



# U.S. Environmental Protection Agency



## **Fiscal Year 2002 Annual Report**

## MISSION

*The mission of the Environmental Protection Agency  
is to protect human health and the environment.*

### **EPA's purpose is to ensure that:**

All Americans are protected from significant risks to human health and the environment where they live, learn, and work.

National efforts to reduce environmental risk are based on the best available scientific information.

Federal laws protecting human health and the environment are enforced fairly and effectively.

Environmental protection is an integral consideration in U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade; and these factors are similarly considered in establishing environmental policy.

All parts of society—communities, individuals, business, state and local governments, tribal governments—have access to accurate information sufficient to effectively participate in managing human health and environmental risks.

Environmental protection contributes to making our communities and ecosystems diverse, sustainable, and economically productive.

The United States plays a leadership role in working with other nations to protect the global environment.

## STRATEGIC GOALS

### September 2000 Strategic Plan

1. Clean Air
2. Clean and Safe Water
3. Safe Food
4. Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces, and Ecosystems
5. Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response
6. Reduction of Global and Cross-Border Environmental Risks
7. Quality Environmental Information
8. Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems
9. A Credible Deterrent to Pollution and Greater Compliance with the Law
10. Effective Management

## MESSAGE FROM THE ADMINISTRATOR

I am pleased to provide the Environmental Protection Agency's FY 2002 Annual Report, which conveys a comprehensive view of the Agency's program and financial performance over the past fiscal year. I believe that the Congress and the American public will find this report helpful in assessing the Agency's success in protecting human health and the environment and in using taxpayer dollars wisely and effectively in this pursuit.

Much of the progress described in the report is a direct result of contributions by our federal, state, local, and tribal partners. Under the Clean Air Act, EPA and its partners continue to make important progress in reducing air pollution and protecting Americans—particularly children, the elderly, and people with respiratory ailments—from airborne health risks. Similarly, under the Clean Water Act and the Safe Drinking Water Act, the Agency and its partners have helped to restore and protect watersheds and aquatic ecosystems and to move us closer to our goal that all Americans have drinking water that is clean and safe to drink. Continued Superfund site cleanup and the job training and employment opportunities associated with Brownfields redevelopment have demonstrated the economic benefits of environmental improvement.

In the aftermath of the attacks of September 11, 2001, the anthrax outbreaks, and in light of continuing terrorist threats, I am proud of this Agency's efforts to meet its homeland security responsibilities, including improving our ability to respond to potential chemical and biological incidents and to promote the safety of our public water systems and of the chemical industry. Our EPA Homeland Security Strategic Plan, released in October, will guide our efforts in the years ahead. We look forward to working closely with the newly-created Department of Homeland Security in meeting our shared homeland security responsibilities.

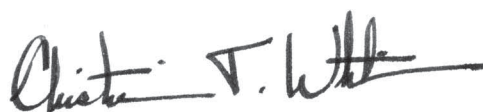
Internationally, under EPA leadership, a renewed program along the United States-Mexico border is taking shape to improve the quality of drinking water and the level of food safety, particularly among young children. As an outgrowth of this summer's World Summit on Sustainable Development in Johannesburg, South Africa, EPA is leading the development of children's environmental health indicators and efforts to reduce levels worldwide of indoor air pollution and lead and sulfur emissions from vehicle fuels.

In FY 2002 EPA made significant progress toward accomplishing the government-wide reforms of the President's Management Agenda. The Agency continues to be a leader in the area of e-government—modernizing and streamlining our administrative systems and actively participating in 14 of the federal government's e-gov projects to improve service efficiency and expand public access. EPA is revising the Agency's Strategic Plan and structuring it around fewer more outcome-oriented environmental goals that we feel will be more meaningful to the public and Congress. EPA's efforts to integrate our Strategic Plan and environmental performance with the Agency's budget process and workforce planning will enable us to make more informed policy decisions and ensure that Americans' tax dollars are well spent.

(continued on next page)

In addition, the Agency is working to develop a comprehensive set of environmental indicators, so that we can improve our understanding of current environmental conditions and ensure that environmental policy is producing measurable improvements in the condition of the environment. We will release the findings later this year in a draft report on the state of the environment.

As we look to the future, I want to thank the American people for their unwavering support of environmental protection. It is to them that we are ultimately accountable, and I know that by working together, we are certain to accomplish our goal of cleaner air, purer water, and better protected land for ourselves and for generations that follow.



Christine Todd Whitman  
Administrator



## MESSAGE FROM THE CHIEF FINANCIAL OFFICER

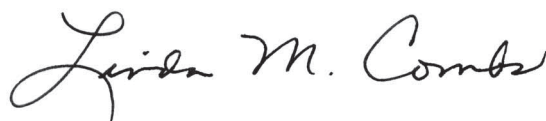
I am pleased to present to you EPA's Annual Report for FY 2002, a year in which the Agency accomplished much in protecting the environment and human health, and in managing public resources effectively and efficiently. This was a special year for all of us. We sustained all of the Agency's ongoing environmental protection efforts for cleaner air, purer water, and better protected land. At the same time, we were called upon to respond to new and complex challenges, including follow-up to the September 11 attacks and to multiple incidents of anthrax contamination. In FY 2002 EPA was also in the vanguard of support for the government-wide reforms outlined in the President's Management Agenda.

As a consolidated annual report, this document is designed to provide information about EPA's performance—what the Agency planned to work on in the past year, and the results of the work we did—along with our audited annual financial statements. We aim to produce a report of useful information for the American people as well as for our partners and stakeholders in state and tribal governments, other federal agencies, Congress and OMB, industry, and the environmental community.

This report itself exemplifies one of our most distinguished achievements. EPA has been described as a leader among federal agencies for integrating our planning and budgeting processes with information about our performance. Most recently, the Agency was honored by the President as one of seven finalists government-wide for the President's Quality Award for budget and performance integration. Thanks to the efforts of many across EPA, we have achieved more rational approaches to planning and budgeting; clearer strategic direction for the Agency; and annual reports that merit clean audit opinions and commendations for transparency—all of which place EPA in the forefront of government reform.

As always, we welcome your suggestions for ways to make EPA's Annual Report for FY 2003 more informative and interesting. We invite you to send comments by postal or electronic mail to the addresses provided on the back cover of this Report.

Thank you for your continuing interest in our work and your support for a clean environment and good health for all Americans.



Linda M. Combs  
Chief Financial Officer



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# EPA'S FY 2002 ANNUAL REPORT

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***Section I***

**Overview  
and Analysis**

# OVERVIEW AND ANALYSIS

## INTRODUCTION

The United States Environmental Protection Agency (EPA) was established in 1970 to protect human health and safeguard the environment. Since that time the Agency has worked continuously to ensure that the American people have air that is safe to breathe, water that is clean and safe to drink, and land that is protected from toxic chemicals and other hazards. Consistent with the Government Performance and Results Act (GPRA), in 1997 EPA established 10 long-term strategic goals that identify the environmental results the Agency is working to achieve and reflect the sound financial and management practices it intends to employ. These goals and the accompanying statement of objectives and strategies to achieve results constituted the Agency's first Strategic Plan under GPRA. In 2000, when the Agency released a revised Strategic Plan, the goals were modified slightly. Each fiscal year, as required under GPRA, the Agency develops an Annual Plan that translates these long-term goals and objectives into specific actions to be taken and resources to be used during the year. EPA is accountable to the American people for making yearly progress toward its annual and long-term goals and is required to assess that progress and report to Congress and the public. As a result, at the end of every fiscal year, the Agency develops an Annual Report that describes the year's programmatic and financial achievements.

This Annual Report is intended to provide a comprehensive assessment of the Agency's fiscal year (FY) 2002 progress in protecting human health and the environment and in using taxpayer dollars efficiently and effectively to do so. The Agency's FY 2002 performance results were achieved by using a mix of tools and approaches and by adjusting strategies in light of the performance assessments of previous years' accomplishments. Throughout the year EPA worked closely with its primary partners—states, tribes and other federal agencies—whose contributions were critical to many of the results described in the report.

EPA's FY 2002 Annual Report contains four main sections. First, this Overview and Analysis is intended to provide a broad view of EPA's performance and fiscal accountability over the past year.\* In discussing performance results, the Overview focuses on environmental achievements, particularly under EPA's Goals 1 through 6. The Overview also presents approaches and tools the Agency is using to improve managing for results, discusses significant factors that might affect future Agency operations, and highlights EPA's accomplishments in sound financial management.

Section II describes in greater detail the results that EPA—working with its federal, state, tribal, and local government partners—achieved under each of the Agency's 10 goals. It also presents progress in meeting the Annual Performance Goals established in EPA's FY 2002 Annual Plan and longer-range strategic goals and objectives identified in EPA's 2000 Strategic Plan. Section III discusses major management challenges EPA faced during the year and presents the Agency's approaches and accomplishments in addressing the challenges. Finally, Section IV summarizes EPA's financial activities and achievements and presents the Agency's annual financial statements, which have been independently audited by EPA's Inspector General.

## PERFORMANCE RESULTS

During FY 2002 EPA and its partners, building on FY 2001 accomplishments, made significant progress in protecting human health and the environment. The sections below highlight key environmental and program

\* The Overview and Analysis also addresses requirements for a "Management's Discussion and Analysis" of the annual financial statements included in EPA's FY 2002 Annual Report. Because the FY 2002 Annual Report consolidates a number of specific reports, some required components of the "Management's Discussion and Analysis" are presented in greater detail elsewhere in this report. In particular, EPA's mission statement and long-range goals appear at the front of the report and an EPA organization chart is included as Appendix C. For a discussion of the Agency's performance goals, objectives, and results, refer to Section II. Management accomplishments and challenges are discussed in Section III. Financial statements, along with a discussion of systems, controls, and legal compliance, are presented in Section IV.

results, summarize the Agency's performance in meeting its FY 2002 performance goals, and discuss some of EPA's current performance issues and concerns.

### **Environmental Accomplishments**

**Clean Air:** Under EPA's Clean Air goal, the Agency and its partners made significant progress in FY 2002 in reducing air pollution and protecting Americans—particularly children, the elderly, and people with respiratory ailments—from the health risks posed by air pollution. During FY 2002 EPA's state and tribal partners continued to work toward achieving or maintaining the National Ambient Air Quality Standards, and the Agency provided guidance, tools, and resources to help its partners meet their objectives. As a result, in FY 2002 more than 19 million Americans live in geographic areas newly designated by EPA as achieving clean air.<sup>1</sup> In FY 2002 as EPA promulgated 13 new standards for toxic air pollutants, its state and tribal partners implemented standards for toxic pollutants that were already in place.<sup>2</sup> In FY 2002 emissions of toxic air pollutants nationwide from stationary and mobile sources combined were reduced by an additional 1.5 percent, or 90,000 tons, from FY 2001 levels. This percentage represents a cumulative reduction of almost 33.8 percent, or about 2 million tons, from the 1993 baseline of 6 million tons.<sup>3</sup>

Power-generating utilities regulated under the market-based Acid Rain Program continue to achieve or exceed the required reductions for sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>). Through FY 2001 SO<sub>2</sub> emissions continued to decline from their high of 17 million tons in 1980 to 10.6 million tons. NO<sub>x</sub> emissions were reduced by 2 million tons nationally during the same period.<sup>4</sup>

Lastly, EPA issued emissions standards for several types of previously unregulated non-road engines and vehicles that contribute to ozone formation and/or particulate matter emissions, both which cause significant health concern. These standards apply to recreational vehicles, diesel marine engines, and large industrial spark-ignition engines. When the standards are fully

implemented, EPA expects an overall 72 percent reduction in hydrocarbon emissions from such engines, an 80 percent reduction in NO<sub>x</sub> emissions, and a 56 percent reduction in carbon monoxide emissions annually. These controls will improve visibility in national parks and wilderness areas and reduce exposure for people who operate, work with, or are close to these engines and vehicles. The annual human health benefits of this rulemaking include avoiding about 1,000 premature deaths, preventing 1,000 hospital admissions, reducing asthma attacks by 23,400, and preventing 200,000 days of lost work. In monetary terms, EPA estimates these health benefits to be worth roughly \$8 billion per year when the standards are fully implemented.<sup>5</sup>

**Clean and Safe Water:** In FY 2002 EPA continued its work to ensure that all Americans have drinking water that is clean and safe to drink; that the country's rivers, lakes, wetlands, aquifers, and coastal and ocean waters are healthy; and that watersheds and aquatic ecosystems are restored and protected. During FY 2002, 91 percent of Americans who obtained their drinking water from community water systems received drinking water that met all EPA health standards.<sup>6</sup>

EPA and its partners worked in FY 2002 to increase the security of the Nation's drinking water supplies and wastewater systems and protect them from potential terrorist attacks. Since November 2001 about 6,000 drinking water and wastewater plant managers and operators have received security training in assessing the vulnerabilities of their water supply systems, developing emergency and response plans, and communicating risks to communities. EPA expects that the drinking water supplies of more than 120 million people, or nearly half the population served by the Nation's community water systems, will be more secure as a result of the greater awareness fostered by this FY 2002 training. Lastly, in FY 2002 EPA developed a protocol for ensuring the safe disposal of wastewater from the cleanup of anthrax-contaminated sites.

**Safe Food:** Throughout FY 2002 EPA worked to ensure that the Nation's food supply is safe from risks posed by pesticide residues. Through its pesticide registration program, EPA made available to the agricultural community alternatives to currently used pesticides posing risks to human health and the environment. EPA registered an alternative to methyl bromide, 9 organophosphate alternatives, 11 bio-pesticides, and 4 conventional reduced-risk pesticides. The Agency also completed its first-ever cumulative risk assessment of a group of pesticides that have a common mechanism of toxicity or a common effect on the human body. This risk assessment evaluated how much risk a group of pesticides posed to human health by estimating human exposure to the pesticides through food, water, skin, and inhalation in residential and public settings in this country. By continuing to conduct cumulative risk assessments in FY 2003, EPA will be able to determine whether the risks posed by groups of similar pesticides meet the current safety standard required by the Food Quality Protection Act of 1996.

**Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces, and Ecosystems:** In FY 2002 EPA continued its work to reduce risk in communities, homes, workplaces, and ecosystems. In FY 2002 the Agency launched a national advertising campaign coupled with a major outreach effort, cosponsored by EPA and key medical, consumer, and community organizations, to protect the more than 15 million children who are exposed to secondhand smoke in their homes. In addition, in FY 2002 the Agency, working cooperatively with the chemical industry, established the Voluntary Children's Chemical Evaluation Program. Under this program 35 chemical manufacturers and 10 consortia have volunteered to sponsor and respond to risk assessments for 20 chemicals to which children have a high likelihood of being exposed. Further, during FY 2002 EPA, in partnership with states, facilitated the safe disposal of more than 10,000 transformers and 22,000 large capacitors containing a group of toxic chemicals known as polychlorinated biphenyls, or PCBs. Finally, in FY 2002 nearly

1,000 hospitals across the country enrolled in EPA's Hospitals for a Healthy Environment program, which seeks to cut the waste generated by hospital facilities in half and to eliminate the use of mercury, a toxic chemical.

**Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response:** To better protect this Nation's land, EPA continued to promote safe waste management, clean up hazardous waste sites, return abandoned or underutilized industrial and commercial properties to productive use, and respond rapidly and effectively to waste-related accidents and emergencies. During FY 2002 EPA's emergency response program supported the environmental cleanup at the World Trade Center (WTC) and the Pentagon. EPA employees monitored these locations for toxic and other air pollutants released from the burning of building contents (particularly from plastics and computers), assisted with waste management, advised on cleanup and decontamination, and provided information to the public. At the WTC EPA was the federal lead on environmental contamination. When outbreaks of anthrax bioterrorism occurred during October 2001, the Agency's response personnel led the effort to clean up and decontaminate six post offices in Florida and four congressional office buildings in Washington, DC. Success in this area depended on counterterrorism research, planning, and preparedness at the federal, state, and local levels.

In FY 2002 the Agency exceeded its performance goal of completing the cleanup of 40 Superfund sites by achieving "construction completes" at 42 sites on the Superfund National Priority List. In addition, the Brownfields Program leveraged more than \$4.8 billion in public and private investments and resulted in more than 21,000 jobs in cleanup, construction, and redevelopment from 1995 through June 2002. The primary goal of EPA's Brownfields Program is to provide states, tribes, and local governments with the tools and financial assistance they need to assess, clean up, and redevelop Brownfield properties. Since 1995, 3,807 properties have been assessed using federal funds. The job training and development

demonstration pilots have trained more than 1,200 participants, of whom more than 750 have obtained jobs.

***Reduction of Global and Cross-Border Environmental Risks:*** By working collaboratively with other countries, international organizations, and U.S. federal agencies, EPA provided U.S. leadership in addressing global environmental challenges. For example, EPA and the Government of Mexico—in cooperation with other federal agencies, the 10 states along the U.S.-Mexican border, and participating tribes—drafted a new “Border 2012” environmental program. This program will protect the environment and the 11.8 million people living near the border over the next 10 years by, among other things, providing potable drinking water and wastewater services, reducing the health and water quality risks posed by discarded tire piles and exposure to pesticides, and addressing the high rates of asthma in children living near the border. Further, at the World Summit on Sustainable Development in Johannesburg, South Africa, in August and September 2002, EPA announced new global partnerships to develop children’s environmental health indicators, reduce indoor air pollution, eliminate lead from gasoline, and reduce sulfur in vehicle fuels.

***A Credible Deterrent to Pollution and Greater Compliance with the Law:*** In FY 2002 EPA took significant actions to promote and monitor compliance with environmental laws as well as to enforce the laws as appropriate. During FY 2002 EPA helped small and medium-sized businesses, local governments, and federal facilities to understand and to comply with their environmental regulatory obligations through 10 Internet-based Compliance Assistance Centers.

During FY 2002 EPA concluded several enforcement settlements that significantly advanced environmental and human health protection. In FY 2002 EPA’s Enforcement and Compliance Assurance Program eliminated 266 million pounds of pollution from the air, water, and land, and compelled violating companies to invest \$56.4 million in environ-

mental improvements. For example, EPA reached a settlement to end the discharge of an estimated 30 million gallons a year of untreated wastewater contaminated with bacteria, pathogens, and other harmful pollutants into the Baltimore harbor. Also during FY 2002 a judicial action was concluded against a large brass fitting company in Alabama for violations of the Resource Conservation and Recovery Act. Illegal treatment of hazardous waste foundry sand at the facility resulted in lead-contaminated sand which the company then donated to city and county governments for use as fill on playgrounds and ballfields. The settlement will eliminate public contact with the sand. Under another settlement reached in FY 2002, a large energy utility in New Jersey will spend \$337 million to install state-of-the-art pollution controls to reduce its emissions of SO<sub>2</sub> by 90 percent and NO<sub>x</sub> by more than 80 percent, eliminating about 54,000 tons of air pollutants per year.

#### **Other Agency Accomplishments and the President’s Management Agenda (PMA)**

To successfully protect human health and the environment, EPA recognizes that it must develop and apply the best available science in carrying out its programs, function effectively as an organization, serve the public responsively, and use its resources wisely. For example, to improve its understanding of environmental risk as well as its ability to detect and address emerging environmental problems, in FY 2002 the Agency produced a modeling framework for estimating human exposure to pollutants through multiple environmental media (e.g., air, water, food) and multiple pathways. This framework will help the Agency in assessing and managing risks for a variety of pollutants, such as pesticides and toxic air pollutants and in protecting children and other susceptible subpopulations from harmful exposures. Further, during FY 2002 EPA developed two innovative computer software programs that allow industry and state and local decision makers to apply the best available science to (1) estimate the potential environmental impact of chemical process designs, and (2) evaluate the inhalation impact of metal finishing facilities on workers

and nearby residents. (Refer to Goal 8 for more information.)

In FY 2002 EPA also made significant progress in ensuring that it has safe, healthy, energy-efficient office facilities and laboratories to support its work and employees. During FY 2002 EPA completed the new state-of-the-art laboratory facilities in North Carolina and Kansas that will enable the Agency to better address the environmental scientific challenges of the 21st century. In January 2002 EPA's Massachusetts laboratory facility received a White House "Closing the Circle Award" for its environmental performance. Finally, EPA completed its relocation to the newly renovated buildings in the Federal Triangle complex in Washington, DC. This project began in 1993 and involved the design and renovation of 1.3 million square feet to support the work of 5,500 EPA employees. (Refer to Goal 10 for more information.)

EPA's senior managers recognize that managing the organization and its resources effectively is key to achieving long-term environmental results. The Agency's most significant accomplishments in this area occurred as it addressed the five areas identified in the President's Management Agenda (PMA)<sup>7</sup>, the Administration's strategy for improving the management and performance of the federal government. In FY 2002 the President's Office of Management and Budget (OMB) credited EPA for taking major steps forward in each of the five areas. OMB's PMA scorecard<sup>8</sup>—used to rate agencies on each initiative using a "score" of red, yellow, or green—designated EPA's progress as green in all five areas, marking EPA as 1 of the 2 agencies out of the 24 CFO agencies accomplishing this progress rating as of September 30, 2002.

**Improved Financial Performance:** This area of the PMA calls for reducing erroneous payments and ensuring that federal financial systems produce accurate and timely information to support operating, budget, and policy decisions. EPA made significant progress in FY 2002 in improving its financial performance by reviewing internal controls to assess the potential for making erroneous payments under

the State Revolving Funds managed by the water program, submitting the final FY 2001 financial statements on time with clean audit opinions, and issuing interim financial statements on schedule. The Agency also made great strides in the grants arena by issuing a grants competition policy, appointing a senior executive as the Agency Grants Competition Advocate, establishing an internal web site to facilitate implementation, and providing training on the policy. EPA also made significant progress in FY 2002 by correcting all four of its current material weaknesses—deficiencies in program policies, guidance, or procedures that might impair EPA's ability to achieve its mission—under the Federal Managers Financial Integrity Act.

***Budget and Performance Integration:***

This area focuses on linking resources to performance, using program evaluation in planning and budget decision-making, and improving accountability for performance. As one of the few agencies with an integrated, goal-based budget, EPA has long been a leader in budget and performance integration consistent with the PMA. In FY 2002 the Agency made good progress addressing the PMA criteria for this area, including developing a methodology to include social costs in the Agency's revised strategic plan. EPA's selection as a finalist for the President's Quality Award in the area of budget and performance integration distinguished the Agency government-wide.

***Expanded Electronic Government:*** This area seeks to make it easier for people to receive high quality government services through the Internet, while reducing the cost of delivering those services. In FY 2002 EPA was recognized by OMB as a model partner for its work under 14 e-government projects that use information technology to improve environmental decision making, eliminate redundant activities across multiple federal agencies, and achieve a more seamless, citizen-centered provision of services. EPA also was designated to be the managing partner and lead agency for the Online Rulemaking Initiative, which will make the rulemaking process more transparent to citizens and businesses.

### **Strategic Management of Human**

**Capital:** This area calls for ensuring that an agency's human capital strategy is aligned with its mission and organizational objectives. EPA uses its Human Resource Council, made up of senior managers from across the Agency, as a forum to discuss key human resource issues and provide direction for its human capital efforts. In FY 2002 EPA launched a Senior Executive Service Candidate Development Program, hired a group of highly skilled and educated EPA interns, and provided grants competition training for current EPA employees, all aimed at improving and enhancing EPA's human resources. The Agency also is aligning its human capital strategy with its revised Strategic Plan to help build the skills and competencies needed in its workforce to carry out the Agency's mission and to strengthen employee recruitment and retention.

**Competitive Sourcing:** This area of the PMA focuses on achieving greater efficiencies in program administration and effective competition between public and private sources. EPA has embraced the President's competitive sourcing initiative and is committed to introducing more competition into the activities EPA performs. By doing so, the Agency can improve how it protects the environment and human health. Competitive sourcing provides EPA with an opportunity to take a fresh look at how the Agency conducts operations, to reevaluate what EPA does as well as how it is done, to generate greater value for the taxpayer, and to introduce efficiencies to business processes. In FY 2002 the Agency completed all targeted conversions and 100 percent of the combined FY 2002/2003 competitive sourcing goal. EPA also launched an Agency-wide competitive sourcing team to develop recommendations for a strategic and sustainable approach to competitive sourcing. The team's report will include an analysis of Agency-wide, cross-cutting functions and activities that can be *bundled* as possible candidates for further study and competition with the private sector as well as a proposed framework for conducting competitive sourcing at EPA.

### **Summary of Performance Data**

In FY 2002 EPA met 48 (83 percent) of the Annual Performance Goals (APGs) for which data are provided in this report. (EPA identified 71 APGs in its FY 2002 Annual Plan; however, final results for 13 of these APGs are not available until FY 2003 or later, and will be discussed in future annual reports.) This reflects an improvement over the total percentage of goals met in FY 2001. The goal chapters in Section II include charts that present EPA's FY 2002 performance results and highlights of 4-year performance trends (FY 1999-FY 2002).

During FY 2002 final performance results data became available for six FY 2001 and two FY 2000 APGs. For example, the Agency met its FY 2001 goals for reducing greenhouse gas emissions and consumption of ozone depleting substances as well as SO<sub>2</sub> and NO<sub>x</sub> emissions. EPA can now report achievement of 46 (69 percent) of the 67 APGs for which it has FY 2001 data. For FY 2000 EPA can now report achievement of 58 (82 percent) of the 71 APGs for which it has performance data. Delays in reporting cycles and targets set beyond the fiscal year continue to affect three FY 2001 APGs, two FY 2000 APGs, and four FY 1999 APGs.

### **Performance Issues and Concerns**

Despite the best efforts of EPA and its partners, the Agency was not able to meet all planned targets for FY 2002. However, the Agency does not expect the shortfall in meeting these APGs to compromise progress toward achieving its long-range goals and strategic objectives. For 4 of the 11 missed APGs, EPA fell only slightly short of the targets and met the cumulative goals.

External factors contributed to seven of the missed APGs. For example, EPA had anticipated that 10 areas would be redesignated from non-attainment to attainment of the ozone standard in FY 2002, but fell considerably short of that goal. Several states previously revoked for the 1-hour ozone standard decided not to redesignate and instead wait for implementation guidance for the new 8-hour ozone standard. As long as issues remain concerning the move toward the

more protective 8-hour ozone standard, states are reluctant to request redesignation to the current 1-hour ozone standard.

EPA had anticipated that six areas would be redesignated to attainment of PM standards, but due to delays in the redesignation process for one state and the failure of a second state to submit a maintenance plan as scheduled, only four areas were redesignated to attainment. Despite these difficulties, EPA and states continue to work together to ensure progress in meeting the present ozone and PM standards while facilitating a smooth transition as new standards are implemented.

In addition, under its goal to achieve Credible Deterrent to Pollution and Greater Compliance with the Law, EPA anticipated a pollution reduction of 300 million pounds of pollutants due to enforcement settlement provisions, an estimated target based on the results of concluded enforcement actions from previous years. In FY 2002 only 266 million pounds of pollutants were reduced. The Agency does not establish quotas for the number of enforcement cases to be pursued, and estimated pollution reduction targets sometimes vary widely from year to year. EPA greatly exceeded the targets for pollution reduction in FY 2000 and FY 2001. The Agency continues to direct enforcement actions to maximize compliance and address environmental and human health problems.

One final example of external factors contributing to performance shortfalls is the Agency's leaking underground storage tank (LUST) program, which oversees cleanup of releases from underground storage tanks containing gasoline, other petroleum products, or hazardous substances. In 2002 EPA and its state partners completed 15,769 cleanups, for a total of nearly 284,000 since 1987. The FY 2002 target of 22,000 cleanups was not met due to the presence at many sites of the contaminate methyl tertiary butyl ether (MTBE), a gasoline additive, which has complicated cleanup and resulted in longer-than-expected cleanup times and higher-than-expected cleanup costs at LUST sites. MTBE contamination also led to the

reopening of previously closed sites in 12 states, thus deflecting resources from completion of other cleanup sites.

For some missed APGs, shortfalls cannot be attributed to a single reason. For example, under the Agency's Clean Water Goal, EPA missed its target for issuing National Pollutant Discharge Elimination System (NPDES) permits for major point sources. NPDES permits help reduce or eliminate discharges into the Nation's waters of inadequately treated wastewater from municipal and industrial facilities and of pollutants from urban stormwater, combined sewer overflows, and concentrated animal feeding operations. In FY 2002 permits issued covered only 83 percent of the targeted 90 percent of major point sources. While EPA is making progress to address the permit backlog, the missed target can be attributed to a number of factors including complexities associated with integrating individual permits with watershed and other planning processes.

In summary, EPA and its partners did not meet 10 of the 58 FY 2002 APGs for which performance data are currently available. These APGs are associated with 7 of EPA's 10 strategic goals. The Agency is considering the various causes of these shortfalls—legal issues, redirection or shortages of staff, continued complexities in cleanup processes, technological limitations, and other factors—as it adjusts APGs and program strategies for FY 2003 and sets priorities for 2004 and beyond. The performance data charts in Section II provide more complete information on missed targets and discuss Agency progress toward achievement of its strategic goals and objectives.

## IMPROVING RESULTS

In FY 2002 EPA strengthened its ability to achieve environmental results and measure its performance. The Agency's Managing for Improved Results Steering Group, composed of senior managers from across EPA, examined a number of current management practices—including priority-setting, planning and budgeting, and performance tracking and reporting—with an eye toward dramatically improving them. In



FY 2002 the group finalized a set of short- and long-term recommendations for improving EPA's results-based management processes. Many of the short-term recommendations were implemented in FY 2002 and have become the driving force behind development of EPA's FY 2004 budget and the 2003 revision of the Agency's Strategic Plan.

For example, in FY 2002 EPA institutionalized a process for developing its annual funding request by analyzing the previous year's results and engaging partners and stakeholders to identify priority areas. This process focused on the Agency's ability to fulfill commitments set forth in its Strategic Plan. It included a series of meetings on each of the 10 strategic goals with the Deputy Administrator and Chief Financial Officer to examine the Agency's performance and identify areas where EPA is not achieving its intended results. Taken together, the recommendations that the Results Group developed in FY 2002 will improve the alignment of day-to-day activities with strategic goals and objectives; improve accountability between EPA's headquarters and regional offices; strengthen the involvement of the Agency's 10 regions, states, and tribes in EPA's planning and priority-setting processes; and build the capacity of Agency managers and staff in managing for results.

In addition in FY 2002, 11 EPA programs, accounting for 20 percent of EPA's budget, were evaluated using the Administration's new Program Assessment Rating Tool (PART), which aims to identify opportunities for federal agencies to improve strategic planning, management, and results of its programs. The results of PART analyses, which showed that some programs have insufficient data, reinforced the need for EPA to continue its progress in identifying outcome-based goals and measures to better link its activities to actual improvements in health or ecosystem quality. In FY 2003 OMB plans to conduct PART reviews for another 20 percent of the Agency's programs during the FY 2005 budget formulation process.

As discussed below, in FY 2002 EPA strengthened other areas critical to its ability to

achieve long-term results: (1) collaborating with its partners, (2) conducting and applying the results of program evaluations, (3) tracking and measuring performance, (4) addressing environmental performance data issues, and (5) anticipating future trends and issues.

### **Strengthening Partnerships**

Many of the FY 2002 advances in environmental protection discussed in Section II would not have been possible without strong collaboration between EPA and its federal, state, local, and tribal partners. EPA continues to collaborate closely with states and tribes and is committed to strengthening vital partnerships with organizations such as the Environmental Council of the States (ECOS) and the Tribal Caucus. EPA envisions a stronger role for states and tribes in its annual planning and budgeting and has been striving to involve them early in these processes. In FY 2002 ECOS and tribal representatives participated in EPA's FY 2004 Annual Planning Meeting to present recommendations for the Agency's FY 2004 budget priorities. Similarly, during FY 2002 EPA regional offices consulted with states and tribes on overall EPA budget priorities and developing regional budget initiatives.

Apart from soliciting state input and participation in its annual planning processes, EPA worked closely with ECOS and other state organizations in FY 2002 as it began to revise its long-range Strategic Plan. In spring 2002 EPA solicited state views on the greatest challenges and opportunities in environmental and human health protection that the Agency and the Nation would likely face in the coming 5 to 10 years. These views were taken into account as the Agency developed options for a new strategic goal framework. The Agency's managers shared these goal framework options with ECOS, carefully considering the state feedback as they developed their recommendations for EPA Administrator Whitman. In July 2002, after the Administrator announced a new five-goal structure, EPA continued consulting with states to help determine more precisely the desired results to be achieved under each of the new strategic goals. EPA will continue to consult

extensively with states in completing the 2003 Strategic Plan and will carefully consider state priorities and issues as it develops the objectives, strategies, and approaches for achieving the Agency's new strategic goals.

EPA and several states, through an ECOS Ad Hoc Committee, conducted a joint system evaluation of the National Environmental Performance Partnership System (NEPPS) during FY 2002. The evaluation reviewed the accomplishments of Performance Partnerships and barriers to further improvement in results-based partnering with states. Recommendations from this evaluative process pull together and build upon other Agency efforts such as the Managing for Improved Results initiative, Indicators project, and the new EPA Innovations Strategy. The Agency will work with selected states in FY 2003 to model having the Performance Partnership Agreement (PPA) become the definitive operating agreement between the Agency and a state. A complementary effort to improve the value of Performance Partnership Grants (PPGs) is also underway with anticipated benefits in flexibility and reduced transaction costs to be realized in FY 2003 and beyond.

During FY 2002 EPA also continued to work closely with tribal governments to identify priorities, improve management of environmental issues, and help develop the capacity to carry out environmental programs in Indian Country. For example, in FY 2002 EPA developed a highly accessible database containing environmental profiles of 300 federally recognized tribes. This new database includes historical information, maps, geographic dimensions, inventories of regulated facilities, governmental structure, descriptions of wastewater and drinking water facilities, grant activities, and the status of environmental programs for each individual tribe. EPA also developed resource materials useful to both the tribes and the Agency in managing tribal grants and maintaining quality grant oversight. The Agency worked closely with authorized tribes to publish the brochure *How Water Quality Standards Protect Tribal Waters*, an informative tool for citizens, tribes, and other stakeholders.

During FY 2002 EPA continued to collaborate with other federal agencies on a wide variety of programs with environmental protection benefits. EPA developed and managed the WTC Multi-Agency Database, which provided decision makers from 13 government and private partner organizations at the WTC site with access to the results of environmental monitoring. In FY 2002 the Agency also developed a Compendium of Environmental Programs, an interactive Web-enabled database that catalogues and cross-references the environmental programs of 29 federal departments and agencies for use in their collaborative planning, implementation, program evaluation, and resource sharing.

In FY 2002 EPA teamed with the Department of the Army and the Department of Defense Logistics Agency to implement alternatives to ozone-depleting halons used in fire protection. EPA and its two Defense Department partners also began jointly investigating environmentally friendly options for destroying stockpiles of certain ozone-depleting substances. Also, because of a strong partnership between EPA and the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Natural Resources Conservation Service, as well as state and local governments in Maryland, Pennsylvania, and Virginia, EPA exceeded its commitment to reduce nonpoint source pollution and restore important forest areas near local waterways and the Chesapeake Bay. As a result EPA and its partners are ahead of schedule to restore 2,010 miles of critical riparian forest areas by 2010 and in FY 2003 will set new goals to extend this restoration.

Further, working with its federal partners in FY 2002, EPA was able to clean up five Superfund sites at federally owned facilities. EPA also entered into a partnership with the National Oceanic and Atmospheric Administration to promote coastal resource protection through smart growth in coastal areas. This collaboration provides developers, local governments, infrastructure providers, and others with information, technical assistance, and recommendations regarding best practices to

minimize the detrimental environmental impacts of growth in these sensitive areas.

### **Using Program Evaluation**

During FY 2002 EPA continued to build Agency-wide capability to effectively conduct program evaluations and analyses that inform management decisions, enhance organizational learning, promote innovation, and foster better environmental results. For example, in FY 2002 EPA conducted an evaluation to assess how effectively the Agency's Clean Air Program is using its resources to build tribal capacity for addressing air quality in Indian Country. The evaluation noted the success that EPA has had since 1995 in increasing the number of tribes participating in the Clean Air Program, but also recognized the significant remaining need for support, expertise, and coordination in Indian Country. The evaluation led to 30 recommendations for improving EPA's approaches to addressing air problems in tribal lands. EPA began implementing many of the recommendations in FY 2002 before the evaluation was complete, and several more will be implemented over time.

In an FY 2002 report, the General Accounting Office (GAO) recognized EPA's Compliance Assistance Program as one of five federal public information dissemination programs employing useful program evaluation strategies that could serve as a model for other federal agencies.<sup>9</sup> GAO also found that EPA's Compliance Assistance Program is the only program that had developed an approach for measuring the long-term health and environmental outcomes or benefits resulting from its program. In many cases, the positive environmental effects of complying with environmental requirements could be seen relatively quickly. To continue to promote such program evaluation efforts and help foster environmental program evaluation as a nationally recognized discipline, EPA launched a Web-based "gateway" in FY 2002, linking environmental program evaluation information within EPA and with information resources outside the Agency.<sup>10</sup> In FY 2003 EPA will continue to add relevant information to this site,

specifically focusing on new developments and new information from states, tribes, and the academic community.

### **Improving Environmental Indicators and Performance Measurement**

During FY 2002 EPA made significant progress in developing and improving environmental indicators and performance measures to measure and assess the Agency's results over the next several years. For example, in FY 2002 EPA began work on an Agency-wide Environmental Indicators Initiative. Environmental indicators are measurements of environmental conditions over time. Indicators help measure the state of air, water, and land resources; the pressures on them; and the resulting effects on ecological and human health. The purpose of the Environmental Indicators Initiative is to improve the Agency's ability to report on the status of and trends in environmental conditions and their impacts on human health and the Nation's natural resources. As a first step, in FY 2002 EPA collected currently available data and indicators and began drafting a report on the environment, which it plans to release for public comment in FY 2003.

In FY 2002 the Agency continued to increase the environmental outcome orientation of its annual performance goals and measures (APGs and PMs) that are used to plan and budget resources. EPA recognizes that to use its resources wisely, it should measure the results it is achieving with respect to environmental protection in terms of outcomes such as cleaner air and cleaner water. During FY 2002 the Agency increased the percentage of environmental outcome-oriented APGs tied to its annual budget by 7 percentage points while increasing the percentage of outcome-oriented PMs by 11 percentage points.<sup>11</sup> In addition, the Agency streamlined its APGs and PMs by consolidating two overlapping sets of goals and measures into a single, more easily understandable set for EPA's FY 2004 Annual Plan and Budget.

In FY 2002 the Agency also worked to develop improved performance measures in a

number of highly focused projects. For example, during FY 2002 new draft measures were developed for assessing the impact in future years of the Agency's planned implementation of provisions relevant to international technical assistance in the Stockholm Convention on Persistent Organic Pollutants (POPs). In this case measures of current activities, such as inventorying stockpiles of POPs, were tied to the more important externally reported measures of POPs stockpiles collected and destroyed. When appropriate, the Agency can use such external measures for external communication as well as management.

Finally, during FY 2002, in an effort to develop more useful measures, the Agency selected several performance measurement improvement projects to fund via an Agency-wide competition. Two examples of these projects include developing outcome PMs for EPA's Brownfields Program and evaluating a measure of the effects of harmful pesticides on bird populations.

### **Improving Data Quality**

During FY 2002 the Agency continued to improve its ability to detect and correct errors in environmental data, standardize reporting, and exchange and integrate electronic data and data quality information among its federal, state, and local data-sharing partners. In FY 2002 EPA completed work on an internal set of Information Quality Guidelines to help ensure that the information the Agency provides to the public is of the highest quality.<sup>12</sup> These guidelines were developed using an electronically enhanced public participation process, and they contain EPA's policy and procedural guidance for maximizing the quality of the information the Agency disseminates. The guidelines also contain new Agency procedures for individuals to seek and obtain correction of information collected by EPA that might not comply with these information guidelines. The information contained in the Performance Data Charts in *Section II - Performance Results* relative to data quality references can be found in

### *Appendix B - Data Quality for Assessments of FY 2002 Performance.*

This FY 2002 Annual Report is one of EPA's first publicly released documents to apply the guidelines to the data on which the Agency's performance is being measured. The report documents, to the extent possible, the quality of the Agency's performance data; makes transparent the methods of analysis and data manipulation; and references data sources. Most of this information is captured in Appendix B. That appendix also explains how EPA's program offices use well-established and robust Agency policies and procedures to ensure data quality, such as the quality system, peer review process, Inspector General's audits, and other error correction processes. Appendix B also discusses the limitations of the performance data contained in this report, as well as data lags in reporting progress toward some FY 2002 goals.

