabilities - Unfunded	\$335	(\$128)	\$207
Accrued Clean-up Costs - Unfunded	—	14,505	14,505
Accrued Unfunded Annual Leave	<u>74,209</u>	<u>4,618</u>	<u>78,827</u>
Total	<u>\$74,544</u>	<u>\$18,995</u>	<u>\$93,539</u>
Superfund			
Accrued Unfunded Annual Leave	\$ ---	\$16,618	\$16,618
Total	<u>\$ 0</u>	<u>\$16,618</u>	<u>\$16,618</u>

Note 11. Leases:

Capital Leases:

Summary of Assets Under Capital Lease:	AllOthers
Land and Buildings	\$40,913
Accumulated Amortization	\$8,077

EPA has three capital leases for land and buildings housing scientific laboratories and/or computer facilities. All of these leases include a base rental charge and escalator clauses based upon either rising operating costs and/or real estate taxes. The base operating costs are adjusted annually according to escalators in the Consumer Price Indices published by the Bureau of Labor Statistics (U.S. Department of Labor). These leases terminate in fiscal years 2010, 2013 and 2025. The charges are expended out of the EPM appropriation. The total future minimum lease payments of the capital leases are listed below.

Future Payments Due:	All Others
Fiscal Year	
1999	\$6,295
2000	6,295
2001	6,295
2002	6,295
2003	6,295
After 5 Years	<u>108,785</u>
 Total Future Minimum Lease Payments	 140,260
Less: Imputed Interest	<u>(101,607)</u>
Net Capital Lease Liability	<u>38,653</u>
Liabilities not covered by Budgetary Resources	<u>\$ 38,653</u>

Operating Leases:

The General Services Administration (GSA) provides leased real property (land and buildings) as office space for EPA employees. GSA charges a Standard Level Users Charge that approximates the commercial rental rates for similar properties.

EPA has five direct operating leases for land and buildings housing scientific laboratories and/or computer facilities. Most of these leases include a base rental charge and escalator clauses based upon either rising operating costs and/or real estate taxes. The base operating costs are adjusted annually according to escalators in the Consumer Price Indices published by the Bureau of Labor Statistics (U.S. Department of Labor). Three leases terminate in 2000. In fiscal 1997 and 1998, EPA entered into two leases, which terminate in fiscal 2017 and 2003 respectively. The charges are expended out of the EPM appropriation. The total minimum future costs of the operating leases are listed below.

Fiscal Year	All Others	Superfund	Total Land & Buildings
1999	\$6,139	\$ —	\$6,139
2000	6,109	—	6,109
2001	36	—	36
2002	34	—	34
2003	34	—	34
Beyond 2003	<u>334</u>	<u>—</u>	<u>334</u>
Total Future Minimum Lease Payments	<u>\$12,686</u>	<u>\$ —</u>	<u>\$12,686</u>

Note 12. Federal Employee and Veterans' Benefits:

	Superfund	All Others
FECA Accrual - Unfunded	\$1,404	\$6,398
FECA Liability - Unfunded	<u>3,875</u>	<u>15,099</u>
Total	<u>\$5,279</u>	<u>\$21,497</u>

Note 13. Unexpended Appropriations:

Unexpended Appropriations:	Superfund	All Others	Total
Unobligated			
Available	\$ 220,352	\$ 1,376,968	\$ 1,597,320
Unavailable	—	99,362	99,362
Undelivered Orders	<u>2,585,608</u>	<u>8,351,470</u>	<u>10,937,078</u>
Total	<u>\$ 2,805,960</u>	<u>\$ 9,827,800</u>	<u>\$ 12,633,760</u>

Note 14. Amounts Held by Treasury:

Amounts Held by Treasury for Future Appropriations consists of amounts held in trusteeship by the U.S. Department of Treasury in the "Hazardous Substance Superfund Trust Fund" (Superfund) and the "Leaking Underground Storage Tank Trust Fund" (LUST).

Superfund (Audited)

Superfund is supported primarily by an environmental tax on corporations, cost recoveries of funds spent to clean up hazardous waste sites, and fines and penalties. Prior to December 31, 1995, the fund was also supported by other taxes on crude and petroleum and on the sale or use of certain chemicals. The authority to assess those taxes expired on December 31, 1995 and has not been renewed by Congress. It is not known if or when such taxes will be reassessed in the future.

The following reflects the Superfund Trust Fund as maintained by the U.S. Department of Treasury. The amounts contained in these statements have been provided by the Treasury. Outlays represent appropriations received by EPA's Superfund Trust Fund, such funds are eliminated on consolidation with the Superfund Trust Fund maintained by Treasury.

	Combined	EPA	Treasury
Undistributed Balances:			
Available for Investment	\$ 980	\$ —	\$ 980
Unavailable for Investment	<u>—</u>	<u>—</u>	<u>—</u>
Total Undisbursed Balance	\$ 980	\$ —	\$ 980
Investments, Net of Discounts	<u>5,074,520</u>	<u>2,949,665</u>	<u>2,124,855</u>
Total Assets	<u>\$ 5,075,500</u>	<u>\$ 2,949,665</u>	<u>\$ 2,125,835</u>
Liabilities & Equity			
Debt	\$ —	\$ —	\$ —
Equity	<u>5,075,500</u>	<u>2,949,665</u>	<u>2,125,835</u>
Total Liability and Equity	<u>\$ 5,075,500</u>	<u>\$ 2,949,665</u>	<u>\$ 2,125,835</u>

	Combined	EPA	Treasury
Receipts			
Crude and Petroleum	\$ (2,604)	\$ —	\$ (2,604)
Certain Chemicals	2,413	—	2,413
Corporate Environmental	79,060	—	79,060
Cost Recoveries	319,605	—	319,605
Fines & Penalties	<u>5,044</u>	<u>—</u>	<u>5,044</u>
Total Revenue	403,518	—	403,518
Appropriations Received	250,000	—	250,000
Interest Income	<u>291,816</u>	<u>—</u>	<u>291,816</u>
Total Receipts	<u>\$ 945,334</u>	<u>\$ —</u>	<u>\$ 945,334</u>
Outlays			
Return of Appropriations	\$ —	\$ (35)	\$ 35
Transfers to EPA	<u>—</u>	<u>(1,473,197)</u>	<u>1,473,197</u>
Total Outlays	<u>—</u>	<u>(1,473,232)</u>	<u>1,473,232</u>
Net Income	<u>\$ —</u>	<u>\$ 527,898</u>	<u>\$ (527,898)</u>

LUST (Unaudited)

LUST is supported primarily by a sales tax on motor fuels to clean up LUST waste sites. The following represents LUST Trust Fund as maintained by the U.S. Department of Treasury. The amounts contained in these statements have been provided by Treasury and are unaudited. Outlays represent appropriations received by EPA's LUST Trust Fund, such funds are eliminated on consolidation with the LUST Trust Fund maintained by Treasury.

	Combined	EPA	Treasury
Undisbursed Balances			
Available for Investment	\$ 126	\$ —	\$ 126
Unavailable for Investment	<u>—</u>	<u>—</u>	<u>—</u>
Total Undisbursed Balance	126	—	126
Investments, Net of Discounts	<u>1,182,039</u>	<u>73,207</u>	<u>1,108,832</u>
Total Assets	<u>\$ 1,182,165</u>	<u>\$ 73,207</u>	<u>\$ 1,108,958</u>
Liabilities & Equity			
Debt	\$ —	\$ —	\$ —
Equity	<u>1,182,165</u>	<u>73,207</u>	<u>1,108,958</u>
Total Liability and Equity	<u>\$ 1,182,165</u>	<u>\$ 73,207</u>	<u>\$ 1,108,958</u>

	Combined	EPA	Treasury
Receipts			
Highway TF Tax	\$ 126,232	\$ —	\$ 126,232
Airport TF Tax	11,791	—	11,791
Inland TF Tax	844	—	844
Gross Revenue	138,867	—	138,867
Less: Reimbursement to G/F	<u>(2,654)</u>	<u>—</u>	<u>(2,654)</u>
Net Revenue	136,213	—	136,213
Interest Income	<u>60,935</u>	<u>—</u>	<u>60,935</u>
Net Receipts	<u>\$ 197,148</u>	<u>\$ —</u>	<u>\$ 197,148</u>
Outlays			
Treasury Operating Expenses	\$ —	\$ 125	\$ 125
Transfers to EPA	<u>—</u>	<u>(62,758)</u>	<u>(62,758)</u>
Total Outlays	<u>—</u>	<u>(62,633)</u>	<u>(62,633)</u>
Net Income	<u>\$ —</u>	<u>\$134,515</u>	<u>\$ (134,515)</u>

Note 15. Contingencies:

EPA is a party in various administrative proceedings, legal actions, and claims brought by or against it. These include:

- Various personnel actions, suites, or claims brought against the Agency by employees and others.
- Various contract and assistance program claims brought against the Agency by vendors, grantees and others.
- The legal recovery of Superfund costs incurred for pollution cleanup of specific sites, to include the collection of fines and penalties from responsible parties.
- Claims against recipients for improperly spent assistance funds which may be settled by a reduction of future EPA funding to the grantee or the provision of additional grantee matching funds.