During FY 2002 EPA undertook several other initiatives to improve the quality of its environmental data. For example, EPA's Science Advisory Board Executive Committee began investigating commonly accepted means by which the scientific community communicates information, analyses, and findings. In addition, EPA's Science Policy Council began work on developing assessment factors for use in reviewing the quality of data submitted to the Agency by third parties. Lastly, EPA's National Health and Environmental Effects Research Laboratory developed and tested software to capture, sort, store, and retrieve the wealth of scientific data developed by EPA's research organizations.

### **Considering Future Trends**

During FY 2002 EPA continued to look to the future to identify potential new challenges and opportunities for human health and environmental protection. The Agency recognizes that in addition to addressing long-standing environmental protection issues, it must try to anticipate and plan for future developments. The future will be marked by increased rates of change and greater uncertainty about the responses of complex biological,

ecological, social, and political systems. EPA is exploring ways to keep pace with these developments by looking ahead to better understand potential threats, such as global warming. Further, the Agency and its partners increasingly recognize that many world developments are likely to present opportunities to further develop environmental protection efforts.

Population growth and the way resources are consumed to sustain this growth are altering the earth in unprecedented ways. The earth's population now exceeds 6 billion. Over the next 25 years this total will increase by nearly 2 billion, largely in developing countries. By 2025 an estimated 2.7 billion people will live in areas experiencing severe water scarcity, creating the potential for regional conflicts over water rights. In the United States, growth in the South and Southwest will pose water management problems such as substantial water and wastewater infrastructure maintenance, aquifer depletion, and surface water contamination. The expected unprecedented population growth will also affect the Agency's long-standing environmental concerns, such as air quality. Urbanization of undeveloped areas, for example, will likely increase demands for transportation, potentially leading to more vehicle miles traveled and increased emissions of pollutants.

Today's world is on the edge of a far-reaching industrial transformation. A number of recent technological developments and advances will pose new issues for human health and environmental protection. Scientists have deciphered the human genome and the genomes of many other organisms, including rice, the food most consumed throughout the world. A number of patents have been filed for a new type of technology where devices are built using single atoms and molecules; i.e., nanotechnology. EPA may need to examine the impact that nanotechnology might have on human health and the environment and also to explore opportunities to foster more environmentally benign technologies that use fewer resources and less energy. Production of industrial biotechnology products, such as

pharmaceuticals raised as crop plants, is growing and might present environmental and human health protection issues. In the area of research advances, scientists might soon be able to ascertain whether current droughts are a normal variation of the earth's weather patterns or an increasingly likely phenomenon due to the effects of climate change. To plan for the future, EPA and its partners must consider these and other technological and scientific advances and the implications they hold for environmental protection work.

During FY 2002, as part of its strategic planning work, EPA completed several efforts to assist managers and staff in adopting a longer-range, futures perspective and in applying their findings to planning activities. In May 2002 senior Agency managers met to discuss emerging issues in environmental protection. The managers focused on two topics, fuel cells and genomics, as examples of emerging technologies with significant implications for EPA's work. In addition, the Agency has been using the results of a Look-Out Panel, including interviews with leaders and experts outside the Agency on future challenges and opportunities facing EPA. This panel will also inform the development of EPA's 2003 Strategic Plan.

The National Advisory Council for Environmental Policy and Technology (NACEPT) provides independent advice to the EPA Administrator on a broad range of environmental policy, technology, and management issues. Earlier this year NACEPT completed a major report *The Environmental Future: Emerging Challenges and Opportunities for EPA*.<sup>13</sup> The report makes several overarching recommendations related to planning: create an ongoing scanning process that involves all major parts of EPA; support the ongoing work of EPA's Futures Network and provide additional training on environmental scanning, scenario development, and modeling; and incorporate futures analysis into EPA's strategic planning. EPA is considering how it will incorporate the findings of this report into its planning processes. In addition to these planning-related recommendations, there are more than 50 emerging challenges and opportunities.

These represent important environmental issues for the future that do not fit well with EPA's traditional roles. The Agency will encourage the programs and regions to consider the emerging challenges and opportunities identified in the report in their long-term planning and use them as a starting point for futures projects within their core work areas. As a result, these programs should be better prepared to respond to changing environmental conditions.

EPA intends to continue using innovative approaches and sound science to investigate complex interdisciplinary problems in environmental protection and to address them in its strategic planning. The Agency will need to expand its efforts to achieve interagency and international cooperation to address environmental issues on a global scale and will continue to rely on relationships with its federal, state, local, and tribal government partners and with its stakeholders to anticipate and address future environmental challenges.

## LOOKING AHEAD TO FY 2003

Over the next year EPA expects to make significant improvements in the use of performance and results information to inform the Agency's internal planning and decision making and to communicate to the public the environmental results it is achieving. During FY 2003 many of the recommendations of the Agency's Results Steering Group will be carried out for both near-term improvements and more far-reaching reforms to improve the way EPA manages for results. In FY 2003 the Agency will issue a revised Strategic Plan. Among other improvements, the Plan will contain a smaller set of more environmentally focused strategic goals and objectives. As recommended by the Results Steering Group, the Plan will set clear directions for the Agency, enable cross-Agency and cross-program planning, accommodate EPA program and regional office priority setting, and reflect input from EPA partners and stakeholders.

Finally, as mentioned earlier, in FY 2003 EPA plans to release a draft report on the environment. This report will use available

national environmental indicators data to describe the current status of environmental conditions and human health concerns. It will also address many of the public's frequently asked questions on the environment, and will reflect work being done by others, such as the H. John Heinz III Center for Science, Economics and the Environment, the EPA Science Advisory Board, and the National Research Council.

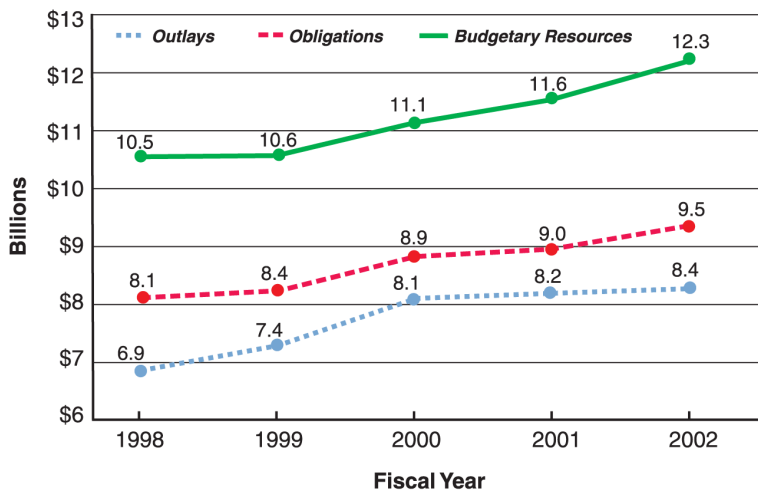
## FINANCIAL ANALYSIS

A central theme of the President's Management Agenda is the need for greater accountability in government. The financial statements provided in Section IV are one important aspect of Agency accountability in that they provide a snapshot of EPA's financial position at the end of the fiscal year. These financial statements are prepared in accordance with established federal accounting standards and audited by EPA's Inspector General. In addition to the financial statements, other views of how the Agency spends its resources are depicted in the discussion below.

### EPA Resources: 1998 to 2002

EPA's available resources from all appropriations and aggregate spending are depicted in the *EPA Financial Trends* chart.<sup>14</sup> Budgetary Resources consist of resources available each fiscal year largely from three sources: (1) yearly appropriations received from Congress, (2) unspent appropriations from previous years that the Agency has the authority to use in subsequent fiscal years, and (3) resources received from other sources such as collections of federal receipts that remit to the Agency and that the Agency may use for specific purposes. Obligations reflect legal authority and commitments to incur costs on the part of the government. For example, an obligation is recognized when the government awards a contract or a grant. The actual payment of the contract or grant may extend over several years depending on the terms and conditions. Outlays represent cash payments for goods and services received. The Statement of Budgetary

### EPA Financial Trends



Resources in Section IV provides more detail on the makeup of these resources.

### EPA FY 2002 Spending

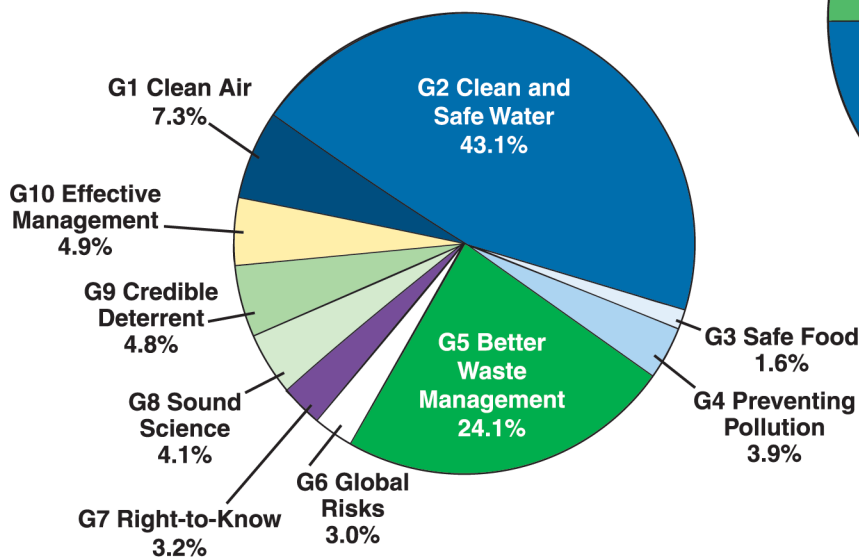
EPA spending can be depicted a number of different ways. The *Gross Costs by Goal* chart provides the percentage breakdown of EPA costs by each of the 10 strategic goals.<sup>15</sup> Costs are EPA's expenses for services rendered or activities performed whether from contractors, grantees, or EPA staff salaries. The difference between this graph and the Statement of Net Costs in Section IV is that *net costs* reflect a reduction for any related offsetting income such as Superfund cost recovery receipts. FY

2002 costs incurred to achieve the Agency's 10 goals total about \$8 billion.

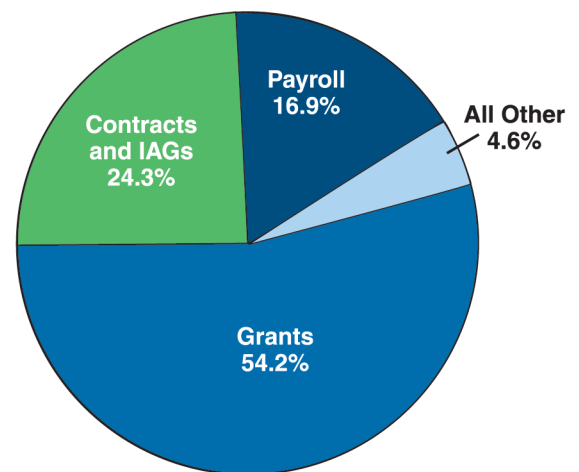
EPA's obligations and costs are largely for services performed outside the Agency. As illustrated in the *FY 2002 Cost Categories* chart<sup>16</sup>, more than 75 percent of EPA's costs are in the form of contracts or grants. EPA's costs are also incurred in the Agency's headquarters and regional offices, which are responsible for carrying out many of the Agency's programs.

Most of EPA's costs are associated with grant programs, and nearly half of the Agency's grants are awarded from two state revolving funds (SRFs). The Clean Water SRF (CWSRF) provides assistance for wastewater and other water projects, such as those dealing with nonpoint sources, estuaries, and storm water. The Drinking Water SRF (DWSRF) provides financing for improvements to community water systems to assist in complying with the Safe Drinking Water Act. The DWSRF also allows states to use grant funds for other activities that support their

### FY 2002 Gross Costs by Goal



### FY 2002 Cost Categories



FY 2002 Obligations by Goal (Dollars in Millions)													
Appropriations	G-1	G-2	G-3	G-4	G-5	G-6	G-7	G-8	G-9	G-10	Reim.	Other	Total
State & Tribal Assistance Grants	233	3,241	0	99	74	10	25	0	70	0	0	0	3,752
All Other	355	649	112	223	273	203	167	301	363	376	287	700*	4,009
Superfund	0	0	0	0	1,473	0	10	3	18	52	130	0	1,686
<b>TOTAL</b>	<b>588</b>	<b>3,890</b>	<b>112</b>	<b>322</b>	<b>1,820</b>	<b>213</b>	<b>202</b>	<b>304</b>	<b>451</b>	<b>428</b>	<b>417</b>	<b>700</b>	<b>9,447</b>
% of Total	6.22	41.18	1.19	3.41	19.27	2.25	2.14	3.22	4.77	4.53	4.41	7.41	100.00

NOTE: Actual costs are reflected in Section IV - Annual Financial Statements

\* The \$700 million represents an annual payment from the general revenue to the Hazardous Substance Superfund and transfers from other federal agencies.

drinking water programs. (See Section II, Goal 2, for more information on the SRFs.)

Funding for both revolving funds is awarded as grants to states and tribes, which then make loans to municipalities and other entities for construction of infrastructure projects, purchases of land or conservation easements, and implementation of other water quality activities. Additional funds from state match and leveraged bond proceeds expand the capital available in the SRFs to address priority water quality and public health needs, while loan repayments and earnings ensure funding for these activities far into the future. The flexibility and revolving nature of the SRFs have provided states with a powerful tool to apply needed funding toward their clean water and drinking water infrastructure needs.

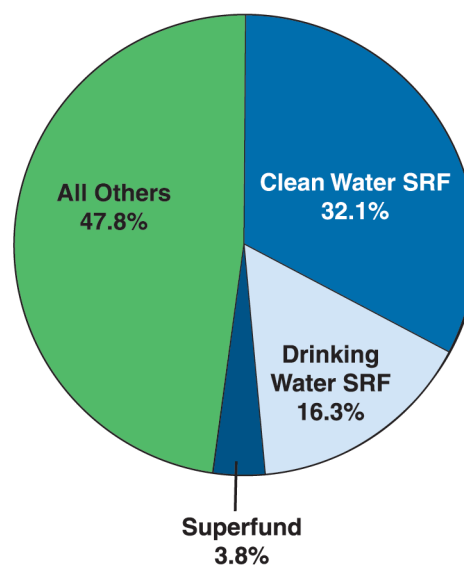
Through FY 2002 CWSRFs have turned \$19.5 billion in federal capitalization grants into more than \$38.7 billion in assistance to municipalities and other entities for wastewater projects. In recent years CWSRFs have directed about \$4 billion in annual loan assistance to wastewater projects. More than \$200 million of these funds are used each year to manage polluted runoff, making the CWSRF an effective tool in addressing nonpoint source problems.<sup>17</sup>

In a similar fashion the newer DWSRFs have turned \$4.4 billion in federal capitalization grants into more than \$5.1 billion in loan assistance, of which \$1.3 billion was provided in assistance in

FY 2002 alone.<sup>18</sup> States have also used more than \$694 million of their DWSRF grants to fund other programs and activities that enhance water system management and protect sources of drinking water.

The large dollar volume of these two grant programs is the reason that more than 43 percent of EPA's costs are incurred in connection with its Clean and Safe Water Goal, as depicted in the *Major Grant Categories* chart. Other grant programs include categorical assistance to states and tribes, consistent with EPA's authorizing statutes, and research grants to universities and other nonprofit institutions.

**FY 2002 Major Grant Categories**

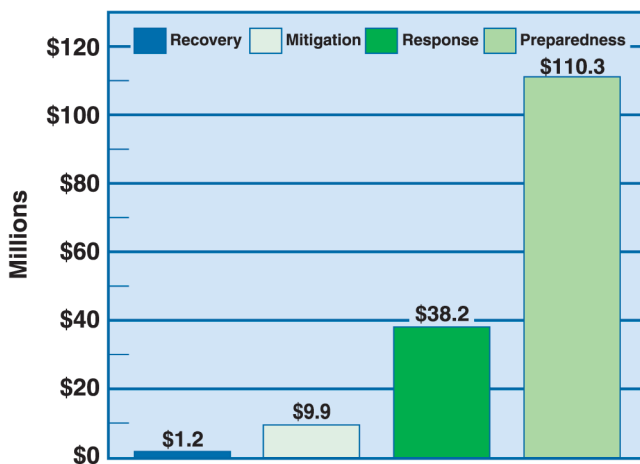




## Homeland Security Spending

EPA's actions in responding to homeland security concerns in the wake of September 11 are described in Section II. During FY 2002 the Agency obligated a total of \$159.6 million<sup>19</sup> for homeland security for the activities shown in the chart. Most of these resources have been devoted to *Preparedness*, which addresses many potential kinds of terrorism incidents. *Response* covers the immediate actions taken in response to the September 11 and other attacks. *Mitigation* is action taken to reduce the risk and potential damage caused by future events, and *Recovery* constitutes actions to rebuild and otherwise return to normal.

**FY 2002 Homeland Security Obligations**

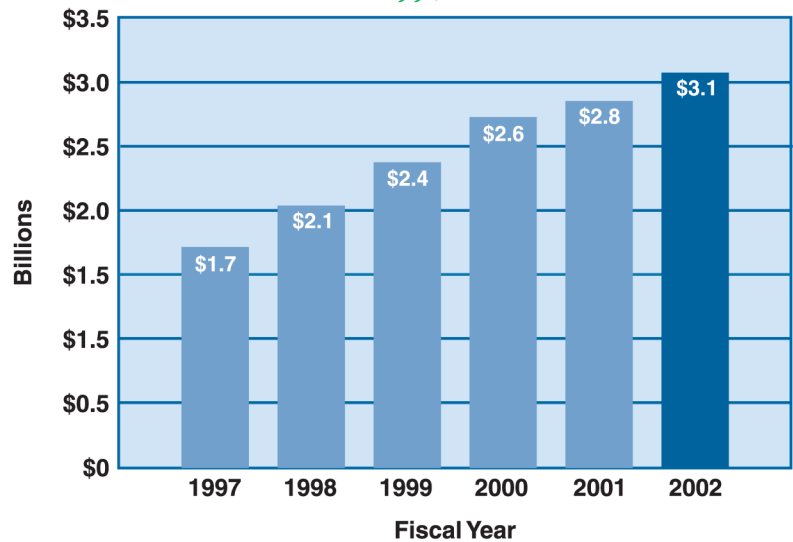


## Superfund Cost Recovery

The Superfund Program was established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (P.L. 96-510) to address public health and environmental threats from abandoned toxic waste dumps and releases of hazardous substances. CERCLA was subsequently amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 (P.L. 99-499).

Under CERCLA, Congress authorized the Superfund Program for 5 years (1981–1985) with funding of \$1.6 billion and established the

**Cumulative Superfund Trust Fund Cost Recoveries  
FY 1997–FY 2002**



Hazardous Substance Response Trust Fund, known as the Hazardous Substance Superfund (Trust Fund). Because of the long-term nature and expense of site cleanups, Congress reauthorized the Superfund Program by passing SARA. Under SARA the Superfund Program was authorized for an additional 5 years (1987–1991) and the Trust Fund's funding level was increased to \$8.5 billion. The Omnibus Budget Reconciliation Act, passed by Congress on November 5, 1990, extended the Superfund program for an additional 4 years (1992–1995) and increased the Trust Fund's funding level by \$5.1 billion. Although the Superfund Program has not been reauthorized, the program continues to operate based on annual congressional appropriations.

The Trust Fund was largely funded by excise taxes charged on crude oil and petroleum and on the sale or use of certain chemicals. Also, a corporate environmental tax (alternative minimum tax) was levied on corporations having a taxable annual income in excess of \$2 million. The Trust Fund's other revenue sources include cost recoveries, fines and penalties, interest revenue from investments, and general revenue appropriated by Congress. Superfund cost recoveries represent amounts recovered by EPA through legal settlements with responsible parties for site clean up cost incurred by EPA. Tax revenues provided the Trust Fund with most of its funding until the Superfund's authority to

tax expired on December 31, 1995. With the expiration of tax authority, current Trust Fund revenue is composed of the other revenues discussed above; appropriations from general revenues make up the largest funding source in this group.

Cost recovery continues to be a major revenue source of the Trust Fund. Cumulative cost recovery receipts since the inception of the program now total \$3.1 billion.<sup>20</sup>

### EPA Spending Related to Other Federal Agencies

As published in the Treasury Department's annual Statement of Receipts and Outlays, EPA's net outlays are relatively small in relation to those of other federal agencies and the federal government as a whole. A comparison of EPA with selected cabinet-level departments is displayed.

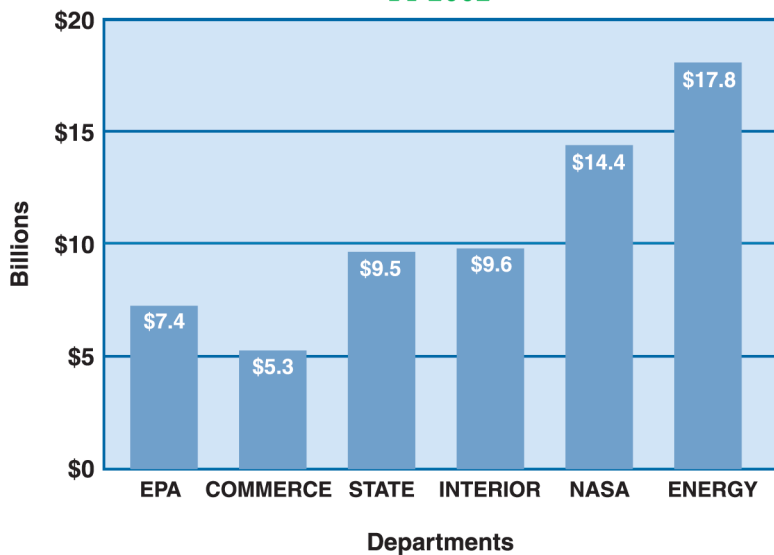
### Innovative Environmental Financing: The Advantage of Public-Private Partnerships

EPA leverages federal funds through several innovative environmental financing efforts that are mutually beneficial public-private partnerships, such as the Environmental Finance Program.

The Environmental Finance Program uses leveraging and partnerships to extend the reach and impact of its activities. The program has

three closely related components that provide financial outreach services to Agency customers and the regulated community. First, the Environmental Financial Advisory Board (EFAB), a discretionary federally chartered advisory committee, provides innovative ideas and recommendations to the EPA Administrator and EPA program offices on ways to lower costs, increase investments, and promote public-private partnerships with respect to environmental and public health protection. Second, the Environmental Finance Center (EFC) Network, consisting of nine university-based programs in eight EPA regions, delivers targeted technical assistance and partners with states, tribes, local governments, and the private sector to address how to cover the costs of meeting environmental standards. Through FY 2002 the EFCs had worked in 46 states delivering this assistance and sharing information among interested parties and throughout the network. (See Section II, Goal 10, for more information.) Third, the Environmental Financing Information Network, through its highly popular Web site and other means, catalogues the work and accomplishments of EFAB and the EFC Network and has provided full-text copies of more than 50 EFAB documents, summaries of over 350 environmental financing tools, and about 1,000 abstracts and case studies of valuable environmental finance documents.

**Government Net Outlays by Selected Department  
FY 2002**



## Notes:

1. Geographic Areas redesignated by EPA as in attainment of the NAAQS: *Billings MT Area, Redesignated to Attainment for CO*, 67 FR 7966, February 21, 2002. *Denver-Boulder CO Area Redesignated to Attainment for CO*, 66 FR 64751, December 14, 2001. *Great Falls Area MT Area Redesignated to Attainment for CO*, 67 FR 31143, May 9, 2002. *Klamath Falls OR Area Redesignated to Attainment for CO*, 66 FR 48349, September 20, 2001. *Lowell MA Area Redesignated to Attainment for CO*, 67 FR 7272, February 19, 2002. *Medford OR Area Redesignated to Attainment for CO*, 67 FR 48388, July 24, 2002. *New York-N. New Jersey-Long Island NY Area Redesignated to Attainment for CO*, 67 FR 54574, August 23, 2002. *New York-N. New Jersey-Long Island NY Area Redesignated to Attainment for CO*, 67 FR 19337, April 19, 2002. *Springfield MA Area Redesignated to Attainment for CO*, 67 FR 7272, February 19, 2002. *Waltham MA Area Redesignated to Attainment for CO*, 67 FR 7272, February 19, 2002. *Worcester MA Area Redesignated to Attainment for CO*, 67 FR 7272, February 19, 2002. *Cincinnati-Hamilton KY Area Redesignated to Attainment for Ozone*, 67 FR 49600, July 31, 2002. *Adams, Denver, and Boulder Counties; Denver Metropolitan Areas Redesignated to Attainment for PM-10*, 67 FR 58335, September 16, 2002. *Mohave County (part); Bullhead City AZ Area Redesignated to Attainment for PM-10*, 67 FR 43020, June 26, 2002. *Pinal and Gila Counties; Payson AZ Area Redesignated to Attainment for PM-10*, 67 FR 43013, June 26, 2002. *Ramsey County; (part) MN Area Redesignated to Attainment for PM-10*, 67 FR 48787, July 26, 2002. *AQCR 238: Marathon County: Rothschild Sub-city Area, Rib Mountain, Weston WI Area Redesignated to Attainment for SO<sub>2</sub>*, 67 FR 37328, May 29, 2002. *Central Steptoe Valley NV Area Redesignated to Attainment for SO<sub>2</sub>*, 67 FR 17939, April 12, 2002.
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The background of the page is a faded, grayscale image of a mountain landscape. In the foreground, there is a calm lake reflecting the surrounding scenery. The middle ground is filled with a dense forest of evergreen trees. In the background, majestic mountains with patches of snow rise against a light sky. The overall tone is serene and natural.

*Section II*

**Performance  
Results**

## GOAL 1: CLEAN AIR

The air in every American community will be safe and healthy to breathe. In particular, children, the elderly, and people with respiratory ailments will be protected from the health risks of breathing polluted air. Reducing air pollution will also protect the environment, resulting in many benefits, such as restoring life in damaged ecosystems and reducing health risks to those whose subsistence depends directly on those ecosystems.

### PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES

The Clean Air Act Amendments of 1990 (CAA) provide a nationwide framework for EPA and its partners and stakeholders to reduce air pollution through implementation of a variety of regulatory, market-based, and voluntary programs.<sup>1</sup> The results since 1990 have been impressive, not only because of the tons of pollution reduced or prevented, but also

#### SIX PRINCIPAL POLLUTANTS

Ozone (O<sub>3</sub>)  
Particulate Matter (PM)  
Carbon Monoxide (CO)  
Nitrogen Dioxide (NO<sub>2</sub>)  
Sulfur Dioxide (SO<sub>2</sub>)  
Lead (Pb)

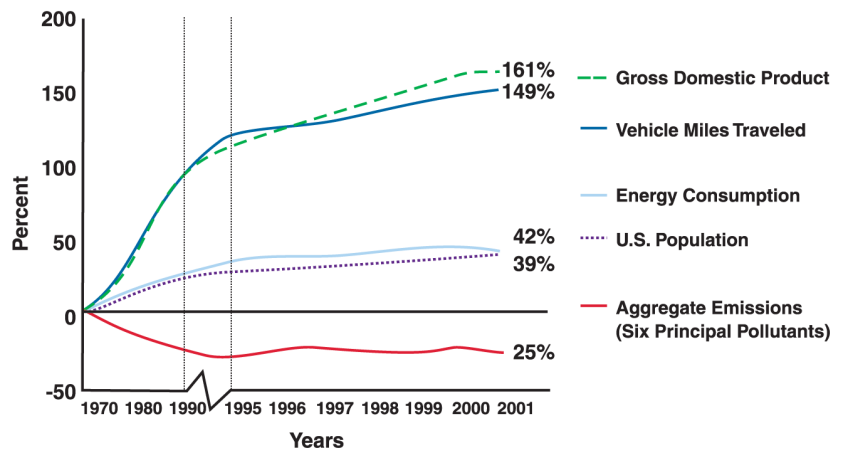
because the programs achieved the results in a cost-effective manner, with the monetized benefits far outweighing the economic impacts. The extent of the public health benefits also is striking. EPA estimates that on a daily basis the 1990 clean air programs, in combination with the results of the 1970 amendments to the Act, have prevented 600 premature mortalities, 2,000 chronic illnesses, and 75,000 lost workdays.<sup>2</sup>

To add to the substantial public health benefits being achieved, EPA is implementing programs that will improve public health in the future. For example, mobile source programs, such as

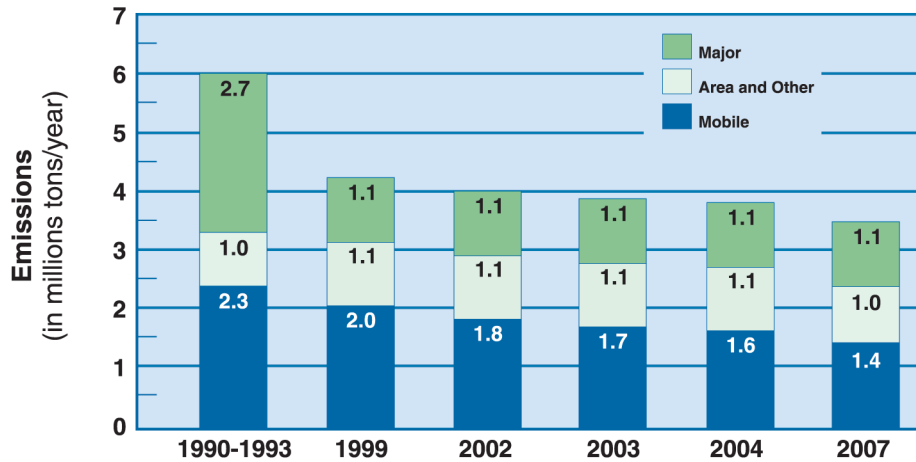
Tier 2 automobile standards and heavy-duty engine and diesel fuel standards, will help a significant number of additional areas meet the National Ambient Air Quality Standards (NAAQS) set to protect public health and improve air quality throughout the country.<sup>3</sup> These programs, when fully implemented, are projected to result in a combined reduction, on a daily basis, of about 30 premature deaths, 20 cases of chronic bronchitis, and 5,600 lost workdays.<sup>4</sup>

EPA and its partners and stakeholders were able to make steady progress toward the Clean Air Goal during a period of economic growth. Since 1970 their combined efforts have reduced aggregate emissions of the six principal pollutants covered by the NAAQS by 25 percent.<sup>5</sup> During the same time period, the U.S. Gross Domestic Product has increased by 161 percent; energy consumption, by 42 percent; and vehicle miles traveled, by 149 percent.<sup>6</sup>

#### Comparison of Growth Areas and Emission Trends



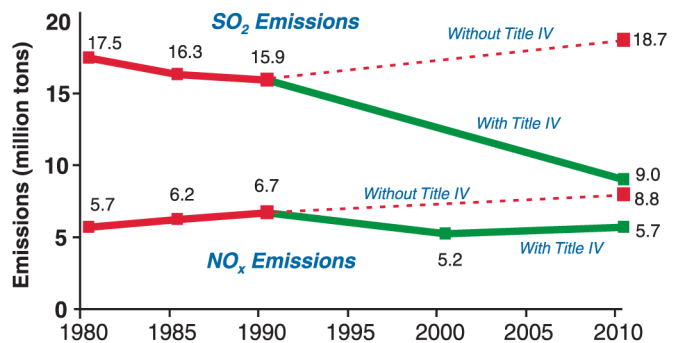
### Contiguous U.S. Contribution of Source Categories to Total Emissions For All Hazardous Air Pollutants



To date, federal rules covering stationary sources, vehicles, fuels, and engines have reduced air toxics by close to 34 percent from the 1993 baseline of 6 million tons. EPA estimates that annual air toxics emissions from stationary sources are nearly 1.5 million tons less in FY 2002 than in 1993 as a result of implementation of Maximum Achievable Control Technology (MACT) standards and 500,000 tons less than in 1993 as a result of implementation of federal mobile source rules. To further reduce air toxics emissions and risk, EPA will begin to focus increasingly on community-specific air toxics problems, working with partners and stakeholders to identify the risk reductions that matter most to local citizens. The National Air Toxics Assessment (NATA), published by EPA in FY 2002, provides a significant source of data to guide additional efforts on more community-based risk reduction activities for air toxics.<sup>7</sup> NATA also supports the need to put in place an air toxics monitoring network that will provide key data to EPA and communities as they develop additional risk reduction strategies and programs.

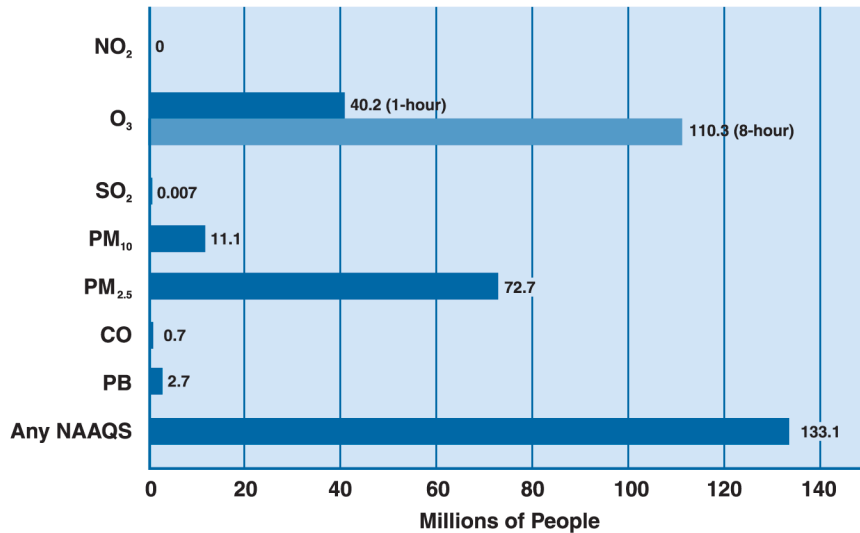
In FY 2000 EPA's Acid Rain Program met its strategic objective for nitrogen oxides (NO<sub>x</sub>) under Title IV of the CAA (42 U.S.C. 7651-7661f). The program now is on track to meet its 2010 objective for sulfur dioxide (SO<sub>2</sub>), which sets a permanent cap on nationwide power plant SO<sub>2</sub> emissions. As a result of efforts by utilities covered under the Acid Rain Program, SO<sub>2</sub> emissions continued to decline from 17.5 million tons in 1980 (baseline) to 10.6 million tons through 2001, while NO<sub>x</sub> emissions were reduced by 2 million tons nationally.<sup>8</sup>

### Reductions in SO<sub>2</sub> and NO<sub>x</sub> Emissions





### Population of Counties With Air Quality Concentrations Above the NAAQS Levels



Utility, industry, transportation, and other sources still emit more than 170 million tons of pollution into the air each year in the United States, and about 133 million people live in counties where monitored air in 2001 was unhealthy at times because of high levels of at least one of the six principal pollutants for which EPA has set NAAQS. The vast majority of areas that experienced unhealthy air did so because of one or both of two pollutants—ozone and particulate matter (PM).<sup>9</sup>

The Agency’s strategies to address the most persistent remaining challenges posed by air pollution in the 21<sup>st</sup> century include a combination of regulatory, market-based, community-based, and voluntary programs. In general, EPA will carry out those components of the strategies that address emissions from whole industries or from source categories such as power plants or motor vehicles, while state, tribal, and local partners will focus on area-specific problems. In implementing the strategies, EPA will continue to set priorities among activities based on health and environmental risk and will seek cost-effective and flexible solutions to reduce air emissions. The Agency also will use an active consultative process to identify solutions that best meet the collective needs of its partners and stakeholders.

The indicators used in the Clean Air chapter of EPA’s draft report on the state of the environment are particularly useful because they focus on longer-term progress and provide context for EPA’s FY 2002 annual performance results. The FY 2002 annual performance information complements this report and includes measures of the following:

- Populations attaining the NAAQS, which are based on air quality concentrations.
- Air toxics emission reductions, which are closely correlated to ambient air toxics concentrations.
- SO<sub>2</sub> and nitrogen dioxide emissions from utilities under the Acid Rain Program.

To address the significant remaining challenges, the President proposed the multi-pollutant Clear Skies legislation.<sup>10</sup> If enacted, the Clear Skies legislation will make considerable advances in reducing power plant emissions by requiring mandatory reductions of SO<sub>2</sub>, NO<sub>x</sub>, and mercury by an average of 70 percent from today’s levels.<sup>11</sup> EPA projects that by 2020 human health benefits alone will include 12,000 avoided premature deaths annually and total more than \$93 billion. Early human health benefits are very significant, including \$40 billion in annual benefits by 2010, and more than 6,000 avoided premature deaths. Visibility benefits in national parks and

### FY 2002 CLEAN AIR PROGRAM RESULTS

- SO<sub>2</sub> emissions continued to decline from 17.5 million tons in 1980 (baseline) to 10.6 million tons through 2001 and NO<sub>x</sub> emissions were reduced by 2 million tons nationally.
- EPA redesignated 17 areas, with a combined population of over 19 million people, to attainment for the NAAQS.
- Air toxics emissions from stationary and mobile sources were reduced by 33.8 percent or 2.02 million tons from the 1993 baseline of 6.0 million tons.
- EPA promulgated 13 additional MACT standards that when fully implemented will reduce air toxics emissions by 20.8 thousand tons annually. EPA also proposed 13 MACT standards.

Source: Air Quality Subsystem; Findings and Required Elements Data System; and Census Bureau, Department of Commerce. See Appendix B.

wilderness areas are projected to be \$3 billion annually.<sup>12</sup> Additional information about Clear Skies, including legislative language and region-specific information about air quality and health benefits, is available at <http://www.epa.gov/clearskies>.

As Congress considers the Clear Skies legislation, EPA and its state, tribal, and local partners will continue their progress toward attaining the NAAQS and maintaining air quality in areas that already meet the standards. EPA will develop implementation guidance for meeting the fine particulate (PM<sub>2.5</sub>) standard through expanding existing state, tribal, and local programs. EPA also will support states, tribes, and local governments in developing innovative, voluntary programs that will help areas achieve early reductions in pollution in the transition from the 1-hour to the 8-hour ozone standard. EPA will continue to implement existing vehicle, engine, and fuel standards, as well as develop additional regulations for selected mobile sources. In FY 2003 EPA expects to propose standards for

heavy-duty, non-road diesel equipment—including construction, mining, industrial, agricultural, and airport equipment. The resultant reduction in pollution will provide important health benefits and emission reductions similar to those of the recent on-highway, heavy-duty diesel rule.

### FY 2002 PERFORMANCE

EPA, working with its state, local, and tribal partners along with industry, small businesses, and other federal agencies, made significant progress in FY 2002 toward achieving the Clean Air annual goals. EPA's partners continued to carry out programs for achieving or maintaining the NAAQS, while EPA provided guidance, tools, and resources to help them meet their objectives. EPA continued work on MACT standards and issued mobile source standards for vehicles, fuels, and engines. When implemented, the standards will provide reductions in health and environmental risks from both air toxic and criteria pollutants. The Agency's air toxics work contributes to progress in addressing the management challenge in the air toxics program (*Refer to Section III, "Management Accomplishments and Challenges," for further discussion*). Lastly, EPA expects utilities regulated under the market-based Acid Rain Program to achieve or exceed the required reductions for SO<sub>2</sub> and NO<sub>x</sub>.

Selected FY 2002 Clean Air accomplishments that support ongoing EPA programs and initiatives are highlighted below.

#### Market-based Programs

EPA's Acid Rain Program, demonstrating the new efficiencies possible through electronic data management systems, implemented the On-line Allowance Tracking System (OATS).<sup>13</sup> The latest innovation in air emissions trading, OATS is a timesaving, system that enables participants in the SO<sub>2</sub> and NO<sub>x</sub> allowance trading markets to record trades directly on the Internet instead of submitting paper forms to EPA for processing. EPA's tracking systems, which currently hold allowances with a combined value of more than \$20 billion, record official SO<sub>2</sub> and NO<sub>x</sub>

### Ratio of Allowance Transfers Recorded Electronically (December 2001 through September 2002)



allowance transfers under existing emission cap and trade programs. Anyone anywhere in the world can participate in the allowance trading market, and hundreds of companies, brokers, and individuals are already engaged in online trading.

#### Air Quality Index (AQI)

EPA continued its strong leadership in providing real-time AQI data to the public through the AIRNow program. In FY 2002 the AIRNow program expanded real-time ozone data delivery from 38 to 43 states and increased the number of air quality forecast cities from 165 to 235. AIRNow reaches millions of readers and viewers through EPA's partnership with the Weather Channel, USA Today, and CNN. EPA also began receiving real-time PM<sub>2.5</sub> data and developed sample maps with the expectation of using these data in future forecasting efforts. As part of the PM<sub>2.5</sub> effort, the program went from no monitors reporting in FY 2001 to more than 170 at the end of FY 2002.<sup>14</sup>

Across the country, EPA offices are reaching out to state and local communities and tribes with information about air quality allowing people to take action to reduce risks when poor air quality is forecast. In New England, EPA implemented an intensive ozone outreach plan during one of the hottest Northeast summers ever. Smog alerts, based on predicted high ozone levels, were provided to children's camps, day care centers, school nurses, and other interested persons. EPA posted the ozone forecast map for the Northeast on the EPA web

site daily; targeted outreach to TV meteorologists, letting them know where to obtain AQI for their areas; and published the air quality forecast in New England newspapers.<sup>15</sup>

#### Mobile Sources

In 2002 EPA set emissions standards for several types of previously unregulated recreational vehicles, diesel marine engines, and large industrial spark-ignition engines. EPA expects that the standards, when fully implemented in 2020, will provide an overall 72 percent reduction in hydrocarbon emissions, an 80 percent reduction in NO<sub>x</sub> emissions, and a 56 percent reduction in carbon monoxide. As a result of reducing emissions of hydrocarbons and NO<sub>x</sub>, which contribute to ozone and PM formation, these controls will improve visibility in national parks and wilderness areas and reduce exposure for people who operate, work with, or are close to these engines and vehicles. The human health benefits of these standards include avoiding about 1,000 premature deaths, preventing 1,000 hospital admissions, reducing asthma attacks by 23,400, and preventing 200,000 days of lost work. In dollars, EPA estimates these health benefits to be worth roughly \$8 billion in 2030.<sup>16</sup>

EPA's voluntary Diesel Retrofit Program helps state and local agencies to retrofit old, dirty engines to make them run cleaner and to develop model programs to reduce emissions from idling engines. Diesel retrofit is a creative, non-regulatory way to reduce pollution from the existing fleet of engines that use diesel fuel.<sup>17</sup>

The Diesel Retrofit Program, which began just over 2 years ago, currently has commitments from partners in industry, states, and local governments, as well as major fleet owners/operators, to retrofit over 87,000 diesel engines. These retrofits will result in the elimination of about 26,000 tons of NO<sub>x</sub> and 12,000 tons of PM. To date, 60 projects have been established in 22 states across the country with 20 new commitments in FY 2002 alone.

EPA also issued the first certifications for engine families that complied with the Heavy-Duty Engine Consent Decree, which require engine manufacturers to meet the 2004 diesel engine standards by October 1, 2002.<sup>18</sup> These engines met EPA emission limits that are about 30 to 45 percent lower than previous engines of the same model.

### Research Contributions

Clean Air goal research provides a strong scientific basis for policy and regulatory decision making and explores emerging problem areas through a coordinated and comprehensive research program. Both EPA and its partners use the results of this peer-reviewed research in carrying out their programs.

EPA described the biological mechanisms that may underlie the reported effects of PM in the Utah Valley, where exposure data were collected before and after the closing of a local steel mill and again after it was reopened. This report correlates, for the first time, pulmonary effects to PM health outcomes observed in epidemiological studies. This information will strengthen the scientific basis for the reassessment of the PM NAAQS.

In FY 2002 EPA also provided critical information to environmental decision makers on the effects of PM on humans believed to be most susceptible to adverse effects, such as the elderly and those with lung disease. For example, state-of-the-art methods were used to measure the effects of exposure to concentrated ambient PM on various subpopulations of human volunteers and animals. These studies will help identify the components of PM producing

toxicity and other factors, such as existing disease, that may affect toxicity.<sup>19</sup>

In FY 2002 EPA published the peer-reviewed report, "*Health Assessment Document for Diesel Engine Exhaust*," which documents the public health implications of current exposure to diesel engine exhaust and further supports ongoing work in the areas of PM, particularly diesel exhaust.<sup>20</sup> The report states that long-term exposure to diesel engine exhaust is likely to be a lung carcinogen hazard to humans, as well as to have non-cancer effects on the respiratory system. The report also pinpoints diesel exhaust as a likely allergy and asthma trigger.

### Program Evaluation

Appendix A contains descriptions of program evaluations completed in FY 2002 that support the overall Clean Air Goal. No program evaluations focused specifically on FY 2002 performance.

## STATE, LOCAL, AND TRIBAL PARTNER CONTRIBUTIONS

State, tribes, and local agencies all play crucial roles in working with EPA toward the goal of cleaner air and contributed significantly to achieving the Agency's FY 2002 accomplishments. These EPA partners carry out extensive program implementation activities, including developing state implementation plans (SIPs) and tribal implementation plans (TIPs), permitting major and minor pollution sources, monitoring air quality, providing education and outreach, and carrying out compliance and enforcement activities. The EPA partners also identify and implement innovative ways to help reduce health and environmental risks in specific areas. Often these innovations are the catalysts for similar programs elsewhere. The contributions described are just a few of the innovative, area-specific approaches that EPA's partners initiated in FY 2002.

## State and Local Partner Contributions

The Hunts Point Cooperative Market in the Bronx, New York, is the site of the first operational anti-idling advanced electrification project in the country. The Hunts Point Market, in partnership with Sustainable South Bronx and the New York Power Authority, installed 28 truck electrification bays during Fall 2002. The Market delivers close to 80 percent of the New York metropolitan area's produce and 40 percent of the region's meat. Each day, while shipments are loaded and offloaded, hundreds of diesel vehicles idle, creating exhaust fumes that pose a serious health risk to the Hunts Point residential community of about 9,000 people. The truck/trailer anti-idling devices allow drivers to power cab/sleeper compartment climate control systems and appliances, as well as refrigerated trailer units, without running their engines. All idling emissions are eliminated while the electrification system is in use, and local air pollution impacts are traded off with emissions from the regional power system. At full operation, the 28 bays are expected to eliminate over 15 tons of NO<sub>x</sub>, 2,000 tons of carbon dioxide, and nearly a ton of toxic pollutants annually with the potential to cut fuel costs by more than \$3,000 and maintenance costs by more than \$1,500 annually per vehicle.<sup>21</sup>

In FY 2002 the City of Cleveland, Ohio, took charge of and expanded the Cleveland Air Toxics Pilot Project begun by EPA to show local, voluntary actions can play a significant role in improving the environment and protecting public health.<sup>22</sup> Cleveland plans to continue and expand many of the EPA projects, including replacing dirty off-road diesel equipment with cleaner diesel equipment, developing a local toxic emissions inventory, completing an anti-idling campaign for motor vehicles, expanding industry agreements to the entire auto refinishing and electroplating sectors, and supporting an effort to reduce indoor air pollution in city schools and to carry out a smoke-free home pledge drive. The Regional Transit Authority (RTA) is inaugurating 225 new buses that will use ultra-low-sulfur diesel fuel. The RTA already operates a number of environmentally friendly vehicles—buses that use

compressed natural gas and rail cars that run on electricity.<sup>23</sup>

In Boston in FY 2002 over 200 school buses will be fueled with ultra-low-sulfur diesel fuel. Over half the buses will be fitted with special pollution control devices that reduce emissions of PM by 90 percent. As a follow-up, EPA will monitor air quality at the bus depot before and after the retrofits to help quantify the local air quality benefit of the project. New England states have partnered with EPA to reduce PM and other emissions from diesel vehicles through retrofit efforts and anti-idling policies. As a result of state and EPA efforts, several major construction projects in New England will also require the retrofitting of diesel construction equipment to minimize emissions.<sup>24</sup>

In the Chicago metropolitan region, the Clean Air Counts Campaign<sup>SM</sup> convened a diverse group of stakeholders interested in working together to create voluntary strategies for attaining the NAAQS, while at the same time achieving community development goals. The Illinois EPA worked with the U.S. EPA to quantify the emission reduction potential of various strategies developed by stakeholders to determine what voluntary actions were needed. As a result of these efforts, 34 public and private organizations and 7 communities across the Chicago metropolitan area are implementing voluntary, measurable emission and energy use reduction programs. In FY 2002 the Campaign's accomplishments included 7 gas can exchange events throughout the metropolitan area, reducing 4 tons/year of volatile organic compounds (VOC); a lawn mower buyback program exchanging 180 two- and four- stroke mowers for rebates on electric and push mowers, reducing 1.5 tons/year of VOC; and a locomotive idling project on 7 switchers, saving 16,000 gallons of fuel/year/locomotive, and reducing 5 tons of NO<sub>x</sub>/year/locomotive and reducing 177 tons CO<sub>2</sub>/year/locomotive.<sup>25</sup>

In FY 2002 the Texas Commission on Environmental Quality and local environmental groups established a voluntary program to encourage early action to reduce levels of urban smog. Early 8-hour air quality plans are

developed through a compact between local, state, and EPA officials for areas that are in attainment of the 1-hour ozone standard, but are close to or monitor levels in excess of the 8-hour standard. The Early Action Compact plans, tailored to local needs and driven by local decisions, are designed to develop and implement control strategies, account for growth, and achieve and maintain the 8-hour ozone standard. This approach offers a way to achieve emission reductions earlier than required by EPA's expected 8-hour implementation rulemaking, while providing fail-safe provisions for the area to revert to the traditional SIP process if specific milestones are not met.<sup>26</sup>

### **Tribal Contributions**

In FY 2002 tribes continued to increase their capacity for carrying out air pollution programs. One of the most significant accomplishments in the Clean Air goal was the establishment of the National Tribal Air Association (NTAA).<sup>27</sup> NTAA's goals are to help tribes participate more effectively in air policy development and decision making, much like the State and Territorial Air Pollution Program Administrators (STAPPA) does for states and the Association of Local Air Pollution Control Officials (ALAPCO) does for local programs. NTAA will bring national representation to tribal air programs.

While many tribes are only beginning basic air quality assessments, attending training, developing inventories, and conducting preliminary monitoring, others are beginning to develop more advanced air programs. Four tribes—the Mohegan, Pequot, St. Regis Mohawk, and Gila River—are working toward adopting TIPs, which are similar to SIPs. Another 10 tribes have asked for and received eligibility determinations to implement parts of the CAA. In FY 2002 the Mohegan Tribe of southern

Connecticut submitted the country's first TIP. Once approved by EPA, this TIP will represent an important milestone in tribal air pollution control program development.

The Puyallup Tribe in the state of Washington established a diesel retrofit project for the tribe's school buses. Through this first-time project, the Puyallup will install advanced emission control technologies on about 20 to 30 buses in the fleet and will use ultra-low-sulfur diesel fuel, thereby reducing particulate levels in bus exhaust by more than 90 percent.<sup>28</sup>

### **ASSESSMENT OF IMPACTS OF FY 2002 PERFORMANCE ON FY 2003 ANNUAL PERFORMANCE PLAN**

Adjustments to the FY 2003 Annual Performance Goals (APGs) under Goal 1, which are documented in the FY 2004 President's Budget,<sup>29</sup> reflect FY 2002 performance. In particular, in FY 2002 EPA missed targets for several of the NAAQS APGs for different reasons, ranging from uncertainty among some states over how areas will be designated under the revised 8-hour ozone standard and under the new PM<sub>2.5</sub> standard, to underestimating the time states required to submit a redesignation request and receive approval. An additional reason some areas do not request redesignation is the loss of federal funding from the Congestion and Mitigation Air Quality Program. EPA and the Department of Transportation are jointly working on adjusting the funding formula to eliminate the current disincentive to request redesignation.

EPA will make adjustments to the FY 2003 targets where EPA and the states underestimated the time required to complete and submit a redesignation request and receive approval.

# Goal 1: Clean Air

## Summary of FY 2002 Annual Performance Goals

**2** Goals Met

**2** Goals Not Met

**3** Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 1:	\$588,190
Goal 1 Share of Total:	6.2%

### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 1 Costs:	\$588,808
Goal 1 Share of Total:	7.4%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs. Refer to page IV-10 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

**Strategic Objective: Reduce the Risk to Human Health and the Environment By Protecting and Improving Air Quality So That Air Throughout the Country Meets National Clean Air Standards By 2005 for Carbon Monoxide, Sulfur Dioxide, Nitrogen Dioxide, and Lead; By 2012 for Ozone; and By 2018 for Particulate Matter (PM). To Accomplish This in Indian Country, the Tribes and EPA Will, By 2005, Have Developed the Infrastructure and Skills to Assess, Understand, and Control Air Quality and Protect Native Americans and Others From Unacceptable Risks to Their Health, Environment, and Cultural Uses of Natural Resources.**  
 FY 2002 Cost (in thousands): \$463,012 (78.6% of FY 2002 Goal 1 Total Costs)

**Progress Toward Strategic Objective:** EPA, working with its state, local, and tribal partners as well as industry, small businesses, and other federal agencies, continues to make steady progress toward the National Ambient Air Quality Standards (NAAQS) objective. Since 1970 aggregate emissions of the six principal pollutants tracked nationally have been cut 25%. These emission reductions are a result of effective implementation of the Clean Air Act (CAA), as well as improvements in industrial technology, state and local initiatives, and goodwill and voluntary efforts on the part of the general public. During this same time period, the U.S. Gross Domestic Product increased 161%, energy consumption increased 42%, and vehicle miles traveled increased 149%. In spite of these impressive gains, there is still considerable work to be done with ozone and particulate matter as the 8-hour ozone and fine particulate (PM<sub>2.5</sub>) standards are implemented. Voluntary programs will help areas achieve early reductions as they transition from the 1-hour to 8-hour ozone standard. Implementation guidance will also be developed for the PM<sub>2.5</sub> standard. For carbon monoxide (CO), lead, and sulfur dioxide (SO<sub>2</sub>), there are few areas not monitoring clean air. For nitrogen dioxide (NO<sub>2</sub>), the country meets the standard.

APG 1	Reduce Ozone and Ozone Precursors	Planned	Actual
FY 2002	Maintain healthy air quality for 41.7 million people living in monitored areas attaining the ozone standard; certify 10 areas of the remaining 55 nonattainment areas have attained the 1-hour NAAQS for ozone, thus increasing the number of people living in areas with healthy air by 2.5 million. <b>Goal Not Met.</b> ➔ <b>Corresponds with FY 2002 NEPPS Core Performance Measure (CPM).</b>	41.7M 10 areas 2.5M	41.7M 1 area 326,000
	<b>Performance Measures</b>		
	- Tons of VOCs Reduced from Mobile Sources.	1,755,000	1,755,000
	- Tons of NO <sub>x</sub> Reduced from Mobile Sources.	1,319,000	1,319,000
FY 2001	Same Goal, different targets. <b>Goal Not Met.</b>	35.1M 5 1.9M	38.2M 3 areas 3.5M
FY 2000	Maintain healthy air quality for 33.4 million people living in 43 areas attaining the ozone standard. <b>Goal Met.</b>	33.4M	33.4M
FY 1999	Eight additional areas currently classified as non-attainment will have the 1-hour ozone standard revoked because they meet the old standard. <b>Goal Met.</b>	8	10 areas

**FY 2002 Result:** EPA maintained healthy air quality for 41.7 million people living in monitored areas attaining the ozone standard and certified 1 area of the remaining 55 nonattainment areas have attained the 1-hour NAAQS for ozone, thus increasing the number of people living in areas with healthy air by 326,000.

The Cincinnati area is composed of two parts, Kentucky and Ohio. The Kentucky part of the Cincinnati area was approved for redesignation to attainment in FY 2002, but the final approval of the Ohio part (1,514,000 population) did not occur in FY 2002 as originally planned. The Portland, Maine area (488,000) was expected to redesignate but violated the NAAQS in the summer of 2002 and

now does not meet the requirement of 3 years of clean air quality data. The remaining areas targeted for redesignation to attainment were the areas previously revoked for the 1-hour ozone standard. The states with these areas have chosen not to redesignate and wait for the implementation guidance for the new 8-hour ozone standard. If a state redesignated the area for the 1-hour standards, it would be required to have a maintenance plan for the area and would likely lose a portion of its Congestion and Mitigation Air Quality funding.

APG 2	Reduce Particulate Matter	Planned	Actual
FY 2002	Maintain healthy air quality for 3.4 million people living in monitored areas attaining the particulate matter (PM) standards; increase by 3.7 million the number of people living in areas with healthy air quality that have newly attained the standard. <b>Goal Not Met.</b> ↳Corresponds with FY 2002 NEPPS CPM.	3.4M 3.7M	3.4M 2.7M
	<b>Performance Measures</b>		
	- Areas redesignated to attainment.	6 areas	4 areas
	- Tons of PM-10 Reduced from Mobile Sources.	23,000	23,000
	- Tons of PM <sub>2.5</sub> Reduced from Mobile Sources.	17,250	17,250
FY 2001	Same Goal, different targets. <i>Goal Met.</i>	1.276M 60,000	1.189M 2.249M
FY 2000	Same Goal, different targets. <i>Goal Met.</i>	1.2M 60,000	1.2M 75,800
FY 1999	Deploy particulate matter 2.5 ambient monitors including mass, continuous, speciation and visibility resulting in a total of 1,500 monitoring sites. <i>Goal Met.</i>	1,500	1,110

**FY 2002 Result:** EPA maintained healthy air quality for 3.4 million people living in monitored areas attaining the PM standards and increased by 2.7 million the number of people living in areas with healthy air quality that have newly attained the standard.

EPA had expected six areas with a total population of 3.7 million to be redesignated to attainment for PM in FY 2002. Four areas were redesignated with a total population of 2.7 million. The status of the two additional areas is that (1) Aspen, Colorado redesignation will not be final until early FY 2003, and (2) Jackson County (Medford), Oregon will not redesignate until FY 2004 because the state did not submit the maintenance plan as scheduled.

APG 3	PM Effects Research	Planned	Actual
FY 2002	Provide data on the health effects and exposure to particulate matter (PM) and provide methods for assessing the exposure and toxicity of PM in healthy and potentially susceptible subpopulations to strengthen the scientific basis for reassessment of the NAAQS for PM. <b>Goal Met.</b>		
	<b>Performance Measures</b>		
	- Report on the effects of concentrated ambient PM on humans and animals believed most susceptible to adverse effects (e.g., elderly, people with lung disease, or animal models of such diseases).	1	1
	- Report on animal and clinical toxicology studies using Utah Valley particulate matter (UVPM) to describe biological mechanisms that may underlie the reported epidemiological effects of UVPM.	1	1
FY 2001	Same Goal, different targets. <i>Goal Not Met.</i>		
	<b>Performance Measures</b>		
	- Complete PM longitudinal panel study data collection and report exposure data.	1	1
	- Report on health effects of concentrated ambient PM in healthy animals and humans, in asthmatic and elderly humans, and in animal models of asthma and respiratory infection.	1	1
	- Final PM AQCD completed.	1	0
FY 2000	Same Goal, different targets. <i>Goal Met.</i>		
	<b>Performance Measures</b>		
	- Hold CASAC Review of draft PM AQCD.	9/30/00	9/30/00
	- Longitudinal Panel Study on exposure of susceptible sub-populations to PM.	1	1
	- PM Monitoring Study Data.	9/30/01	9/30/00
	- Baltimore Study on Response of Elderly to PM.	1	1
FY 1999	Identify and evaluate at least two plausible biological mechanisms by which PM causes death and disease in humans. <i>Goal Met.</i>	2	2



**FY 2002 Result:** To strengthen the scientific basis for reassessment of the NAAQS for PM, EPA provided data on the health effects of and exposure to PM and provided methods for assessing the exposure and toxicity of PM in healthy and potentially susceptible subpopulations. EPA has made significant progress in assessing the health effects of ambient PM. Through coordinated studies in the field (retirement homes in Baltimore and Fresno) and in the laboratory evaluating human subjects and animal models, investigators have ascertained that there are likely cardiovascular implications of PM exposure.

APG 4	Reduce CO, SO <sub>2</sub> , NO <sub>2</sub> , Lead	Planned	Actual
FY 2002	Maintain healthy air quality for 36.7 million people living in monitored areas attaining the carbon monoxide (CO), sulfur dioxide (SO <sub>2</sub> ), nitrogen dioxide (NO <sub>2</sub> ), and lead standards; increase by 16 million, the number of people living in areas with healthy air quality that have newly attained the standard. <b>Goal Met.</b> ↳Corresponds with FY 2002 NEPPS Core Performance Measure (CPM).	36.7M 16M	36.7M 16.5M
FY 2001	Same Goal, different targets. <b>Goal Not Met.</b>	31.1M 13.2M	36.3M 0.4M
FY 2000	Same Goal, different targets. <b>Goal Met.</b>	27.7M 1.1M	27.7M 3.41M
FY 1999	Certify that 14 of the 58 estimated remaining nonattainment areas have achieved the NAAQS for carbon monoxide, sulfur dioxide, or lead. <b>Goal Met.</b>	14	13

**FY 2002 Result:** EPA maintained healthy air quality for 36.7 million people living in monitored areas attaining the CO, SO<sub>2</sub>, NO<sub>2</sub>, and lead standards and increased by 16.5 million the number of people living in areas with healthy air quality that have newly attained the standard. EPA exceeded its target of 8 redesignations by 4, and its population target by an additional 500,000 people.

**Strategic Objective: By 2020, Eliminate Unacceptable Risks of Cancer and Other Significant Health Problems From Air Toxic Emissions for at Least 95% of the Population, With Particular Attention to Children and Other Sensitive Subpopulations, and Substantially Reduce or Eliminate Adverse Effects on Our Natural Environment. By 2010, the Tribes and EPA Will Have the Information and Tools to Characterize and Assess Trends in Air Toxics in Indian Country.**  
FY 2002 Cost (in thousands): \$105,133 (17.9% of FY 2002 Goal I Total Costs)

**Progress Toward Strategic Objective:** EPA is on track to meeting this objective. When all the Maximum Achievable Control Technology (MACT) rules are fully implemented in addition to efforts by states and industry, toxic emissions from large industrial facilities will decrease by 1.7 million tons, or 63%. EPA is making steady progress in reducing emissions and the associated health risks from air toxics by reducing toxic emissions from industrial sources and reducing emissions from vehicles and engines through new emission standards and cleaner-burning gasoline. EPA is also working extensively with the tribes to build capacity. Through FY 2002 EPA estimates, using the Emissions Modeling System for Hazardous Air Pollutants (EMS-HAP) modeling tool, air toxics emissions nationwide from stationary and mobile sources combined have been reduced by 33.5% from the adjusted 1993 levels. (Based on updated inventory data in the 1996 National Toxics Inventory (NTI), EPA has adjusted the 1993 baseline to 6.0 million tons.)

EPA issued the Integrated Urban Air Toxics Strategy in 1999 which identified the Hazardous Air Pollutants (HAPS) that pose the greatest threat in the largest number of urban areas and the area source categories that emit these pollutants. In 2002, EPA published the National Air Toxics Assessment (NATA) that lays the groundwork for developing the state, local, and tribal component of the overall toxics strategy. NATA will help EPA, states, local areas, and communities address emissions issues that are of concern to a specific area. EPA is beginning to provide information to states and communities through case examples, documents, web sites, and workshops on tools to help them in conducting assessments and identifying risk reduction strategies. This approach puts the tools in the hands of communities who are then able to prioritize risk concerns locally. As tribal capacity increases, they too will begin to benefit from the availability of these tools.

APG 5	Reduce Air Toxic Emissions	Planned	Actual
FY 2002	Air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 5% from 2001 (for a cumulative reduction of 40% from the 1993 level of 4.3 million tons per year). <b>Data Lag.</b> ↳Corresponds with FY 2002 NEPPS CPM.	5%	data available in 2004
FY 2001	Air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 5% from 2000 (for a cumulative reduction of 35% from the 1993 level of 4.3 million tons per year). <b>Data Lag.</b>	5%	data available in 2004
FY 2000	Air toxic emissions nationwide from both stationary and mobile sources combined will be reduced by 3% from 1999 (for a cumulative reduction of 30% from the 1993 levels of 4.3 million tons). <b>Data Lag.</b>	3%	data available in 2004
FY 1999	Reduce air toxic emissions by 12% in FY 1999, resulting in cumulative reduction of 25% from 1993 levels. <b>Data Lag.</b>	12%	data available in 2003

Goal 1 - Clean Air

**FY 2002 Result:** Air toxics emissions nationwide from stationary (major and area) mobile sources are estimated to have been reduced by 1.5% or 90,000 tons from 2001, for a cumulative reduction of 33.5% or 2,028,000 tons from the adjusted 1993 level of 6.0 million tons. EPA expects that final estimated data for FY 2002 will be available in 2004 when the 2002 NTI is completed.

**Strategic Objective: By 2005, Reduce Ambient Nitrates and Total Nitrogen Deposition to 1990 Levels. By 2010, Reduce Ambient Sulfates and Total Sulfur Deposition By Up to 30% From 1990 Levels.**

*FY 2002 Cost (in thousands): \$20,663 (3.5% of FY 2002 Goal I Total Costs)*

**Progress Toward Strategic Objective:** EPA's Acid Rain Program met its strategic objective under Title IV of the CAA Amendments in FY 2000 for nitrogen oxide (NO<sub>x</sub>) emissions and is on track to meet its 2010 objective for SO<sub>2</sub>, which sets a permanent cap on the total amount of SO<sub>2</sub> that can be emitted by power plants nationwide. As a result of efforts by utilities covered under the Acid Rain Program, SO<sub>2</sub> emissions continued to decline from 17.5 million tons in 1980 (baseline) to 10.6 million tons through 2001, while NO<sub>x</sub> emissions were reduced by 2 million tons nationally.

APG 6	Reduce SO <sub>2</sub> Emissions	Planned	Actual
<b>FY 2002</b>	<b>Maintain or increase annual SO<sub>2</sub> emission reduction of approximately 5 million tons from the 1980 baseline. Keep annual emissions below level authorized by allowance holdings and make progress toward achievement of Year 2010 SO<sub>2</sub> emissions cap for utilities. <a href="#">Data Lag.</a></b>	<b>5M</b>	<b>data available in 2003</b>
<i>FY 2001</i>	<i>Maintain annual reduction of approximately 5 million tons of SO<sub>2</sub> emissions from utility sources from 1980 baseline. Keep annual emissions below level authorized by allowance holdings and make progress towards achievement of Year 2010 SO<sub>2</sub> emissions cap. <a href="#">Goal Met.</a></i>	<i>5M</i>	<i>6.67M</i>
<i>FY 2000</i>	<i>5 million tons of SO<sub>2</sub> emissions from utility sources will be reduced from the 1980 baseline. <a href="#">Goal Met.</a></i>	<i>5M</i>	<i>6.3M</i>
<i>FY 1999</i>	<i>Maintain 4 million tons of SO<sub>2</sub> emissions reduction from utility sources. <a href="#">Goal Met.</a></i>	<i>4M</i>	<i>5.04M</i>

**FY 2002 Result:** EPA is on track to meet this goal. End-of-year 2002 data will be available in late 2003 to verify that an annual SO<sub>2</sub> emissions reduction of approximately 5 million tons from utility sources has been maintained or increased during 2002, making progress toward achievement of the year 2010 SO<sub>2</sub> emission cap for utilities. (Annual progress in SO<sub>2</sub> emission reductions under the Title IV Acid Rain Program is measured and reported on a calendar year, not fiscal year, basis.)

**FY 2001 Result Available in FY 2002:** In calendar year 2001, SO<sub>2</sub> emissions for all Title IV affected utility units totaled 10.63 million tons, representing an annual emission reduction of more than 6.5 million tons from the 1980 baseline. In 2001 SO<sub>2</sub> emissions dropped by approximately 5%, or 570,000 tons, from 2000 levels.

APG 7	Reduce NO <sub>x</sub> Emissions	Planned	Actual
<b>FY 2002</b>	<b>Two million tons of NO<sub>x</sub> from coal-fired utility sources will be reduced from levels that would have been emitted without implementation of Title IV of the Clean Air Act Amendments. <a href="#">Data Lag.</a></b>	<b>2M</b>	<b>data available in 2003</b>
<i>FY 2001</i>	<i>Two million tons of nitrogen oxides (NO<sub>x</sub>) from coal-fired utility sources will be reduced from levels that would have been emitted without implementation of Title IV of the Clean Air Act Amendments. <a href="#">Goal Met.</a></i>	<i>2M</i>	<i>2M</i>
<i>FY 2000</i>	<i>Two million tons of NO<sub>x</sub> emissions from coal-fired utility sources will be reduced from the levels before implementation of Title IV of the Clean Air Act Amendments. <a href="#">Goal Met.</a></i>	<i>2M</i>	<i>2M</i>
<i>FY 1999</i>	<i>Maintain 300,000 tons of NO<sub>x</sub> reduction from coal-fired utility sources. <a href="#">Goal Met.</a></i>	<i>300,000</i>	<i>420,000</i>

**FY 2002 Result:** EPA is on track toward this goal of maintaining or increasing the annual NO<sub>x</sub> emission reduction goal of 2 million tons from levels that would have been emitted without implementation of Title IV of the CAA Amendments.

**FY 2001 Result Available in FY 2002:** Program achieved goal of reducing annual NO<sub>x</sub> emissions from coal-fired utility sources by 2 million tons from levels that would have been emitted without implementation of Title IV of the CAA Amendments.

## Notes:

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## GOAL 2: CLEAN AND SAFE WATER

**All Americans will have drinking water that is clean and safe to drink. Effective protection of America's rivers, lakes, wetlands, aquifers, and coastal and ocean waters will sustain fish, plants, and wildlife, as well as recreational, subsistence, and economic activities. Watersheds and their aquatic ecosystems will be restored and protected to improve public health, enhance water quality, reduce flooding, and provide habitat for wildlife.**

### PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES

The quality of the Nation's surface waters and drinking water supplies has improved dramatically in the 30 years since the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA) were enacted. However, despite tangible improvements in the quality of the Nation's waters, serious water pollution and drinking water problems remain. With respect to drinking water, although 91 percent of the population served by community water systems received water that met all health-based standards,<sup>1</sup> states, tribes, and public water systems will need increased implementation assistance to meet the 2005 target of healthy drinking water for 95 percent of the population.<sup>2</sup> With respect to surface water quality, in FY 2001 states reported that more than 80 percent of assessed waters in 510 watersheds met all water quality standards. This is an increase from 501 watersheds in 1998, but it may not be at the rate needed to meet the FY 2003 goal of 600 watersheds.<sup>3</sup> In FY 2002 the Agency exceeded its targets for pounds of pollution prevented from entering waterways as a result of states and EPA issuing National Permit Discharge Elimination System (NPDES) permits, which implement the effluent guidelines developed by the Agency. Since FY 2000 state and EPA programs have protected waterways from 13.5 million pounds of toxic pollutants, 715.7 million pounds of conventional pollutants, and 1,200 million pounds of non-conventional pollutants.<sup>4</sup> Despite these achievements, without improved effectiveness of drinking water and clean water programs, there is the risk of losing some of the

water quality improvements achieved over the past 30 years.

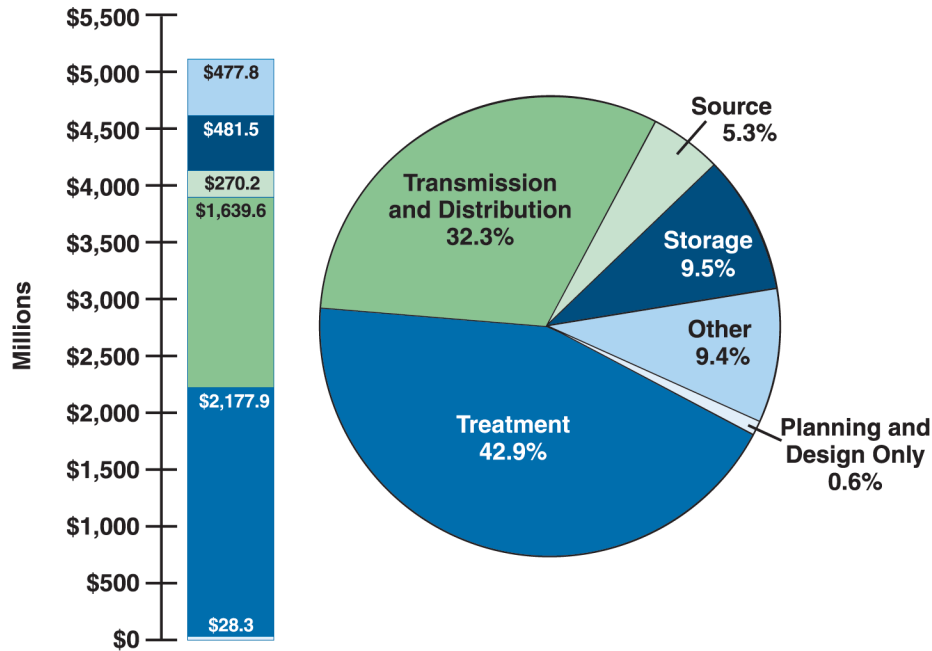
A report on the state of the environment, which EPA plans to release in draft during FY 2003, features two of EPA's geographically-based water programs, the Great Lakes and Chesapeake Bay, that are setting the pace in developing and using environmental indicators to track the condition of these waters, to make management decisions, to evaluate programs, and to inform joint work with states, tribes, and stakeholders on priorities and commitments. The report includes indicators and descriptions of available data and efforts under way to improve the quality of data on drinking water safety, the condition of recreational waters, the condition of waters supporting fish and shellfish propagation, and the overall condition of surface waters. The report also uses indicators presented in *EPA's FY 2002 Coastal Condition Report*, a groundbreaking report that integrates a broad range of data from a variety of sources into a coherent picture of the environmental quality of the Nation's coastal waters.<sup>5</sup>

### FY 2002 PERFORMANCE

#### Drinking Water

The first line of defense against consumers' exposure to drinking water contaminants is protecting their drinking water sources from contamination. State and tribal community water systems (CWSs) completed assessments of more than 7,700 drinking water sources in FY 2002, exceeding the target of 6,000. In addition and of particular note, 3,528 CWSs are implementing source water protection programs.<sup>6</sup> During

## Types of Drinking Water State Revolving Fund (DWSRF) Projects: Dollars Loaned from 1997 to 2002



Source: Drinking Water National Information Management System; Project Category is a percentage of Total Dollars of Assistance Provided; Cumulative from DWSRF inception in 1997 through June 30, 2002.

FY 2002 drinking water systems completed 1,253 infrastructure improvement projects, exceeding the target of 1,100. States also exceeded the FY 2002 goal of 2,400 by making more than 2,500 agreements with water systems for projects that help maintain or achieve systems' capacity to provide safe drinking water.<sup>7</sup>

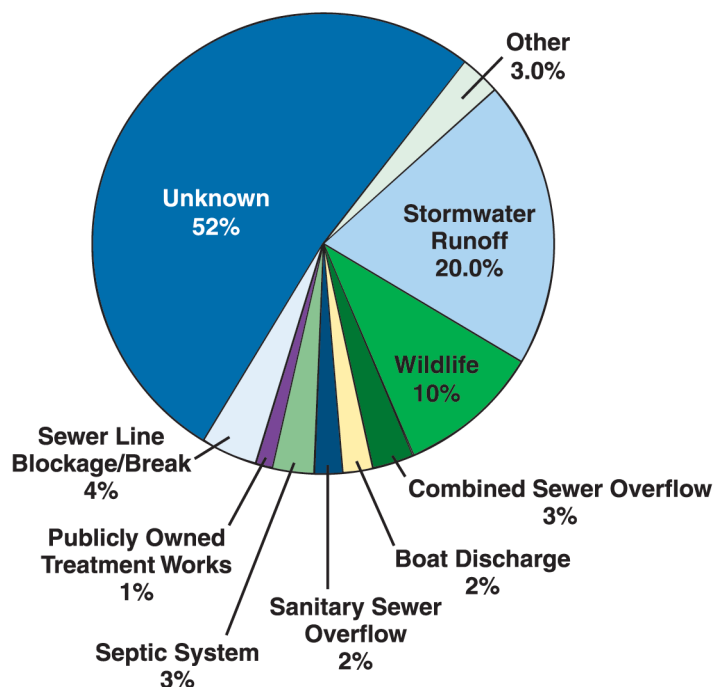
In FY 2002 EPA also strengthened the drinking water standard that protects consumers served by small community water systems (those serving a population of 10,000 or fewer) against dangerous microbes such as *Cryptosporidium*. Implementation of this new standard at all small public water systems by 2005 will result in the reduced likelihood of endemic illness from *Cryptosporidium* by an estimated 12,000 to 41,000 cases annually.<sup>8</sup> States and water systems are working to develop the technical and managerial capacity to address implementation assistance needs and to comply with drinking water regulations, especially rules for arsenic, microbes, disinfectants, and disinfection by-products.

The Agency and its state and tribal partners may not meet the national target to provide drinking water that meets all health-based standards in place as of 1994 to 95 percent of the population served by community water systems by 2005. Because implementing source water protection programs is not mandated under the Safe Drinking Water Act (SDWA), the achievement of national source water protection goals depends on states, tribes, and communities taking voluntary measures to implement contamination prevention programs.

### Recreational Waters and Fish Consumption

In FY 2002 EPA continued to provide states and tribes with tools and information to help them protect people from health risks associated with contaminated recreational waters and noncommercially caught fish. Jurisdictions provided information voluntarily on closings and advisories for more than 2,400 beaches, exceeding the target of 2,354 beaches.<sup>9</sup> The Beaches Environmental Assessment and Coastal Health Act of 2000 (BEACH Act, PL 106-284) enacted in October 2000, requires EPA to

## Reported Causes of Beach Closings or Advisories



publish performance criteria for monitoring and assessment of all recreational waters adjacent to beaches and authorizes EPA to award grants to states and territories to develop beach monitoring and notification programs. EPA published this document in June 2002<sup>10</sup> and awarded grants to all 35 eligible states and territories. The Act also requires all coastal and Great Lakes states to adopt stronger water quality standards for their coastal recreation waters by April 2004. As of FY 2002, 17 states had taken the first step toward these stronger, consistent standards by adopting *E. coli* or enterococci criteria approved by EPA for all of their recreational waters.<sup>11</sup>

In FY 2002, 28 percent of U.S. lake acres and 14 percent of U.S. river miles were covered by state and tribal fish consumption advisories, as compared to 23 percent of lake acres and 9.8 percent of river miles in FY 2001.<sup>12</sup> This steady increase in advisories over the last 10 years is due to increased monitoring and use of risk-based methodologies for issuing advisories. EPA activities included technical assistance to states and tribes to enhance fish tissue monitoring and development of fish and shellfish consumption advisories, sponsoring a national forum for state,

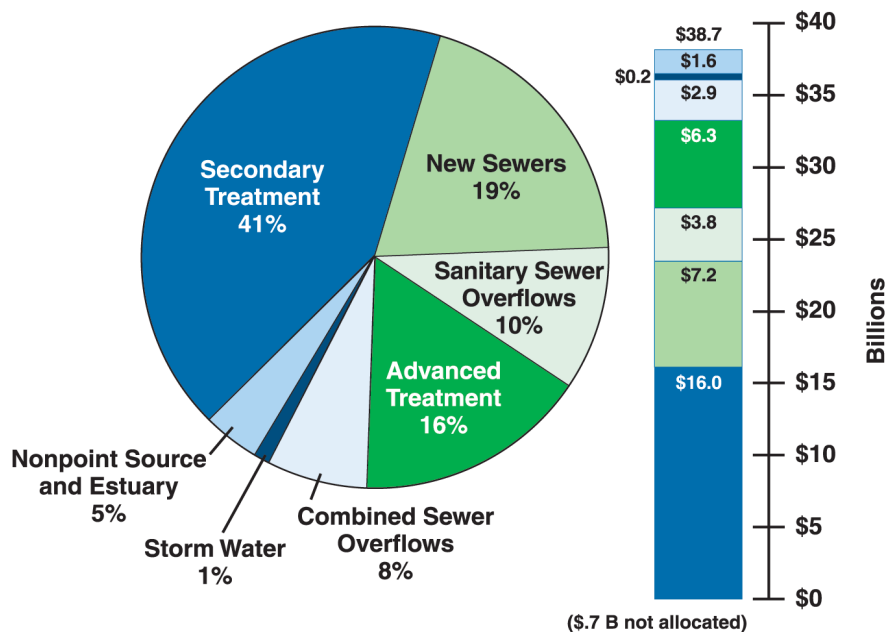
tribal, and federal agencies on risk assessment and risk communication, and development and dissemination of outreach materials. In FY 2002 EPA completed the first phase of a 4-year national screening-level study of contaminants in fish tissue from 500 lakes and reservoirs in the continental United States. Results of this effort will help states determine if further fish tissue samples are needed in their decisions about issuing consumption advisories for these waters.<sup>13</sup>

## Protecting and Restoring Surface Waters

States reported in FY 2001 that nearly 40 percent of all assessed waters in the United States did not meet water quality standards. Pollution from nonpoint sources remains the single largest reported cause of poor water quality.<sup>14</sup> In FY 2002, 25 states now have approved new or revised water quality standards, exceeding the target of 20. This is the first time in 3 years that the Agency has met this commitment.<sup>15</sup> Twenty-two tribes have adopted and EPA has approved new or revised standards, reflecting continuing progress, but not meeting the goal of 27.<sup>16</sup> A number of reasons have contributed to slower than anticipated progress. Most notable are two recent Supreme Court decisions, *Nevada v. Hicks*, 533 U.S. 353, 121 S. Ct. 2304 (2001) and *Atkinson Trading Company, Inc. v. Shirley*, 352 U.S. 645, 121 S. Ct. 1825 (2001). These two cases ruled on the jurisdiction tribes have over non-members who reside within a reservation. EPA had to reevaluate its program authorization process to determine what, if any, additional analysis was necessary to support Treatment as a State decisions.