Superfund

Under CERCLA §106 (a), EPA issues administrative orders that require parties to clean up contaminated sites. CERCLA §106(b) allows a party that has complied with such an order to petition EPA for reimbursement from the Fund of its reasonable costs of responding to the order, plus interest. To be eligible for reimbursement, the party must demonstrate either that it was not a liable party under CERCLA § 107 (a) for the response action ordered, or that the Agency's selection of the response action was arbitrary and capricious or otherwise not in accordance with law.

There are currently thirteen CERCLA § 106(b) administrative claims and four pending lawsuits. If the claimants are successful, the total losses on the administrative and judicial claims could amount to approximately \$54.9 million and \$5.3 million, respectively. The Environmental Appeals Board has not yet issued final decisions on the administrative claims; therefore a definite estimate of the amount of the contingent loss cannot be made. The claimants chance of success in these outstanding cases is characterized as reasonably possible. The claimants chance of success in three of the four pending lawsuits is also reasonably possible. The outcome of the remaining lawsuit is considered as probable for the claimant totaling

\$185 thousand.

There are a number of outstanding CERCLA § 106(a) cleanup orders where the recipients of the orders have not yet completed the ordered response actions. Each such recipient could potentially file a claim with EPA for reimbursements under CERCLA § 106(b) of its costs of responding to the order once it has completed the ordered actions.

EPA is responsible to indemnify response action contractors (CERCLA § 119) for legal costs that will eventually exceed or have exceeded the deductible specified in the current indemnification agreements. Such payments by the United States would be recoverable government response costs. EPA has only one claim which is considered remote.

EPA contractors have submitted response action contractor claims. No claims were material.

All Others

There were no material litigation, asserted or unasserted claims or assessments involving all other appropriated funds of the Agency.

Judgement Fund

In cases which are paid by the U.S. Treasury Judgement Fund, the Agency must recognize the full cost of a claim regardless of who is actually paying the claim. The Agency is involved in various other actions that in the aggregate do not exceed \$1.2 million. EPA also has one probable claim that is not estimable.

In addition, EPA is party to certain pending litigation upon which EPA believes it has a reasonable legal position. No estimate has been provided for a loss.

In the opinion of EPA's management and General Counsel, the ultimate resolution of any legal actions still pending will not materially affect EPA's operations or financial position.

Note 16. Grant Accrual:

Grant accruals represent grantee expenses that were not reported to EPA for reimbursement as of September 30, 1998.

We selected a statistical sample of grant recipients from our grantee universe to use as our basis to calculate our accrual. We sent confirmation letters to the sample grantees, asking them to provide the amount of unbilled grant expenses as of September 30, 1998. We calculated the unbilled grant expense rates. Finally, we used weighted-average rates to compute the overall unbilled grant expense accruals.

Superfund	\$ 22,867
All Others	\$212,157

Note 17. Environmental Cleanup Costs:

EPA has five sites that require clean up stemming from its activities. Four of these sites will be paid from the Treasury Judgement Fund amounting to \$206 thousand. EPA estimates that clean up on the other site will be approximately one thousand dollars. EPA also holds title to a site in Edison, New Jersey, which was formerly an Army Depot. While EPA did not cause the contamination, the Agency could potentially be liable for a portion of the clean up costs. However, it is expected that the Department of Defense and the General Services Administration will bear all or most of the cost of remediation.

Future Clean up Cost

EPA has nine sites that require future clean up associated with permanent closure. The estimated cost will be approximately \$14.5 million. Since the clean up costs associated with permanent closure are not primarily recovered through user fees, EPA has elected to recognize the estimated total cleanup cost as a liability upon implementation. EPA could also be potentially liable for cleanup costs at two GSA-leased sites; however, the amounts are not known.

Of the \$14.5 million, \$11.9 million represents the estimated expense to close the current RTP research facility. These costs will be incurred within the next three years. The \$2.6 million represents the future decontamination and decommissioning costs of EPA's research facilities.

Note 18. Superfund State Credits:

Authorizing statutory language for Superfund and related Federal regulations require States to enter into Superfund State Contracts (SSCs) when EPA assumes the lead for a remedial action in their State. The SSC defines the State's role in the remedial action and obtains the State's assurance that they will share in the cost of the remedial action. Under Superfund's authorizing statutory language, States will provide EPA with a ten percent cost share for remedial action costs incurred at privately owned or operated sites, and at least fifty percent of all response activities (i.e., removal, remedial planning, remedial action, and enforcement) at publicly operated sites. In some cases, States may use EPA approved credits to reduce all or part of their cost share requirement that would otherwise be paid by the States. Credit is limited to State site-specific expenses EPA has determined to be reasonable, documented, direct out-of-pocket expenditures of non-Federal funds for remedial action. Once EPA has reviewed and approved a State's claim for credit, the State must first apply the credit at the site where it was earned. The State may apply any excess/remaining credit to another site when approved by EPA. As of September 30, 1998, total outstanding State credits has been estimated at \$11 million.

Note 19. Superfund Preauthorized Mixed Funding Agreements:

Under Superfund Preauthorized Mixed Funding Agreements, settling Potentially Responsible Parties (PRPs) agree to perform response actions at their sites with the understanding that EPA will reimburse the PRPs a percentage of their total response action costs. EPA's authority to enter into mixed funding agreements is provided under Section 111(a)(2) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. Under Section 122(b)(1) of CERCLA, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, a PRP may assert a claim against the Superfund Trust Fund for a portion of the costs they incurred while conducting a preauthorized response action as agreed to under a mixed funding agreement. As of September 30, 1998, EPA had 12 outstanding preauthorized mixed funding agreements with obligations totaling \$44.5 million. A liability is not recognized for these amounts until the PRP's work has been performed and has been approved by EPA for payment. EPA will not disburse any funds under these agreements, however, until the PRP's application, claim, and claims adjustment processes have been reviewed and approved by EPA.

Note 20. Deferred Maintenance:

The EPA classifies property, plant, and equipment as following: 1) EPA-Held Equipment, 2) Contractor-Held Equipment, 3) Land and Buildings, and, 4) Capital Leases. The condition assessment survey method of measuring deferred maintenance is utilized. The Agency adopts requirements or standards for acceptable operating condition in conformance with industry practices.

One deferred maintenance project was identified in the Land and Buildings category, with an estimated total cost of \$325 thousand. This project included repairing and resurfacing weathered and cracked parking lots and driveways. In addition, one deferred maintenance project was identified in the EPA-Held Equipment category with an estimated cost of \$45 thousand. Maintenance for gas chromatograph system was postponed until 1999. No deferred maintenance was reported for the other two categories.

Note 21. Income and Expenses from other Appropriations:

The Statement of Net Cost reports program costs that include the full costs of the program outputs and consist of the direct costs and all other costs that can be directly traced, assigned on a cause and effect basis, or reasonably allocated to program outputs.

During FY 1998, EPA had three appropriations which funded a variety of programmatic and non-programmatic activities across the Agency, subject to statutory requirements. The Environmental Programs and Management (EPM) appropriation was created to fund personnel compensation and benefits, travel, procurement, and contract activities. Two prior year appropriations, Program and Research Operations (PRO) and Abatement Control and Compliance (AC&C) generated expenses. PRO funded travel, personnel compensation and benefits. AC&C funded procurement and contract activities.

All of the expenses from EPM, PRO and AC&C were distributed among EPA's two Reporting Entities: Superfund and All Others. This distribution is calculated using a combination of specific identification of expenses to Reporting Entities, and a weighted average that distributes expenses proportionately to total programmatic expenses.

As illustrated below, this estimate does not impact the net effect of the Statement of Net Costs.