EPA and states continued to increase the annual pace of developing approved Total Maximum Daily Loads (TMDLs), water quality planning tools that consider all sources of water pollution in a watershed and develop *budgets* to bring the water bodies into attainment. States and EPA completed 2,956 in FY 2002, which is more than five times the number completed in FY 1999.<sup>17</sup> New effluent guidelines issued in FY 2002 will clean up 5,000 miles of streams impaired by abandoned coal mines,<sup>18</sup> reduce pollutants discharged by the iron and steel

## Types of Projects Funded by the \$38.7 Billion of the Clean Water State Revolving Funds (through 2002)



Source: State Data for July 1, 2001, through June 30, 2002; Clean Water State Revolving Fund National Information Management System, <http://www.epa.gov/r5water/cwsrf>

industry by 1.4 million pounds per year beginning in FY 2005,<sup>19</sup> and improve arid western watersheds by restoring land at active mines to pre-mining conditions upon closure.<sup>20</sup> A new regulation for cooling water intake structures at about 120 facilities will significantly reduce the number of eggs, larvae, and small aquatic organisms that are pulled into cooling water systems and killed or injured and will virtually eliminate impacts on larger organisms over the next 20 years.<sup>21</sup>

In FY 2002 the pace of initiating the funding of wastewater treatment projects has continued to increase under the Clean Water State Revolving Loan Fund (CWSRF), with 8,642 projects in place since the program began in 1987, exceeding the target of 7,900. The CWSRF also provided \$242 million to help manage nonpoint source pollution. EPA and states continue to work hard to issue current NPDES permits to protect water quality and human health. The backlog of major facilities has been reduced from 26 percent in 1998 to 17 percent in September 2002, and the backlog of minor facilities from 48 percent in 1998 to 25.5 percent in September 2002. States and EPA achieved 83 percent current permits for

majors, falling short of the FY 2002 target of 90 percent. However, states and EPA exceeded the minors target of 73 percent current permits by 1.5 percent in FY 2002.<sup>22</sup>

Throughout the United States, EPA and states are facing backlogs, court challenges, and petitions to withdraw state program authorization. EPA will work with states and tribes to focus on core water programs to remedy significant problems and boost environmental performance in the following areas:

- Monitoring and assessment programs, with a particular emphasis on the probabilistic approach, to support water quality decision-making.
- Assisting states and tribes to adopt water quality standards that are appropriate for use in developing TMDLs.
- Increasing the pace of TMDL development and working with states to ensure implementation of already approved TMDLs, including targeting CWA Section 319 nonpoint source funding.<sup>23</sup>



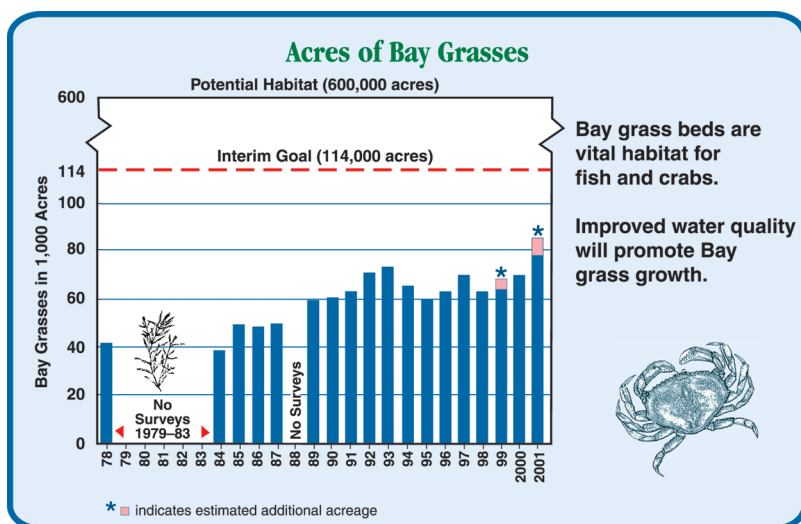
- Assisting states in adopting tools, such as the new Permitting for Environmental Results Initiative for prioritizing permits, to ensure that facilities required to have permits are covered by current effective permits.
- Strengthening the drinking water implementation program to maintain effective state and tribal programs and to achieve the enhanced level of public health protection established in post-1998 drinking water rules.<sup>24</sup>

### Geographically-based Results

In FY 2002, 85,000 acres of submerged aquatic vegetation were measured in the Chesapeake Bay, exceeding the target of 78,000 acres.<sup>25</sup> The Bay Program also exceeded its commitment to restore riparian forest buffers, which play an important role in providing habitat and reducing pollutant loads from nonpoint sources to local waterways and the Bay.<sup>26</sup> EPA's Gulf of Mexico program reported that 3,197 acres of coastal and marine habitat were restored or protected, exceeding the goal of 2,400 acres. Restoration actions are being implemented in 37 coastal river and estuary segments in the Gulf, exceeding the target of 14.<sup>27</sup>

modest, annual goal for habitat acres protected and restored. The actual number of acres protected and restored by the NEPs may exceed that goal due to a number of factors, including unanticipated changes in federal funding levels for habitat protection and restoration at the state and local level, changes in NEPs' annual priorities that lead to enhanced protection and restoration efforts, growth in community interest and involvement in protection and restoration, and the enhanced capacity of NEPs and their partners to collect and report on data depicting protection and restoration achievements.

Residents of 21 percent of the 71,000 homes in Indian Country who did not have access to adequate sanitation now have adequate wastewater systems funded through the CWSRF Tribal set-aside.<sup>29</sup> This number exceeds the FY 2002 goal of 19 percent of households and reflects the Agency's commitment to tribes. In FY 2002, 720,000 people who live in the U.S.-Mexico border area were protected from health risks through access to basic sanitation provided by funding that supported water and wastewater infrastructure.<sup>30</sup> This number is less than the target of 790,000 additional people due to the extra time that was required to complete final planning and design to ensure the high quality of the projects.



In 2002 the National Estuary Program (NEPs) protected and restored more than 137,000 acres, exceeding the target of 50,000 acres, and initiated 88 priority actions.<sup>28</sup> EPA sets a realistic, but

### Wetlands

In FY 2002 EPA and the U.S. Army Corps of Engineers issued a rule that clarified the definition of the term *fill material* to ensure consistent, fair, and environmentally effective implementation of the regulatory program under Section 404 of the CWA.<sup>31</sup> This rule, together with other measures being taken to strengthen protection of wetlands, streams, and watersheds in Appalachia, will help achieve national consistency and reduce mining-related environmental impacts.

In 2002 EPA also established a goal that two-thirds of its Wetland Program Development Grants to states, tribes, and local agencies under Section 104(b)(3) of the CWA would be used to

fund three major challenges faced by EPA and its partners: (1) protecting vulnerable wetlands and other waters, including those no longer federally regulated because of the 2001 Supreme Court decision;<sup>32</sup> (2) developing wetlands monitoring programs to establish baseline conditions and measure movement towards the national goal of improving the quality of the Nation's wetlands; and (3) improving compensatory mitigation in the CWA's Section 404 program.<sup>33</sup>

### **Innovations**

In FY 2002 EPA and partners improved water quality management by using both traditional and innovative strategies, such as asset management, Environmental Management Systems (EMS), and electronic tools. EPA designated eight organizations around the country as EMS Local Resource Centers that will help local communities to adopt state-of-the-art management approaches that minimize environmental risks, reduce costs to taxpayers, and help citizens enjoy a cleaner and healthier environment.<sup>34</sup> Fourteen local agencies that completed an EPA project to help them adopt EMSs were able to document cost savings, improved compliance, and greater efficiency as a result of adopting EMSs.<sup>35</sup>

EPA also released its Water Quality Trading Policy and awarded the first grants under this policy that encourages states and tribes to implement the requirements of the CWA in more flexible ways while reducing the cost of improving and maintaining the quality of the Nation's waters.<sup>36</sup> Trading provides voluntary incentives for industrial and municipal facilities to go beyond technology requirements to achieve further progress toward water quality goals.

### **Homeland Security**

EPA worked with states, tribes, local governments, and the private sector to take steps to secure the Nation's 168,000 public drinking water systems and 16,000 wastewater systems from terrorism by providing new tools, training, technical and financial assistance, information, and research and technology.<sup>37</sup> Since November 2001 about 6,000 drinking

water and wastewater plant managers and operators have received training in security issues including assessing vulnerabilities, emergency response plans, and risk communication. EPA expects that the work supported by grants to drinking water systems will provide an added level of protection for at least 120 million people or nearly half the total population served by community water systems. Work through EPA grants to technical, professional, and academic organizations also helped protect 125 million people, or 58 percent of those who depend on centralized wastewater treatment systems.<sup>38</sup> EPA has also developed a protocol for assuring the safe disposal of wash-down water from the cleanup of anthrax-contaminated sites at wastewater treatment facilities.<sup>39</sup>

### **Research Contributions**

The SDWA Amendments of 1996 require EPA to establish scientifically sound and cost-effective drinking water regulations that protect the health of both the general public and subpopulations that may be more sensitive to the effects of contaminated drinking water.<sup>40</sup> The Agency's ability to accomplish this depends upon the availability of adequate information and methods to assess and control the risks posed by contaminants. A critical area of research involves the development of reliable and accurate analytical methods to detect and enumerate waterborne pathogens, particularly those on the Contaminant Candidate List<sup>41</sup> to be considered for future regulation. These analytical methods provide exposure data for use in risk assessments and are essential for health effects and treatability studies. In FY 2002 EPA developed a method for calicivirus that was used to investigate two waterborne outbreaks.<sup>42</sup> This method will enhance the quality and sensitivity of detection technologies for caliciviruses, allowing EPA and states to start collecting data on the occurrence of these pathogens in drinking water. These data will also assist EPA in making better regulatory decisions and helping to safeguard the American public from harmful drinking water contaminants.

## Program Evaluation

An EPA evaluation, *A Review of Statewide Watershed Management Approaches*, focused on the experiences of eight states with different models of statewide watershed management. State managers identified benefits of using a watershed model, including more and better water quality monitoring data, better focused water quality assessments and planning, more efficient and equitable permitting programs, improved coordination, and increased public involvement.<sup>43</sup> EPA is working to incorporate these findings into its current strategies to support state efforts to plan and manage on a watershed basis.

During FY 2002 EPA worked with the U.S. Army Corps of Engineers and the Departments of Agriculture, Commerce, Interior, and Transportation to develop a National Wetlands Mitigation Action Plan to be completed and released in 2003. The action plan is intended to ensure effective, scientifically-based decisions about protecting and restoring wetlands and also expand access to information on these activities.

## STATE AND TRIBAL PARTNER CONTRIBUTIONS

EPA, states, and tribes all play crucial roles in working toward the goal of clean and safe water. Virtually all of the accomplishments described above and those reported in the performance data chart that follows represent the combined efforts of EPA, state, and tribal programs.

### State Contributions

The CWA authorizes states to carry out or EPA delegates responsibility to states to carry out programs. In particular, states have the primary responsibility to set water quality standards, taking into account variations in hydrological and geographic conditions and the social uses of aquatic resources. The standards guide programs in making surface waters healthier. Forty-four

states and one territory have delegated authority for NPDES permitting and compliance and enforcement.<sup>44</sup> Fifty-three states and territories have primary enforcement authority (primacy) for drinking water regulations.<sup>45</sup>

States contribute significant resources to managing CWA and SDWA programs. Constraints on state resources may impact states' abilities to protect and restore surface waters and to provide safe drinking water.

### Tribal Contributions

The CWA, as amended in 1987, allows tribes to be treated *as states* to receive funding and administer programs. In FY 2002, of 570 recognized tribes, 212 can receive funds to administer one or more CWA programs, 70 can receive nonpoint source funds, and 22 tribes have CWA water quality standards.<sup>46</sup> In FY 2002 the Agency worked closely with authorized tribes to publish the brochure *How Water Quality Standards Protect Tribal Waters*, an informative tool for citizens, tribes, and other stakeholders to learn about how the water quality standards program relates to tribes.<sup>47</sup>

## ASSESSMENT OF IMPACTS OF FY 2002 PERFORMANCE ON FY 2003 ANNUAL PERFORMANCE PLAN

In FY 2003 the National Estuary Program habitat performance measure will be lowered to reflect that large parcels (more than 1 million acres) have been restored or protected since the beginning of the program in 1987. Continued restoration will occur in smaller, more difficult to manage parcels. In addition, the Chesapeake Bay partners are ahead of schedule to restore 2,010 miles of riparian forest buffers by 2010 and will set new goals to expand buffer mileage in 2003.

## Goal 2: Clean and Safe Water

### Summary of FY 2002 Annual Performance Goals

**7** Goals Met

**1** Goals Not Met

**2** Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

#### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 2:	\$3,889,731
Goal 2 Share of Total:	41.2%

#### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 2 Costs:	\$3,447,114
Goal 2 Share of Total:	43.1%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs.  
Refer to page IV-10 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

**Strategic Objective: By 2005, Protect Human Health So That 95% of the Population Served by Community Water Systems Will Receive Water That Meets Drinking Water Standards, Consumption of Contaminated Fish and Shellfish Will Be Reduced, and Exposure to Microbial and Other Forms of Contamination in Waters Used for Recreation Will Be Reduced.**

*FY 2002 Cost (in thousands): \$1,071,099 (31.0% of FY 2002 Goal 2 Total Costs)*

**Progress Toward Strategic Objective:** EPA is on track to achieve this objective by 2005. The Agency has consistently met its drinking water goals, and the population that receives drinking water that meets all standards has been maintained, even as population increases and threats to drinking water sources pose new challenges. States and water systems, however, face increasing capacity issues, which might hinder their ability to reach the target of 95% by 2005. EPA does not track consumption of fish and shellfish, but the Agency does continue to work with states, the Agency for Toxic Substances and Disease Registration, the Food and Drug Administration, the Centers for Disease Control and others to improve fish consumption advisories and to increase the quantity and quality of information about contaminated fish that is available to the public. Legislation enacted in 2001 requires states to strengthen water quality standards to protect against microbial contamination in recreational waters. States must update these standards by April 2004, or EPA will promulgate standards for them. Grants to states under the BEACH Act are providing increased funding for monitoring of coastal waters and public notification of closings or advisories. Better standards and more information will improve both the condition of and public knowledge about the condition of recreational waters by 2005.

APG 8	Safe Drinking Water	Planned	Actual
FY 2002	<b>91% of the population served by community water systems will receive drinking water meeting all health-based standards, up from 83% in 1994. <b>Goal Met.</b></b> ↳Corresponds with FY 2002 NEPPS Core Performance Measure (CPM).	91%	91%
FY 2001	Same Goal, different targets. <b>Goal Met.</b>  <u>Performance Measures</u> - Population served by community drinking water systems with no violations during the year of any federally enforceable health-based standards that were in place by 1994. 91% 91% - Population served by non-community, non-transient drinking water systems with no violations during the year of any federally enforceable health-based standards that were in place by 1994. 96% 92%		
FY 2000	Same Goal. <b>Goal Met</b>	91%	91%
FY 1999	Same Goal, different targets. <b>Goal Met</b>	91%	91%
<b>FY 2002 Result:</b> In FY 2002, 244 million people were served by community water systems meeting all health-based standards. This result is 91% of the 268 million people served by 53,437 community water systems in FY 2002.			

APG 9	Safe Drinking Water	Planned	Actual
FY 2002	<b>85% of the population served by community water systems will receive drinking water meeting health-based standards promulgated in 1998. <b>Data lag.</b></b> ↳Corresponds with FY 2001 NEPPS Core Performance Measure (CPM).	85%	data available in 2003
<b>FY 2002 Result:</b> Data Lag. FY 2002 end of year data will be available July 2003.			

APG 10	Increase Information on Beaches	Planned	Actual
FY 2002	Reduce exposure to contaminated recreation waters by increasing the information available to the public and decision-makers. <b>Goal Met.</b>		
	<b>Performance Measure</b>		
	- Beaches for which monitoring and closure data are available to the public at <a href="http://www.epa.gov/OST/beaches/">http://www.epa.gov/OST/beaches/</a> (cumulative).	2,354	2,445
FY 2001	Same Goal, different targets. <b>Goal Met.</b>	2,200	2,200
FY 2000	Same Goal, different targets. <b>Goal Met.</b>		
	<b>Performance Measures</b>		
	- Cumulative number of beaches for which monitoring and closure data are available at "beaches" web-page.	1,800	1,981
	- Number of digitized maps on the web-page.	150	150
<b>FY 2002 Result:</b> Exposure to contaminated recreation waters was reduced as a result of use of monitoring and closure data on 2,455 beaches by the public and decision makers.			

APG 11	Drinking Water Research	Planned	Actual
FY 2002	Produce scientific reports to support the development of the next Contaminant Candidate List (CCL) of chemicals and pathogens for potential regulatory action and research. These reports will help ensure that future regulations address the contaminants of greatest public health concern. <b>Goal Met.</b>		
	<b>Performance Measure</b>		
	- Provide method(s) for CCL related pathogens in drinking water for use in the Unregulated Contaminant Monitoring Rule.	1 Journal article	1 Journal article

**FY 2002 Result:** EPA produced scientific reports to support the development of the next CCL of chemicals and pathogens for potential regulatory action and research. These reports will help ensure that future regulations address the contaminants of greatest public health concern. In addition, EPA developed an improved analytical detection method for an unregulated waterborne pathogen of public health concern (calicivirus), which will allow the Agency and others to collect accurate national occurrence data on this important pathogen. The use of this method and other FY 2002 research products will provide critical data to support EPA's regulatory decision making process for unregulated contaminants.

**Strategic Objective: By 2005, Increase By 175 the Number of Watersheds Where 80% or More of Assessed Waters Meet Water Quality Standards, Including Standards That Support Healthy Aquatic Communities. (The 1998 Baseline is 501 Watersheds Out of a National Total of 2,262.)**

*FY 2002 Cost (in thousands): \$432,633 (12.6% of FY 2002 Goal 2 Total Costs)*

**Progress Toward Strategic Objective:** No new data to report. EPA receives data from states every 2 years. In FY 2001 EPA did not meet the goal of 550 watersheds. The accomplishment of 510 watersheds represents progress, but results may not be happening fast enough to meet the target by 2005.

APG 12	Watershed Protection	Planned	Actual
FY 2002	By FY 2003, water quality will improve on a watershed basis such that 600 of the Nation's 2,262 watersheds will have greater than 80% of assessed waters meeting all water quality standards, up from 500 watersheds in 1998. <b>Data Lag.</b>	600	data available in 2003
FY 2001	Same Goal, different targets. <b>Goal Not Met.</b>	550	510
FY 2000	Environmental improvement projects will be underway in 350 high priority watersheds as a result of implementing activities under the Clean Water Action Plan (CWAP). <b>Goal Not Met.</b>	350	324
FY 1999	As part of CWAP, all states will be conducting or have completed unified watershed assessments, with support from EPA, to identify aquatic resources in greatest need of restoration or prevention activities. <b>Goal Met.</b>	50	56

**FY 2002 Result:** This measure reflects states' biennial reporting under CWA 305(b), and is not intended to be reported until the FY 2003 reporting cycle.

APG 13	State/Tribal Water Quality Standards	Planned	Actual
FY 2002	Assure that states and tribes have effective, up-to-date water quality standards programs adopted in accordance with the Water Quality Standards (WQSs) regulation and the WQSs program priorities. <b>Goal Met.</b>		
	<b>Performance Measures:</b>		
	- States with new or revised WQSs that EPA has reviewed and approved or disapproved and promulgated federal replacement standards.	20	25
	- Tribes with water quality standards adopted and approved (cumulative).	27	22
FY 2001	Same Goal, different targets. <b>Goal Not Met.</b>	30 states 27 tribes	21 states 19 tribes
FY 2000	Same Goal, different targets. <b>Goal Not Met.</b>	15 states 22 tribes	35 states 16 tribes

**FY 2002 Result:** WQSs established under the Clean Water Act establish specific environmental goals for the Nation's waters. Having current, protective WQSs in place is an essential element of the national water program's water quality protection efforts. States and tribes continue to do significant work in this area. In FY 2002 EPA ensured that 25 states and 22 tribes have effective, up-to-date WQSs programs adopted in accordance with the WQSs regulation and the WQSs program priorities. Several tribes are at different stages in the process of adoption and approval of WQSs. A Supreme Court decision resulted in EPA revisiting its tribal program authorization process, which has delayed approval of any new tribal standards.

APG 14	Protecting and Enhancing Estuaries	Planned	Actual
FY 2002	Restore and protect estuaries through the implementation of Comprehensive Conservation and Management Plans (CCMPs). <b>Goal Met.</b>		
	<b>Performance Measure</b>		
	- Acres of habitat restored and protected nationwide as part of the National Estuary Program (annual).	50,000	137,710
FY 2001	Same Goal, different targets. <b>Goal Met.</b>		
	<b>Performance Measure</b>		
	- Acres of habitat preserved, restored and/or created nationwide as part of the National Estuary Program (cumulative).	50,000	70,000

**FY 2002 Result:** EPA restored and protected more than 137,000 acres of estuary habitat through the implementation of CCMPs, significantly exceeding its FY 2002 target. The National Estuary Program (NEP) exceeded the goal due to one or more of the following factors: unanticipated changes in federal funding levels for habitat protection and restoration at the state and local levels; changes in the NEP's annual priorities that led to enhanced protection and restoration efforts, growth in community interest and involvement in protection and restoration; or the enhanced capability of estuary programs and their partners to collect and report on data depicting protection and restoration achievements.

**Strategic Objective: By 2005, Reduce Pollutant Loadings From Key Point and Nonpoint Sources By at Least 11% From 1992 Levels. Air Deposition of Key Pollutants Will Be Reduced to 1990 Levels.**  
*FY 2002 Cost (in thousands): \$1,943,382 (56.4% of FY 2002 Goal 2 Total Costs)*

**Progress Toward Strategic Objective:** EPA continues to face a significant challenge in its ability to adequately document reductions in pollutant loadings. The amount of data available from many EPA programs is and will continue to be very limited. To help document loading reductions from permits that implement effluent guidelines and an overall loading reductions strategy, EPA is taking steps to determine the number of facilities in each major program. This information will greatly improve the Agency's ability to successfully model expected reductions and validate these models using the limited data available.

APG 15	Reducing Industrial Pollutant Discharge	Planned	Actual
FY 2002	Industrial discharges of pollutants to the Nation's waters will be significantly reduced through implementation of effluent guidelines. <b>Goal Met.</b>		
	<b>Performance Measures</b>		
	- Cumulative reduction in loadings for toxic pollutants for facilities subject to effluent guidelines promulgated between 1992 and 2000, as compared to 1992 levels as predicted by model projections.	10.5 M lbs	13.5 M lbs
	- Cumulative reduction in loadings for conventional pollutants for facilities subject to effluent guidelines promulgated between 1992 and 2000, as compared to 1992 levels as predicted by model projections.	572 M lbs	715.7 M lbs

- Cumulative reduction in loadings for non-conventional pollutants for facilities subject to effluent guidelines promulgated between 1992 and 2000, as compared to 1992 levels as predicted by model projections. **1,007 M lbs** **1,199.8 M lbs**

FY 2001 Same Goal, different targets. *Goal Met.*

Performance Measures

- Cumulative reduction in toxic-pollutant loadings by facilities subject to effluent guidelines promulgated between 1992 and 1999, as predicted by model projections. **9.8 M lbs** **10.3 M lbs**
- Reduction in loadings for conventional pollutants for facilities subject to effluent guidelines promulgated between 1992 and 2000, as compared to 1992 levels as predicted by model projections. **552.7 M lbs** **557 M lbs**
- Reduction in loadings for non-conventional pollutants for facilities subject to effluent guidelines promulgated between 1992 and 2000, as compared to 1992 levels as predicted by model projections. **935.6 M lbs** **922 M lbs**

FY 2000 Same Goal, different targets. *Goal Met.*

Performance Measures

- Cumulative reduction in toxic-pollutant loadings by facilities subject to effluent guidelines promulgated between 1992-1999, against 1992 levels (predicted by models). **4 M lbs** **4 M lbs**
- Cumulative reduction in conventional pollutant loadings by facilities subject to effluent guidelines promulgated between 1992-1999, against 1992 levels (predicted by models). **385 M lbs** **473 M lbs**
- Cumulative reduction in non-conventional pollutant loadings by facilities subject to effluent guidelines promulgated between 1992-1999, against 1992 levels (predicted by models). **260 M lbs** **136 M lbs**

**FY 2002 Result:** Industrial discharges of pollutants to the Nation's waters were significantly reduced through implementation of effluent guidelines. A total of approximately 2 billion pounds of industrial discharges was eliminated.

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<b>APG 16</b>	<b>NPDES Permit Requirements</b>	<b>Planned</b>	<b>Actual</b>
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**FY 2002** Current national pollutant discharge elimination system (NPDES) permits reduce or eliminate discharges into the Nation's waters of (1) inadequately treated discharges from municipal and industrial facilities; and (2) pollutants from urban stormwater, combined sewer overflow (CSO), and concentrated animal feeding operations (CAFOs). **Goal Not Met.**

Performance Measures

- Major point sources are covered by current permits. **90%** **83%**
- Minor point sources are covered by current permits. **73%** **74.4%**

FY 2001 Same Goal, different targets. *Goal Not Met.*

Performance Measures

- Major point sources are covered by current permits. **89%** **75%**
- Minor point sources are covered by current permits. **66%** **75%**

**FY 2002 Result:** EPA and states exceeded the minor point sources covered by current permits target by 1.5%. EPA and states achieved 83% current permits for major point sources, falling short of the FY 2002 target of 90% due to state and regional capacity issues as well as growing complexities of permits including the need to integrate individual permits with watershed and other planning processes. Nevertheless, the Agency is making progress towards its goals and objectives as evidenced by the following: 94% of states and territories had current storm water permits for all industrial activities, and 98% had current permits for construction sites more than 5 acres; 92% of approximately 900 CSO communities were covered by permits or other enforceable mechanisms consistent with the 1994 CSO Policy; and approximately 67% of states had current NPDES general permits for CAFOs or individual NPDES permits for all CAFOs.

The Agency has launched a Permitting for Environmental Results Initiative to address the permit backlog and focus existing resources on getting the most environmental results. This effort will work toward achieving an environmental focus in permit issuance, mutual accountability for EPA and states, and developing permitting efficiencies.

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<b>APG 17</b>	<b>Clean Water State Revolving Fund: Annual Assistance</b>	<b>Planned</b>	<b>Actual</b>
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**FY 2002** 700 projects funded by the Clean Water State Revolving Fund (CWSRF) will initiate operations, including 400 projects providing secondary treatment, advanced treatment, CSO correction (treatment), and/or storm water treatment. Cumulatively, 7,900 CWSRF funded projects will have initiated operations since program inception. **Goal Met.**

FY 2001 Same Goal, different targets. *Goal Met.*

**7,200** **7,452**

Goal 2 - Clean and Safe Water

FY 2000	Another 2 million people will receive the benefits of secondary treatment of wastewater, for a total of 181 million people. <i>Goal Met.</i>	2M	2M
FY 1999	Another 3.4 million people will receive the benefits of secondary treatment of wastewater, for a total of 179 million. <i>Goal Met.</i>	3.4M	3.4M

**FY 2002 Result:** Operations initiated through projects funded by the CWSRF totaled 1,190, including 400 projects providing secondary treatment, advanced treatment, CSO correction (treatment), and/or storm water treatment. Cumulatively, 8,642 projects have initiated operations since program inception.

**Prior Year Annual Performance Goals Without Corresponding FY 2002 Goals**  
(Actual Performance Data Available in FY 2002 and Beyond)

		<b>Planned</b>	<b>Actual</b>
FY 1999	<i>By 2003: deliver support tools, such as watershed models, enabling resource planners to select consistent, appropriate watershed management solutions and alternative, less costly wet-weather flow control technologies.</i>		<i>target year is FY 2003</i>



## Notes:

1. Appendix B.
2. Ibid.
3. Ibid.
4. Ibid.
5. U.S. EPA, *National Coastal Condition Report*, EPA-620/R-01/005 (September 2001). Available at <http://www.epa.gov/owow/oceans/nccr>.
6. Information collected from EPA regions and housed in an internal EPA database. Contact the Drinking Water Protection Division at 202-564-3797.
7. The EPA Office of Ground Water and Drinking Water's Drinking Water National Information Management System (DWNIMS) is accessible only on the Internet at <http://www.epa.gov/OGWDW/dwsrf/dwnims.html>.
8. See Federal Register 67 (9, January 14, 2002):1812.
9. Appendix B.
10. U.S. EPA, *National Beach Guidance and Required Performance Criteria for Grants*, EPA-823-02-004. Available at <http://www.epa.gov/waterscience/beaches/grants>.
11. U.S. EPA, Office of Water, *Bacterial Water Quality Standards for Recreational Waters (Freshwater and Marine Waters)*, draft, EPA-B-02-003 (Washington, DC: May 2002). U.S. EPA, Office of Water, Regulations and Standards Division, *Ambient Water Quality Criteria for Bacteria—1986* (Washington, DC: U.S. EPA, 1986).
12. U.S. EPA, Office of Water, *Update: National Listing of Fish and Wildlife Advisories*, EPA-823-F-02-007 (Washington, DC: U.S. EPA, 2002). Available at <http://www.epa.gov/waterscience/fish/advisories/factsheet.pdf>.
13. U.S. EPA, Office of Water, *The National Study of Chemical Residues in Lake Fish Tissue*, EPA-823-F01-028 (Washington, DC: U.S. EPA, 2001).
14. U.S. EPA's *National Water Quality Inventory: 2000 Report* is accessible only on the Internet at <http://www.epa.gov/305b/2000report/>.
15. Appendix B.
16. Ibid.
17. For national-level information on TMDLs completed to date, see the *National Section 303(d) List Fact Sheet*, with information compiled by state and by region, on the EPA Total Maximum Daily Loads web page at [http://oaspub.epa.gov/waters/national\\_rept.control](http://oaspub.epa.gov/waters/national_rept.control). Annual TMDL production numbers are available through EPA's Assessment and Watershed Protection Division.
18. Preamble to final rule, 67 FR 3389, January 23, 2002. Available at <http://www.epa.gov/guide/coal/>.
19. Preamble to final rule, 67 FR 64216, October 17, 2002. See also U.S. EPA, *Development Document for Final Effluent Limitations Guidelines and Standards for the Iron and Steel Manufacturing Point Source Category*, EPA-821-R-02-004. Available at <http://www.epa.gov/waterscience/ironsteel/>.
20. Preamble to final rule, 67 FR 3370 and 3381, January 23, 2002. Available at <http://www.epa.gov/guide/coal/>.
21. Preamble to final rule, 66 FR 65262-5, 65279-80, 65311-13, December 18, 2001. Available at <http://www.epa.gov/fedrgstr/EPA-WATER/2001/December/Day-18/w28968.pdf>. See also U.S. EPA, *Economic Analysis of the Final Regulations Addressing Cooling Water Intake Structures for New Facilities*, EPA-821-R-01-035 (November 2001). Available at <http://www.epa.gov/waterscience/316b/economics/economic.html>.
22. U.S. EPA, *Permit Compliance System Database—Backlog Tables* (major facilities, minor facilities, minor facilities including non-storm water general permits), *Backlog Trend Reports* (national major facilities, national minor facilities, EPA only major facilities, EPA only minor facilities, state only major facilities, state only minor facilities, regional major facilities, regional minor facilities), *Backlog Staleness Reports* (major facilities, minor facilities), *Monthly Backlog Report to Regions*. Available (with password) at <http://clients.limno.com/protected/pcscleanup>.  
  
Backlog calculations from November 1998 through December 2001 were made through sorting out all non-individual permits from PCS data with the exception of non-storm water major general permits and individual major storm permits and dividing the total number of these permits that have been expired 45 days or longer plus the total number of permits with no issuance data and/or no expiration date by the total number of active permits not sorted out as mentioned above. This number provides the backlog percentage. As of January 2002, permits were considered backlogged only if they had been expired 6 months or greater, up from

- 45 days. Beginning in the September 2002 backlog report, individual permits issued by EPA in authorized states were counted as EPA permits and not state permits. Beginning with the October 2002 backlog report, minor facilities covered by non-storm water general permits listed in the Permit Issuance Forecasting Tool are included in the definition of backlog.
23. U.S. EPA, *Supplemental Guidelines for the Award of Section 319 Nonpoint Source Grants to States and Territories in FY 2003* (August 2002). Available at <http://www.epa.gov/owow/nps/Section319/319guide03.html>.
  24. 40 CFR Part 141; 40 CFR Parts 136 to 149 (Washington, DC: U.S. Government Printing Office, 2002).
  25. Information on the SAV measure is available at <http://www.chesapeakebay.net/status.cfm?sid=88&subjectarea=INDICATORS>.
  26. Information on the riparian forest buffer measure is available at <http://www.chesapeakebay.net/status.cfm?sid=83&subjectarea=INDICATORS>.
  27. Information is available at <http://www.epa.gov/gmpo>.
  28. Appendix B.
  29. The 2000 Census reports that there are 302,882 existing occupied American Indian homes; the Indian Health Service, Department of the Interior, reports that 123,277 homes require solid waste assistance (Sanitation Facilities Construction Program of the Indian Health Service, Public Law 86-121 Annual Report for 2000). A total of 41 percent of homes therefore require solid waste assistance. EPA has set a multiyear goal to reduce this percentage by 25 percent. EPA's Annual Performance Reports for 2000 and 2001 document progress toward that goal.
  30. Appendix B.
  31. Federal Register 67 (31, May 9, 2002):129. Available at <http://www.epa.gov/owow/wetlands/fflfinal.html>.
  32. Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001) can be found at <http://www.epa.gov/owow/wetlands/swanccnav.html>.
  33. Memorandum from Robert H. Wayland to Water Division Directors and the Environmental Services Division Director of Region 3 (November 19, 2001).
  34. There is no specific publication to cite. EPA sent letters dated June 18, 2002, to each of the eight Local Resource Centers informing them of their selection. The funding to assist these Local Resource Centers is included in a cooperative agreement awarded to the Global Environment and Technology Foundation in July 2002. Additional information about each Local Resource Center can be found at <http://www.epa.gov/ems> or <http://www.peercenter.net>.
  35. Global Environment and Technology Foundation (GETF), *Final Report on Second EMS Initiative for Government Entities*, prepared under Cooperative Agreement no. 828071-01-0 awarded by the U.S. EPA (fall 2002). Available through the EPA Water Resource Center and online at <http://www.peercenter.net> or <http://www.epa.gov/ems>.
  36. Federal Register 67 (94, May 15, 2002):34709–34710. Available at <http://www.epa.gov/owow/watershed/trading/tradingpolicy.html>.
  37. “Quarterly Monitoring Report, Water Environment Federation, September 3, 2002, Grant No. 829656” to Curt Baranowski, Project Officer, Office of Wastewater Management, U.S. EPA; “Quarterly Monitoring Report, Association of Metropolitan Sewerage Agencies, September 30, 2002, Grant No. 829595” to Curt Baranowski, Project Officer, Office of Wastewater Management, U.S. EPA.
  38. Information from periodic grantee reports required by regulation and provided to the Agency during FY 2002. No quality assurance plan; not publicly available; not peer-reviewed.
  39. U.S. EPA, Office of Ground Water and Drinking Water, Water Infrastructure Task Force, *Draft Protocol for Discharging Decontaminated Anthrax Wastewater to POTWs* (September 2002.)
  40. Safe Drinking Water Act Amendments of 1996, Section 1412(b)(3).
  41. Safe Drinking Water Act Amendments of 1996, Section 1412(b)(1).
  42. A Waterborne Outbreak of Norwalk-like Virus among Snowmobilers? Wyoming, 2001, NERL-CI-MCEARD-02-039. Accepted for publication by *Journal of Infectious Diseases*, September 2002; not yet publicly available. Contact the National Exposure Research Laboratory, Microbiological and Chemical Exposure Assessment Research Division, 513-569-7303.

43. U.S. EPA, *A Review of Statewide Watershed Management Approaches* (April 2002). Available at [http://www.epa.gov/owow/watershed/approaches\\_fr.pdf](http://www.epa.gov/owow/watershed/approaches_fr.pdf).
44. U.S. EPA, *State NPDES Program Status Table* (December 16, 2002). Available at <http://cfpub.epa.gov/npdes/statestats.cfm>.
45. Contact the Drinking Water Protection Division at 202-564-3797.
46. Section 518 of the Clean Water Act, 33 U.S.C. § 1377. For further information on tribal water quality standards activities, contact the Standards and Health Protection Division at U.S. EPA, 202-566-0400.
47. EPA-823B-02-002 is available from the National Service Center for Environmental Publications, P.O. Box 42419, Cincinnati, OH 45242-2419 (phone 800-490-9198, fax 513-489-8695).

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## GOAL 3: SAFE FOOD

**The foods Americans eat will be free from unsafe pesticide residues. Particular attention will be given to protecting subpopulations that may be more susceptible to adverse effects of pesticides or have higher dietary exposures to pesticide residues. These include children and people whose diets include large amounts of noncommercial foods.**

### PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES

EPA continues to make progress toward its long-term goals of protecting the Nation's food supply, reducing risk from unsafe pesticide residues, and eliminating the use on food of pesticides that do not meet standards through registration and reregistration of pesticides. EPA sets limits, called tolerances, on the amount of pesticides that may remain on foods. Tolerances are set on the basis of risk assessments pursuant to the Food Quality Protection Act (FQPA) of 1996.<sup>1</sup> Through tolerance reassessments, EPA ensures that existing tolerances meet the FQPA standard of reasonable certainty of no harm.<sup>2</sup> Those that do are either revoked or have additional risk mitigation measures added to them. EPA's consideration of cumulative risk takes into account exposure from all pesticides that have a common mode of action, thereby adding additional protection. The inclusion of aggregate risk considerations in the risk assessments provides further protection.<sup>3</sup>

In FY 2002 EPA's strategy for reducing risks from pesticide residues in foods included:

- Reevaluating older, potentially higher-risk pesticides by using the best current scientific data and methods to determine what additional limits on each pesticide's use are needed to provide reasonable certainty of no harm, especially to children and other sensitive subpopulations. In FY 2002 EPA reevaluated 2,667 tolerances for older pesticides.
- Accelerating EPA's review and registration of alternative pesticides that are less risky than those currently in use. In FY 2002 EPA registered 15 reduced-risk pesticides.

- Using partnerships and other means to promote the adoption and use of lower-risk pest management methods. EPA continued or launched a variety of partnership efforts in FY 2002.

A key element in meeting these objectives and thus demonstrating performance results is the availability of baseline data. EPA, the Florida State University, and the National Pollution Prevention Roundtable worked cooperatively in 2002 to identify data sets and potential performance indicators and measures in the challenging pollution prevention area. Tribal program measures were another area of continuing focus. This work builds on EPA's and Florida State University's efforts to inventory and describe environmental outcome measures nationwide for federal agencies, states, tribes, and local government entities. The statute requires EPA to examine each pesticide individually, unless there is a class of pesticides with a common mechanism of toxicity. The data sets and hazard and exposure findings for the pesticides that are reviewed cannot be aggregated into a national baseline. The program is continuing to analyze federal and other data sets, as well as internal risk assessment methodologies, to explore options to identify baseline data without posing enormous data collection burdens and expense on EPA's partners.

The program is very science-oriented and constantly works to incorporate the latest scientific methodologies. Additional challenges include addressing resource issues associated with the expiration of the maintenance fee, the timely receipt of stakeholder input, and the need for more intensive risk assessment reviews prompted by the incorporation of cumulative and aggregate risk work.

The Agency has collaborated extensively with scientists from other federal agencies, academia, and the private sector, including members of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel. These collaborative efforts involved the Agency's regulatory decision-making responsibilities and particularly complex work in the evolving field of biotechnology and new science policies for risk assessments. These efforts provide opportunities to review the Agency's processes, scientific methodologies, and in some cases assessments and to ensure transparency, as required by the FQPA. Such a review conducted on certain biotechnology issues has led to the creation of a multi-agency, department-level work group to improve coordination and outreach to the agriculture industry.

## **FY 2002 PERFORMANCE**

### **Reducing Agricultural Pesticide Risk**

Older registered pesticides might cause health problems such as birth defects, nerve damage, and cancer after long-term exposure. In addition, some pesticides might adversely affect indigenous populations of birds, fish, mammals, beneficial insects, and other sensitive species that are not targets for pesticide applications. Consequently, EPA seeks to eliminate or reduce human health and environmental risks by encouraging substitution of less risky pesticides for older chemicals that have the potential to cause these adverse effects.

Reduced risk pesticides constituted an estimated 3.6 percent of all agricultural pesticide acre treatments in 1998. This increased to 7.5 percent during the FY 2002 reporting period that used FY 2001 data, significantly exceeding EPA's original annual and long-term targets. However, two reduced risk pesticides—glyphosate and s-metalachlor—account for about 50 percent of the pesticides used. The Agency anticipates that the growth rate of this measure, which depends on how quickly the agriculture and pesticide industries make the transition, might slow in the next year or two. EPA encourages the switch to the use of safer pesticides through outreach programs, applicator training, and the

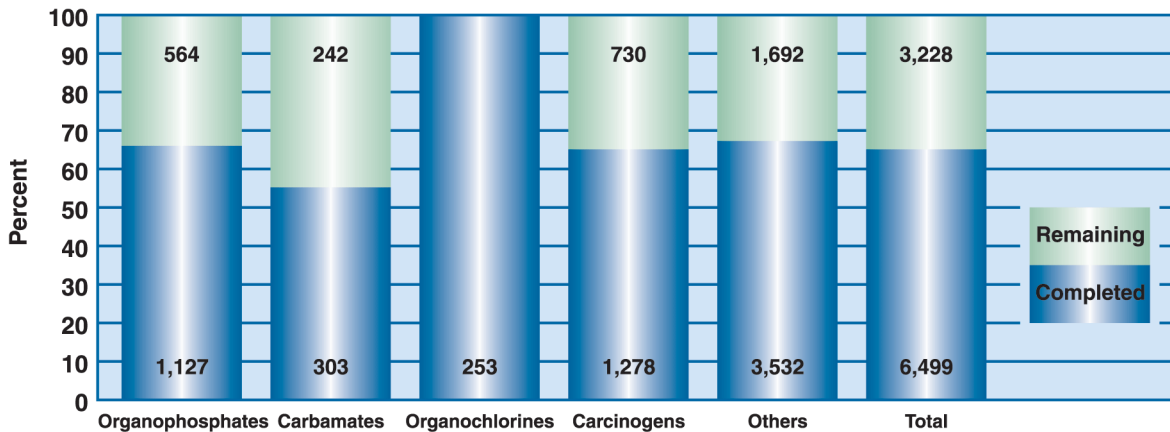
provision of grants for integrated pest management and environmental stewardship projects. The Agency reviews pesticides to ensure that they meet the current health and safety standards and provides incentives for the registration and adoption of reduced risk pesticides; however EPA has limited impact on the adoption of these pesticides. This is due in part to farmers' preference for using broad-spectrum pesticides that tend to be cheaper and easier to apply. It is, therefore, difficult for the Agency to predict with accuracy the extent of adoption of reduced risk pesticides.

### **Reducing Use on Food of Pesticides Not Meeting Health Standards**

EPA continued its ongoing comprehensive reviews of pesticides initially registered before November 1, 1984, to ensure their continued safety. After a thorough review of the data, the Agency issues a Reregistration Eligibility Decision (RED). In cases where pesticides do not meet health and environmental requirements, EPA determines what changes are needed in the allowable uses of the pesticides, including canceling use or limiting use to certified applicators. For pesticides that do meet the new standards, the issuance of a RED makes the products eligible for reregistration. By the end of FY 2002, EPA completed review of 72.7 percent of the 612 cases requiring reregistration. The Agency did not meet the target of 76.4 percent because of both the need to incorporate into the process the cumulative risk assessment required by the FQPA and the redirection of resources to support the homeland security initiative on anthrax contamination. The cumulative risk assessment under the FQPA requires a more intensive review and also requires that pesticides having a common mode of action be reviewed together.

To further protect the Nation's food supply, the FQPA set stricter safety standards for pesticide residues in or on food and requires EPA to reassess all existing tolerances by 2006 to ensure they meet the new safety standard of "reasonable certainty of no harm." By the end of FY 2002, the Agency had completed reassessment of 66.9 percent of these tolerances, including

## Tolerance Reassessments That Now Meet New Health Standards as of August 2002



This graph shows the status of EPA's tolerance reassessment program by chemical class. As of August 5, 2002, EPA had reassessed 6,499 tolerances (66.9%).

about 65 percent of the organophosphates and carcinogens that are among those pesticides considered of highest risk. The reassessment of these tolerances included an additional 198 of the 893 tolerances on children's foods. In FY 2002 EPA met the second statutory deadline set by FQPA for tolerance reassessment, and the Agency is on track to meet its long-term objective to substantially eliminate pesticides that do not meet the FQPA standard and to reduce dietary risk to children.

In FY 2002 EPA completed a total of 36 reregistration regulatory decisions, including 9 risk mitigation decisions on the most hazardous organophosphates (OPs). EPA met the decision deadlines set by the Natural Resources Defense Council (NRDC) agreement for FY 2002 (five completed in FY 2002) with one exception, atrazine, for which an extension to 2003 has been requested. These decisions were completed after extensive public participation and negotiations.<sup>4</sup>

FQPA requires that EPA take into account the cumulative effects of pesticide residues and other substances that have a common mechanism of toxicity when setting tolerances. EPA completed and issued the preliminary organophosphate cumulative risk assessment in December 2001 and revised it in June 2002 based on stakeholder input. As a result, EPA met the NRDC agreement deadline to issue a revised risk assessment of the OPs by August 2002. This

methodology incorporated new standards and represents a new way of analyzing data regarding potential exposure to pesticides and

### REDUCING RISK THROUGH REGULATORY ACTIONS

During FY 2002 EPA significantly reduced exposure to several organophosphate (OP) pesticides by completing regulatory actions such as issuance of Reregistration Eligibility Decisions (RED). OPs are older, widely used pesticides that are among the riskiest. Benefits derived from this action include reduced exposure, assumed reduced risk, and therefore improved protection of human health and the environment. The pesticides involved included azinphos-methyl, diazinon, dicrotophos, disulfoton, fenamiphos, methamidophos, naled, phosmet, and tetrachlorvinphos. Azinphos-methyl risk reduction measures were taken in 1999 to reduce dietary risk to children. Additional measures were taken in FY 2002 to further reduce risk to agricultural workers and the environment. For phosmet, which is used on orchard fruits, nuts, and other crops, additional measures were identified to reduce risk to agricultural workers, including requiring personal protective equipment and enclosed cabs. Ecological risk reduction measures included revising labels, limiting application amounts, prohibiting application during bloom, and canceling some uses.

the risks they might pose and is the result of rigorous scientific analysis and extensive public participation.

### **Research Contributions**

In FY 2002 EPA produced exposure and effects data and models to support the August 2006 assessment of current uses of pesticides (tolerance reassessment) required under the FQPA. This research was part of an ongoing collaborative effort with the National Institute of Environmental Health Sciences to study outcomes of developmental exposure to pesticides on the nervous, immune, and reproductive systems. These efforts have provided the Agency with a better understanding of the increased vulnerabilities of children to pesticide exposure through food consumption as well as during gestation. As a result, EPA can better determine the latent and/or persistent effects of developmental exposure to pesticides and compare the sensitivities of different human systems to various pesticides. The data and models will also help EPA examine the critical factors influencing children's exposure to pesticides and fill important data gaps to reduce uncertainties in future pesticide risk assessments. In addition, EPA developed a source-to-dose modeling framework that will advance the science of human exposure and dose assessment by describing the routes, magnitude, and variability of human exposures and doses, as well as by characterizing the way people interact with their environment.

## **STATE AND TRIBAL PARTNERSHIP CONTRIBUTIONS**

### **State Contributions**

Through grant agreements, and with guidance provided by EPA, the states enforce federal and state laws, maintain pesticide laboratory operations, train and certify commercial and private pesticide applicators, and develop groundwater pesticide management plans to protect groundwater from contamination. States play a pivotal role in ensuring that food use and other pesticides are used according to

the label instructions, and that applicators who apply restricted use pesticides are adequately trained. In FY 2002 states submitted more than 500 emergency exemption requests to EPA in response to emergency pest problems, each of which the Agency reviewed for compliance with FQPA health-based standards. Use of the emergency exemption process generates a savings in excess of \$1 billion per year to the U.S. economy, according to estimates from the Inter-Regional Four (IR-4) program, which promotes increased availability of less risky pesticides for use on foods.

EPA supports a state-led project providing training on pesticide safety for farmworkers and farm families by partnering with the Association of Farmworker Opportunity Programs, AmeriCorps, and 37 community-based organizations in 22 states. EPA also consults with the Association of American Pesticide Control Officials and shares information with the State FIFRA Issues Research and Evaluation Group, a network of state officials interested in federal/state co-regulation of pesticides. In FY 2002 EPA and California's Department of Pesticide Regulation Workshare Program conducted data review for IR-4 petitions, which has expedited federal and state minor use registrations and resulted in establishment of tolerances for many crop uses. Most fruits and vegetables are actually "minor use" crops, such as corn and peaches, and industry does not support the science to establish tolerances because it is costly.

### **Tribal Contributions**

EPA continues to work closely with its tribal partners, including members of the Tribal Pesticide Program Council (TPPC) and others, to create risk assessment models that capture the chemical exposure opportunities that may uniquely attend traditional native American lifeways. To support this endeavor, in FY 2002 EPA launched a pilot project to create two new software modules for the state-of-the-art risk assessment software—LifeLine. The tribes in the Nivalena consortium near Alaska's Lake Iliamna, and the Blackfeet Reservation in Montana are working with EPA to provide data to incorporate into the software that will model risks to those



populations. The Tribal Medicine Project (TMP) is another important tribal risk project supported by EPA. The TMP sends teams of experts on pesticide exposure risks and symptoms to Indian country, where they encourage greater community awareness of potential pesticide-related hazards and train tribal health care providers to identify, prevent, and treat toxic exposure. There are about 40 tribes with ongoing pesticide programs. Since tribes are sovereign governments, there is an increase in both human health and environmental protection when a pesticide program is implemented, where the need is identified. When a tribe implements a continuing program, it commits to a pesticide use compliance program plan, with either direct enforcement under tribal code or by referral to EPA in the absence of a specific code.

## **ASSESSMENTS OF IMPACTS OF FY 2002 PERFORMANCE ON FY 2003 ANNUAL PERFORMANCE PLAN**

As a result of exceeding FY 2002 performance, the Agency revised its FY 2003 targeted percentage of acre-treatments that used reduced risk pesticides and will likely adjust the 2004 target. Because the Agency missed its FY 2002 targets for Registration Eligibility Decisions and Product Reregistrations, EPA adjusted its FY 2003 targets and an adjustment to FY 2004 targets is likely.

# Goal 3: Safe Food

## Summary of FY 2002 Annual Performance Goals

**3** Goals Met

**1** Goals Not Met

**1** Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 3:	\$112,374
Goal 3 Share of Total:	1.2%

### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 3 Costs:	\$128,817
Goal 3 Share of Total:	1.6%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs.  
Refer to page IV-10 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

### Strategic Objective: By 2006, Reduce Public Health Risk From Pesticide Residues in Food From Pre-Food Quality Protection Act (FQPA) Levels (Pre-1996).

FY 2002 Cost (in thousands): \$47,093 (36.6% of FY 2002 Goal 3 Total Costs)

**Progress Toward Strategic Objective:** Since 1996, the year FQPA was enacted, EPA has made substantial progress toward reducing risk from pesticide residues in food. More than 100 safer pesticides—those which pose less risk to human health and the environment than conventional chemical pesticides—have been registered, substantially increasing the tools farmers have at their disposal to protect human health and the environment while ensuring productive agricultural yields. At the same time, use of pesticides that have the highest potential to cause cancer and neurotoxic effects has declined by more than 15% based on survey data. The increasing number of safer pesticides on the market, and the increasing number of acre-treatments using such pesticides, ensure that EPA is on track to meet its revised objective to reduce public health risk from pesticides in food from pre-FQPA levels.

APG 18	Decrease Risk from Agricultural Pesticides	Planned	Actual
FY 2002	Decrease adverse risk from agricultural uses from 1995 levels and assure that new pesticides that enter the market are safe for humans and the environment through ensuring that all registration actions are timely and comply with standards mandated by law. <b>Goal Met.</b>		
	<u>Performance Measure</u>		
	- Register safer chemicals and biopesticides (cumulative).	105	107
FY 2001	Same Goal, different targets. <b>Goal Not Met.</b>		
	<u>Performance Measure</u>		
	- Register safer chemicals and biopesticides.	96	92
FY 2000	Decrease adverse risk from agricultural uses from 1995 levels and assure that new pesticides are safe by such actions as registering 6 new chemicals, 2,200 amendments, 600 me-toos, 200 new uses, 45 inerts, 375 special registrations, 225 tolerances and 13 reduced risk chemicals/biopesticides. <b>Goal Met.</b>	6 2,200 600 200 45 375 225 13	6 3,069 1,106 427 95 458 452 16
FY 1999	Decrease adverse risk from agricultural pesticides from 1995 levels and assure new pesticides that enter the market are safe for humans and the environment. No Data.		--
	<b>FY 2002 Result:</b> In FY 2002 EPA continued to register pest control products, including “safer” pesticides, thus ensuring that growers have an adequate number of pest control options available to them.		

APG 19	Reduce Use of Highly Toxic Pesticides	Planned	Actual
FY 2002	Detections of residues of carcinogenic and cholinesterase inhibiting neurotoxic pesticides on foods eaten by children will have decreased by 15% (cumulative) from their average 1994 to 1996 levels. <b>Data Lag.</b>	15%	data available in 2003

FY 2002 Result: Data lag. Data will be available for the FY 2003 Annual Report.

APG 20	Reduced Risk Pesticides	Planned	Actual
FY 2002	At least 1% of acre-treatments will use applications of reduced risk pesticides. <b>Goal Met.</b>	1%	7.5%

**FY 2002 Result:** Targets for this annual goal were developed without the benefit of experience on their adoption by growers or the impact of improvements in the registration process. The use of two herbicides—glyphosate and s-metalachlor—greatly exceeded expectations and contributed to surpassing the target.

**Strategic Objective: By 2008, Use on Food of Current Pesticides That Do Not Meet the New Statutory Standard of “Reasonable Certainty of No Harm” Will Be Eliminated.**

*FY 2002 Cost (in thousands): \$81,724 (63.4% of FY 2002 Goal 3 Total Costs)*

**Progress Toward Strategic Objective:** EPA is well on the way to meeting the revised objective to substantially eliminate, by 2008, the use on food of pesticides that do not meet the “reasonable certainty of no harm” standard of the FQPA. Since 1996, 66.9% of the 9,721 tolerances (legal pesticide residue levels on food) have been reassessed using the new standard. More than 72% of 612 reregistration eligibility decisions have been completed. In particular, the risk of pesticides used on foods frequently eaten by children is decreasing, in part through work conducted in EPA’s tolerance reassessment program.

APG 21	Reassess Pesticide Tolerances	Planned	Actual
FY 2002	By the end of 2002 EPA will reassess a cumulative 66% of the 9,721 pesticide tolerances required to be reassessed over 10 years. This includes 67% of the 893 tolerances having the greatest potential impact on dietary risks to children. <b>Goal Met.</b>	66% 67%	66.9% 65.6%
FY 2001	Same Goal, different targets. <b>Goal Not Met.</b>	40% 46%	40% 44%
FY 2000	EPA will reassess 20% of the existing 9,721 tolerances to ensure that they meet the statutory standard of “reasonable certainty of no harm.” <b>Goal Not Met.</b>	1,250	121
FY 1999	Under pesticide reregistration, EPA will reassess 19% (or 1,850) of the existing 9,700 tolerances (cumulative 33%) for pesticides food uses to meet the new statutory standards of “reasonable certainty of no harm.” <b>Goal Not Met.</b>	1,850	1,445

**FY 2002 Result:** The Agency met its statutory and GPRA deadlines and targets for reassessing tolerances in FY 2002. (Tolerances in general are the major portion of the work, and the children’s tolerances are a small subset.) Reassessing these tolerances helps ensure that pesticide residues on foods are safe. EPA expects all 9,721 pesticide tolerances, including the 893 tolerances of special concern to children, to be reassessed by the statutory deadline, August 2006.

APG 22	Review Pesticides’ Active Ingredients	Planned	Actual
FY 2002	Assure that pesticides’ active ingredients registered prior to 1984 and the products that contain them are reviewed to assure adequate protection for human health and the environment. Also consider the unique exposure scenarios such as subsistence lifestyles of Native Americans in regulatory decisions. <b>Goal Not Met.</b>		
	<b>Performance Measures</b>		
	- Product Reregistration.	750	314
	- Reregistration Eligibility Decisions (REDs) (cumulative).	76.4%	72.7%

**FY 2002 Result:** Cumulative risk assessment is a new area of science that requires extensive peer review and several iterations before becoming final. The cumulative risk assessments themselves are a resource-intensive and time-consuming process. Also, in FY 2002 funding was redirected to review and test pesticides for efficacy against anthrax. These factors delayed reregistration efforts. REDs are done in tandem with the tolerance reassessments and all 612 REDs are on track to be completed by August 2006. Product reregistrations are generally completed 2 years after the RED is done. Therefore, the Agency is on track to complete product reregistrations by 2008. The total number of REDs completed to date is 443; 169 remain to be done. The relationship of product registration to REDs is that one RED can result in any number of product registrations (from one to many). Fewer REDs completed will result in fewer future product registrations. Because the Agency missed its FY 2002 targets for REDs and Product Reregistrations, EPA adjusted its FY 2003 targets and an adjustment to FY 2004 targets is likely.

**FY 2001 Annual Performance Goals (No Longer Reported for FY 2002)**

*Provide timely decisions to the pesticide industry on the registration of active ingredients for conventional pesticides including tolerance setting, product registrations and inert ingredients.*

## Notes:

1. Tolerances and Exemptions for Pesticide Chemical Residues, Food Quality Protection Act of 1996, sec. 408 [6a](a) Requirement for Tolerance or Exemptions.
2. The new safety standard, provided in section 408(b)(2)(A)(ii) of the FQPA, is a “reasonable certainty of no harm” standard for aggregate exposure using dietary residues and all other reliable exposure information.
3. U.S. EPA, The Office of Pesticide Programs’ Policy on Determination of the Appropriate FQPA Safety Factor(s) for Use in the Tolerance-Setting Process, draft document, 64 FR 48617 (Washington, DC: Office of Pesticide Programs, Office of Prevention, Pesticides, and Toxic Substances, May 10, 1999). Available at <http://www.epa.gov/scipoly/sap/1999/may/10xpoli.pdf>.
4. C.T. Whitman, Directive on Implementation of EPA Obligations Under the Consent Decree in *NRDC v. Whitman*, March 19, 2001.

## **GOAL 4: PREVENTING POLLUTION AND REDUCING RISKS IN COMMUNITIES, HOMES, WORKPLACES, AND ECOSYSTEMS**

**Pollution prevention and risk management strategies aimed at eliminating, reducing, or minimizing emissions and contamination will result in cleaner and safer environments in which all Americans can reside, work, and enjoy life. EPA will safeguard ecosystems and promote the health of natural communities that are integral to the quality of life in this Nation.**

### **PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES**

EPA is on track to meet most of its strategic objectives toward its goal of ensuring cleaner and safer environments by preventing pollution before it occurs and reducing human and ecosystem risks from pollutants that cannot be eliminated at their source. EPA's work under this goal spans six strategic objectives that follow a risk identification, reduction, and elimination progression:

- Screening new and existing chemicals to identify potential for human and ecological risks.
- Assessing environmental conditions on tribal lands to identify need for action.
- Improving indoor air quality to rid homes, schools, and workplaces of indoor environmental pollutants and to reduce asthma incidents.
- Reducing the incidence of childhood lead poisoning and human exposure to polychlorinated biphenyls (PCBs), dioxin, and asbestos, as well as other chemicals of concern.
- Reducing pesticide risks to workers, consumers, and ecosystems.
- Preventing, recycling, and reducing wastes and toxic chemicals.

EPA's Chemical-Right-To-Know Program focuses on providing the public with information on the basic health and environmental effects of the 2,800 highest production volume chemicals in the United States. More than 300 companies and 101 consortia have voluntarily accepted the

challenge to address the absence of and need for screening-level data for more than 2,100 high-production-volume (HPV) chemicals by 2005, with the remaining to be addressed by international and government actions. In FY 2002 EPA continued to make health and environmental effects screening data publicly available for more than 800 industrial and commercial chemicals, making steady progress toward its objective of screening existing chemicals to identify potential human and ecological hazards and risks.<sup>1</sup> EPA also continued its work to evaluate potential risk of 20 chemicals to which children have a high likelihood of exposure.<sup>2</sup>

In connection with assessing conditions on tribal lands, EPA's American Indian Environmental Office (AIEO) has made tremendous progress in developing an electronic baseline assessment system used to access tribal environmental information.<sup>3</sup> In addition to providing a picture of environmental conditions in Indian Country, this baseline assessment profile will provide indicators of the progress of tribal environmental programs in contributing to the Agency's strategic goals and objectives. EPA deployed the Tribal Information Management System (TIMS) as an Intranet application in September 2001 and can now extract environmental information tribe by tribe or by using tribal boundaries. TIMS currently has completed profiles for 300 tribes. In addition to TIMS, AIEO has developed a GPRA performance measure tracking system called the Tribal Accountability Tracking System and a tracking system for the General Assistance Program (GAP) grants program.

In FY 2002 EPA continued to make progress toward its strategic objective of improving indoor air quality. By reducing the exposure of children with asthma to indoor environmental triggers and to secondhand smoke in their homes, EPA seeks to protect a particularly vulnerable sector of the population.<sup>4</sup> EPA is also making progress in promoting the adoption of good indoor air quality management in schools and commercial buildings and in reducing the exposure of all Americans to elevated levels of radon in their homes.<sup>5</sup>

EPA has made great strides in reducing the incidence of childhood lead poisoning through a combination of rulemaking, education, research, and partnerships. According to blood lead level data from the National Health and Nutrition Examination Survey for children 1 to 5 years of age, the incidence of children with elevated blood lead levels dropped in the last decade.<sup>6</sup> In addition, the geometric mean blood level for children ages 1 to 5 years decreased from 15  $\mu$ /dL to 2  $\mu$ /dL from 1980 to 1999.

EPA has made significant progress in reducing pesticide risks to workers, consumers, and ecosystems through a wide array of environmental programs. The Agency is ensuring that pesticides pose less risk to groundwater through careful management of pesticides with high leaching and persistence potential. EPA identified 31 such pesticides. Twenty-one of those pesticides were managed through FY 2002. The development and implementation of environmentally friendly model partnership pilot projects under the Strategic Agricultural Initiative, as well as Pesticide Environmental Stewardship strategies developed by voluntary partners, have encouraged a transition to safer pesticides. In a new measure for FY 2002, the Agency found that the use of pesticides that it considers safer increased to an estimated 7.5 percent of all agricultural pesticide acre-treatments in 2001 based on data reported in FY 2002, an increase from 3.6 percent in 1998.

EPA also made continued progress in achieving its 50 percent priority chemicals reduction target and in meeting the Municipal Solid Waste recycling goal. In 2002 EPA

launched the Resource Conservation Challenge (RCC), which targets 30 waste minimization priority chemicals and urged all Americans to join in conserving resources by reducing waste and increasing recycling.<sup>7</sup> The RCC is the umbrella for initiatives that target waste reduction and recycling. Through these initiatives, EPA works directly with state and local governments, businesses, industry, and the public to reduce waste generation. In several ways, states continue to be instrumental to achievement of the national recycling goal. States participate with EPA as WasteWise partners and endorsers, implement EPA's Comprehensive Procurement Guidelines by purchasing goods made from recycled materials, actively support America Recycles Day, and provide training, support, and oversight for local recycling programs. Other EPA programs such as the Green Chemistry Challenge Awards, Design for the Environment, Hospitals for a Healthy Environment, and National Environmental Performance Track are achieving significant progress in reducing the amount of toxic substances and waste released into the environment. For example, EPA Region 2 Performance Track facilities have collectively reduced the generation of hazardous waste in their area by more than 20 million pounds through process and design changes, equipment upgrades, and efficiency improvements.<sup>8</sup>

## FY 2002 PERFORMANCE

### Risk Identification

Hazard identification is an essential initial step in the risk-reduction process. In FY 2002 EPA's HPV Challenge Program continued to provide health and environmental effects screening data for more than 800 industrial and commercial chemicals. EPA's efforts in making these data available on the Agency's HPV Web site kept pace with the unprecedented volume of data submitted by industry participants.<sup>9</sup>

EPA also established the Voluntary Children's Chemical Evaluation Program (VCCEP), under which 35 chemical manufacturers and 10 consortia volunteered to develop risk assessment and additional data for 20 chemicals

to which children have a high likelihood of exposure.<sup>10</sup> In FY 2002 EPA and the American Chemistry Council conducted a technical workshop to assist industry in formulating and reporting exposure information on chemicals sponsored under the pilot program. In addition, in FY 2002 the Toxicology for Excellence in Risk Assessment (TERA) group, through a cooperative agreement with EPA, solicited and approved members for the peer review panel that will convene to review submissions on sponsored chemicals in FY 2003.

The Agency also worked to identify risks posed by endocrine disruptors—chemicals that may cause adverse effects in humans and wildlife. In FY 2002 EPA continued to move forward with evaluation and validation of test methods focused on identifying and assessing potential endocrine-disrupting chemicals.

In FY 2002 EPA electronically published environmental profiles for all 565 federally recognized tribes as part of the Tribal Baseline Assessment Project.<sup>11</sup> Of those profiles 331 are complete, including history, maps, geographic dimensions, inventories of regulated facilities, governmental structure, descriptions of wastewater and drinking water facilities, grant activities, and status of environmental programs for each tribe.

### **Risk Reduction and Elimination**

Where potential risks are identified, EPA pursues three strategies for reducing or eliminating them. The Agency's first choice is to prevent risks from occurring in the first place by eliminating pollution at the source. Second, when pollution cannot be eliminated at the source, EPA applies several risk reduction strategies: education and outreach, partnership and collaboration, regulation, and international negotiation. Third, once wastes are produced, there is still an opportunity for recycling or reuse.<sup>12</sup>

Part of the Agency's pollution prevention efforts in FY 2002 was the public release of the PBT (persistent bioaccumulative toxics) Profiler,<sup>13</sup> which received accolades from both industry and environmentalists.<sup>14</sup> In the brief

### **CHEMICAL TERRORISM: INCREASING EMERGENCY PREPAREDNESS**

To prepare for catastrophes that might occur and to improve the Nation's incident response capabilities, EPA leads nine federal agencies, six states, member countries of the Organisation for Economic Co-operation and Development, and numerous other experts from private industry and other non-governmental organizations in developing Acute Exposure Guideline Levels (AEGs) for chemicals in commerce.<sup>a</sup> The AEG values represent three tiers of health effects endpoints (discomfort, disability, and death) for five different exposure durations (10 and 30 minutes, 1, 4, and 8 hours) to provide maximum flexibility and applicability to chemical emergency planners and responders. To date the program has developed AEGs for about 90 chemicals with Proposed, Interim, or Final status. The Agency continues to assess the remaining 300 extremely hazardous substances.<sup>b</sup>

<sup>a</sup> U.S. EPA Office of Prevention, Pesticides, and Toxic Substances. *Overview of the Acute Exposure Guideline Levels (AEG) Program*. June 2002.

<sup>b</sup> U.S. EPA Acute Exposure Guideline Limits (AEG) Tracking System, Office of Pollution Prevention and Toxics.

period of time between the PBT Profiler's public release on September 25, 2002, and mid-November 2002, industry conducted more than 3,750 chemical-specific PBT analyses.<sup>15</sup> A component of EPA's Pollution Prevention Assessment Framework, the PBT Profiler is a screening-level tool that estimates persistence, bioaccumulation, and fish chronic toxicity. Use of this tool informs decision making at early stages of new chemical development and promotes the selection and application of safer chemicals and processes, thus reducing product development costs and increasing pollution prevention benefits.

In addition, EPA made substantial progress in reducing potential health and environmental risks posed by a number of chemicals already in commerce. For example, in the case of perfluorooctanyl sulfonate (PFOS) chemicals, EPA followed up 3M's voluntary phase-out of

**CHALLENGES:  
KEY STRATEGY FOR REDUCING RISKS**

EPA's challenges to industry, academia, and others to seek new ways to reduce risk are increasingly effective. Pollution prevented by EPA's Green Chemistry Challenge Award winners reached new levels through the 2002 award cycle.<sup>a</sup> Results included reduced quantity of hazardous chemicals and solvents in the environment through the adoption of safer chemicals and greener technologies. Since 1996 more than 250 million pounds and 25 million gallons of hazardous solvents were eliminated and 2 billion gallons of water were saved.

<sup>a</sup> U.S. Environmental Protection Agency, Green Chemistry. Office of Pollution Prevention and Toxics. Information available on the Internet: (<http://www.epa.gov/opptintr/greenchemistry>).

these chemicals with Toxic Substances Control Act (TSCA) Significant New Use Rules (SNURs) addressing 88 PFOS-related chemicals.<sup>16</sup> The SNURs establish a 90-day notification process for companies interested in manufacturing or importing the listed chemicals for new uses other than those specifically excluded in the rules. The required notice provides EPA with the opportunity to evaluate the intended use and, if necessary, to prohibit or limit that use before it occurs.<sup>17</sup>

The Design for the Environment (DfE) Program demonstrated the effectiveness of its best practices approach by helping auto body shops reduce emissions of and exposure to diisocyanates and other hazardous air pollutants.<sup>18</sup> Diisocyanates are the leading cause of occupational asthma.<sup>19</sup> In the past several years, DfE has conducted more than 50 best practices site visits. Over 75 percent of visited shops show improved practices and better protection of their workers and the neighboring community.<sup>20</sup> To build on this success and reach out to the more than 50,000 auto body shops across the country, DfE is conducting train-the-trainer workshops for regional and state technical assistance providers in FYs 2002 and 2003.

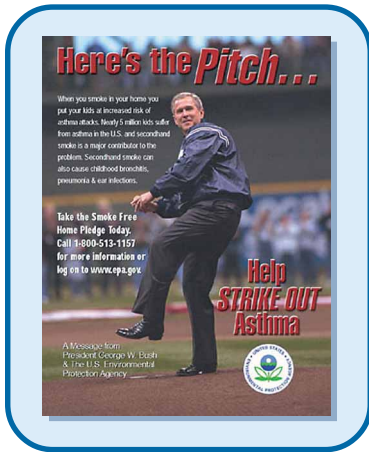
DfE also published two Cleaner Technologies Substitutes Assessments on flexographic printing inks and foam adhesives, which are spurring adoption of cleaner formulations and the innovation of even cleaner ones.<sup>21</sup> For example, prior to the Foam Adhesives Partnership,<sup>22</sup> the predominant solvent used in adhesive formulations was methylene chloride, a hazardous air pollutant and a suspected human carcinogen. In part based on the DfE study, use of methylene chloride in foam adhesives has dropped by more than 80 percent (from 46 million pounds in 1997 to 8 million pounds in 2001). The DfE Program also formed a partnership with the broader electronics industry in FY 2002, at the industry's request, to begin a life-cycle assessment of lead-free alternatives to the traditional tin-lead solder now used in virtually all electronic products.<sup>23</sup>

The Environmental Leadership Program in the National Parks Intermountain Region is a joint venture between EPA and the National Park Service of the Department of the Interior (DOI), which won the 2002 Most Valuable Pollution Prevention (MVP2) Partnership Award from the National Pollution Prevention Roundtable.<sup>24</sup> This innovative partnership between EPA Region 8 and the National Park Service delivered pollution prevention tools, training, and technical assistance to 90 parks in the Intermountain Region, including Rocky Mountain, Bryce Canyon, and Grand Canyon National Parks. Examples of the partnership's success include an integrated solid waste management program that saved the parks thousands of dollars while setting up recycling centers in many locations; a hazard communication program that trained 3,000 employees on chemical preparedness; a green purchasing program for environmentally sound products; a clean-out manual on how to remove, dispose of, and recycle unwanted chemicals; and the first environmental management system in the DOI based on EPA's Performance Track program.<sup>25</sup> Another successful partnership was achieved between the Department of Defense (DOD) and the southeastern states' pollution prevention programs. Two million dollars of DOD funds were supplied to state partners to initiate



pollution prevention (P2) research projects at military facilities in FY 2002. This partnership represents DOD's first effort to link P2 resources in state universities to facilities in those states.<sup>26</sup>

EPA will continue to conduct education and outreach programs to inform and educate the public about the health risks posed by poor indoor air quality. In FY 2002 EPA launched a national campaign to protect children from secondhand smoke by motivating millions of parents to pledge to keep their homes smoke-free. It is estimated that 15 million children are



exposed on a daily basis to secondhand smoke.<sup>27</sup> The Smoke-Free Home Pledge initiative includes a national advertising campaign coupled with a major outreach effort cosponsored by EPA and key

medical, consumer, and community organizations.<sup>28</sup> In addition, mold continues to be one of the highest concerns for people in their indoor environments. In FY 2002 EPA released current guidance to the public on mold in *A Brief Guide to Mold, Moisture, and Your Home*.<sup>29</sup> The guide, available at <http://www.epa.gov/iaq/molds/images/moldguide.pdf>, provides information and guidance to homeowners and renters on how to clean up residential mold problems and how to prevent mold growth.<sup>30</sup> EPA also released the report *Healthy Buildings, Healthy People: A Vision for the 21<sup>st</sup> Century*, a cross-Agency effort that includes comments from more than 300 stakeholders.<sup>31</sup> The report focuses on why human health indoors deserves the scrutiny, concern, and action of policy makers. It also provides information on actions and strategies that can be taken to protect people indoors. EPA has already undertaken program initiatives focusing on childhood asthma, characterizing the effect of building and consumer products for use in schools, creating

voluntary guidance for existing buildings, and designing indoor air quality guidance that can be applied by architects and engineers when planning new schools and major renovations.<sup>32</sup>

EPA's campaign to reduce the incidence of childhood lead poisoning through regulatory and extensive outreach efforts has realized significant results. The consolidation of 1999 National Health and Nutrition Examination Survey data with 2000 data (made public in the summer of 2002) revealed that the incidence of children with elevated blood lead levels dropped during the 1990s.<sup>33</sup> The median concentration of lead in the blood of children 5 years old and younger dropped from 15 micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ) between 1976 and 1980 to 1.9  $\mu\text{g}/\text{dL}$  in 1999, a decline of 87 percent.

In FY 2002 EPA also made significant progress in promoting Integrated Pest Management (IPM) in schools and day care facilities, with the goal of reducing the risk of both pesticides and pests to children. EPA grant funding supported a partnership of 14 land grant universities that aided in the development of comprehensive IPM guidance documents, which enabled state agencies to more efficiently operate their IPM programs. Currently, 33 states and more than 400 school districts have policies and/or laws relating to the adoption of IPM in schools. More than 1 million children attend schools that use IPM according to the Monroe Model, that has been replicated in several states, such as Indiana, Alabama, Florida, Nevada, California, and Arizona (including Navajo Nation/Bureau of Indian Affairs Schools). The Monroe Model is the IPM program developed for the Monroe County, Indiana, school system. Monroe County is a Pesticide Environmental Stewardship Program (PESP) partner that received seed funding from the PESP program through grants with the National Foundation for IPM Education. These schools report a 90 percent reduction in pesticide applications, while at the same time achieving a 90 percent reduction in pest problems and a reduction in cost for pest management.

EPA has targeted reduction and elimination efforts for chemicals that persist, accumulate through the food chain, and are toxic to humans

or are environmental receptors (PBTs.) In FY 2002 EPA launched the Hospitals for a Healthy Environment (H2E) program, seeking to eliminate use of mercury by hospitals and cut waste generation in half. More than 1,000 facilities enrolled in the first year—five times more than expected—prompting the Agency to raise expectations for its FY 2003 and FY 2004 annual performance measure targets.<sup>34</sup> EPA is also targeting the reduction of 30 priority chemicals through hazardous waste minimization. The National Waste Minimization Voluntary Program, initiated in FY 2002 as part of the RCC, is seeking industry partners to eliminate or reduce the generation of priority chemicals typically found in hazardous waste. This effort would result in the generation of less hazardous waste and a reduction in the likelihood of exposures to toxic chemicals. The Agency expects to have between 50 and 100 members enrolled by 2004 and expects to continue the program beyond 2004.<sup>35</sup>

Once wastes are produced, there is still an opportunity to recycle or otherwise reuse them. Data reported in FY 2002 reflect that the 2000 national Municipal Solid Waste (MSW) recycling rate increased to 30 percent.<sup>36</sup> This figure reflects the diversion of 69.9 million tons of MSW from the waste stream and the conservation of 159 million cubic yards of landfill capacity.<sup>37</sup> Reducing the amount of MSW that goes to landfills by recycling saves resources, such as the number of trees milled to produce lumber and paper goods and the amount of metals mined and tailings produced to create new cans. At the same time, by providing feedstock, increased recycling enhances the viability of the recycling and reuse industry, a key segment of the Nation's manufacturing base. Data compiled from 1997 through 1999 indicate that recycling and reuse contribute more than 1.1 million jobs to the economy with a \$37 billion annual payroll and \$236 billion in gross annual sales.<sup>38</sup>

### Research Contributions

FY 2002 research focused on improving EPA's understanding of health risks and reducing community and wildlife exposures to

environmental stressors. EPA produced a report for Agency use on ecological risk assessment methods that shows the extent to which acutely toxic effects of pesticides and crop management practices on non-target birds can be used to project health impacts on wildlife populations in complex agricultural landscapes.<sup>39</sup> EPA also performed studies on the variability and value of newly developed biological indicators in determining the endocrine-disrupting potential of various pesticides. EPA's research on new molecular biological indicators will help the Agency detect and protect the public from pesticides that induce genetic changes characteristic of those caused by endocrine-disrupting chemicals.

EPA continued to move forward with evaluation and validation of test methods for identifying and assessing potential endocrine disrupting chemicals. In FY 2002 EPA completed and presented to one of its advisory committees, the Endocrine Disruptor Methods Validation Subcommittee, detailed review papers summarizing what is known in the literature for 13 assays.<sup>40</sup> All 13 assays are in various stages of pre-validation, optimization, and standardization.