	Income From Other Appropriations	Expenses From Other Appropriations	Net Effect
Superfund	\$ 5,542	(\$5,542)	\$ 0
All Others	(5,542)	5,542	0

Note 22. Working Capital Fund Rebate:

The Working Capital Fund's (WCF) net revenue of \$111.6 millions is comprised of \$3.9 million from postage operations and \$107.7 million from Enterprise Technology Services Division (ETSD). The WCF revenue reflects a \$6.7 million rebate that was included in the September billing cycle. This was the result of an analysis of potential revenue versus projected cost anticipated through the end of the year. The rebate was made during FY 1998 as the WCF refined its revenue to meet appropriation requirements.

Note 23. Custodial Non-Exchange Revenues:

EPA uses the accrual basis of accounting for the collection of fines, penalties and miscellaneous receipts.

Collectability by EPA of the fines and penalties is based on the responsible parties' willingness and ability to pay.

Fines, Penalties & Miscellaneous Receipts

Fines, Penalties & Miscellaneous Revenue (EPA) \$92,132

Accounts Receivable Fines, Penalties & Miscellaneous Receipts

Accounts Receivable \$81,868

Less: Allowance for Doubtful Accounts 47,472

Accounts Receivable (Net) \$34,396

Note 24. Statement of Budgetary Resources:

A reconciliation of budgetary resources, obligations incurred, and outlays, as presented in the audited Statement of Budgetary Resources, to amount included in the Budget of the United States Government for the year ended September 30, 1998, is as follows:

	Budgetary Resources	Obligations Incurred	Outlays
Audited Superfund Statement of Budgetary Resources	\$2,197,026	\$1,495,558	\$1,377,023
Restatement of Available Authority based on budget controls	(517,910)	---	---
Restatement of Reimbursable Authority	1,536	---	---
Recoveries netted with obligations	175,925	(175,925)	---
Receivables excluded from Statement of Budgetary Resources	---	---	(2,919)
Adjustments to Unliquidated Obligations results from audit review	---	41,364	---
Other (Note 25)	<u>375</u>	<u>83,917</u>	<u>614</u>
Budget of the United States Government	<u>\$1,856,952</u>	<u>\$1,444,914</u>	<u>\$1,374,718</u>
Audited All Others Statement of Budgetary Resources	\$8,310,476	\$6,592,535	\$5,534,583
Restatement of Available Authority based on budget controls	(83,980)	---	---
Restatement of Reimbursable Authority	12,244	---	---
Recoveries netted with obligations	48,808	(48,808)	---
Receivables excluded from Statement of Budgetary Resources	---	---	(69,987)
Adjustments to Unliquidated Obligations results from audit review	---	119,279	---
Other (Note 25)	<u>(281)</u>	<u>2,327</u>	<u>(1,504)</u>
Budget of the United States Government	<u>\$8,287,267</u>	<u>\$6,665,333</u>	<u>\$5,463,092</u>

Note 25. Adjustments:

Includes a \$375 thousand difference in Superfund and a \$281 thousand difference in All Others.

Note 26. Unobligated Balances Available:

The Superfund Trust Fund has an unobligated balance of \$701 million in unexpired authority. All Others has an unobligated balance of \$1.7 billion which includes \$1.6 billion in unexpired authority and \$99 million in expired authority. The unexpired authority is available to be apportioned by the Office of Management and Budget for new obligations at the beginning of FY 1999. Unobligated balances of expired authority is not available for new obligations. However, the expired authority is available for upward adjustments of obligations incurred as of the end of the fiscal year.

Note 27. Obligated Balance, Net - End of Period:

Undelivered Orders at the end of the period are \$2.6 billion for the Superfund Trust Fund and \$8.8 billion for All Others. These amounts include adjustments of \$16 million to the Superfund and \$216 million to All Others. These adjustments are primarily for additional grant accruals related to unbilled liabilities at the end of the fiscal year and for deobligations of Undelivered Orders that are no longer needed. These adjustments were not included in the Budget of the United States Government.

Note 28. Difference in Outlays Between Statement of Budgetary Resources and SF-133:

Outlays between the Statement of Budgetary Resources and the SF-133 differ by \$2 million for Superfund and \$72 million for All Others. Of the difference, \$3 million for Superfund and \$70 million for All Others is represented by the exclusion of refunds receivable from the Obligated Balance, Net Beginning of Period on the Statement of Budgetary Resources, whereas receivables had been included on the SF-133. The different presentations result from a change in policy effective March 1, 1998, wherein receivables are not a budgetary resource until collected. Other outlay differences of \$1 million for Superfund and \$2 million for All Others are unidentified.

Note 29. Statement of Financing:

Increases in Unfunded Liabilities relate to unfunded annual leave and Federal Employees Compensation Act (FECA) special benefit fund. For Superfund, the amount totaled \$3.8 million and is reflected in Financing Sources Yet To Be Provided. For All Others, the amount was \$7.9 million, which is included in the total Net Decrease in Liabilities of \$23.9 million.

Note 30. Other Financing Sources:

Consists primarily of Appropriations to EPA from the Superfund and Lust Trust Funds held at Treasury (Treasury Trust Funds). Such appropriations are reported as non expenditure transfers on the financial statements of the respective Treasury Trust Funds. Upon consolidation with Trust funds held by EPA, the Treasury Trust Fund Appropriation non expenditure transfers are reported as Other Financing Sources to offset Appropriations Used and Trust Fund revenues.

	Superfund	Lust
Treasury Trust Fund Transfers	\$1,473,232	\$ 62,633
Other	<u>150,161</u>	<u>46,868</u>
Total	<u>\$1,623,393</u>	<u>\$ 109,501</u>

EPA Required Supplemental Information
Hazardous Substance Superfund Trust Fund and All Other Funds
Supplemental Statement of Budgetary Resources (Unaudited)
As of September 30, 1998
(Dollars in Thousands)

	STAG	Environmental Programs & Management	Science & Technology	FIFRA	LUST Trust Fund	Miscellaneous All Others	Consolidated All Others
Budgetary Resources:							
Budget Authority	\$3,213,125	\$1,803,600	\$631,000	\$ ---	\$65,000	\$429,869	\$6,142,594
Unobligated Balances - Beginning of the Period	1,351,061	280,942	131,989	15,928	2,542	165,576	1,948,038
Spending Authority from Offsetting Collections	17,040	48,651	50,414	18,828	6	149,045	283,984
Adjustments	-----	<u>(2,704)</u>	<u>9,614</u>	<u>89</u>	<u>181</u>	<u>(71,320)</u>	<u>(64,140)</u>
Total Budgetary Resources	<u>\$4,581,226</u>	<u>\$2,130,489</u>	<u>\$823,017</u>	<u>\$34,845</u>	<u>\$67,729</u>	<u>\$673,170</u>	<u>\$8,310,476</u>
Status of Budgetary Resources:							
Obligations Incurred	\$3,442,416	\$1,884,842	\$678,528	\$19,344	\$64,978	\$502,427	\$6,592,535
Unobligated Balances - Available	<u>1,138,810</u>	<u>245,647</u>	<u>144,489</u>	<u>15,501</u>	<u>2,751</u>	<u>170,743</u>	<u>1,717,941</u>
Total, Status of Budgetary Resources	<u>\$4,581,226</u>	<u>\$2,130,489</u>	<u>\$823,017</u>	<u>\$34,845</u>	<u>\$67,729</u>	<u>\$673,170</u>	<u>\$8,310,476</u>
Outlays:							
Obligations Incurred	\$3,442,416	\$1,884,842	\$678,528	\$19,344	\$64,978	\$502,427	\$6,592,535
Less: Spending Authority from Offsetting Collections and Adjustments	17,040	74,074	45,485	18,917	187	101,991	257,694
Obligated Balance, Net - Beginning of Period	6,185,434	974,037	411,169	1,493	71,167	306,731	7,950,031
Less: Obligated Balance, Net - End of the Period	<u>7,013,753</u>	<u>944,098</u>	<u>517,570</u>	<u>1,517</u>	<u>74,687</u>	<u>198,664</u>	<u>8,750,289</u>
Total Outlays	<u>\$2,597,057</u>	<u>\$1,840,707</u>	<u>\$526,642</u>	<u>\$ 403</u>	<u>\$61,271</u>	<u>\$508,503</u>	<u>\$5,534,583</u>

EPA Required Supplemental Information
Working Capital Fund
Supplemental Statement of Financial Position (Unaudited)
As of September 30, 1998
(Dollars in Thousands)

ASSETS

Entity Assets:

Intragovernmental Assets:

Balance With Treasury	\$41,040
Avances and Prepayments	1

Governmental Assets:

Operating Materials and Supplies, Net	13
Avances and Prepayments	3
Property and Equipment, Net	15,379
Other Governmental Assets	<u>5,319</u>

Total Assets	<u>\$61,755</u>
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LIABILITIES

Intragovernmental Liabilities:

Accounts Payable	\$ 1,303
Other Intragovernmental Liabilities	12,962

Governmental Liabilities:

Accounts Payable	18,316
Other Governmental Liabilities	<u>719</u>

Total Liabilities	<u>33,300</u>
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NET POSITION

Balances:

Paid in Capital	23,293
Cumulative Results of Operations	<u>5,162</u>

Total Net Position	<u>28,455</u>
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Total Liabilities and Net Position	<u>\$61,755</u>
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EPA Required Supplemental Information
Working Capital Fund
Supplemental Statement of Operations and Changes in Net Position (Unaudited)
As of September 30, 1998
(Dollars in Thousands)

REVENUE AND FINANCING SOURCES

Revenues from Services to the Public	\$118,309
Other Revenues and Financing Sources	6,584
Less: Rebate - WCF	<u>6,696</u>
Total Revenues and Financing Sources	<u>118,197</u>

EXPENSES

Program or Operating Expenses	98,748
Imputed Expenses	6,584
Depreciation and Amortization	8,570
Funded Accrued Annual Leave	135
Loss on Sale of Assets	<u>53</u>
Total Funded Expenses	<u>114,090</u>

Excess (Shortage) of Revenues and Financing Sources Over Total Expenses	<u>\$ 4,107</u>
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NET POSITION

Net Position, Beginning Balance	\$ 20,550
Excess (Shortage) of Revenues and Financing Sources Over Total Expenses	4,107
Plus (Minus) Non Operating Changes	<u>3,798</u>
Net Position, Ending Balance	<u>\$ 28,455</u>

**EPA Required Supplemental Information
Annual Stewardship Information
For the Fiscal Year Ended September 30, 1998**

***INVESTMENT IN THE NATION'S RESEARCH
AND DEVELOPMENT:***

Public and private sector institutions have long been significant contributors to our nation's environmental and human health research agenda. EPA's Office of Research and Development, however, is unique among scientific institutions in this country in combining research, analysis, and the integration of scientific information across the full spectrum of health and ecological issues and across both risk assessment and risk management. This broad scope has resulted in scientific and engineering expertise, physical facilities, and equipment that permit and encourage integrated multimedia and multidisciplinary research on environmental issues. As part of a regulatory Agency that establishes national priorities and sets national standards, ORD research is conducted to protect human and ecosystem health in a cost-effective manner and to provide a firm scientific and technical foundation for environmental decisions and standards.

Among the Agency's highest research priorities is a program to expand the understanding of near- and long-term effects of the environment on children. Another priority is the Particulate Matter (PM) research program, which focuses on review, implementation, and eventual attainment of the National Ambient Air Quality Standards (NAAQS). For FY 1998, the full cost of the Agency's Research and Development activities totaled \$561 million. A breakout of the expenses is below (Dollars in thousands):

Programmatic Expenses:	\$507,828
Allocated Expenses:	\$ 53,322

***INVESTMENT IN THE NATION'S
INFRASTRUCTURE:***

The Agency makes significant investments in the Nation's drinking water and clean water infrastructure. The investments are the result of three programs: The Construction Grant Program which is being phased out, and two State Revolving Fund programs.

Construction Grants Program: During the 1970s and

1980s, the Construction Grants Program was a source of federal funds, providing more than \$60 billion of direct grants for the construction of public wastewater treatment projects. These projects, which constituted a significant contribution to the nation's water infrastructure, included sewage treatment plants, pumping stations, and collection and intercept sewers, rehabilitation of sewer systems, and the control of combined sewer overflows. The construction grants led to the improvement of water quality in thousands of municipalities nationwide.

Congress set 1990 as the last year that funds would be appropriated for Construction Grants. Projects funded in 1990 and prior will continue until completion. Beyond 1990, EPA shifted the focus of municipal financial assistance from grants to loans that are provided by State Revolving Funds.

State Revolving Funds: The Environmental Protection Agency provides capital, in the form of capitalization grants, to state revolving funds which state governments use to make loans to individuals, businesses, and governmental entities for the construction of water treatment infrastructure. When the loans are repaid to the state revolving fund, the collections are used to finance new loans for new construction projects. The capital is reused by the states and is not returned to the Federal Government.

The Agency is also appropriated funds to finance the construction of infrastructure outside the Revolving Funds. These are reported below as Other Infrastructure Grants.

The Agency's expenses related to investments in the Nation's Water Infrastructure are outlined below:

Construction Grants:	\$ 444,817
Clean Water SRF:	\$1,109,017
Safe Drinking Water SRF:	\$ 94,936
Other Infrastructure Grants:	\$ 138,363
Allocated Expenses:	\$ 187,649

STEWARDSHIP LAND

The Agency holds title to certain land and land rights related to remedial clean-up sites. The land rights are in the form of easements to allow access to clean-up sites or restrict usage of remediated sites. In some instances, the Agency takes title to the land during remediation, and returns it to private ownership upon the completion of clean-up.

As of 9/30/98, the Agency possesses the following land and land rights:

Superfund Sites with Easements	22
Superfund Sites with Land acquired	18

HUMAN CAPITAL

Agencies are required to report expenses incurred to train the public with the intent of increasing or maintaining the nation's economic productive capacity. Training, public awareness, and research fellowships are components of many of the Agency's programs, and are effective in achieving the Agency's mission of protecting public health and the environment, but the focus is on enhancing the nation's environmental, not economic, capacity.

Training and Awareness Grants	\$39,131
Fellowships	\$11,084
Allocated Expenses	\$ 5,273

**OIG'S REPORT
ON EPA'S FY 1998
FINANCIAL STATEMENTS**

Note: This summary is part of Audit Report Number 99B0003 issued by the EPA Office of Inspector General on September 28, 1999. Therefore, it contains references to other sections of the report (e.g., attachments) which are not included. For a complete copy of the report, please contact:

**Environmental Protection Agency
Office of the Inspector General
Financial Audit Division
Mail Code 2422
401 M Street, S.W.
Washington, D.C.**

**Telephone: 202-260-1397
FAX: 202-260-1398**

INSPECTOR GENERAL'S REPORT ON EPA'S FISCAL 1998 FINANCIAL STATEMENTS

The Administrator
U.S. Environmental Protection Agency:

In accordance with the requirements of the Government Management Reform Act (GMRA), we audited EPA's fiscal 1998 financial statements. As described in Note 1, these financial statements were prepared in accordance with provisions of OMB Bulletin 97-01, entitled "Form and Content of Agency Financial Statements," which is considered a comprehensive basis of accounting other than generally accepted accounting principles.

The financial statements include expenses of grantees, contractors and other Federal agencies. Our audit work pertaining to these expenses included testing only within EPA. Audits of grants, contracts and interagency agreements performed at a later date may disclose questioned costs of an undeterminable amount at this time.

In addition, the United States Treasury collects and accounts for excise taxes that are deposited into the Superfund and Leaking Underground Storage Tank Trust Funds.⁴ The United States Treasury is also responsible for investing amounts not needed for current disbursements and transferring funds to EPA as authorized in legislation. Since the United States Treasury, and not EPA, is responsible for these activities our audit work did not cover these activities.

The Office of Inspector General (OIG) is not independent with respect to amounts pertaining to its operations that are presented in the financial statements. The amounts included for the OIG are not material to EPA's financial statements. The OIG is organizationally independent with respect to all other aspects of the Agency's activities.

EPA's Required Supplemental Information and the Annual Stewardship Information are presented for purposes of additional analysis. We reviewed this information to determine if it was consistent with the information in the principal financial statements, but our audit was not designed to express, and we are not expressing an opinion on it.

1 The Leaking Underground Storage Tank Trust Fund is included in the All Other Appropriated Funds column of the financial statements.

OPINION ON EPA'S FISCAL 1998 FINANCIAL STATEMENTS

In our opinion, the financial statements fairly present the:

- assets, liabilities, and net position;
- net costs;
- changes in net position;
- budgetary resources;
- reconciliation of net costs to budgetary obligations; and
- custodial activity

for the Superfund Trust Fund, All Other Appropriated Funds and the Agency as a whole as of and for the year ended September 30, 1998, in accordance with the basis of accounting described in Note 1 to the financial statements. As described in Note 1, these financial statements were prepared in accordance with applicable provisions of OMB Bulletin 97-01, "Form and Content of Agency Financial Statements," as amended November 20, 1998, which is considered a comprehensive basis of accounting other than generally accepted accounting principles.