## STATE AND TRIBAL PARTNER CONTRIBUTIONS

### State Contributions

States significantly contributed to achieving EPA's goal to lower children's blood lead levels and reduce childhood lead poisoning. Partnering with 36 states, EPA made substantial progress toward its goal of establishing a national cadre of trained and certified lead-based paint abatement professionals. By the end of FY 2002, more than 4,000 workers were certified to employ EPA-required and recommended work practices to reduce the primary remaining source of children's exposure to lead.<sup>41</sup>

States have primary enforcement responsibility for the Pesticides Certification and Training programs as well as the Worker Protection Program under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. The states' role is critical to the health and safety

of applicators and workers who have the highest degree of potential exposure to pesticides. The Worker Protection Program has an enormous scope, reaching more than 3.5 million workers at over 560,000 workplaces.<sup>42</sup>

### **Tribal Contributions**

Through its Jobs Through Recycling program, EPA partners with a number of nonprofit organizations, including some in tribal nations, to successfully demonstrate the ability of recycling practices to create job and business opportunities. EPA's high-visibility WasteWise program serves as a vehicle for the Agency's 1,250 partners to enhance, measure, and obtain recognition for their proactive achievements in waste reduction and recycling.<sup>43</sup> WasteWise partners are diverse, representing all sizes of businesses, government agencies at all levels, tribal nations, and nonprofit organizations. By showing cost savings through waste reduction and recycling, partners are protecting the environment while enhancing the economy both locally and nationally.

In FY 2002 the Federal Geographic Data Committee organized a Tribal Data Working Group, an interagency effort to promote tribal data coordination and compatibility throughout the federal government in assessing environmental conditions in Indian Country. EPA also provided \$52.5 million in Indian GAP grants that will support the work of at least one person in about 75 percent of all federally recognized tribes or intertribal consortia in building understanding about the environment and helping to set tribal priorities. Creating a strong, sustainable environment for the future based on sound, quality information is an important objective for EPA's tribal partners.

### **ASSESSMENT OF IMPACTS OF FY 2002 PERFORMANCE ON FY 2003 ANNUAL PERFORMANCE PLAN**

There are no changes to FY 2003 APGs based on the results of FY 2002 performance.

## Goal 4: Preventing Pollution and Reducing Risks

### Summary of FY 2002 Annual Performance Goals

**5** Goals Met

**0** Goals Not Met

**4** Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

#### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 4:	\$322,442
Goal 4 Share of Total:	3.4%

#### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 4 Costs:	\$309,196
Goal 4 Share of Total:	3.8%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs.  
Refer to page IV-10 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

**Strategic Objective: By 2005, Public and Ecosystem Risk From Pesticides Will Be Reduced Through Migration to Lower-Risk Pesticides and Pesticide Management Practices, Improving Education of the Public and At Risk Workers, and Forming “Pesticide Environmental Partnerships” With Pesticide User Groups.**

*FY 2002 Cost (in thousands): \$51,487 (16.7% of FY 2002 Goal 4 Total Costs)*

**Progress Toward Strategic Objective:** EPA continued to make significant progress toward fulfilling this objective in FY 2002 and is on target to achieve its goals through a wide array of environmental programs. EPA's Strategic Agricultural Initiative, in which states, academia, and grower groups develop and implement model agricultural partnership pilot projects, is providing a highly visible platform for environmentally friendly agricultural projects. In addition, the Pesticide Environmental Stewardship Program has approved 120 strategies developed by voluntary partners in both agricultural and nonagricultural settings, which are made available to the public through EPA's Web site (<http://www.epa.gov/oppbppd1/PESP/>). EPA is also working to ensure that pesticides pose less risk to the Nation's groundwater through careful management of those pesticides with high leaching and persistence potential. In addition, EPA is working to reduce the risk of pesticides to human health and the environment, by registering safer pesticides (those registered through the Reduced Risk Initiative and biopesticides).

APG 23	Agricultural Partnership	Planned	Actual
FY 2002	Implementation of 10-15 additional model agricultural partnership projects that demonstrate and facilitate the adoption of farm management decisions and practices that provide growers with a “reasonable transition” away from the highest risk pesticides. <b>Goal Met.</b>	10-15	12

**FY 2002 Result:** EPA implemented 12 strategic agricultural projects.

**Strategic Objective: By 2007, Significantly Reduce the Incidence of Childhood Lead Poisoning and Reduce Risks Associated With Polychlorinated Biphenyls (PCBs), Mercury, Dioxin, and Other Toxic Chemicals of National Concern.**

*FY 2002 Cost (in thousands): \$37,062 (12.0% of FY 2002 Goal 4 Total Costs)*

**Progress Toward Strategic Objective:** The Agency is making significant progress toward the objective of reducing the incidence of childhood lead poisoning, from approximately 900,000 children under 6 years of age to under 200,000 by 2007, through its regulatory and outreach efforts. The 1999 National Health and Nutrition Examination Survey (NHANES) data reveal that the median concentration of lead in the blood of children 5 years old and under dropped from 15 micrograms per deciliter (µg/dL) between 1976 and 1980 to 1.9 µg/dL in 1999, a decline of 87%. However, even when the 1999 NHANES data are combined with the 2000 NHANES data made public in the summer of 2002, there are insufficient numbers of observations in the samples to report an estimate of the number of children 5 years old and under with levels of 10 µg/dL in 1999/2000. This suggests that the number of such children nationally has been reduced dramatically from the early 1990s, though development of a reportable estimate must now wait at least until the 2001 NHANES data can be added to the combined sample. EPA's efforts, through state partnerships, contributed partly to this reduction through the certification of more than 4,500 workers to employ EPA-required and recommended lead-based paint abatement practices.

Risk reduction efforts for other National Program Chemicals such as PCBs, mercury, asbestos, and dioxin continue to meet the mandates under TSCA and fulfill the commitments made in domestic and international agreements. Approximately 98,000 PCB-contaminated capacitors and approximately 53,000 PCB-contaminated transformers were disposed of in permitted facilities between 1996 and 2000, continuing progress toward EPA's 2007 targets for PCB capacitors.

APG 24	Lead Certification and Training of Lead Abatement	Planned	Actual
FY 2002	Implement certification and training of lead abatement professionals. <b>Goal Met.</b>		

**Performance Measure**

- Certified nationally (federally-administered and state-administered program).	4,000	4,574
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**FY 2002 Result:** In FY 2002, 4,574 lead abatement officials were nationally certified. EPA exceeded its FY 2002 target for this measure as a result of the response by lead-based paint abatement professionals to the Agency's and states' efforts to train and certify proficiency in lead-based paint abatement techniques, which was greater than anticipated. Targets for future performance under this goal have been increased accordingly.

**Strategic Objective: By 2007, Prevent or Restrict Introduction into Commerce of Chemicals That Pose Risks to Workers, Consumers, or the Environment and Continue Screening and Evaluating Chemicals Already in Commerce for Potential Risk.**

*FY 2002 Cost (in thousands): \$77,788 (25.1% of FY 2002 Goal 4 Total Costs)*

**Progress Toward Strategic Objective:** EPA is making progress toward this strategic objective by safeguarding the entry of new chemicals into commerce and providing screening tools through the Agency's Pollution Prevention Assessment Framework. These tools inform decision-making at early stages of new chemical development and promote the selection and application of safer chemicals and processes, thus reducing product development costs and increasing pollution prevention benefits. EPA's High Production Volume (HPV) Challenge Program continued to provide health and environmental effects screening data for more than 800 industrial and commercial chemicals—supplying input to hazard identification efforts (<http://www.epa.gov/chemrtk/viewsrch.htm>). More than 300 companies and 101 consortia have accepted the voluntary challenge to address the absence of and need for screening-level data for more than 2,100 of the 2,800 HPVs by 2005. Concurrently, EPA established the Voluntary Children's Chemical Evaluation Program (VCCEP), under which 35 chemical manufacturers volunteered to develop risk assessment and additional data needs for 20 chemicals to which children have a high likelihood of exposure. In addition, EPA reduced potential health and environmental risks associated with a number of chemicals already in commerce. For example, in the case of perfluorooctanyl sulfonate (PFOS) chemicals, EPA followed up industry's voluntary phase-out of these chemicals with TSCA Significant New Use Rules (SNURs) addressing 88 PFOS-related chemicals.

APG 25	New Chemicals and Microorganisms Review	Planned	Actual
FY 2002	Of the approximately 1,800 applications for new chemicals and microorganisms submitted by industry, ensure those marketed are safe for humans and the environment. Increase proportion of commercial chemicals that have undergone pre-manufacture notice review to signify they are properly managed and may be potential green alternatives to existing chemicals. <b>Goal Met.</b>	1,800	1,943
FY 2001	Same Goal. <b>Goal Met.</b>	1,800	1,770*
FY 2000	Same Goal. <b>Goal Met.</b>	1,800	1,838
FY 1999	Same Goal. <b>Goal Met.</b>	1,800	1,717*

**FY 2002 Result:** EPA reviewed all 1,943 Pre-manufacturing Notices (PMNs) received during FY 2002. At the end of 2002, 21.5% of all chemicals in commerce had been assessed for risks. Many of these chemicals also may be "green" alternatives to existing chemicals in commerce, thus reducing these chemicals' impact on human health and the environment.

**\*Note:** While the actual number of chemicals for which PMNs were reviewed is lower than the target, the target was set to reflect EPA's commitment to comply with statutorily-mandated 90-day reviews of all PMNs submitted in 1999 and 2001, which it did. Under the Toxic Substances Control Act, EPA does not control the pace at which companies submit PMNs for review, but it does control the pace at which it completes such reviews. Accordingly, the Agency has determined this performance goal to have been met.

APG 26	Chemical Right to Know Initiative	Planned	Actual
FY 2002	Provide information and analytical tools to the public for accessing the risk posed by toxic chemicals. <b>Goal Met.</b>		
	<b>Performance Measure</b>		
	- Make screening quality health and environmental effects data publicly available for 2,800 HPV chemicals (cumulative).	10% data (280 chemicals)	843 chemicals
FY 2001	EPA will make publicly available data from test plans submitted by industry or chemicals already in commerce. <b>Goal Met.</b>		
	<b>Performance Measure</b>		
	- Through chemical testing program, obtain test data for high production volume chemicals on master testing list.	800	724* chemicals

**FY 2002 Result:** In FY 2002 screening quality health and environmental effects data were made available for 843 HPV chemicals, vastly exceeding EPA's annual goal. Companies voluntarily reported more than 30% of the total cumulative requirement (20% above the annual target).

**\*Note:** While the actual number of chemicals for which test data were obtained was lower than the target, the target was set to reflect EPA's commitment to make publicly available all test data that it received from companies in 2001, which it did. Under the HPV Challenge voluntary program, EPA does not control the pace at which companies submit their test data, but it does control the pace at which such data are made public. Accordingly, the Agency determined this performance goal to have been met.

**Strategic Objective: By 2005, 16 Million More Americans Than in 1994 Will Live or Work in Homes, Schools, or Office Buildings With Healthier Indoor Air.**

*FY 2002 Cost (in thousands): \$38,397 (12.4% of FY 2002 Goal 4 Total Costs)*

**Progress Toward Strategic Objective:** In FY 2002 EPA continued to make progress in the areas of reducing the exposure of children with asthma to indoor environmental triggers, reducing all Americans' exposure to elevated levels of radon in their homes, reducing the exposure of children to secondhand smoke in their residences, and promoting the adoption of good indoor air quality management in schools and commercial buildings. While the data on which EPA evaluates its FY 2002 progress toward the objective are not yet available for 2002, the Agency is on track in meeting its goal for improving the indoor conditions for 16 million Americans in their homes, schools, and offices.

APG 27	Healthier Residential Indoor Air	Planned	Actual
FY 2002	<b>834,400 additional people will be living in healthier residential indoor environments.</b> <a href="#">Data Lag.</a>	<b>834,400</b>	<b>data available in 2003</b>
FY 2001	Same Goal. <i>Goal Met.</i>	890,000	890,000
FY 2000	Same Goal. <i>Goal Met.</i>	890,000	1,032,000
FY 1999	Same Goal, different targets. <i>Goal Met.</i>	700,000	1,322,000

**FY 2002 Result:** Based on feedback received to date, EPA is making progress in reducing radon exposure in homes. EPA will implement a survey to measure asthma and ETS results. These data will be available in late 2003 and will be reported on in the FY 2003 Annual Report. (Data sources: National Association of Home Builders Research Center Survey (January 2002); National Radon Residential Study 1989-1990, EPA 402-R-92-011 (October 1992); National Radon Results: 1985-1999; IAQ Practices in Office Buildings Survey, OMB 2060-0436 (October 2001) .)

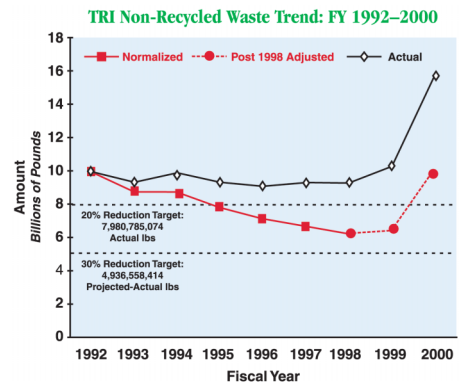
APG 28	Healthier Indoor Air in Schools	Planned	Actual
FY 2002	<b>1,228,500 students, faculty and staff will experience improved indoor air quality in their schools.</b> <a href="#">Data Lag.</a>	<b>1,228,500</b>	<b>data available in 2003</b>
FY 2001	Same Goal, different targets. <i>Goal Met.</i>	1,930,000	1,930,000
FY 2000	Same Goal, different targets. <i>Goal Met.</i>	2,580,000	2,600,000

**FY 2002 Result:** EPA is on track to meet this APG. The number of schools adopting indoor air quality management plans, a key component of the Indoor Air Quality Tools for Schools kit, continued to increase in FY 2002 based on feedback received to date. EPA will determine FY 2002 performance in calendar year 2003 once final survey results become available.

**Strategic Objective: By 2005, Facilitate the Prevention, Reduction, and Recycling of Toxic Chemicals and Municipal Solid Wastes, Including Persistent, Bioaccumulative Toxicants (PBTs). In Particular, Reduce By 20% the Actual (From 1992 Levels) and By 30% the Production-Adjusted (From 1998 Levels) Quantity of Toxic Release Inventory (TRI)-Reported Toxic Pollutants Which Are Released, Disposed of, Treated, or Combusted For Energy Recovery, Half Through Source Reduction.**

*FY 2002 Cost (in thousands): \$46,623 (15.1% of FY 2002 Goal 4 Total Costs)*

**Progress Toward Strategic Objective:** EPA is making progress toward this strategic objective. In September 2002 EPA launched its Resource Conservation Challenge, a major national effort inviting all Americans to join in conserving resources by reducing waste and increasing recycling. In the coming months, EPA will form partnerships, conduct an intense educational campaign, and demonstrate progress in conserving our natural resources through waste reduction and recycling. For the 30 waste minimization priority chemicals tracked by EPA and included in the Challenge, there was a 44% reduction in the reported Toxics Release Inventory (TRI) volume generated between 1991 and 1998. This reduction, coupled with the ongoing efforts of the Resource Conservation Challenge, illustrates EPA's continued progress toward achieving its 50% source reduction objective by 2005. Through EPA's Green Chemistry Challenge Program, initiated in 1996, more than 250 million pounds and 25 million gallons of hazardous solvents were eliminated and 2 billion gallons of water were saved. Another major step toward source reduction has occurred through EPA's Hospitals for a Healthy Environment (H2E) program. Launched in FY 2002, the H2E program seeks to eliminate use of mercury by hospitals and cut waste generation in half; more than 330 partners representing more than 1,000 facilities enrolled in FY 2002, far surpassing the Agency's expectations.



EPA's progress toward reduction of TRI pollutants is uncertain. The aggregate change in TRI non-recycled wastes since 1992 is unknown due to a significant reporting error uncovered subsequent to the release of the 2000 TRI reporting data. It is difficult to predict with accuracy the number of pounds of pollutants released in any given year due to fluctuations in production, reporting system rules, and estimation methods. The long-term trend, however, is a continued reduction of pollutants released into the environment.

APG 29	Toxic Release Inventory (TRI) Pollutants Released	Planned	Actual
FY 2002	The quantity of TRI pollutants released, disposed of, treated or combusted for energy recovery in 2002 (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2001. <a href="#">Data Lag.</a>	-200 M	data available in 2004
FY 2001	The quantity of TRI pollutants released, disposed of, treated or combusted for energy recovery in 2001 (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2000. <a href="#">Data Lag.</a>	-200 M	data available in 2003
FY 2000	The quantity of TRI pollutants released, disposed of, treated or combusted for energy recovery, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 1999 reporting levels. <a href="#">Goal Met.</a>	-200 M	-405 M
FY 1999	The quantity of TRI pollutants released, treated, or combusted for energy recovery will be reduced by 200 million pounds, or 2% from 1998 reporting levels. <a href="#">Goal Not Met.</a>	-200 M	+684 M

**FY 2002 Result:** Data Lag. Data will be available in September 2004.

**FY 2000 Result Available in FY 2002:** EPA exceeded its target of a reduction of 200 million pounds of TRI pollutants released. An analysis conducted using preliminary corrected data shows that actual non-recycled waste increased by just under 300 million pounds (2.9%) from 1999 to 2000, compared to the target of a 2% reduction. However, when the data are normalized to control for changes in production, a 2.3% reduction is observed from 1999 to 2000.

APG 30	Municipal Solid Waste Source Reduction	Planned	Actual
FY 2002	Divert an additional 1% (for a cumulative total of 31% or 69 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of Resource Conservation and Recovery Act (RCRA) municipal solid waste at 4.5 pounds per day. <a href="#">Data Lag.</a>	69 M 4.5 lbs	data available in 2004
FY 2001	Divert an additional 1% (for a cumulative total of 30% or 67 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day. <a href="#">Data Lag.</a>	67 M 4.3 lbs	data available in 2003
FY 2000	Divert an additional 1% (for a cumulative total of 29% or 64 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day. <a href="#">Goal Met.</a>	64 M 4.3 lbs	69.9 M 4.5 lbs
FY 1999	Maintain levels (for a cumulative total of 28% or 62 million tons) of municipal solid waste diverted from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day. <a href="#">Goal Met.</a>	62 M 4.3 lbs	64 M 4.6 lbs

**FY 2002 Result:** Data Lag. Data will be available in December 2004.

**FY 2000 Result Available in FY 2002:** In FY 2000, 30.1%, or 69.9 million tons of municipal solid waste, was diverted from land filling and combustion, and the per capita generation decreased to 4.5 pounds per day.

**Strategic Objective: By 2005, EPA Will Assist All Federally Recognized Tribes in Assessing the Condition of Their Environment, Help in Building Tribes' Capacity to Implement Environmental Management Programs, and Ensure That EPA is Implementing Programs in Indian Country Where Needed to Address Environmental Issues.**

*FY 2002 Cost (in thousands): \$57,839 (18.7% of FY 2002 Goal 4 Total Costs)*

**Progress Toward Strategic Objective:** EPA is on track and making progress toward this strategic objective. Through FY 2002 the Agency has collected baseline environmental information on 331 tribes, or 58% of tribes, exceeding its annual goal. In addition to providing a picture of environmental conditions in Indian Country, the baseline assessment effort will provide indicators of the progress of tribal environmental programs according to Agency goals and objectives.

APG 31	Tribal Environmental Baseline/Environmental Priority	Planned	Actual
FY 2002	Baseline environmental information will be collected for 38% of tribes (covering 50% of Indian Country). <a href="#">Goal Met.</a>		
	<u>Performance Measure</u>		
	- Environmental assessments for tribes (cumulative).	217 tribes*	331 tribes*

Goal 4 - Preventing Pollution and Reducing Risks

FY 2001	Same Goal, different targets. <i>Goal Met.</i>	193	207
FY 2000	16% of tribal environmental baseline information will be collected and 12 additional tribes (cumulative total of 57) will have tribal/EPA environmental agreements or identified environmental priorities. <i>Goal Not Met.</i>	16% 12	16% 4
FY 1999	10% of tribal environmental baseline information will be collected and 10 additional tribes (cumulative total of 45) will have tribal/EPA environmental agreements or identified environmental priorities. <i>Goal Met.</i>	10% 10	10% 11

**FY 2002 Result:** Under federal environmental statutes, EPA is responsible for ensuring human health and environmental protection in Indian Country. By the end of FY 2002, EPA collected baseline environmental information for a cumulative total of 331 of 572 tribal entities.

**\*Note:** EPA collected baseline information for 331 tribes (58%) of the universe of 572 tribes, thereby exceeding the goal of 217 tribes (38%).

**Prior Year Annual Performance Goals Without Corresponding FY 2002 Goals**  
(Actual Performance Data Available in FY 2002 and Beyond)

		<b>Planned</b>	<b>Actual</b>
FY 2000	Administer federal programs and oversee state implementation of programs for lead-based paint abatement certification and training in 50 states, to reduce exposure to lead-based paint and ensure significant decreases in children's blood levels by 2005.		target year is FY 2005
FY 1999	Complete the building of a lead-based paint abatement certification and training in 50 states, to ensure significant decreases in children's blood lead levels by 2005 through reduced exposure to lead-based paint.		target year is FY 2005



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## **GOAL 5: BETTER WASTE MANAGEMENT AND RESTORATION OF CONTAMINATED WASTE SITES, AND EMERGENCY RESPONSE**

**America's wastes will be stored, treated, and disposed of in ways that prevent harm to people and to the natural environment. EPA will work to clean up previously polluted sites, restore them to uses appropriate for surrounding communities, and respond to and prevent waste-related or industrial accidents.**

### **PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES**

EPA has made significant progress in achieving the goal of better waste management, restoration of contaminated sites, and emergency response preparedness. With the help of federal, state, tribal, and local partners, the Agency has continued to clean up sites and has ensured that facilities are managed according to practices that prevent releases to the environment. EPA and its partners have made progress toward meeting strategic objectives in Goal 5 for protecting human health and the environment by performing, supporting, and overseeing cleanup operations and ensuring protective and preventive facility management practices.

EPA has already met the FY 2005 target (more than 375,000 sites) for the first objective by reaching cleanup milestones at more than 389,000 sites. Success in exceeding the target is primarily due to the work of the Underground Storage Tank (UST) Program, which had initiated or completed cleanup action at more than 384,000 releases by the end of FY 2002.<sup>1</sup> In addition, the Brownfields Program has already exceeded its FY 2005 target (of 1,500 sites) for property assessments: 3,807 properties were assessed from the beginning of the program in 1995 through June 2002.<sup>2</sup> The Resource Conservation and Recovery Act (RCRA, as amended) Corrective Action Program is on target to achieve FY 2005 intermediate cleanup goals, signifying that adequately protective controls are in place at these facilities to prevent any unacceptable human exposures or migration of contaminated groundwater. Through FY 2002, 1,018 facilities had adequate controls in place

for pathways of human exposure (compared to the FY 2005 target of 1,630 facilities), and 876 facilities had adequate controls in place for controlling migration of contaminated groundwater (compared to the FY 2005 target of 1,200 facilities).<sup>3</sup> Although 846 sites<sup>4</sup> in the Superfund Program had achieved construction completion through FY 2002, it is unlikely that the program will meet its FY 2005 target of 1,105 sites.

It is unlikely that EPA will be able to validate meeting the overall FY 2005 target for the second objective, ensuring that more than 277,000 facilities are managed according to practices that prevent releases to the environment. The total includes 3,750 RCRA municipal solid waste facilities with approved controls, and the data for these facilities are unavailable. The total also includes ensuring that 7,100 facilities are in compliance with the spill prevention, control, and countermeasure provision of the Oil Pollution Act. While 2,925 facilities<sup>5</sup> are in compliance through FY 2002, annual targets for confirming facility compliance have been reduced as resources are shifted to address high demand for Agency assistance in responding to or monitoring oil spills. Otherwise, the UST Program, in partnership with the states, has ensured that 213,000 facilities<sup>6</sup> are in compliance with spill, overfill, and corrosion protection requirements through FY 2002, as compared to the FY 2005 target of 264,000. Finally, the RCRA Program, working effectively in partnership with states, tribes, and other stakeholders, has exceeded this year's expectations in achieving permits or approved controls at 2,176 hazardous waste management facilities<sup>7</sup> through FY 2002, as compared to the FY 2005 target of 2,750.

## FY 2002 PERFORMANCE

The most significant accomplishment for EPA's emergency response program was the rapid and effective response to the anthrax bioterrorism incident on Capitol Hill. This catastrophe presented challenges due to the unique contaminant, the uncertainty of the response technology, and the time constraints and nature of the work of the legislative branch. EPA led the effort to clean up and decontaminate six post offices in Florida and four congressional office buildings in Washington, DC—the Ford, Longworth, Dirksen, and Hart office buildings. The Agency's success in this area is due to homeland security planning and preparedness activities at the state and local levels in conjunction with federal activities.

During FY 2002 the Superfund Program reduced health threats posed to 140,000 people who lived within 1 mile of the 42 sites that achieved construction completion. In addition, the Superfund Program cleaned up 800,000 cubic yards of solid hazardous waste and provided alternative drinking water supplies to 32,500 people at 6 sites.<sup>8</sup> Coordination with state partners during the construction phase of these projects contributed to the achievement.

Another important element is that federal agencies worked together to carry out cleanups at federal facilities. In conjunction with EPA's federal partners, in FY 2002 the Superfund Program was able to accomplish 5 of the 42 construction completions at sites owned by federal agencies.<sup>9</sup> Nationwide, thousands of federal facilities are contaminated with hazardous waste, unexploded ordnance, radioactive waste, fuels, and various of other toxic contaminants. These facilities include abandoned mines, nuclear weapons production plants, fuel distribution areas, and landfills. As a result, cleanup remedies are varied and difficult to accomplish. For example, the Department of Energy's nuclear weapons production facility in Hanford, Washington, is the size of Rhode Island, and cleanup estimates for the facility exceed 100 years.

An important element of managing the Superfund Program is ensuring that potentially responsible parties (PRPs) perform cleanups or

### **SUPERFUND CLEANUP AND RESTORATION: DUPONT-NEWPORT SITE, NEWPORT, DELAWARE**

Cleanup efforts have resulted in more than 9 acres of wetland areas being restored while creating an additional acre of wetland and wildlife habitat along the river. Two industrial landfills at the Dupont-Newport Site in New Castle County, Delaware were capped. The cleanup remedy included the removal of more than 70,000 cubic yards of contaminated soils and sediments and installation of groundwater treatment and containment systems. The former pigment-manufacturing facility was used to manufacture a white zinc- and barium-based pigment called Lithopone, and much of the area was contaminated with heavy metals and chlorinated solvents from past operations and disposal practices (<http://www.epa.gov/superfund/accomp/success/dupont.html>).



pay their fair share of cleanup costs. In FY 2002 PRPs initiated 71 percent of new long-term cleanup actions at non-federal facility Superfund sites, exceeding the 70 percent annual goal. EPA also secured private party commitments for cleanup and cost recovery that exceeded \$627 million. Of this amount, PRPs agreed to conduct more than \$501 million in future cleanup work and to reimburse EPA for more than \$126 million in past costs. Total private party commitments for cleanup and cost recovery since the inception of the program are valued at more than \$20.6 billion—more than \$16.9 billion in response settlements and about \$3.7 billion in cost recovery settlements,<sup>10</sup> resulting in almost \$8 in private party

## BROWNFIELDS HOUSING

The Twin Cities Metropolitan Council Brownfields Pilot grant, awarded by EPA, has partnered with the Minnesota Environmental Initiative and Twin Cities Habitat for Humanity to perform environmental assessments on 10 Brownfields in Minneapolis and St. Paul, Minnesota. This partnership is opening the door to reuse of the sites for affordable housing. As of April 2002, three energy-efficient single-family homes had been built on one property at Nebraska and Arkwright Streets in St. Paul by Habitat's WomenBuild project, which uses all-female volunteer crews. All of the Habitat homes will be built with energy-efficient r25 insulation in the walls and mechanical ventilation to maintain indoor air quality ([http://www.epa.gov/brownfields/pdf/ss\\_twin.pdf](http://www.epa.gov/brownfields/pdf/ss_twin.pdf).)



commitments for cleanup and cost recovery for every \$1 spent on Superfund enforcement.<sup>11</sup>

The Brownfields Program, one of EPA's most successful public-private partnerships, has awarded 437 pilot grants since its inception in 1995. These Brownfield pilots assessed 3,807 properties, leveraged more than \$4.8 billion in public and private investments, and generated more than 21,000 jobs in cleanup, construction, and redevelopment through the third quarter of FY 2002.<sup>12</sup>

In January 2002 the President signed the Small Business Liability Relief and Brownfields Revitalization Act. This law authorized up to \$250 million for financial assistance for Brownfields revitalization and limited the liability of certain prospective purchasers and contiguous property owners. Spurred in part by the new Brownfields law, the Agency and at least 20 other federal agencies have committed to the 2002 Brownfields Federal Partnership Action Agenda to support Brownfields redevelopment in communities throughout the United States. The agenda also incorporates commitments from federal agency participants to increase coordination between Brownfields stakeholders and promote Brownfields redevelopment.

In FY 2002 EPA's waste management programs worked in partnership with states and the regulated community to ensure safe and preventive facility management practices by:

- Obtaining permits or approved controls at 2,176 hazardous waste management facilities.<sup>13</sup>
- Attaining compliance with spill prevention requirements at 2,925 oil facilities.<sup>14</sup>
- Achieving 74 percent significant operational compliance with leak detection requirements and 81 percent significant operational compliance with spill, overfill, and corrosion protection requirements at UST facilities.<sup>15</sup>

### Research Contributions

In FY 2002 EPA completed evaluations of six innovative technologies through the Superfund Innovative Technology Evaluation program (SITE) program (<http://www.epa.gov/ORD/SITE/>). This information will assist decision makers in determining the most effective remediation options for the cleanup of contaminated sites. EPA also evaluated and produced reports on several processes for treating methyl tertiary butyl-ether (MTBE)-contaminated groundwater. These reports provide site managers with the appropriate performance data to assess the best technologies for treating MTBE contamination. EPA also produced reports on the short-term effects of dredging and capping contaminated sediments, comparing the advantages and disadvantages of these cleanup strategies in protecting ecological surroundings. The capping reports evaluate the release of contaminated

sediments occurring during capping procedures through resuspension. The dredging report assesses the potential effects on aquatic receptors from dredging. These reports will be valuable tools for risk managers and risk assessors in evaluating the short-term risks associated with the implementation of dredging and capping remedies at contaminated sediment sites.

### **Program Evaluation**

Appendix A contains descriptions of program evaluations completed in FY 2002 that support the overall Waste Management Goal. Two reports provide lessons learned from Agency activities following the September 11 attacks in New York and Washington, DC, and the anthrax incidents. Both reports conclude that overall the Agency did an excellent job responding to these unprecedented actions of terrorism and successfully carried out its mission to protect human health and the environment. The Agency has taken several actions to respond to report recommendations, including providing consistent training in incident management and communication for both senior managers and field personnel, hiring more On Scene Coordinators in each region for spill incidents and other emergencies, and purchasing uniform national equipment.

## **STATE AND TRIBAL PARTNER CONTRIBUTIONS**

Although federal statutes govern the RCRA, Underground Storage Tanks, Emergency Preparedness, and Brownfields Programs, almost all of the issues addressed by these programs are unique to each state, tribe, or locality. For this reason, states, tribes, and local communities are the primary implementers of these programs and work in partnership with EPA. Even the Superfund Program, which EPA implements nationally, relies on strong state, tribal, and local partnerships to ensure that its mission is achieved in the most effective and efficient manner.

## **State Contributions**

Homeland security planning and preparedness efforts through the National Response Team and the Federal Response Plan have established effective coordination and communication systems and deterred creation of redundant systems. In addition, EPA's work with states, tribes, and communities has resulted in 16 states implementing the risk management plan program and establishing partnerships with thousands of Local Emergency Planning Committees.

Superfund has a strong and effective partnership with states to support its implementation. In FY 2002 EPA provided more than \$75 million to states for conducting site-specific support functions such as assessment, and \$18 million to support or enhance state program capabilities such as hiring staff with technical expertise.

States implement cleanup and management programs for hazardous and solid waste management facilities and for USTs. States are also key players in implementing RCRA Corrective Action Program reforms, with accomplishments in piloting innovative approaches to cleanups, developing venues to showcase program success stories, and actively participating in Brownfields Program activities to further integrate these two programs.

Since 1997 EPA has offered Superfund Core Program financial assistance and contract support for Voluntary Cleanup Program (VCP) and/or Targeted Brownfields Assessments (TBAs) to 48 states and 2 tribes. EPA headquarters provided \$25.5 million in FY 2002 for state and tribal voluntary cleanup programs and pre-remedial site assessment funding for EPA-, state-, and tribe-conducted Targeted Brownfields Assessment. These funds supported state and tribal VCPs, state TBAs, and TBAs conducted by EPA regional offices.

The new Brownfields law amends section 128 to CERCLA and provides expanded authority for EPA to fund state and tribal response programs to capitalize revolving loan

funds and support insurance mechanisms. The goals of this funding are to ensure that state and tribal response programs include, or are working to include, four statutory elements and a required public record and to provide funding for other activities, including TBAs, that enhance the cleanup capacity of a state or tribal program. In addition, the new law authorizes EPA to perform TBAs itself with funding available to carry out section 104 of CERCLA.

The UST Program awarded \$3.8 million to fund 40 state and tribal UST field pilots. These pilots will help communities turn petroleum-contaminated land into clean, safe, productive properties that will create jobs, yield higher property values, and generate new revenue. The program also provided \$3.1 million in funding for four MTBE cleanup pilots (Long Island, NY, Santa Monica, CA, Pascoag, RI, and Columbia, SC). In addition, the UST program developed a Web-based toolbox to promote and assist states in the use of performance-based contracting to clean up releases from USTs. The 14 states currently using performance-based contracting have reported that their cleanups cost about half as much and took about half as long to complete as compared to cleanups done using the more traditional time and materials contracts.

### **Tribal Contributions**

During FY 2002 EPA continued to work with tribal waste program managers to develop waste program expertise in tribes and address the most pressing needs on tribal lands. EPA provided

\$775,000 as part of an interagency grant program totaling about \$2.2 million for closing municipal solid waste open dumps in Indian Country. Cumulatively, since 1999 the Interagency Workgroup has provided more than \$6 million to 31 tribes resulting in the cleanup of 27 open dumps and conducts activities to prevent future dumping of wastes in Indian Country. EPA also provided \$425,000 in tribal grants for RCRA hazardous waste activities and surveyed more than 175 tribes as an initial step in developing an inventory of the RCRA hazardous waste management needs of tribal lands.

EPA provided more than \$3.6 million in grants to develop or enhance tribal UST and Superfund Programs in FY 2002. The Agency also supported involvement for 78 tribes at Superfund sites through 27 cooperative agreements. In FY 2002 EPA also provided \$450,000 to tribes through its Brownfields assessment pilot grants.

### **ASSESSMENT OF IMPACTS OF FY 2002 PERFORMANCE ON THE FY 2003 ANNUAL PERFORMANCE PLAN**

Beginning in FY 2003 the Agency is starting a 3-year planning cycle to identify and track construction completion candidate sites. Early in FY 2002 data were collected from project managers in regional offices on the status of candidate sites for construction completion during FY 2002 through FY 2004. Future-year targets for construction completions will be set using this information.

# Goal 5: Better Waste Management

## Summary of FY 2002 Annual Performance Goals

9 Goals Met

1 Goals Not Met

0 Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 5:	\$1,820,344
Goal 5 Share of Total:	19.3%

### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 5 Costs:	\$1,929,151
Goal 5 Share of Total:	24.1%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs.  
Refer to page IV-10 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

**Strategic Objective: By 2005, EPA and Its Federal, State, Tribal and Local Partners Will Reduce or Control the Risk to Human Health and the Environment At More Than 374,000 Contaminated Superfund, RCRA, Underground Storage Tank (UST) and Brownfield Sites and Have the Planning and Preparedness Capabilities to Respond Successfully to All Known Emergencies to Reduce the Risk to Human Health and the Environment.**

FY 2002 Cost (in thousands): \$1,690,421 (87.6% of FY 2002 Goal 5 Total Costs)

**Progress Toward Strategic Objective:** Through FY 2002 EPA and its partners reduced or controlled the risks to human health and the environment at more than 389,000 contaminated sites. The FY 2005 objective target includes 384,000 leaking underground storage tank (LUST) cleanups initiated or completed, and through FY 2002, EPA initiated 384,000 LUST cleanups and completed approximately 284,000. The Agency also reduced or controlled the risks to human health and the environment at more than 840 Superfund sites, more than 800 high-priority RCRA sites, and more than 3,800 Brownfields sites. EPA and its partners are also working to increase their capabilities to successfully respond to all known emergencies by FY 2005 to reduce the risk to human health and the environment.

APG 32	Superfund Cleanups	Planned	Actual
FY 2002	EPA and its partners will complete 40 Superfund cleanups (construction completions). 47 construction completions were completed in FY 2001. <b>Goal Met.</b>	40	42
FY 2001	Same Goal, different targets. <b>Goal Not Met.</b>	75	47
FY 2000	Same Goal, different targets. <b>Goal Met.</b>	85	87
FY 1999	Same Goal, different targets. <b>Goal Met.</b>	85	85

**FY 2002 Result:** In FY 2002 EPA completed construction at 42 Superfund sites for a cumulative total of 846 sites where the Agency has reduced or controlled the risks to human health and the environment over the life of the program. FY 2002 Superfund accomplishments in Indian Country include eight site assessments, provision of \$2.4 million for capacity building, and tribal leadership or support in responding to 28% of Superfund sites affecting Indian Country. The FY 2001 construction completion target was reduced for FY 2002 due to the constraints of large size and complexity of sites on construction completion.

APG 33	Superfund Potentially Responsible Party Participation	Planned	Actual
FY 2002	Maximize all aspects of potentially responsible party (PRP) participation which includes maintaining PRP work at 70% of the new remedial construction starts at non-Federal Facility Superfund sites, and emphasize fairness in the settlement process. <b>Goal Met.</b>	70%	71%
FY 2001	Same Goal. <b>Goal Not Met.</b>	70%	67.3%
	<u>Performance Measures</u>		
	- Ensure fairness by making orphan share offers at 100% of all eligible settlement negotiations for response work.	100%	100%
	- Provide finality for small contributors by entering into de minimis settlements and report the number of settlers.	18	15
FY 2000	Same Goal. <b>Goal Not Met.</b>	70%	68%
		100% (orphan)	100%
		20 (de minimis)	18



FY 1999	Obtain PRP commitments for 70% of the work conducted at new construction starts at non-federal facility sites on the National Priority List (NPL) and emphasize fairness in the settlement process. <i>Goal Met.</i>	70%	80%
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**FY 2002 Result:** In FY 2002 the percentage of remedial construction starts initiated by responsible parties exceeded the target by 1%. EPA determines the percentage of remedial construction starts conducted by responsible parties at non-federal facility Superfund sites because it indicates the percentage of sites where cleanup is achieved using private party funding as opposed to the Superfund Trust Fund. It also includes those construction starts performed by EPA where the majority of funding comes from special accounts, and majority is defined to mean that the funding contributed by responsible parties toward the total response cost to the special account exceeds the amount contributed by the largest non-private entity.

APG 34	Superfund Cost Recovery	Planned	Actual
FY 2002	Ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations on total past costs equal to or greater than \$200,000. <i>Goal Met.</i>	100%	100%
FY 2001	Same Goal. <i>Goal Not Met.</i>	100%	97.8%
FY 2000	Same Goal. <i>Goal Not Met.</i>	100%	98.5%
FY 1999	Same Goal. <i>Goal Met.</i>	100%	99%

**FY 2002 Result:** Cost recovery was addressed at 204 National Priority List (NPL) and non-NPL sites during FY 2002, of which 101 had total past costs greater than or equal to \$200,000 and potential statute of limitations concerns. EPA's cost recovery activities are important because they replenish the Superfund Trust Fund by recovering EPA's past costs, making resources available for other Superfund site cleanups. With respect to private parties, in FY 2002 EPA secured cleanup and cost recovery commitments in excess of \$627 million (more than \$501 million for future cleanup and \$126 million for recovery of past costs).