OVERVIEW SECTION OF THE FINANCIAL STATEMENTS

We did not identify any material inconsistencies between the information presented in the Overview and in the financial statements. During this audit, we did not perform sufficient audit work to express an opinion on the performance information included in the Overview. Our audits of EPA's programmatic areas have identified weaknesses in the environmental data information systems used to generate data used for managing the Agency's environmental programs and presented in the Overview. The Agency has taken steps to enhance data quality, but recognizes major challenges still exist. The Agency has several initiatives underway to address data quality and ensure that environmental data systems contain timely and accurate data.

The Overview also contains information on the state of readiness of the Agency's systems to deal with the Year 2000. EPA reports that its mission critical financial and mixed financial systems are already Year 2000 compliant. The Agency also reports that its core financial systems have addressed both internal and external data exchanges. EPA has implemented an independent certification program administered through an interagency agreement with the Department of Transportation to test all mission critical systems. To date, the results of independent verification tests on financial systems have not been formally reported.

In addition, the Agency still needs to address the issue of establishing required contingency plans to ensure uninterrupted financial operations in the case of unexpected technical difficulties. All regional and Headquarters offices are required to develop Continuity of Operations Planning (COOP) plans. Following completion of individual COOP plans, an overarching Agency plan will be developed in accordance with Presidential Decision Directive #67 which requires EPA to have

an Agency plan by October 1999. As a part of this process EPA expects to develop Business Continuity and Contingency Planning (BCCP) for the Year 2000 program. The Agency's Year 2000 Senior Council has directed that an interdisciplinary team be formed to develop the Year 2000 BCCP that will be an addendum to the overarching COOP Agency plans.

Lastly, the Agency is reassessing its non-mission critical systems, central and local infrastructure, and buildings and facilities, and will develop remediation plans to address noted weaknesses. EPA expects to closely monitor progress in these areas and will receive monthly status reports from various regional and program offices starting in July 30, 1999.

EVALUATION OF INTERNAL CONTROLS

We evaluated the Agency's internal control structure: (1) to determine the audit procedures necessary to express an opinion on the financial statements, and (2) to determine whether the internal controls provide reasonable assurance that:

- transactions are properly recorded, processed, and summarized to permit the preparation of reliable principal financial statements in accordance with Federal accounting standards;
- financial transactions are executed in compliance with applicable laws and regulations; and
- assets are safeguarded against loss from unauthorized acquisition, use or disposition.

Our objective in evaluating controls was not to express an opinion on controls. Accordingly, we do not express such an opinion. Our evaluation would not necessarily disclose all matters in the internal control structure that might be reportable conditions or material weaknesses. Because of inherent limitations in any internal control structure, losses, noncompliance, or misstatements could occur and not be detected. Also, projecting our evaluation of internal controls to future periods is subject to the risk that controls may become inadequate because of changes in conditions, or the degree of compliance with such controls may deteriorate.

Material Weaknesses

OMB Bulletin 98-08, "Audit Requirements for Federal Financial Statements," defines a material weakness as a situation where internal controls do not reduce to a relatively low level, the risk that errors, fraud or noncompliance in amounts material to the audited financial statements or Required Supplemental Stewardship Information may occur and not be detected in a timely manner by employees in the normal course of performing their assigned functions. In evaluating the Agency's internal control structure, we identified the following material weaknesses.

Although CFO staff and managers committed to meeting the March 1 deadline for submitting EPA's audited financial statements to OMB, they were unable to meet the deadline due to difficulties in obtaining information from other Agency offices and external sources, and problems in implementing the new financial standards and OMB reporting requirements. In particular, the Agency encountered significant difficulties in preparing the Statements of Budgetary Resources and Financing due to weaknesses in the Agency's deobligation process, conversion of accounting information from EPA's predecessor accounting system, and errors in recording various accounting transactions. These issues highlight the need for the Agency to strengthen its coordination and quality control processes to ensure accurate data is available to prepare the annual financial statements and to manage the Agency's program activities on an ongoing basis. Further improvements in the Agency's deobligation process would result in additional funds becoming available to be used in support of EPA's environmental programs.

Attachment 1 describes weaknesses in the Agency's financial statement processes in more detail, including the Agency's ongoing and planned corrective actions and additional corrective actions we are recommending.

Reportable Conditions

We also identified the following reportable conditions. OMB Bulletin 98-08 defines a reportable condition as an internal control weakness that could adversely affect EPA's ability to ensure: (1) transactions are executed in accordance with applicable laws; (2) assets are safeguarded against unauthorized acquisition, use, or disposition; and (3) transactions are properly recorded, processed, and summarized to permit the preparation of reliable financial statements and Required Supplemental Stewardship Information in accordance with Federal accounting standards. Attachment 2 describes each of these reportable conditions in more detail.

- EPA's regions are not consistently tracking demands for payment made under Comprehensive Environmental Response, Compensation and Liability Act Section 106 Unilateral Administrative Orders (UAOs).⁵ Amounts demanded under UAOs are significant and need to be tracked and controlled. In three regions, we identified \$11 million in demands made under UAOs. Other regions either had no record of the amounts demanded under UAOs, or the amounts were not demanded because the UAOs did not include a provision to request reimbursement of oversight costs. When amounts are not tracked in IFMS they cannot be followed up on. Also, the potential exists for multiple demands to be issued for the identical cost to the same or different parties resulting in duplicate collections. Tracking the amounts demanded in IFMS would allow the Agency to maintain better control over the amounts demanded and collected.
- During fiscal 1998, the Agency continued its efforts to improve controls in the accounts receivable area by issuing additional guidance and instructing Financial Management Offices

² Unilateral Administrative Orders are one of the Agency's primary enforcement tools to compel responsible parties to conduct response actions. The Agency may demand payment for costs it incurs in overseeing the response actions.

(FMOs) to conduct quality assurance reviews covering this area. We continued to find some accounts receivable, including those for oversight costs, that were not timely recorded and billed; outstanding receivables that were not timely followed up on and written off; and allowances for doubtful accounts that were not properly computed. Consequently, some accounts receivable may not have been correctly valued and timely collected. These problems were caused primarily by Offices of Regional Counsel and program offices not timely forwarding documentation to Agency FMOs, and FMO staff being unsure about the methodology they were to use to compute the allowance for doubtful accounts.

- Some Agency project officers were not fulfilling one of their program oversight duties, that of reviewing invoices for interagency agreements. In addition, some project officers were not obtaining and reviewing supporting cost information for amounts billed by other agencies. The Agency needs to continue making improvements in this area, so that it can be assured that payments are only made for costs billed that are valid and allowable under the terms of its interagency agreements.

- For a number of years, we have reported on the need for the Agency to make improvements in accounting for its property. The Agency has taken actions to permanently resolve these issues, and we commend the Agency for its continuing efforts to correct weaknesses in this area. The results of this audit show there are still issues remaining where additional improvements are needed. We again found property that was not recorded timely or accurately, and property that was capitalized when it should have been expensed. In addition, we found weaknesses in the reconciliation of property information in the Agency's accounting system with information contained in the property subsystem. Such weaknesses impact the quality of data available to manage the Agency's resources and increase the risk of theft, loss or misuse of the property.

- During fiscal 1998 and prior years, EPA did not properly recognize revenue on its Superfund State Contracts. Although significant progress has been made in resolving problems that have existed in this area, we found a few issues remained, primarily at three of the six FMOs where we tested these accounts. Consequently, material adjustments were needed to fairly present the financial statements. If regional FMOs had been performing analytical reviews of these accounts, these errors could have been identified and corrected before becoming an audit issue.

- We continue to be unable to assess the adequacy of the automated internal control structure for accounting transactions contained in the Agency's Integrated Financial Management System. During past audits, we reported that the Agency's documentation for the system did not contain the level of detail necessary to construct tests of automated controls necessary for a financial statement audit. Agency management acknowledged that the IFMS data dictionary could be improved. However, management also believes that data dictionary enhancements would not be cost effective considering the system's maturity, and concurs with a recent Department of Treasury review which recommends that the Agency defer development of a detailed data dictionary until it is ready to transition to a new system. We will obtain and assess the Treasury review team's

analysis concerning documentation requirements, as a part of our fiscal 1999 financial statement audit. In addition, we will continue to participate as a consultant on the Agency's workgroup to replace the payroll system.

In addition to the above reportable conditions resulting from our audit of the Agency's financial statements, our office completed an audit to determine the adequacy of critical mainframe operating system software controls. We identified the following weaknesses:

- EPA is not maintaining and reviewing Authorized Program Facility (APF) libraries⁶ in a timely manner. Specifically, we identified libraries that no longer require APF authorization. Without effectively managing the contents of the APF, EPA management cannot be assured programs running in an authorized state will adhere to system integrity⁷ requirements or Agency integrity guidelines.
- EPA is not adequately controlling the number of users who have ALTER and/or UPDATE access capabilities to APF libraries. Specifically, we identified users that no longer needed this type of access to perform their current jobs. Also, we identified user IDs assigned to positions and not individuals. Without effective access controls to the APF, a knowledgeable user could circumvent or disable security mechanisms and/or modify programs or data files on the computer without leaving an audit trail.
- EPA is not maintaining Program Property Tables (PPT) or Exits. In addition, EPA is using nonstandard Supervisor Calls (SVCs). Full implementation of prior APF-related recommendations should resolve these weaknesses. Furthermore, because these deficiencies do not significantly put the operating system at risk, we only made suggestions for improving the PPT, SVC and EXIT controls.

Our office also conducted follow-up audits of physical and environmental information systems general controls at a number of EPA regions. The follow-up audits assessed the implementation of corrective actions to improve physical and environmental controls, thereby ensuring the security and reliability of regional computer facilities and data. We also evaluated the adequacy of approved security plans for regional general support systems. The following matrix summarizes continuing security concerns:

3 An operating system mechanism for identifying and specifically authorizing programs which are to process in an unrestricted or privileged instruction mode.

4 System integrity is the ability of the system to protect itself against unauthorized user access to the extent that security controls cannot be compromised.

Regional Follow-up Audits: Physical, Environmental, and Disaster Recovery Controls							
CRITICAL SECURITY CONTROLS	Region 1	Region 2	Region 3	Region 4	Region 5	Region 9	Cincinnati
1. Independent review of current security operations completed. (OMB A-130)	no	no	yes	no	yes	no	yes
2. Security Plan level of detail was sufficient to adequately address required subjects. (OMB A-130) ⁵	no	no	no	no	no	no	no
3. Contingency/disaster recovery plan existed and was acceptable. (OMB A-130, & NIST guides)	no	no	no	no	no	no	no
4. Security training was adequate. (OMB A-130 & Security Act of 1987)	no	no	no	no	no	no	no

Although we have issued separate audit memorandums containing our recommendations to correct these remaining deficiencies, we believe these matters are significant enough to warrant mention in this report because they relate to the Agency's financial statements. Specifically, general support systems, regardless of the regional location, support and help control access to EPA's financial systems. If general controls over EPA's regional general support systems are adequate, then these systems help provide reasonable assurance that the financial data, used to prepare the financial statements, is sufficiently protected from unauthorized access or abuse. Conversely, control deficiencies related to general support systems weaken the first line of defense and reduce the assurance which can be placed on the integrity of financial data. We will also report these continuing weaknesses to the Agency's Director for Information Resources Management.

Comparison of EPA'S FMFIA Report with Our Evaluation of Internal Controls

As required by OMB Bulletin 98-08, we compared EPA's Federal Managers' Financial Integrity Act (FMFIA or the Integrity Act) Report with our evaluation of the Agency's internal control

5 A security plan should include the following detailed information:

- description of security related controls used by the system,
- ❖ adequacy and effectiveness of those security controls,
- ❖ internal control weaknesses identified,
- ❖ controls planned to correct each identified weakness with milestone dates for their implementation,
- ! compensating controls, and
- ! standard operating procedures for subjects required by OMB A-130.

systems. For reporting under FMFIA, material weaknesses are defined differently than they are defined for financial statement audit purposes. OMB Circular A-123, "Management Accountability and Control" defines a material weakness under FMFIA as a deficiency that the Agency head determines to be significant enough to be reported outside the Agency. OMB Bulletin 98-08 defines a material weakness for financial statement audit purposes as a weakness in controls that creates a risk that errors, fraud or noncompliance in amounts material to the financial statements could occur and not be timely detected.

As a part of the fiscal 1998 Integrity Act process, the Agency reported the following three material weaknesses that relate to the Agency's financial statements.

- **Construction Grants Close Out.** Of the more than \$50 billion in construction grants awarded in the last 20 years, grants totaling \$6.3 billion remained to be closed out at the end of fiscal 1998. In 1992, EPA designated this area as an Agency weakness and in 1996 reclassified it as a material weakness due to the concern that lack of Agency-wide attention might result in the loss of resources to properly complete the program. In addition, there were concerns that millions of dollars in potentially ineligible program costs might not be available for reuse on other high priority state clean water projects. The Agency projects that it will close out all construction grants by 2002.
- **Grants Close Out and Oversight of Assistance Agreements.** Our audits have shown that Agency staff have not adequately managed assistance agreements. Agency project files lacked documentation to show that EPA monitored progress on the projects or required recipients to complete projects and submit the required close out documentation. This lack of oversight resulted in a significant backlog of assistance agreements to be closed out. As of the end of fiscal 1998, EPA reported that it had closed out 16,700 of the original 20,000 backlog of grants to be closed.
- **Information Systems Security Plans.** Our audits have found deficiencies in the Agency's information security planning. Information security programs must include the development and maintenance of information security plans, and a strategy to conduct management reviews. To date, this has not occurred. At risk, is the possible unauthorized access, use, modification or destruction of EPA information resources that could result from these vulnerabilities. The Agency is in the process of implementing corrective action strategies. We consider this weakness a Federal Financial Management Improvement Act noncompliance. The following section of this report discusses weaknesses in this area as they relate to the Agency's financial systems.

As a part of the Agency's Integrity Act process, the Agency did not identify and report material weaknesses in its financial statement preparation process. Also, the CFO's March 15, 1999, management representation letter to the GAO, OMB and Treasury, in conjunction with the Government-wide financial statement audit, did not identify weaknesses in the Agency's financial

statement preparation process. We believe the lack of identification and reporting of weaknesses in this area represents a material weakness in the Agency's Integrity Act process.

TESTS OF COMPLIANCE WITH LAWS AND REGULATIONS

We tested compliance with those laws and regulations that could either materially affect the financial statements or Required Supplemental Stewardship Information, or that OMB or we considered significant to the audit. Our compliance testing did not disclose any material misstatements to the financial statements as a result of noncompliance with laws and regulations. However, the objective of our audit, including our tests of compliance with applicable laws and regulations, was not to provide an opinion on overall compliance with such provisions. Accordingly, we do not express such an opinion. There are a number of ongoing investigations involving EPA's grantees and contractors which could reveal violations of laws and regulations, but a determination about these cases has not been made.

Federal Financial Management Improvement Act Compliance

As required by the Federal Financial Management Improvement Act (FFMIA), as a part of our audit, we assessed whether EPA's financial management systems substantially complied with Federal financial management systems requirements, applicable accounting standards, and the Standard General Ledger at the transaction level. In planning, performing and reporting on our tests of compliance, we followed OMB Bulletin 98-08, "Audit Requirements For Federal Financial Statements."

We found EPA was not in substantial compliance with the FFMIA requirements because of weaknesses in the Agency's financial statement preparation process. In addition, the following issues related to the Agency's financial management systems that were operational or under development, caused the Agency to be in substantial noncompliance with FFMIA as of September 30, 1998. Specifically, we found that approved security plans for eight financial or mixed financial systems did not comply with the requirements of OMB Circular A-130, "Management of Federal Information Resources," and management had not approved security plans for the remaining seven financial or mixed systems, as required by OMB Circular A-130. As a result, the Agency does not have reasonable assurance that existing controls would prevent unauthorized disclosure or manipulation of data, or the loss of data in the event of a disaster or accidental or intentional damage. For additional information concerning these security plan issues, please refer to Attachment 3.

Other Noncompliance Issues

We also identified the following noncompliance issue that did not cause a material misstatement to the financial statements, but is nonetheless significant. EPA is not complying with appropriation

law when making disbursements for grants funded with more than one appropriation. Disbursements for these grants are made using the oldest available funding (appropriation) first which may or may not be the appropriation that benefitted from the work performed. Thus, EPA is not complying with Title 31 U.S.C. 1301 which requires EPA to match disbursements to the benefitting appropriation. We have reported on this noncompliance issue in prior financial statement audit reports.

In addition, as previously noted, the Agency did not meet the Government Management and Reform Act's March 1 deadline for submission of its audited financial statements to OMB.