APG 35	RCRA Corrective Actions	Planned	Actual
FY 2002	172 (for a cumulative total of 995 or 58%) of high priority RCRA facilities will have human exposures (HE) controlled and 172 (for a cumulative total of 882 or 51%) of high priority RCRA facilities will have groundwater releases (GWR) controlled. <i>Goal Met.</i> ↳Corresponds with two FY 2002 NEPPS Core Performance Measures (CPMs).	172 HE 172 GWR	205 HE 171 GWR
FY 2001	Same Goal. <i>Goal Not Met.</i>	172 HE 172 GWR	179 HE 154 GWR
FY 2000	Same Goal. <i>Goal Met.</i>	172 HE 172 GWR	191 HE 168 GWR
FY 1999	Same Goal, different targets. <i>Goal Met.</i>	83 HE 45 GWR	162 HE 188 GWR

**FY 2002 Result:** During FY 2002 the Corrective Action Program achieved environmental indicators (EIs) for human health protection and groundwater migration EIs at 205 and 171 facilities, respectively. This progress, combined with progress from previous years, allowed the program to remain ahead of its cumulative goals by achieving cumulative totals of 1,018 facilities with human exposures controlled and 876 high priority RCRA facilities with groundwater releases controlled. The progress made toward achieving the two EIs was facilitated by the successful partnerships among EPA, states, and tribes.

APG 36	Leaking Underground Storage Tank Cleanups	Planned	Actual
FY 2002	EPA and its partners will complete 22,000 Leaking Underground Storage Tank (LUST) cleanups for a cumulative total of approximately 290,000 cleanups since 1987. <i>Goal Not Met.</i> ↳Corresponds with FY 2001 NEPPS Core Performance Measures (CPMs).	22,000	15,769
FY 2001	Same Goal, different targets. <i>Goal Not Met.</i>	21,000	19,074
FY 2000	Same Goal. <i>Goal Met.</i>	21,000	20,834
FY 1999	Same Goal, different targets. <i>Goal Met.</i>	22,000	25,678

**FY 2002 Result:** During FY 2002 EPA and its state partners completed 15,769 LUST cleanups for a total of nearly 284,000 since 1987. The FY 2002 target of 22,000 LUST cleanups was not met for several reasons. Contributing factors include (1) the majority of states are discovering new sites contaminated by MTBE, which is more complicated and costly to cleanup; (2) at least 12 states have already reopened closed sites due to MTBE contamination, thus diverting resources from overseeing completion of cleanups; and (3) state programs are now confronting cleanup of more complex sites in general.

APG 37	Brownfield Site Assessment Grants	Planned	Actual
FY 2002	EPA will provide additional site assessment funding to 38 new communities, and to 38 existing communities, resulting in a cumulative total of 3,100 properties assessed, the generation of 19,300 jobs, and the leveraging of \$4.0 billion in cleanup and redevelopment funds since 1995. <b>Goal Met.</b>	3,100 19,300 \$4.0 B	3,807 21,737 \$4.8 B
FY 2001	Same Goal, different targets. <b>Goal Met.</b>	2,500 12,000 \$3.1 B	2,754 (properties) 17,307 (jobs) \$3.7 B
FY 2000	Same Goal, different targets. <b>Goal Met.</b>	1,900 4,900 \$1.7 B	2,024 (properties) 7,446 (jobs) \$2.8 B
FY 1999	EPA will fund Brownfields site assessments in 100 more communities, thus reaching 300 communities by the end of 1999. <b>Goal Met.</b>	100	80 (307 cumulative)

**FY 2002 Result:** Although fourth-quarter data will not be available until April 2003, EPA exceeded the FY 2002 targets for the Brownfields Program, as indicated by third-quarter data. Since 1995 more than 3,800 properties have been assessed, more than 21,000 jobs generated, and more than \$4.8 billion in cleanup and redevelopment funds leveraged through Brownfields Program activities. The program facilitates assessment and cleanup of abandoned or underutilized sites where actual or potential contamination and liability might be impeding development. It empowers states, communities, and other stakeholders in economic development to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse Brownfields.

APG 38	Superfund Federal Facilities Compliance	Planned	Actual
FY 2002	Within 18 months after final listing on the NPL, EPA will make a final offer for an interagency agreement (IAG) that is consistent with Agency policy and guidance at 100% of Federal facility Superfund sites. <b>Goal Met.</b>		
	<b>Performance Measures</b>		
	- Percentage of Federal facility NPL sites for which final offers are made that meet Agency policy and guidance.	100%	100%
	- Percent of Federal facilities with final offers made within 18 months.	100%	100%
FY 2001	Same Goal. <b>Goal Not Met.</b>	100% 100%	0% 0%
FY 2000	Ensure compliance with Federal facility statutes and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) agreements and ensure completion of current NPL CERCLA IAGs. <b>Goal Not Met.</b>		
	<b>Performance Measures</b>		
	- Complete NPL IAGs.	6	2
	- Begin CERCLA Negotiations.	4	1

**FY 2002 Result:** In FY 2002 there were two federal facility Superfund sites for which EPA could make a final offer for interagency agreements (IAGs) within 18 months of having listed the sites on the NPL. In both cases, the offer was made, resulting in the goal being met. Because of a dispute raised by the Department of Defense (DOD) concerning EPA's authority to oversee cleanup after a remedy has been selected, negotiations to finalize these IAGs have stalled. Once the dispute with DOD is resolved, the offers made by EPA should lead to signed IAGs at these sites.

APG 39	Scientifically Defensible Decisions for Site Clean-up	Planned	Actual
FY 2002	Provide at least 6 innovative approaches that reduce human health and ecosystem exposures from dense non-aqueous phase liquids (DNAPLs) and methyl-tertiary butyl ether (MTBE) in soils and groundwater, and from oil and persistent organics in aquatic systems. <b>Goal Met.</b>		
	<b>Performance Measure</b>		
	- Deliver the Annual Superfund Innovation Technology Evaluation (SITE) Program Report to Congress detailing 4-6 innovative approaches, their cost savings and future direction; reports summarizing pilot scale evaluation of in-situ remedies for solvents.	1	1
FY 2001	Provide technical information to support scientifically defensible and cost-effective decisions for cleanup of complex sites, hard-to-treat wastes, mining, oil spills near shorelines, and Brownfields to reduce risk to human health and the environment. <b>Goal Not Met.</b>		

Performance Measures

- Deliver the Annual SITE Program Report to Congress. 1 0

FY 2000 Enhance scientifically defensible decisions for site cleanup by providing targeted research and technical support. **Goal Not Met.**

Performance Measures

- Report of natural attenuation case studies of MTBE. 1 0
- Deliver the SITE report to Congress. 9/30/00 1/30/01
- Report of key research on methods, models and factors relating to risk evaluation of dermal route of exposure. 9/30/00 12/31/00
- Review 20 soil contaminants and develop screening levels. 9/30/00 9/30/00

**FY 2002 Result:** EPA made significant progress in providing information to site managers to determine the most effective methods/technologies for cleaning up contaminated sites. The technologies evaluated through the SITE Program provide a range of innovative means for remediation of contaminated soils including in situ chemical oxidation, bioremediation, steam heating, and electrokinetic extraction. EPA also produced a report on the ecotoxicity soil screening levels for mammals, birds, soil plants, and soil biota that will provide a consistent basis for making decisions on whether to conduct additional monitoring and risk assessments for various soil contaminants.

**Strategic Objective: By 2005, EPA and Its Federal, State, Tribal, and Local Partners Will Ensure That More Than 277,000 Facilities Are Managed According to the Practices That Prevent Releases to the Environment.**

*FY 2002 Cost (in thousands): \$238,730 (12.4% of FY 2002 Goal 5 Total Costs)*

**Progress Toward Strategic Objective:** Through FY 2002 EPA and its partners have been assured that more than 218,000 facilities are being managed according to practices that prevent releases to the environment. The total includes 2,176 RCRA management facilities with approved controls; 2,925 oil facilities in compliance with spill prevention, control, and countermeasure requirements of the Oil Pollution Act; and 213,000 underground storage tank facilities in compliance with spill, overfill, and corrosion protection requirements.

APG 40	RCRA Facility Standards and Compliance	Planned	Actual
FY 2002	<b>75.8% of the hazardous waste management facilities will have approved controls in place to prevent dangerous releases to air, soil, and groundwater, representing an average increase of 39 additional facilities per year. Goal Met.</b>	75.8%	79.0%
FY 2001	Same Goal, different targets. <b>Goal Met.</b>	68%	74%
FY 2000	Same Goal, different targets. <b>Goal Met.</b>	67%	67%
FY 1999	Same Goal, different targets. <b>Goal Met.</b>	61%	61%

**FY 2002 Result:** EPA exceeded its goal of 75.8% by achieving 79.0% of hazardous waste management facilities having approved controls in place to prevent dangerous releases to air, soil, and groundwater. The progress resulted from a focused effort and coordination with the regions and states. This increased effort has been ongoing for the past few years.

APG 41	Ensure WIPP Safety	Planned	Actual
FY 2002	<b>Certify that 6,000 55 gallon drums of radioactive waste (containing approximately 18,000 curies) shipped by DOE to the Waste Isolation Pilot Plant are permanently disposed of safely and according to EPA standards. Goal Met.</b>	6,000	22,800

**FY 2002 Result:** EPA substantially exceeded the goal of ensuring the safe characterization and disposal of drums of transuranic waste.<sup>16</sup> In FY 2002 the Department of Energy disposed of the equivalent of 22,800 drums. To date, 35,070 drums have been shipped. Four percent of the planned waste volume, based on the disposal of 860,000 drums, has been permanently disposed of safely and in accordance with EPA standards.

**FY 2001 Annual Performance Goals (No Longer Reported for FY 2002)**

EPA and its state and tribal partners will achieve levels of 75% UST compliance with EPA/State leak detection requirements; and 96% UST compliance with EPA/State December 22, 1998 requirements to upgrade, close or replace substandard tanks.

Continue to make formerly contaminated parcels of land available for residential, commercial, and industrial reuse by addressing liability concerns through the issuance of comfort letters and Prospective Purchaser Agreements (PPAs).

## Notes:

1. U.S. EPA, Office of Underground Storage Tanks, *FY 2002 End of Year Activity Report*, Cliff Rothenstein, Director (December 23, 2002). Available at <http://www.epa.gov/swerst1/cat/coy02memo.pdf>.
2. U.S. EPA, Brownfields Cleanup and Redevelopment, Brownfields Management System (June 2002).
3. U.S. EPA, RCRAInfo database, Corrective Action, Facility Information. Available at <http://www.epa.gov/epaoswer/hazwaste/ca/facility.htm#Database>. Facility information updated monthly at <http://www.epa.gov/epaoswer/hazwaste/ca/facility/stofcra/sei>.
4. U.S. EPA, Superfund Information Systems, CERCLIS Hazardous Waste Sites, CERCLIS database. Available at <http://www.epa.gov/superfund/sites/query/queryhtm/nplccl1.htm>.
5. Ibid.
6. Although this number is not in the *FY 2002 End-of-Year Activity Report* for the Office of Underground Storage Tanks (note 1, above), it is derived from data primarily found in that report and is based on the following calculations: There were 697,966 active tanks at the end of FY 2002. A facility number can be derived from the tank number by dividing 697,966 by 2.65, which is the average number of tanks per facility. Thus, there were 263,383 facilities at the end of FY 2002. Then, the number of facilities can be multiplied by the compliance rate of 81%, which results in the estimate of 213,000 facilities in compliance with spill, overfill, and corrosion protection requirements.
7. U.S. EPA, RCRAInfo database, Hazardous Waste Facility Permitting Accomplishments. Available at <http://www.epa.gov/epaoswer/hazwaste/permit/pgprarpt.htm> and <http://www.epa.gov/epaoswer/hazwaste/permit/charts/charts.pdf>.
8. U.S. EPA, Superfund Information Systems, CERCLIS database and U.S. Census 2000.
9. U.S. EPA, Superfund Information Systems, CERCLIS database. The five federal facility sites are Fort Wainwright, Old Navy Dump/Manchester Lab, Brunswick Naval Air Station, Lone Star Army Ammunition Plant, and Sacramento Army Depot.
10. U.S. EPA, Superfund Information Systems, CERCLIS database.
11. U.S. EPA, Office of the Chief Financial Officer, Integrated Financial Management System.
12. U.S. EPA, Brownfields Cleanup and Redevelopment, Brownfields Management System (June 2002).
13. U.S. EPA, RCRAInfo database, Hazardous Waste Facility Permitting Accomplishments.
14. U.S. EPA, Superfund Information Systems, CERCLIS database.
15. U.S. EPA, Office of Underground Storage Tanks.
16. The official, operating definition as taken from federal legislation is as follows: radioactive waste containing more than 100 nanocuries (3,700 becquerels) of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years, except for (1) high-level radioactive waste; (2) waste that the Secretary of Energy has determined, with the concurrence of the Administrator of the U.S. EPA, does not need the degree of isolation required by the 40 CFR Part 191 disposal regulations; or (3) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61.

## GOAL 6: REDUCTION OF GLOBAL AND CROSS-BORDER ENVIRONMENTAL RISKS

The United States will lead other nations in successful multilateral efforts to reduce significant risks to human health and ecosystems from climate change, stratospheric ozone depletion, and other hazards of international concern.

### PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES

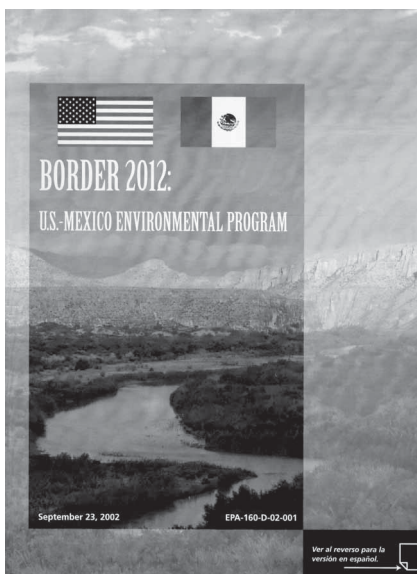
EPA's domestic, bilateral, and multilateral efforts protect and preserve human health and the environment in the United States and around the world. Since 1997 the Agency has made significant progress in reducing risks to human health and ecosystems by working to reduce stratospheric ozone depletion, helping to slow climate change through voluntary programs, reducing and mitigating hazards on U.S. borders, and taking action to reduce other hazards of international concern.

On the Mexican border, new and increased regional participation will result in better health and ecosystem protection. The governments of the United States and Mexico, 10 border states in the United States and Mexico, and 26 participating tribes drafted a new Border 2012 environmental program to protect the public health of 11.8 million inhabitants of the area and the environment for the next 10 years. Border 2012 emphasizes a bottom-up approach, anticipating

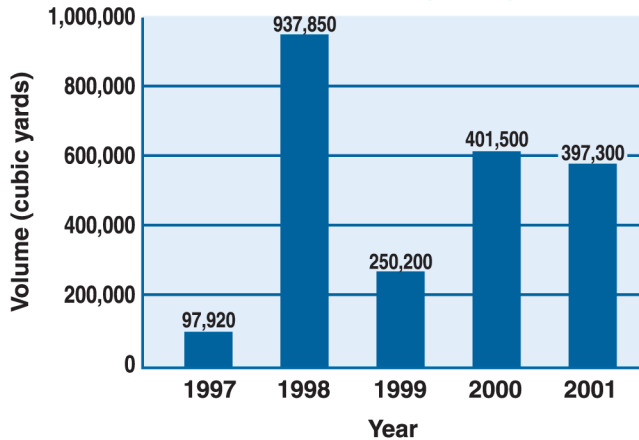
that local decision making, priority setting, and project implementation will better address environmental issues in the border region (<http://www.epa.gov/r6border>).<sup>1</sup>

EPA and state and local governments succeeded in conducting both an international exercise between sister cities on the border to test the binational emergency response plan and local binational security seminars on weapons of mass destruction including biological and nuclear exposures. EPA continues to evaluate environmental needs and facilitate the construction of environmental infrastructure with the Border Environment Cooperation Commission (BECC) and the North American Development Bank. As of FY 2002, 67 BECC-certified projects had been or were being built in the border area, ultimately serving about 7.6 million border residents. About 720,000 residents along the Mexican border will receive protection from health risks, beach pollution, and damaged ecosystems as a result of improved water and wastewater sanitation systems funded in FY 2002.

Contaminated sediments impair more than 2,000 miles, or 20 percent, of shoreline and are a principal source of the polychlorinated biphenyls (PCBs) and other persistent toxics contributing to fish consumption advisories throughout the U.S.–Canadian Great Lakes. On the Canadian border, contaminated sediments and PCBs are the principal sources of Great Lakes fish and wildlife contamination. EPA and its partners remediated almost 400,000 cubic yards of contaminated sediments in 2001, bringing the 4-year cumulative total to 2.1 million cubic yards.<sup>2</sup> Consequently, from 2001 actions alone, 100,000 to 200,000 pounds of toxic pollutants, which could adversely affect human health, were physically removed from the



### Volume of Sediment Remediated in U.S. Great Lakes Basin Beginning in 1997



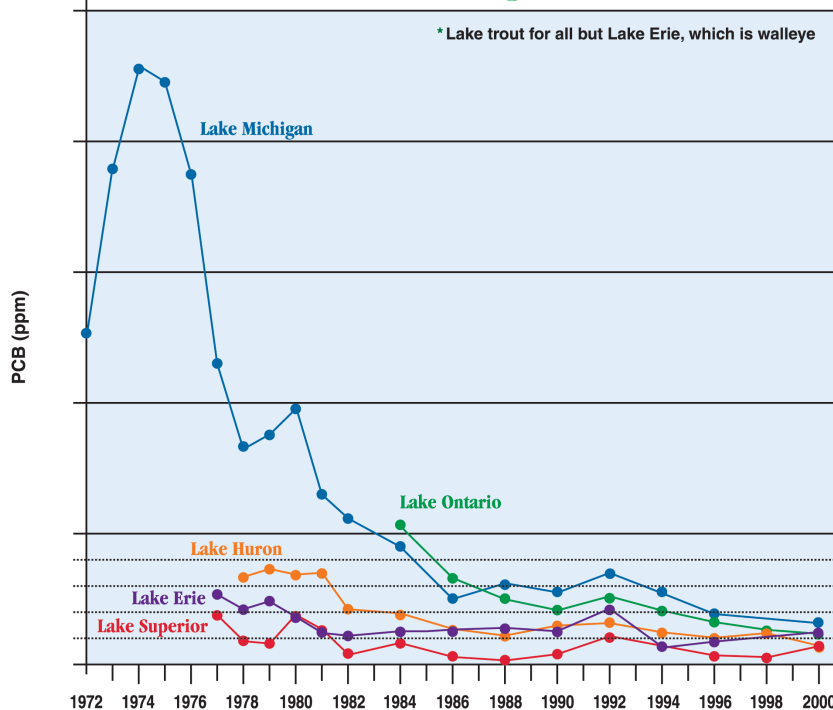
environment. Such removal will lead to a more diverse and less contaminated community of small organisms at the base of the food chain. Over the long term, water quality will improve and fish will be less contaminated and safer to eat.

Despite major reductions since the 1970s of PCB concentration levels in Great Lakes fish, this region is still well beyond the Health Protection Value (HPV) of 0.05 parts per million agreed upon by the Great Lakes states. The HPV is a level considered safe for even the most sensitive subpopulations, such as women and children, to eat unlimited fish. Although the overall trend continues to decline, indicating progress by EPA

in removing contaminants from the Great Lakes ecosystem, concentrations of certain contaminants in Lakes Erie and Superior fish are no longer decreasing. Some contaminants such as polybrominated diphenyl ethers, used in flame retardants and often applied to textiles, have been detected in Great Lakes fish at exponentially increasing concentrations.<sup>3</sup>

EPA continues to make adjustments concerning the inexplicably low dissolved oxygen levels in Lake Erie, which have resulted in an increasing “dead zone,” despite U.S. and Canadian success in achieving total phosphorus targets. Success in phosphorus reduction should have resulted in higher dissolved oxygen concentrations because there should have been less of the algae decomposition that removes oxygen from the water. Instead, the dissolved oxygen rate of decline in 2001, reported in 2002, was among the most rapid in the past decade. EPA convened 25 principal investigators and cooperators in May 2002 to initiate a special study of Lake Erie. More than \$1 million from U.S. and Canadian federal and local agencies and universities will be invested in the study (<http://www.epa.gov/glnpo/lakeerie/eriedeadzone.html>).

### PCBs in Great Lakes Top Predator Fish\*



EPA, working together with the U.S. Coast Guard, the National Oceanic and Atmospheric Administration, the Department of State, and other interested parties, made a significant breakthrough in FY 2002 in efforts to prevent the introduction of invasive species into navigable waterways. The introduction of nonnative aquatic species through ship ballast water has resulted in direct costs exceeding \$1 billion in the United States since 1989 and has dramatically altered estuarine and marine ecosystems across North America. International negotiations continue, but the United States has succeeded in convincing numerous other governments around the world that an international performance standard applicable to ship ballast water discharges is the most effective means for preventing the transfer of these harmful organisms. Although aquatic species are introduced through other vectors, such as hull fouling, ballast water is widely recognized as the single largest vector responsible for the transfer of aquatic species across the globe.

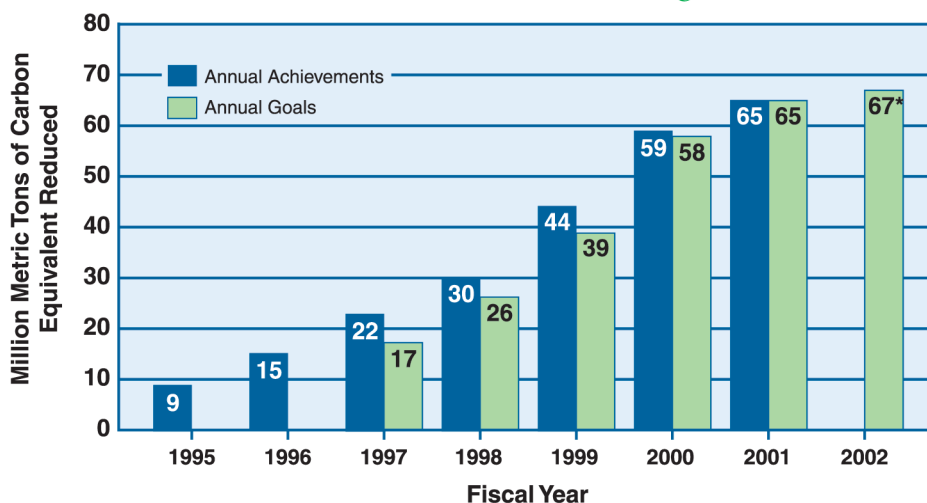
Climate change and depletion of the ozone layer are both important areas of focus for the Agency. EPA is on target to achieve the strategic objective to reduce U.S. greenhouse gas (GHG) emissions and slow climate change through voluntary programs. In addition to the long-term climate benefits, energy savings from

partnership programs leads to increased energy system reliability and energy security, as well as reduced energy costs to businesses and consumers. Reductions in energy use lead to corresponding reductions in emissions of carbon dioxide (CO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), and mercury, resulting in cleaner air and water. Emissions of NO<sub>x</sub> were reduced by 140,000 tons in 2001 alone.<sup>4</sup>

## FY 2002 PERFORMANCE

EPA's international accomplishments in FY 2002 were wide-ranging. At the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa, in August–September 2002, EPA and its partners announced a goal to reduce by half, by 2015, the estimated 4.4 billion people worldwide who do not have access to basic sanitation and announced partnerships on cleaner fuels and vehicles (<http://www.johannesburgsummit.org>). International capacity efforts will lead to several accomplishments: the reduction of 600,000 tons of mobile source emissions in Russia; 25 countries in Africa committing to phaseout of leaded gasoline by 2005; establishment of environmental ministries in all 7 Central American countries; small-scale efforts in East Africa to train workers in accessing chemical

### Overall Goals and Accomplishments for the Climate Protection Programs



\*Note: FY 2002 data are not official as shown in EPA Budget documents.

## EPA'S ON THE GROUND AT WSSD



The Ubuntu Village was the central transportation and logistics hub for the WSSD, in which more than 22,000 people participated, including more than 10,000 delegates, 8,000 non-governmental organizations, and representatives of civil society. EPA presented formal mini-courses on key sustainable development issues. These practical “how to” courses addressed environmental decision making, water resource and watershed management, pesticide handling, children’s health, and partnerships.

safety information via the Internet; and advances implementing the Stockholm Convention on persistent organic pollutants (POPs) worldwide, toward the goal to eliminate the use of 12 of the worst POPs chemicals (<http://www.pops.int>).

In June 2002 a new cooperative agenda for children’s environmental health in North America was adopted at the Council Session of the North American Commission on Environmental Cooperation. Through this agenda, the Council, representing the governments of the United States, Mexico, and Canada, agreed on 17 concrete action items to address the priorities of asthma and respiratory disease, lead poisoning, and the effects of exposures to toxic chemicals, including pesticides. Priority actions identified in the cooperative agenda include strengthening the knowledge base through the development of indicators, research, risk assessment, and economic valuation for the long term and increased public outreach and education for the short term. Activities related to waterborne diseases might be added to the cooperative agenda in the future.

Many of EPA’s climate protection programs have resulted in substantial savings in energy use and energy costs in the United States that will be realized over the next decade. Because equipment promoted through EPA’s climate change programs often lasts for decades or more, these investments will continue to deliver

environmental and economic benefits through 2012 and beyond. Based on a 2002 analysis of actions that program partners have taken through the end of 2001, consumers and businesses have secured investments in energy-efficient technologies exceeding \$13 billion. After accounting for these investments, consumers and businesses are expected to save about \$70 billion cumulatively through 2012. In FY 2001 reductions of GHGs totaled 65 million metric tons of carbon equivalent and energy consumption was reduced by an estimated 84 billion kilowatt hours. These programs continue to be highly cost-effective approaches for delivering environmental benefits across the nation. Every dollar EPA spends on climate change programs results in a reduction in GHG emissions of 1 metric ton of carbon equivalent (3.7 tons of CO<sub>2</sub>), savings for partners and consumers of more than \$75 per year on their energy bills, the creation of more than \$15 in private sector investment, and the addition of over \$60 into the economy.<sup>5</sup>

The projected increase in the use of chlorofluorocarbons (CFCs) and halons—powerful stratospheric ozone-depleting substances (ODS)—in developing countries could eliminate the benefits achieved in the United States, in addition to posing serious public health problems, such as increased skin cancer, for populations worldwide. Through U.S. payments to the Multilateral Fund over the past 10 years, EPA helped fund more than 3,900 projects that when fully implemented will permanently eliminate more than 150,000 metric tons of ODSs.<sup>6</sup> EPA also concluded agreements with developing countries to dismantle over two-thirds of their CFC production capacity and nearly all of their halon production capacity. In FY 2002 the United States reduced methyl bromide production and imports by 50 percent from the 1991 baseline and listed 50 new alternatives to ODSs through the Significant New Alternatives Program.<sup>7</sup> Finally, EPA expanded the outreach of its SunWise School Program by 70 percent over the 2001 level with an additional 223,000 students in a total of 4,800 schools. The SunWise School Program



## ENVIRONMENTAL TECHNOLOGY AT WORK

EPA's Clean Automotive Technology program made significant progress on the goal of increasing the fuel economy of motor vehicles by as much as 50 percent or more through hydraulic hybrid technology. Using EPA-developed technology, the Ford Motor Company announced its plans for "a demonstration fleet of E550 commercial vans for production prove-out of a promising hydraulic hybrid powertrain" and noted that a demonstration fleet will be put into service in early 2004<sup>a</sup>. This initial commercial prove-out of EPA's hydraulic hybrid technology provides a 30 to 35 percent fuel economy improvement. This action reflects Ford's commitment to its agreement with EPA "to invest to further develop this proprietary technology, with an aim toward putting a pilot fleet of vehicles on the road by the end of the decade." Research is continuing on the goal for a full hydraulic hybrid vehicle, which is expected to achieve fuel economy improvement of more than 100 percent<sup>b</sup>.

Sources:

a. "Ford Prepares Demonstration Fleet of Vans with Hydraulic Power Assist," Ford Motor Company, July 15, 2002.

b. U.S. Environmental Protection Agency, "Ford Signs Agreement to Develop Technology to Improve Fuel Economy" (October 12, 2001).

educates children ages 5 to 12 on the risks associated with ultraviolet and sun exposure.

### Research Contribution

In FY 2002 EPA examined the effects of climate change on weather-related morbidity in the United States at both the national and regional levels. Specifically, the Agency issued a report for external review that analyzed the effects of inclement weather on accidents and injuries and projected changes in incidence associated with climate change. The report also addressed the effects of extreme heat on emergency room visits and hospital admissions. These data will help inform decision makers about the extent to which adaptive responses will have to be made to reduce the effects of continued global warming.

The Agency is also conducting research on the effects of globally transmitted mercury. Research findings suggest unanticipated changes are occurring to mercury, which cycles globally through the air after being released from coal-fired facilities, at the poles and at high altitudes.<sup>8</sup> For example, in the spring, when sunlight first returns to the Arctic, elemental mercury transforms into more water-soluble and bioavailable reactive gaseous mercury (RGM), which can enter the ecosystem through snowmelt. Further evidence indicates that there

might be some transport of mercury from the Arctic to the lower 48 states due to the polar sunrise in the spring. Findings of research conducted at high altitudes indicates that elemental mercury, previously believed to remain unreactive and innocuous during global transport, is transforming into RGM, which is being deposited over land and sea with such biological consequences as increased mercury levels in tuna, swordfish, and other fish.

### Program Evaluation

Appendix A contains descriptions of program evaluations completed in FY 2002 that support this goal.

## STATE CONTRIBUTIONS

Although many metropolitan areas have had some form of commuter programs through the years, the Commuter Choice Leadership Initiative represents the first comprehensive national standard of excellence for commuter benefits. EPA partners with employers who agree to reduce their employees' vehicle miles traveled during commuting by offering incentives for them to use alternative modes of transportation. FY 2002 represented the first full year of recruiting for the Commuter Choice Partners program. By the end of FY 2002, 1,300 employers had signed up

### COMMUTER CHOICE EMPLOYERS IN COLORADO<sup>a</sup>

- Almost 20,000 fewer automobile commuting trips taken every single working day.
- 3 million gallons of gasoline saved every year.
- \$4.7 million a year in gasoline costs saved by employees.
- 550 tons per year of noxious air pollutants taken out of Colorado air.
- 24,000 tons of global warming pollution prevented.

<sup>a</sup> Those values are estimates based on the COMMUTER Model, A EPA-, DOT- and industry-reviewed model that estimates changes in travel behavior. With the number of commuters from program data, the model gives an estimate of mode shift (changes in travel behavior), then the national average auto emissions savings values are applied.

representing nearly 570,000 commuters. Commuter Choice Employers are located at over 290 work sites in more than 25 states<sup>9</sup> (<http://www.commuterchoice.gov>).

The Agency continues to partner with states and Canada to achieve significant environmental progress in addressing toxic chemicals. In FY 2002 government, industry, and non-governmental partners in the United States/Canadian Great Lakes Binational Toxics Strategy reported large reductions in the worst toxic chemicals polluting the Great Lakes. For the first time, EPA can quantify that it has made substantial progress toward achieving the challenge goals set for 2006.

In FY 2002 EPA worked with states, through the Quicksilver Caucus, to resolve two difficult mercury issues: how to meet mercury reduction goals for specific water bodies where mercury water pollution is caused primarily by air deposition, and how to ensure safe stewardship of mercury supplies and wastes. The Caucus is also providing comments and counsel on EPA's draft Mercury National Action Plan.

In FY 2002 the Commission for Environmental Cooperation (CEC) established the Bio-diversity Conservation Working Group. This is the first standing working group of the Commission for Environmental Cooperation to include non-governmental stakeholders in a

#### Progress Under United States/Canada Great Lakes Binational Toxics Strategy

<b>Mercury</b>	United States	over 40%–50% use and release reduction
	Canada	over 78% release reduction
<b>Polychlorinated biphenyl (PCBs)</b>	United States	30% (PCB transformers) and 10% (PCB capacitors) have been disposed of
	Canada	80% of high-level PCB wastes have been destroyed
<b>Other Toxic Chemicals</b>	United States	75% reduction of hexachlorobenzene and 25% reduction of benzo(a)pyrene
	Canada	65% reduction of hexachlorobenzene and 45% reduction of benzo(a)pyrene

Source: US EPA, Great Lakes National Program Office and Environment Canada, Environmental Protection Branch. *Great Lakes Binational Toxics Strategy Five-Year Perspective*. May 2002. <http://www.epa.gov/glnpo/bns/reports/5YearPerspective/5Year.html>

formal way, and it represents a new direction in stakeholder involvement on the CEC. The working group includes state/provincial and federal government agencies, indigenous and local communities, the academic community, environmental non-governmental organizations, and the private sector. These stakeholders and other interested groups will be included in the processes of developing a Strategic Plan to guide the Conservation of Bio-diversity Program, promoting the implementation of Action Plans and other activities, and reviewing the Strategic Plan to ensure its continuing effectiveness.

## **ASSESSMENT OF IMPACTS OF FY 2002 PERFORMANCE ON FY 2003 ANNUAL PERFORMANCE PLAN**

There are no changes to FY 2003 APGs based on the results of FY 2002 performance.

# Goal 6: Reduction of Global and Cross-Border Risks

## Summary of FY 2002 Annual Performance Goals

**1** Goals Met

**3** Goals Not Met

**3** Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 6:	\$212,569
Goal 6 Share of Total:	2.3%

### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 6 Costs:	\$242,958
Goal 6 Share of Total:	3.0%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs. Refer to page IV-10 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

**Strategic Objective: By 2005, Reduce Transboundary Threats to Human Health and Shared Ecosystems in North America, Including Marine and Arctic Environments, Consistent with Our Bilateral and Multilateral Treaty Obligations in These Areas, As Well As Our Trust Responsibility to Tribes.**  
 FY 2002 Cost (in thousands): \$62,807 (25.9% of FY 2002 Goal 6 Total Costs)

**Progress Toward Strategic Objective:** EPA is on track to meet this objective. EPA made significant progress in FY 2002 toward achieving this objective by reducing threats to human health and shared ecosystems along the Mexican and Canadian borders and marine waters. Improved water and wastewater services were provided along the Mexican border through the Border Environmental Infrastructure Fund. Successful international exercises were conducted between U.S.-Mexican border sister cities to test the binational emergency response plans, and local binational security seminars on weapons of mass destruction and bio and nuclear exposures were conducted to support homeland security. Along the Canadian border EPA and its partners removed or contained more than 400,000 cubic yards of contaminated sediments from the Great Lakes, substantially exceeding the 100,000-cubic yard target and bringing the 4-year cumulative total to 2.1 million cubic yards. The removal or containment of contaminated sediments will over the longer term result in improved water quality and in fish which are less contaminated and safer to eat. Negotiations that seek to manage the introduction of invasive species by ships globally took a major step forward, resulting in an agreement to establish an international standard to prevent introduction of invasive species through ship's ballast water.

APG 42	U.S.-Mexico Border Water/Wastewater Infrastructure	Planned	Actual
FY 2002	Increase the number of residents in the Mexico border area who are protected from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service. <b>Goal Not Met.</b>		
	<u>Performance Measure</u>		
	- Number of additional people in Mexico border area protected from health risks because of adequate water and wastewater sanitation systems funded through Border Environmental Infrastructure Fund.	790,000	720,000
FY 2001	Same Goal, different target. <i>Goal Met.</i>	600,000	576,405
FY 2000	Five additional water/wastewater projects along the Mexican border will be certified for design-construction for a cumulative total of 30 projects. <i>Goal Met.</i>	5	10
FY 1999	One additional water/wastewater project along the Mexican border will be certified for design construction. <i>Goal Met.</i>	1	9
<b>FY 2002 Result:</b> EPA's Mexico Border Program is working to increase public health and environmental benefits by directing funding to high-quality projects ready to proceed relatively quickly to construction. Progress has slowed somewhat from earlier projections due to the intensity and duration of pre-project planning necessary for the development of such higher quality projects. Residents numbering 720,000 in the Mexican border area were protected from health risks, beach pollution, and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.			

APG 43	Great Lakes: Ecosystem Assessment	Planned	Actual
FY 2002	Great Lakes ecosystem components will improve, including progress on fish contaminants, beach closures, air toxics, and trophic status. <b>Goal Not Met.</b>		

Goal 6 - Reduction of Global and Cross-Border Risks

**Performance Measures**

- Long-term concentration trends of toxics (PCBs) in Great Lakes top predator fish. declining declining declining
- Long-term concentration trends of toxic chemicals in the air. declining declining declining
- Total phosphorus concentrations (long-term, µg/l) in the Lake Erie Central Basin. improving mixed

FY 2001 Great Lakes ecosystem components will improve, including progress on fish contaminants, beach closures, air toxics, and trophic status. *Goal Met.*

**Performance Measures**

- Concentration trends of toxics (PCBs) in Great Lakes top predator fish. declining uncertain
- Concentration trends of toxic chemicals in the air. declining declining
- Trophic status and phosphorous concentrations in the Great Lakes. improving improving

FY 2000 Measurable improvements in Great Lakes ecosystem components. *Goal Met.*

**Performance Measures**

- Indicator indices. 9 10
- Model predictions for toxics reductions. 5 5

**FY 2002 Result:** EPA met targets for declining long-term concentration trends of toxics (PCBs) in Great Lakes top predator fish and toxic chemicals in the air. By removing or containing contaminated sediments, 100,000 to 200,000 pounds of persistent toxics that could affect human health will no longer be biologically available through the food chain. This decrease contributes to decreasing fish contaminants and advances the goal of removing fish advisories.

There is currently scientific uncertainty over the cause of the regrowth of the Lake Erie dead zone. Nonpoint source control had reduced nutrient levels in the past (from agriculture and husbandry activities), but the zone is redeveloping without known cause. To provide a better focus on the dynamic changes to the Lake Erie ecosystem, the Agency, for FY 2003 and beyond, replaced the general Great Lakes trophic status and phosphorus concentration measure with a measure for phosphorus concentration in the Lake Erie central basin, specifying a quantitative target.

**FY 2001 Result Available in FY 2002:** Great Lakes ecosystem components improved, including progress on fish contaminants, beach closures, air toxics, and trophic status.

**Strategic Objective: By 2010, U.S. Greenhouse Gas Emissions Will Be Substantially Reduced Through Programs and Policies That Also Lead to Reduced Costs to Consumers of Energy and Reduced Emissions Leading to Cleaner Air and Water. In Addition, EPA Will Carry Out Assessments and Analyses and Promote Education to Provide an Understanding of the Consequences of Global Change Needed for Decision Making.**

*FY 2002 Cost (in thousands): \$146,171 (60.1% of FY 2002 Goal 6 Total Costs)*

**Progress Toward Strategic Objective:** EPA continues to make substantial progress toward this objective. EPA's Climate Protection Programs (CPP) have substantially reduced emissions of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases (GHGs) such as methane and perfluorocarbons (PFCs). Since the mid-1990s these programs have reduced U.S. GHG emissions by more than 300 million metric tons carbon equivalent (MMTCE), while also saving families and businesses an estimated \$28 billion on energy bills (net of investments in energy-efficient technologies) and deterring approximately 600,000 tons of smog-forming nitrogen oxide (NO<sub>x</sub>) from entering the air. In FY 2002 EPA implemented new partnership programs aimed at reducing energy demand in the transportation sector.

Many of EPA's CCPs have locked in substantial energy and environmental benefits over the next decade. Since many of the investments promoted through CPPs involve energy-efficient equipment with lifetimes of decades or more, the investments achieved through 2002 will continue to deliver environmental and economic benefits through 2012 and beyond. Based on investments made in equipment due to EPA's programs through 2002, the Agency estimates that organizations and consumers across the country will net savings of more than \$70 billion and GHG emissions will be reduced by more than 500 MMTCE through 2012 (cumulative reductions based on estimated 2002 achievements). These programs continue to be highly cost-effective approaches for delivering environmental benefits across the country. For every dollar EPA spends on its technology deployment programs, these programs reduce GHG emissions by more than 1.0 metric ton of carbon equivalent (3.7 tons of CO<sub>2</sub>) and deliver more than \$75 per year in energy bill savings. This is based on a cumulative reduction since 1995.