PRIOR AUDIT COVERAGE

During previous financial audits, weaknesses that impacted our audit objectives were reported in the areas of:

- recording unbilled Superfund oversight costs,
- accounting for and managing Superfund accounts receivable,
- accounting for and controlling property,
- analyzing Agency financial activities,
- recording accrued liabilities for grants,
- approving payments for interagency agreements,
- identifying, tracking and reporting EPA's environmental liabilities,
- recording revenue for Superfund state contracts,
- documenting EPA's Integrated Financial Management System,
- complying with federal financial management system requirements,
- accounting for payments for grants funded from multiple appropriations,
- reconciling the components of Superfund net position,
- identifying and allocating indirect costs,
- reviewing Agency fees, and
- allocating costs to the Superfund Trust Fund.

Attachment 4 summarizes the status of the prior audit report recommendations in each of these areas. Other sections of this report on internal controls and compliance with laws and regulations provide additional details on the current status of the Agency's corrective actions.

The Chief Financial Officer (CFO), as the Agency's Audit Follow-up Official, oversees EPA's follow-up on audit findings and recommendations, including resolution and implementation of corrective actions. For these prior audits, final action occurs when the Agency completes implementation of the corrective actions to remedy weaknesses identified in the audit.

We acknowledge that many actions and initiatives have been taken to resolve prior financial statement audit issues. We also recognize that the issues we have reported are complex, and require extensive, long-term corrective actions and coordination by the CFO with the General Counsel and with various Assistant Administrators, Regional Administrators and Office Directors before they can be completely resolved. A number of issues have been unresolved for a number of years. Our office will continue to work with the CFO in helping them to resolve these issues.

RECOMMENDATIONS

To improve the Agency's financial reporting processes, we are recommending the CFO:

- evaluate the current processes for preparing the annual financial statements, update procedures to reflect new accounting guidance and standards, and establish quality review processes to help ensure the preparation of timely, complete and reliable financial statements; and
- develop reports for the annual review of unliquidated obligations which highlight older obligations, require responsible officials to justify why unliquidated obligations exist if the period of performance has ended, and follow-up to verify that invalid obligations were deobligated.

To improve the security over EPA's financial systems, we are recommending the CFO:

- develop a remediation plan which -- (1) specifies resources, remedies, and intermediate target dates to bring the Agency's financial systems into compliance with applicable requirements, and (2) addresses the critical security controls outlined in this report.

Our report also contains recommendations related to other internal control and compliance issues we identified during this audit. These recommendations are contained in Attachments 2 and 3 of our final report and are addressed to the following senior management officials: Chief Financial Officer; Assistant Administrator for Enforcement and Compliance Assurance; Director, Grants Administration Division; Director, Financial Services Division; Assistant Administrator for Administration and Resources Management; and the Director, Office of Acquisition Management.

AGENCY COMMENTS AND OUR EVALUATION

In a memorandum dated August 16, 1999, the CFO responded to our draft report. In the response, she indicated that her office believes some of the issues we identified as material weaknesses and reportable conditions were not properly categorized. The CFO agreed with many of the recommendations and indicated corrective actions are planned or ongoing to implement

these recommendations. The CFO noted her office is committed to continued improvements in financial management with specific emphasis on improving the process that produces the Agency's financial statements. Management's goal is to prepare reliable, timely financial statements. The CFO appreciated the cooperation from our office over the past several months to resolve the outstanding issues. With respect to compliance with the Federal Financial Management Improvement Act, the CFO believes the Agency is in substantial compliance, and steps are being taken to remedy the deviations with the procedural requirements we noted. The Agency's complete response is included as Appendix II to our final report.

We will continue to support the Agency's efforts to improve its processes for preparing reliable, timely financial statements. We look forward to working with the Agency to bring about process improvements in financial practices, systems and controls for future financial statements. We have not changed the classification of the reported weaknesses, nor have we changed our conclusion about the Agency's noncompliance with FFMIA. The rationale for our conclusions is included in the appropriate sections of our final report.

RESPONSIBILITIES AND METHODOLOGY

EPA MANAGEMENT RESPONSIBILITIES

EPA's management is responsible for:

- preparing annual financial statements and Required Supplemental Stewardship Information;
- establishing and maintaining a system of internal controls; and
- complying with applicable laws and regulations.

OIG RESPONSIBILITIES

We are responsible for:

- auditing the financial statements to determine if they are free of material misstatements and presented fairly in accordance with Federal accounting standards, and
- evaluating related internal controls and testing compliance with applicable provisions of laws and regulations.

AUDIT METHODOLOGY

In order to fulfill our responsibilities, except as described in our opinion on the financial statements, we:

- examined on a test basis, evidence supporting the amounts and disclosures in the principal financial statements;
- assessed the accounting principles used and significant estimates made by management;
- evaluated the overall presentation of the financial statements;
- obtained an understanding of the significant internal control structure policies and procedures, determined whether they had been placed in operation, and assessed the level of control risk relevant to the following significant cycles, classes of transactions, and account balances:
 - Receivables and Collections
 - Disbursements and Operating Expenses
 - Payroll
 - Investments
 - Property
 - Budget and Obligations
 - Accounts Payable and Accrued Liabilities
 - Fund Balances
 - General Accounting and Financial Reporting
- gained an understanding of the significant internal control policies and procedures related to the Annual Stewardship Information;
- tested significant manual controls to determine whether the controls were effective;
- evaluated the adequacy of: (1) the general automated data processing control structure for backup and disaster recovery, (2) physical and environmental security controls, (3) regional security plans, and (4) the software maintenance processes affecting EPA's financial management systems;
- evaluated the adequacy of controls over critical operating systems libraries;
- evaluated the adequacy of security plans and disaster recovery plans for the Agency's financial and mixed financial systems;

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- evaluated the controls over EPA's technical support and maintenance contract for the Agency's core financial systems;
 - evaluated operational controls separate from other compliance reviews, as outlined in our multi-year plan to review ADP general controls which was endorsed by General Accounting Office representatives;
 - evaluated the adequacy of the accounts receivable systems documentation for the Integrated Financial Management System;
 - followed-up on findings and recommendations from previous audits that could materially affect the financial statements;
 - obtained an understanding of management's process for evaluating and reporting on internal controls and accounting systems, as required by FMFIA;
 - compared the material weaknesses reported in the Agency's FMFIA report to the material weaknesses we found;
 - tested compliance with applicable sections of laws and regulations that either materially affect the financial statements or that OMB or our office considered significant to the audit; and
 - performed sufficient tests to report whether EPA's financial management systems substantially comply with Federal financial management systems requirements, applicable accounting standards, and the Standard General Ledger at the transaction level.

Detailed system documentation was not available that would have allowed us to develop an understanding of the IFMS automated control structure and to test these controls.

The information presented in Management's Overview of EPA and EPA Programs is supplemental information required by OMB Bulletin 97-01, entitled "Form and Content of Agency Financial Statements." OMB Bulletin 98-08, "Audit Requirements for Federal Financial Statements," requires that we obtain an understanding of the internal controls designed to ensure that data supporting the measures are properly recorded and accounted for to permit the preparation of reliable and complete performance information. Our audit work in the area of performance measures was limited to comparing the financial information included in the overview with information contained in the principal financial statements.

Details of Audit Field Work

We selected statistical and non-statistical samples from EPA's detailed accounting records

supporting various financial statement amounts. We tested these sample transactions to determine if they were adequately supported by documentation and were recorded in accordance with internal control policies and procedures and applicable laws and regulations. We also reviewed other supporting documentation, such as worksheets and schedules, that the Agency used in preparing its financial statements. In addition, we applied certain analytical review procedures to account balances.

The financial management records and supporting documentation we reviewed were maintained by Financial Management Centers in Washington, D.C., Research Triangle Park, Cincinnati and Las Vegas; Financial Management Offices in EPA's regional offices; the Office of the Chief Financial Officer; various offices within the Office of Administration and Resources Management; and by Headquarters and regional program offices. To gain an understanding of established internal control procedures, and to evaluate these controls, we also interviewed personnel in these offices and reviewed applicable policies and procedures. In addition, we conducted a physical inventory of a sample of property items, and we observed the Agency's physical inventory of its property.

Our fieldwork for the audit was performed from May 29, 1998 through July 8, 1999. Except as previously discussed in this report, we conducted our audit work in accordance with: generally accepted auditing standards; the standards applicable to financial audits contained in the Government Auditing Standards (1994 Revision), issued by the Comptroller General of the United States; and OMB Bulletin No. 98-08, as amended January 25, 1999. These standards require that we plan and perform our audits to obtain reasonable assurance that the financial statements are free of material misstatement. We believe that our audit provides a reasonable basis for our opinions.

James O. Rauch
Assistant Inspector General for Audit
U.S. Environmental Protection Agency
July 8, 1999

ACRONYMS

ACRONYMS

ACPs	Area Contingency Plans
AFO	Animal Feeding Operations
ASHERA	Asbestos Hazard Emergency Response Act
ALAPCO	Association of Local Air Pollution Control Officials
AMI	Advanced Measurement Initiative
ANPRM	Advanced Notice of Proposed Rulemaking
AOC	Administrative Order on Consent
APGs	Annual Performance Goals
APO	Administrative Penalty Order
ASHAA	Asbestos School Hazard Abatement Act
BBDR	Biologically Based Dose Response
BCCP	Business Continuity and Contingency Planning
BEACH	Beaches Environmental Assessment, Closure, and Health
BECC	Border Environment Cooperation Commission
B&F	Buildings and Facilities
BRLF	Brownfields Revolving Loan Fund
BRS	Biennial Reporting Systems
CAA	Clean Air Act
CAFO	Concentrated Animal Feeding Operations
CAGs	Community Advisory Groups
CAMEO	Computer Aided Management of Emergency Operations
CBEP	Community Based Environmental Programs
CCAP	Climate Change Action Plan
CCL	Contaminant Candidate List
CDC	Centers for Disease Control
CEPPO	Chemical Emergency Preparedness and Prevention Office
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFCs	Chlorofluorocarbons
CFO Act	Chief Financial Officers Act of 1990
CHAD	Consolidated Human Activity Database
CI	Compression Ignition
CIPP	Critical Infrastructure Protection Plan
COOP	Continuity of Operations Planning
CSI	Common Sense Initiative
CSRS	Civil Service Retirement System
CTAC	Combustion Technical Assistance Center

CWA	Clean Water Act
CWSRF	Clean Water State Revolving Fund
CZARA	Coastal Zone Act Reauthorization Amendments
DBPs	Disinfection By-Products
DCIs	Data Call-Ins
DEIS	Draft Environmental Impact Statement
DOE	Department of Energy
DOJ	Department of Justice
DWSRF	Drinking Water State Revolving Fund
ECOS	Environmental Council of the States
EDA	Economic Development Administration
EJP	Environmental Justice Program
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-To-Know Act
EPM	Environmental Programs and Management
ETS	Environmental Tobacco Smoke
ETSD	Enterprise Technology Services Division
FACA	Federal Advisory Committee Act
FAS	Fixed Assets Subsystem
FASAB	Federal Accounting Standards Advisory Board
FEMA	Federal Emergency Management Agency
FERS	Federal Employees Retirement System
FFDCA	Federal Food, Drug and Cosmetic Act
FFMIA	Federal Financial Management Improvement Act
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FIFRA '88	1988 Amendments to FIFRA
FMFIA	Federal Managers Financial Integrity Act
FQPA	Food Quality Protection Act
FRM	Final Rulemaking
FRP	Facility Response Plan
FWPCA	Federal Water Pollution Control Act
FY	Fiscal Year
GLCPA	Great Lakes Critical Protection Act
GMRA	Government Management Reform Act of 1994
GPRA	Government Performance and Results Act of 1993
GS	General Schedule
GSA	General Services Administration

HABs	Harmful Algal Blooms
HAPs	Hazardous Air Pollutants
HCBD	Hexachlorobutadiene
HCFCs	Hydrofluorocarbons
HHS	Health and Human Services
HQ	Headquarters
HSWA	Hazardous and Solid Waste Amendments
HUD	Housing and Urban Development
HWIR	Hazardous Waste Identification Media and Process Rule
IAQ	Indoor Air Quality
IDEA	Integrated Data for Enforcement Analysis
IESWT	Interim Enhanced Surface Water Treatment
IG	Inspector General (also Office of Inspector General)
IHS	Indian Health Services
IM	Inspection and Maintenance
IR-4 Program	Inter-Regional Research Project Number 4
IRIS	Integrated Risk Information System
ITC	Interagency Testing Committee
IWI	Index of Watershed Indicators
LAN	Local Area Network
LDR	Land Disposal Restrictions
LEPCs	Local Emergency Planning Committees
LUST	Leaking Underground Storage Tank
MACT	Maximum Achievable Control Technology
MAIA	Mid Atlantic Integrated Assessment
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MIMS	Multimedia Integrated Modeling System
MMTCE	Million Metric Tons of Carbon Equivalent
MOA	Memorandum of Agreement
MPG	Miles Per Gallon
MPPRCA	Marine Plastics Pollution Research and Control Act
MPRSA	Marine Protection, Research and Sanctuaries Act
MSW	Municipal Solid Waste
NAAQS	National Ambient Air Quality Standards
NAFTA	North American Free Trade Agreement
NAPLs	Non-Aqueous Phase Liquids
NAREL	National Air and Radiation Environmental Laboratory
NCP	National Contingency Plan

NEPA	National Environmental Policy Act
NEPPS	National Environmental Performance Partnership Program
NGA	National Governors Association
NHAPS	National Human Activity Patterns Survey
NHEXAS	National Human Exposure Assessment Survey
NO _x	Nitrogen Oxide
NOAA	National Oceanic and Atmospheric Administration
NODAs	Notices of Data Availability
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPS	Nonpoint Source
NSR	New Source Review
NSR/PSD	New Source Review/Prevention of Significant Deterioration
NVFEL	National Vehicle and Fuel Emissions Laboratory
OAQPS	Office of Air Quality Planning and Standards
OAR	Office of Air and Radiation
OC	Office of the Comptroller
OCFO	Office of the Chief Financial Officer
OECA	Office of Enforcement and Compliance Assurance
OECD	Organization for Economic Cooperation and Development
OERR	Office of Emergency and Remedial Response
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPA	Oil Pollution Act
OPPT	Office of Pollution Prevention and Toxics
ORD	Office of Research and Development
OSLTF	Oil Spill Liability Trust Fund
OSPS	Outreach and Special Projects Staff
OSRE	Office of Site Remediation Enforcement
OSW	Office of Solid Waste
OSWER	Office of Solid Waste and Emergency Response
OTAG	Ozone Transport Assessment Group
OTR	Ozone Transport Region
OUST	Office of Underground Storage Tanks
OW	Office of Water
PALs	Plant-wide Applicability Limits
PBTs	Persistent Bioaccumulative Toxics
PCBs	Polychlorinated Biphenyls
PDD	Presidential Decision Directive
PM	Particulate Matter

PM _{2.5}	Fine Particulate Matter
PM ₁₀	Coarse Particulate Matter
PMN	Premanufacture Notice
PPA	Pollution Prevention Act
PP&E	Property, Plant and Equipment
PPAS	Personal Property Accountability System
PPGs	Performance Partnership Grants
PRO	Program and Research Operations
PRPs	Potentially Responsible Parties
PRTRs	Pollutant Release and Transfer Registries
PSD	Prevention of Significant Deterioration
PWS	Public Water System
PWSS	Public Water System Supervision
RBCA	Risk-Based Corrective Action
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RD/RA	Remedial Design and Remedial Actions
RED	Reregistration Eligibility Decision
RIA	Regulatory Impact Analysis
ROD	Record of Decision
RMPs	Risk Management Plans
RP	Responsible Party
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System
SEPs	Supplemental Environmental Projects
SERCs	State Emergency Response Commissions
SFFAS	Statement of Federal Financial Accounting Standard
SFIP	Sector Facility Indexing Project
SIPs	State Implementation Plans
SITE	Superfund Innovative Technology Evaluation
SPA	Shore Protection Act
SO ₂	Sulfur Dioxide
SOL	Statute of Limitation
SOS	Southern Oxidant Study
SPA	Shore Protection Act
SPCC	Spill Prevention Control and Countermeasures
SRF	State Revolving Fund
SSCs	Superfund State Contracts
S&T	Science and Technology

STAPPA	State and Territorial Air Pollution Program Administrators
STAG	State and Tribal Assistance Grants
SWAP	Source Water Assessment Program
SWTR	Source Water Treatment Rule
TEA-21	Transportation Equity Act for the 21st Century
TMDL	Total Maximum Daily Load
TRI	Toxic Release Inventory
TSCA	Toxic Substances Control Act
UAOs	Unilateral Administrative Orders
UIC	Underground Injection Control
UNECE	United Nations Economic Commission for Europe
USDA	U.S. Department of Agriculture
UST	Underground Storage Tank
UWAs	Unified Watershed Assessments
WCF	Working Capital Fund
WIN	Waste Information Needs
WIPP	Waste Isolation Pilot Plant
WMPT	Waste Management Prioritization Tool
WRDA	Water Resources Development Act
Y2K	Year 2000
1,3-BCP	1,3-Bichloropropne

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