APG 44	Reduce Greenhouse Gas Emissions	Planned	Actual
FY 2002	Greenhouse gas (GHG) emissions will be reduced from projected levels by approximately 65.8 million metric tons of carbon equivalent (MMCTE) per year through EPA partnerships with businesses, schools, state and local governments, and other organizations thereby offsetting growth in GHG emissions above 1990 levels by about 20 percent. <a href="#">Data Lag.</a>		
	<b>Performance Measures</b>		
	- Annual GHG Reductions--All EPA Programs.	65.8	data available in 2003
	- GHG Reductions from EPA's Buildings Sector Programs (ENERGY STAR).	17.2	
	- GHG Reductions from EPA's Industrial Efficiency/Waste Management Programs.	6.3	
	- GHG Reductions from EPA's Industrial Methane Outreach Programs.	16.3	
	- GHG Reductions from EPA's Industrial HFC/PFC Programs.	21.9	

Goal 6 - Reduction of Global and Cross-Border Risks

- GHG Reductions from EPA's Transportation Programs. 2.1
- GHG Reductions from EPA's State and Local Programs. 2.0

FY 2001	<i>GHG emissions will be reduced from projected levels by approximately 66 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations thereby offsetting growth in greenhouse gas emissions above 1990 levels by about 20%. <b>Goal Met.</b></i>	66	65*
FY 2000	<i>GHG emissions will be reduced from projected levels by more than 58 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations thereby offsetting growth in GHG emissions above 1990 levels by about 20%. <b>Goal Met.</b></i>	58	59.3
FY 1999	<i>Reduce U.S. GHG emissions by 35 MMTCE per year through partnerships with businesses, schools, state and local governments, and other organizations. <b>Goal Met.</b></i>	35	46

**FY 2002 Result:** Data for this performance goal will be available in mid-2003. EPA is on track to meet this goal.

**FY 2001 Result Available in FY 2002:** EPA's CPPs reduced GHG emissions by 65 MMTCE in 2001. EPA estimates that due to investments made through the Agency's technology deployment programs, GHG emissions will be reduced by more than 500 MMTCE through 2012.

**\*Note:** The annual target for this goal was set at 65.8 MMTCE. Of that total, 6.2 MMTCE was for transportation programs. Within that 6.2 MMTCE, approximately 4.2 MMTCE was for the Transportation Partners Program that was zeroed out by Congress. When these estimated reductions are removed, the revised target for FY 2001 is 61.6 MMTCE. Using the revised target, EPA met its goal.

APG 45	Reduce Energy Consumption	Planned	Actual
FY 2002	<b>Reduce energy consumption from projected levels by more than 85 billion kilowatt hours, contributing to over \$10 billion in energy savings to consumers and businesses. <b>Data Lag.</b></b>	<b>85</b>	<b>data available in 2003</b>
FY 2001	<i>Reduce energy consumption from projected levels by more than 75 billion kilowatt hours, contributing to over \$9 billion in energy savings to consumers and businesses. <b>Goal Met.</b></i>	75	84
FY 2000	<i>Same Goal, different targets. <b>Goal Met.</b></i>	60	74

**FY 2002 Result:** Data for this performance goal will be available in mid-2003. EPA is currently on track to meet this goal.

**FY 2001 Result Available in FY 2002:** EPA's CPPs reduced energy use by 84 billion kilowatt hours in 2001. EPA estimates that from investments made due to EPA's technology deployment programs, businesses and consumers across the country will realize energy bill savings of more than \$70 billion through 2012 (net of investment in energy-efficient technologies).

**Strategic Objective: By 2005, Ozone Concentrations in the Stratosphere Will Have Stopped Declining and Slowly Begun the Process of Recovery. In Addition, Public Education to Promote Behavior Change Will Result in Reduced Risk to Human Health From Ultraviolet (UV) Overexposure, Particularly Among Susceptible Subpopulations Such As Children.**

*FY 2002 Cost (in thousands): \$14,802 (6.1% of FY 2002 Goal 6 Total Costs)*

**Progress Toward Strategic Objective:** Although EPA and the United States have met all the requirements of the Montreal Protocol to date, current understanding of the protective stratospheric ozone layer indicates that the Agency's stated goal will not be met by 2005. However, the latest quadrennial assessment of the state of the protective stratospheric ozone layer finds that restraints on production of ozone-destroying chemicals such as chlorofluorocarbons are having the intended effect. The concentration of the prime offender, chlorine, is at or near a peak in the stratosphere. And an improved scientific understanding of stratospheric ozone is reassuring scientists that the world has probably seen the worst ozone loss.<sup>10</sup>

The global average total column ozone amount for the period 1997 to 2001 was approximately 3% below the pre-1980 average values. However, observations show that the total combined effective abundance of ozone-depleting compounds continues to decline slowly from the peak that occurred in 1992 to 1994 in the troposphere (lower atmosphere). A return to pre-1980 total column ozone amounts in the Antarctic is expected by the middle of this century. The expected decrease in the amount of stratospheric chlorine and bromine over the next 50 years is predicted to lead to an increase in the global amount of total column ozone.<sup>11</sup>

EPA is also making steady progress to reduce ultraviolet overexposure, particularly among children through its voluntary SunWise School Program. In 2002 alone, EPA directly reached 233,000 students in 4,800 schools, an increase of 70% since 2001.

APG 46	Montreal Protocol Fund	Planned	Actual
FY 2002	<b>Provide assistance to at least 60 developing countries to facilitate emissions reductions and toward achieving the requirements of the Montreal Protocol. <b>Goal Not Met.</b></b>	<b>60</b>	<b>50</b>
FY 2001	<i>Same Goal, different targets. <b>Goal Met.</b></i>	75	76
FY 2000	<i>Same Goal, different targets. <b>Goal Met.</b></i>	50	50

**FY 2002 Result:** EPA provided funding to 50 developing countries to facilitate emissions reductions and toward achieving the requirements of the Montreal Protocol. The Multilateral Funds were awarded with priority given to those projects targeted toward the most harmful ozone depletion substances. This resulted in not as many countries receiving funding from the Multilateral Fund, while still working toward the goal of reducing the highest risk ozone depleting substances.

APG 47	Restrict Domestic Consumption of Class II HCFCs	Planned	Actual
FY 2002	<b>Restrict domestic consumption of class II hydrochlorofluorocarbons (HCFCs) below 15,240 ozone depletion potential-weighted metric tons (ODP MTs) and restrict domestic exempted production and import of newly produced class I chlorofluorocarbons (CFCs) and halons below 60,000 ODP MTs. <a href="#">Data Lag.</a></b>	<15,240 <60,000	<a href="#">data available in 2003</a>
FY 2001	<i>Restrict domestic consumption of class II hydrochlorofluorocarbons (HCFCs) below 15,240 ozone depletion potential-weighted metric tons (ODP MTs) and restrict domestic exempted production and import of newly produced class I chlorofluorocarbons (CFCs) and halons below 60,000 ODP MTs. <a href="#">Goal Met.</a></i>	<15,240 <60,000	12,807 3,062
FY 2000	<i>Same Goal. <a href="#">Goal Met.</a></i>	<15,240 <60,000	13,180 462
FY 1999	<i>Same Goal, different target. <a href="#">Goal Met.</a></i>	<208,400 <60,000	<208,400 <130,000

**FY 2002 Result:** Data for this performance goal will be available in mid-2003. EPA is currently on track to meet this goal.

**FY 2001 Result Available in FY 2002:** EPA successfully reduced consumption, production, and import of ozone-depleting substances in accordance with the U.S. obligations under the Montreal Protocol on Substances that Deplete the Ozone Layer and requirements of the Clean Air Act by restricted domestic consumption of class II HCFCs below 15,240 ODP-weighted metric tonnes (ODP MTs) and restricted domestic exempted production and import of newly produced class I CFCs and halons below 60,000 ODP MTS.

**Strategic Objective: By 2006, Reduce the Risks to Ecosystems and Human Health, Particularly in Tribal and Other Subsistence-Based Communities, From Persistent, Bioaccumulative Toxicants (PBTs) and Other Selected Toxins Which Circulate in the Environment on Global and Regional Scales.**

*FY 2002 Cost (in thousands): \$6,037 (2.5% of FY 2002 Goal 6 Total Costs)*

**Progress Toward Strategic Objective:** EPA is on track to achieve this objective. Major progress was made toward this strategic objective when the United States signed the Stockholm Convention on Persistent Organic Pollutants (POPs) in May 2001. Countries signing the convention committed to reduce and/or eliminate the production, use, and/or release of the 12 POPs of greatest concern to the global community and established a mechanism to add further chemicals in the future. Toxics covered by the convention include DDT, PCBs, and dioxins. EPA's capacity building efforts in FY 2002 led to dioxin inventories being conducted in Jordan, Lebanon, Bruni, Vietnam, and the Philippines, and PCB inventories in the Caribbean. Domestic, regional, and international activities were conducted in FY 2002 to address mercury contamination. Mercury is known to circulate globally and accumulate in fish and is the cause of many U.S. fish advisories. EPA is leading the development of a United Nations global mercury assessment, which may result in a treaty or other global mechanism to reduce mercury risk.

**Strategic Objective: Through 2005, Integrate Environmental Protection With International Trade and Investment and Increase the Application of Cleaner and More Cost-Effective Environmental Practices and Technologies in the United States and Abroad to Ensure That a Clean Environment and a Strong Economy go Hand-in-Hand.**

*FY 2002 Cost (in thousands): \$13,141 (5.4% of FY 2002 Goal 6 Total Costs)*

**Progress Toward Strategic Objective:** EPA is on track to achieve this objective. At the World Summit on Sustainable Development, EPA and its partners announced a goal by 2015 to reduce by half the estimated 4.4 billion people worldwide who do not have access to basic sanitation, and announced partnerships on cleaner fuels and vehicles. All seven Central American countries—El Salvador, Ecuador, Belize, Panama, Honduras, Guatemala, and Costa Rica—now have environmental ministries. These successes and the variety of projects described below will allow EPA to meet this objective.

APG 48	Enhanced Institutional Capabilities	Planned	Actual
FY 2002	<b>Enhance environmental management and institutional capabilities in priority countries. <a href="#">Goal Met.</a></b>		
	<b>Performance Measures</b>		
	- Assist in the development or implementation of improved environmental laws or regulations in priority countries.	2 countries	2 countries
	- Increase the transfer of environmental best practices among the United States and its partner countries and build the capacity of developing countries to collect, analyze, or disseminate environmental data.	3 countries	3 countries
	- Increase the capacity of programs in Africa or Latin America to address safe drinking water quality issues.	3 countries	3 countries

Goal 6 - Reduction of Global and Cross-Border Risks

FY 2001 Same Goal, different targets. *Goal Met.*

Performance Measures

- Number of countries or localities (3) that have adopted new or strengthened environmental laws and policies.	3	3
- Number of organizations (3) that have increased environmental planning, analysis, and enforcement capabilities.	3	3
- Number of organizations (3) that have increased capabilities to generate and analyze environmental data and other information.	3	3
- Number of organizations (3) that have increased public outreach and participation.	3	4
- Number of targeted sectors (3) that have adopted cleaner production practices.	3	2
- Number of cities (3) that have reduced mobile-source based ambient air pollution concentrations.	3	3

FY 2000	Deliver 30 international training modules; implement 6 technical assistance/technology dissemination projects; implement 5 cooperative policy development projects; and disseminate information products on U.S. environmental technologies and techniques to 2,500 foreign customers. <i>Goal Met.</i>	30	12
		6	6
		5	5
		2,500	3,100

**FY 2002 Result:** FY 2002 efforts led to two countries committing to the phaseout of leaded gasoline and targeted countries in the Caribbean and in Asia completing the first phases of commitments to the POP conventions with PCB inventories.

**FY 2001 Annual Performance Goals (No Longer Reported for FY 2002)**

*Assess the consequences of global change (particularly climate change and climate variability) on human health and ecosystems.*

*Assist 10 to 12 developing countries with economies in transition in developing strategies and actions for reducing emissions of greenhouse gases and enhancing carbon sequestration.*

*Demonstrate technology for a 80 mpg mid-size family sedan that has low emissions and is safe, practical, and affordable.*

*In close cooperation with the U.S. Department of Agriculture, identify and develop specific opportunities to sequester carbon in agricultural soils, forests, other vegetation and commercial products, with collateral benefits for productivity and the environment, with carbon removal potential of up to 25 MMTCE by 2010.*

*Provide analysis, assessment, and reporting support to Administration officials, the Intergovernmental Panel on Climate Change, and the Framework Convention on Climate Change.*

*Increase the number of children participating in the SunWise School Program by 20%.*



## Notes:

- 1 U.S. EPA, U.S.-Mexico Border Program Office, *Border 2012 Program* (2002). Available at <http://www.epa.gov/r6border.html>.
- 2 U.S. EPA, Great Lakes National Program Office, *2001 Sediment Remediation Report* (Collier, June 2002). Available at <http://www.epa.gov/glnpo/glindicators/sediments/remediatea.html>.
- 3 J.M. Luross, M. Alaei, D.B. Sergeant, D.M. Whittle, and K.R. Solomon, Spatial and Temporal Distribution of Polybrominated Biphenyls in Lake Trout from the Great Lakes, *Organohalogen Compounds* 47 (2000):73–76. J.P. Hickey, S.M. Chernyak, L.J. Begnoche, and R.T. Quintal, Concentration Trends of Polybrominated Diphenyl Ethers (PBDEs) in Great Lakes Biota, U.S. Geological Survey abstract, presented in June 2002.
- 4 U.S. EPA, Office of Air and Radiation, Climate Protection Partnerships Division, *Partnerships Changing the World: ENERGY STAR and Other Voluntary Programs*, EPA 430-R-02-010 (Washington, DC, August 2002). 2001 Annual Report.
- 5 Ibid.
- 6 U.S. EPA, *Ozone Depletion Rules & Regulations: Harmonizing the Clean Air Act & Montreal Protocol Methyl Bromide Phaseouts*. Available at <http://www.epa.gov/ozone/mbr/harmoniz.html>.
- 7 *Federal Register* Notices: Notice 16, 67 FR 13272 (March 22, 2002); Direct Final Rule 67 FR 4185 (January 29, 2002); Subsequent Final Rule No. 10, 67 FR 44703 (July 22, 2002). All actions listed new alternatives and/or updated SNAP regulations.
- 8 S. Brooks, M. Goodsite, M.S. Landis, C.J. Lin, S.E. Lindberg, A. Richter, K.L. Scott, and R.K. Stevens, Dynamic Oxidation of Gaseous Mercury in the Arctic Troposphere at Polar Sunrise, *Environ. Sci. Technol.* 36 (2002):1245–1246.
- 9 Information about the Commuter Choice Program is available at <http://www.commuterchoice.gov>.
- 10 Ozone Depletion: A Brighter Outlook for Good Ozone, *Science* 297(5587), September 6, 2002):1623–1625.
- 11 The Executive Summary of the “Scientific Assessment of Ozone Depletion: 2002” published July 2002 by the Scientific Assessment Panel of the *Montreal Protocol on Substances that Deplete the Ozone Layer*.

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## GOAL 7 - QUALITY ENVIRONMENTAL INFORMATION

**The public and decision makers at all levels will have access to information about environmental conditions and human health to inform decision making and help assess the general environmental health of communities. The public will also have access to educational services and information services and tools that provide for the reliable and secure exchange of quality environmental information.**

### PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES

EPA strives to provide the right information, at the right time, in the right format, to the right people. This means making quality environmental and management information available to decision makers for developing environmental policies and priorities. It means making environmental data publicly accessible to support family and community involvement in environmental developments. It means building the necessary infrastructure to provide secure information, reliable data, efficient and timely access, and analytical information tools.

EPA makes environmental information more widely available through education, partnerships, and other methods. In partnership with states and others, the Agency is building a National Environmental Information Exchange Network (NEIEN) to effectively share information. To make environmental information more accessible and readily understood, EPA develops analytical tools, such as its redesigned Internet Web site for integrated access to environmental information and the forthcoming report on the environment reporting on the status of the Nation's environmental conditions. The report, part of a multiyear Environmental Indicators Initiative to provide indicators of human health and environmental conditions, will be a valuable tool for helping to assess the effectiveness of environmental programs.

EPA continues to improve the reliability, capability, and security of its information infrastructure. New Agency policies and procedures for coordinated information system investment and development ensure the best use of Agency resources in managing information and

expanding access to it. EPA's substantial progress in keeping pace with the evolving challenges of information security has been recognized by the Office of Management and Budget (OMB) and the General Accounting Office, as well as the Agency's Inspector General. EPA made substantial progress in meeting new information security challenges and corrected a material weakness in information security by implementing effective new security controls. (*Refer to Section III, "Management Accomplishments and Challenges," for further discussion.*)

### FY 2002 PERFORMANCE

EPA's information goals and objectives are in alignment with the President's Management Agenda<sup>1</sup> initiative to improve management of and access to government information. The Agency is actively involved in 14 of the federal electronic government projects to better serve citizens' needs and has been commended for improvements in providing electronic access to information, strengthening information security, and making results-based investments in technology. EPA's environmental e-government initiatives include the NEIEN, electronic reporting, and electronic dockets. In FY 2002 OMB designated EPA as the managing partner and lead agency for the President's electronic On-Line Rulemaking Initiative.

### Availability of Quality Environmental Information

In FY 2002 EPA continued to make progress in improving access to quality information. The Agency worked successfully with state and tribal partners to further develop the building blocks of the NEIEN. Using Internet technology, the NEIEN promotes more timely,

secure, cooperative data exchange among federal, state, tribal, and local governments; improves the delivery of government services to citizens; and reduces the business paperwork burden. EPA awarded \$25 million in NEIEN Grants to 44 states, 17 tribes, and 1 U.S. territory (Puerto Rico) to build NEIEN.

EPA developed the Central Data Exchange (CDX), a NEIEN central reporting facility that provides users with faster access to reliable data. The CDX became fully operational in FY 2002 and quickly became so popular that the number of state users (45) is now three times the Agency's goal for the first operational year. Including reporting industries, there are now more than 8,000 external CDX registered users, more than double the FY 2001 number. CDX currently processes information flows for the Toxics Release Inventory (TRI), Toxic Substances Control Act, Permit Compliance System Interim Data Exchange Format, Unregulated Contaminant Monitoring Rule, and National Emissions Inventory. EPA established a long-term, performance-based contract to efficiently support the CDX and other Agency data processing with state-of-the-art technical support. Through NEIEN and CDX, EPA integrated environmental information from state, federal, and EPA program systems; improved data accuracy; and supported better use and understanding of environmental information.

In FY 2002 EPA enhanced the TRI program to reduce reporting burden, improve data quality, and increase access to data. One improvement was the first full release of EPA's new intelligent desktop software, TRI Made Easy (TRI-ME). TRI-ME assists facilities in understanding and completing their TRI reporting obligations. Facilities using TRI-ME to submit Reporting Year 2001 TRI reports numbered 10,799, representing 43 percent of all reporting facilities<sup>2</sup> and exceeding an Agency target of 25 percent. Data that EPA collected on the prior, pilot version of TRI-ME indicate that facilities that use TRI-ME for the first time reduce reporting burden by 25 percent and reduce errors by about 50 percent.<sup>3</sup> Ninety-two percent of TRI facilities

prepared and/or submitted Reporting Year 2001 TRI forms electronically in FY 2002, 7 percent above the Agency's goal.<sup>4</sup>

EPA collected and processed 110,000 chemical form submissions in FY 2002, as well as 2,400 miscellaneous documents from about 24,800 facilities.<sup>5</sup> In FY 2002 the Agency released the TRI data for 2000, which was the first year of public information on persistent bioaccumulative toxic (PBT) chemicals, including dioxins, mercury, and polychlorinated biphenyls.<sup>6</sup> This PBT reporting provided the public with more complete information on toxic chemicals in their communities; in particular, there were an additional 6,947 PBT chemical reports from 3,543 facilities, 762 of which had not reported in the previous year.<sup>7</sup>

To help facilities prepare their first year of reporting for lead and lead compounds with the new lower reporting thresholds, EPA produced and published a guidance document on the new lead rule through a public notice and comment process.<sup>8</sup> The first TRI reports for lead under the new thresholds were due on July 1, 2002, and will be publicly available in June 2003. These new lead reports will give the public more complete information on the lead releases and waste management activities.

### **Better Understanding Through Increased Access**

In FY 2002, to support better access to and understanding of environmental information, EPA designed several tools to integrate and interpret the information used to support environmental decisions. EPA launched the Environmental Indicators Initiative and identified indicators for the first key product, a draft report on the Nation's environmental conditions, which the Agency plans to release in FY 2003 for public review. The Agency is identifying indicators of the condition of the country's air, land, water, human health, and ecosystems. In FY 2002 EPA identified, reviewed, and analyzed more than 130 potential environmental indicators and selected 80 to include in the environmental report. The Agency also established a new partnership with the U.S. Department of Health and Human

## INTEGRATED ACCESS TO LOCAL ENVIRONMENTAL INFORMATION THROUGH EPA'S WINDOW TO MY ENVIRONMENT

In January 2002 EPA received an Excellence.gov award for Window to My Environment as an innovative federal electronic government information service. EPA's Window to My Environment is a powerful Web-based tool that provides a wide range of federal, state, or local information about environmental conditions for any area in the United States specified by the user. EPA provides this helpful information tool on its public Internet site at, in partnership with federal, state and local government and other organizations.

To get started, users can access Window to My Environment at <http://www.epa.gov/enviro/wme> and input a ZIP code or the name of a city/town and state. Features include:

- An interactive map—shows the location of regulated facilities, monitoring sites, water bodies, population density, perspective topographic views and more, with hotlinks to state and federal information about these items of interest.
- Your Window—selected geographic statistics about the area of interest, including estimated population, county and urban area designations, local watersheds and water bodies, plus much more.
- Your Environment—links to information from federal, state, and local partners on environmental issues such as air and water quality, watershed health, Superfund sites, fish advisories, impaired waters, and local services working to protect the environment in the area.

Services to share environmental information on the links between human health and environmental exposure. The report on the environment will be an important information tool for understanding and analyzing environmental issues and for evaluating progress.<sup>9</sup>

EPA also launched a redesigned Agency Web site (<http://www.epa.gov>) that provides enhanced features such as up-to-the-minute coverage of EPA's responses to security threats, gives users more direct access to topics, and strengthens protection of sensitive information. About 1.2 million people visit EPA's top-ranked federal Web site each month for one-stop access to environmental information, including news, resources, applications, maps, tools, and databases.<sup>10</sup>

In FY 2002 EPA implemented its innovative On-Line Rule-making system, which provides a single point for businesses and the public to access all available information on proposed rule-makings. The new electronic access effectively expands opportunities to participate in the process of environmental decision making.

The Agency also developed and implemented EDOCKET (<http://www.epa.gov/EDOCKET>), another e-government initiative that supports the President's Management Agenda. EDOCKET combines eight electronic dockets into one central system, providing a unified, convenient way for the public to comment on any regulatory or nonregulatory action proposed by the Agency. EPA improved on-site access to regulatory information by combining docket centers from several locations into one central site.

### Infrastructure to Support Security and Quality

In FY 2002 EPA improved and expanded its information infrastructure to deliver reliable, secure information. EPA systematically assesses and manages risk by implementing effective management and security controls, including risk assessments, analytical reviews, automated monitoring tools, and independent testing. EPA assessed the security of 168 general support systems and major applications. The assessment confirmed the effectiveness of security controls and provided the basis for planning further improvements.<sup>11</sup>

EPA also implemented a virtual private network technology, one of the most effective security technologies available, for electronic information exchange with external business partners. In FY 2002 the Agency continued to support World Trade Center site monitoring activities through its Multi-Agency Environmental Monitoring Database, which also provides the public with a “clickable” interactive map of all relevant monitoring locations.<sup>12</sup> By the end of FY 2002 the database contained hundreds of thousands of records of environmental monitoring data collected by 13 federal, state, city, and private organizations at dozens of sites in the lower Manhattan area and its environs.<sup>13</sup>

In FY 2002 EPA issued the Information Quality Guidelines to improve data quality and accountability for information provided to the public.<sup>14</sup> The guidelines, developed using an electronically enhanced public participation process, include Agency procedures for ensuring information quality. They also outline how the public, particularly the business and scientific communities, can seek correction of information. The Agency also provided a user-friendly method for reporting and resolving data quality errors in all its publicly accessible data through the Integrated Error Correction Process.

EPA is taking a comprehensive, systematic approach to improving information technology planning and investment. In FY 2002 the Agency assessed management of its information technology investment to ensure compliance with federal guidance and requirements. It also took action to better coordinate investments, streamline authority for acquisitions, and formally establish a capital planning and investment control process. EPA started developing a complete investment portfolio aligned with the Agency’s technology architecture, deploying the Information Technology Investment Portfolio System, and planning better alignment and efficiencies between information technology investment and other Agency management processes. In FY 2002 EPA established a baseline Agency-wide enterprise

architecture to guide system development and conform with federal guidance.

### **Research Contributions**

In FY 2002 EPA submitted seven human health assessments for Agency consensus review. These assessments describe the potential human health impacts of various chemicals found in the environment. This information is used for hazard identification and dose-response evaluations in EPA and state risk assessments, and it is available to the public. Chemical toxicity data will also provide EPA with valuable information that might influence the development of the Agency’s regulatory standards and site cleanup decisions. These assessments will be posted on the publicly available Integrated Risk Information System.<sup>15</sup>

### **Program Evaluation**

Appendix A contains descriptions of program evaluations completed in FY 2002 that support the overall goal. No program evaluations focused specifically on FY 2002 performance.

## **STATE/TRIBAL PARTNER CONTRIBUTIONS**

State and tribal governments are essential partners in EPA’s efforts to achieve its vision of integrated access to comprehensive environmental information. Accordingly, the Agency works closely with state and tribal partners on all aspects of the NEIEN.

### **State Contributions**

EPA worked with states and tribes to increase access to information needed to make informed decisions by developing the NEIEN to provide better environmental information for decision making, improving data quality and accuracy, ensuring the security of sensitive data, avoiding data redundancy, and reducing the burden on those who provide and those who access information.

## **Tribal Contributions**

EPA and the EPA Tribal Caucus worked together to plan for achieving the tribes' environmental information vision and priorities. They outlined ongoing and planned tribal information projects and actions for FY 2002 and FY 2003, and they agreed to review progress and identify new initiatives annually. In addition, the Agency awarded NEIEN Grants to 17 tribes.

## **ASSESSMENT OF IMPACTS OF FY 2002 PERFORMANCE ON FY 2003 ANNUAL PERFORMANCE PLAN**

EPA increased its FY 2003 target for number of states using the CDX because FY 2002 performance exceeded expectations.

# Goal 7: Quality Environmental Information

## Summary of FY 2002 Annual Performance Goals

**6** Goals Met

**0** Goals Not Met

**0** Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 7:	\$202,090
Goal 7 Share of Total:	2.1%

### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 7 Costs:	\$253,865
Goal 7 Share of Total:	3.2%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs.  
Refer to page IV-11 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

**Strategic Objective:** Through 2006, EPA Will Continue to Increase the Availability of Quality Health and Environmental Information Through Educational Services, Partnerships, and Other Methods Designed to Meet EPA's Major Data Needs, Make Data Sets More Compatible, Make Reporting and Exchange Methods More Efficient, and Foster Informed Decision Making.

FY 2002 Cost (in thousands): \$87,636 (34.5% of FY 2002 Goal 7 Total Costs)

**Progress Toward Strategic Objective:** EPA continues to make progress toward this objective, and in FY 2002 improved access to environmental information by implementing new electronic reporting tools. These tools increase the Agency's capability to quickly provide current information and also integrate available environmental data used to support environmental decisions. Highlights include tripling external users of EPA's Central Data Exchange (CDX), increasing by 33% the number of unique facility records in the Federal Registry System, and expanding Window to My Environment to provide the public with a "one stop shop" for federal, state, and local government information on environmental conditions in their communities.

APG	Enhanced Public Access	Planned	Actual
FY 2002	<p><b>Improve public access to compliance and enforcement documents and data through multimedia data integration projects and other studies, analyses and communication/outreach activities. Goal Met.</b></p> <p><u>Performance Measure</u></p> <ul style="list-style-type: none"> <li>- Make 90% of enforcement and compliance policies and guidances issued this fiscal year available on the Internet within 30 days of issuance.</li> </ul>	90%	100%
FY 2001	<p>Same Goal, different targets. Goal Not Met.</p> <p><u>Performance Measures</u></p> <ul style="list-style-type: none"> <li>- By the end of FY 2001, all ten EPA Regions will have an enforcement and compliance web site.</li> <li>- Make 90% of enforcement and compliance policies and guidances issued this fiscal year available on the Internet within 30 days of issuance.</li> <li>- By April 2001, make summaries of all significant cases available on the Internet.</li> </ul>	10 90%	9 86%
FY 2000	<p>Same Goal, different targets. Goal Met.</p> <p><u>Performance Measures</u></p> <ul style="list-style-type: none"> <li>- Percent of OECA policy and guidance documents available on the Internet.</li> <li>- Increase by 50% the number of states with direct access to Integrated Data for Enforcement Analysis (IDEA).</li> </ul>	90% 21 states	94% 34 states

**FY 2002 Result:** EPA was able to make all of the enforcement and compliance policies and guidances available to the public by posting them on the Agency's compliance and enforcement web site at <http://www.epa.gov/oeca/index.html>.

APG	Process and Disseminate TRI Information	Planned	Actual
FY 2002	<p>EPA will reduce reporting burden, improve data quality, lower program costs, and speed data publication by increasing the amount of Toxics Release Inventory (TRI) electronic reporting from 70 to 85%. Goal Met.</p>	85%	92%



FY 2001	Process all submitted facility chemical release reports; publish annual summary of TRI data; provide improved information to the public about TRI chemicals; and maximize public access to TRI information. <i>Goal Met.</i>		
	<u>Performance Measures</u>		
	- TRI Public Data Release.	1 report	1 report
	- Chemical submissions and revisions processed.	110,000	120,000
FY 2000	Same Goal, different targets. <i>Goal Met.</i>		
	<u>Performance Measures</u>		
	- TRI public data release.	1	1
	- Form R's processed.	110,000	119,000
	- TRIS database complete and report issued.	2/2001	on target
FY 1999	Process 110,000 facility chemical release reports, publish the TRI Data Release Report, and provide improved information to the public about TRI chemicals, enhancing community right-to-know and efficiency processing information from industry. <i>Goal Met.</i>	110,000	117,171

**FY 2002 Result:** In FY 2002, 92% of the chemical submissions for TRI Reporting Year 2001 were submitted and/or prepared electronically. Many facilities used EPA's new, expert software, TRI Made Easy (TRI-ME), thereby making the reporting process significantly easier, faster, and more accurate.

APG 51	<b>Information Exchange Network</b>	<b>Planned</b>	<b>Actual</b>
FY 2002	<b>The Central Data Exchange, a key component of the environmental information exchange network, will become fully operational and 15 states will be using it to send data to EPA thereby improving data consistency with participating states. <i>Goal Met.</i></b>	15	45

**FY 2002 Result:** By the end of FY 2002, 45 states were using CDX to send data to EPA, tripling the number of states originally anticipated. The new users significantly increased the flow of data through CDX, speeding progress toward a fully functioning environmental information exchange network.

**Strategic Objective: By 2006, EPA Will Provide Access to New Analytical or Interpretive Tools Beyond 2000 Levels So That the Public Can More Easily and Accurately Use and Interpret Environmental Information.**

*FY 2002 Cost (in thousands): \$31,932 (12.6% of FY 2002 Goal 7 Total Costs)*

**Progress Toward Strategic Objective:** EPA is on track to achieve this objective, and in FY 2002 increased users' understanding of available environmental data by integrating and interpreting the many data sets and information sources that are used to support environmental decisions. To support better understanding of environmental information and public health protection, EPA's Window to My Environment became operational and now serves citizens across the country with federal, state, and local environmental information that can be geared to a specific geographic location. In addition, 100% of the publicly available facility data from EPA's national systems accessible on the EPA web site is part of EPA's Integrated Error Correction Process. The Agency used an electronically enhanced public participation process to develop federally required *EPA Information Quality Guidelines*.

APG 52	<b>Environmental Justice (EJ)</b>	<b>Planned</b>	<b>Actual</b>
FY 2002	<b>Ensure that EPA's policies, programs and activities address disproportionately exposed and under-represented population issues so that no segment suffers disproportionately from adverse health and environmental effects. <i>Goal Met.</i></b>		

Performance Measures

- |  |    |    |
|--|----|----|
| - Award 90 grants to organizations which address environmental problems in communities disproportionately impacted by environmental hazards.   | 90 | 73 |
| - Hold meetings with the National Environmental Justice Advisory Council (NEJAC), all stakeholders involved in the environmental justice dialogue, and communities disproportionately impacted by environmental hazards. | 30 | 38 |

FY 2001 Same Goal, different targets. *Goal Met.*

Performance Measures

- |   |     |      |
|---|-----|------|
| - Award 90 grants to organizations which address environmental problems in communities comprised primarily of low income and minority populations.                              | 90  | 79   |
| - Hold 25 EPA-sponsored public meetings where disproportionately impacted and disadvantaged communities participate.  | 25  | 25   |
| - Respond within 60 days to 75% of requests made to each Region and National Program Manager to address complaints heard during public comment period at NEJAC public meetings. | 75% | >75% |
| - Conduct 18 NEJAC meetings and focused roundtables in local communities where problems have been identified.   | 18  | 13   |

Goal 7 - Quality Environmental Information

- Increase the number of demonstration projects established under the Federal Interagency Working Group on Environmental Justice. 18 15

FY 2000 Same Goal, different targets. **Goal Met.**

Performance Measures

- Number of EPA-sponsored public meetings held where disproportionately disadvantaged communities participate. 25 31
- Number of grants awarded to low income, minority communities for addressing environmental problems. 70 62

FY 1999 Provide over 100 grants to assist communities with understanding and address EJ issues. **Goal Met.** 100 100

**FY 2002 Result:** EPA continued to work for equal environmental and health protection through access to information across the United States. EPA published environmental justice reports and sponsored community revitalization demonstration projects and intern training in community organizations. EPA also awarded grants, although it did not receive enough applications to meet the FY 2002 target (this also explains FY 2001 and FY 2000 results for the same performance measure). Although EPA did not receive enough applications to meet the FY 2002 target, it did award grants to all 73 eligible applicants.

APG 53	Data Quality	Planned	Actual
FY 2002	100% of the publicly available facility data from EPA's national systems accessible on the EPA web site will be part of the Integrated Error Correction Process, reducing data error. <b>Goal Met.</b>	100%	100%

**FY 2002 Result:** Access to the Agency's Integrated Error Correction Process (IECP), a user-friendly method for reporting and resolving errors identified by the public, is now available by clicking on "Contact Us" on the EPA homepage. By offering easy access to IECP via the EPA web site and by providing direct links from more than a dozen databases and web sites, EPA is helping to reduce errors in the information it makes available to the public.

**Strategic Objective: Through 2006, EPA Will Continue to Improve the Reliability, Capability, and Security of EPA's Information Infrastructure.**

*FY 2002 Cost (in thousands): \$134,297 (52.9% of FY 2002 Goal 7 Total Costs)*

**Progress Toward Strategic Objective:** EPA is on track and making progress toward this objective. The Agency increased the security of environmental information on its acute infrastructure, financial, and mission critical environmental systems. Based on the assessment results, the Agency strengthened its information security program to ensure the integrity and availability of data and appropriate level of access to data. EPA supported the development of an additional strategy for homeland security by establishing a rigorous plan to prevent and respond to a terrorist attack.

APG 54	Information Security	Planned	Actual
FY 2002	Complete risk assessments on the Agency's critical infrastructure systems, critical financial systems, and mission critical environmental systems. <b>Goal Met.</b>		
	<u>Performance Measures</u>		
	- Critical infrastructure systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document.	12	12
	- Critical financial systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document.	13	13
	- Mission critical environmental systems risk assessment findings will be formally documented and transmitted to system owners and managers in a formal Risk Assessment document.	5	5

**FY 2002 Result:** EPA conducted formal risk assessments, including comprehensive testing, on 30 systems. The Agency also conducted base risk assessments on 168 general support systems and major applications. The risk assessments provide fuller knowledge about the threats to, and vulnerabilities of, the Agency's electronic systems, thereby allowing EPA to implement the best possible security measures and achieve a high degree of confidence in its security program.

**FY 2001 Annual Performance Goals (No Longer Reported for FY 2002)**

*Provide guidance for risk assessment to improve the scientific basis of environmental decision making.*

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13. U.S. EPA, EPA response to September 11. Information available at <http://www.epa.gov/wtc/>. See also Monitoring Summaries at <http://www.epa.gov/WTC/summary.html>. For New York City response, see also EnviroMapper at <http://www.epa.gov/wtc/em/>.
14. Available at <http://www.epa.gov/oei/qualityguidelines/index.htm>.
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## **GOAL 8: SOUND SCIENCE, IMPROVED UNDERSTANDING OF ENVIRONMENTAL RISK, AND GREATER INNOVATION TO ADDRESS ENVIRONMENTAL PROBLEMS**

**EPA will develop and apply the best available science for addressing current and future environmental hazards, as well as new approaches toward improving environmental protection.**

### **PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES**

EPA continued to address current and future environmental challenges in FY 2002 by developing the best available science and adopting new and innovative approaches for environmental protection. Specifically, the Agency completed an analysis of acid deposition trends in U.S. lakes and streams that provides evidence of the success of current environmental policies and contributes to the scientific understanding needed to maintain and restore these highly valued ecosystems.<sup>1</sup> The development of new methods to assess pesticide-related health impacts in young children similarly strengthens the Agency's ability to effectively prevent and manage risks to human health, particularly for those most susceptible to the effects of environmental contaminants.<sup>2</sup> Improved methods for quantifying mercury emissions from man-made sources and other research to reduce and prevent environmental and human exposure to endocrine disruptor chemicals (EDCs), mercury, and biological agents will enhance EPA's ability to anticipate and respond to environmental challenges.<sup>3</sup>

Environmental decision makers also have access to improved pollution prevention tools and technologies, including software to evaluate the inhalation impacts of metal finishing facilities on workers and nearby residents and protocols to verify the performance of new pollution prevention technologies with applicability to multiple economic sectors.<sup>4</sup> In FY 2002 EPA continued to encourage the use of expert review and collaborative partnerships to ensure the

highest level of quality in its work. Building on its scientific, economic, and regulatory research and analysis activities, EPA is making environmental protection more flexible, efficient, and effective, while minimizing the burden on the regulated community.

### **FY 2002 PERFORMANCE**

#### **Sound Science**

The American public, EPA, Congress, and the research community have expressed growing concern about the effects of acidic deposition on the lakes and streams of the United States. Title IV of the Clean Air Act Amendments sets target reductions for sulfur and nitrogen emissions from industrial sources as a means of reducing the acidity of deposition and thereby improving the biological condition of surface waters. In FY 2002 EPA produced a report<sup>5</sup> on trends in acid deposition and the acidity of lakes and streams in the Northeast, mid-Atlantic, and upper Midwest regions of the United States. The report provides evidence that acid deposition controls are working. Researchers found that all regions except the Blue Ridge area have experienced significant declines in sulfate concentrations in surface waters, consistent with a decline in sulfate precipitation. Nitrate concentrations decreased in two regions. The highest nitrate concentrations were found in the Adirondacks and northern Appalachian plateau; however, acid-neutralizing capacity increased in the Adirondacks, northern Appalachian plateau, and upper Midwest, and modest increases in neutralizing capacity have reduced the number

of acidic lakes and streams in some of these regions. For example, the number of acidic lakes in the upper Midwest fell from 251 to 80 between 1985 and 2001. Acid-neutralizing capacity is a key indicator of recovery because it reflects the capacity of watersheds to buffer inputs of acidity. The National Acid Precipitation Assessment Program (NAPAP) will include the results of this analysis in its report to Congress and will be available at <http://www.oar.noaa.gov/organization/napap.html>.

Another significant FY 2002 achievement involved the completion of a framework that provides the Agency with the necessary components to determine the routes, magnitude, and variability of human exposures to various multimedia pollutants (e.g., pesticides, air toxics, metals). Through the framework, EPA will advance the science of human exposure and dose assessment by helping to answer key questions regarding pollutants that pose significant risk to children and other susceptible subpopulations. In response to recommendations from the Science Advisory Board (SAB),<sup>6</sup> EPA also completed analyses of the National Human Exposure Assessment Survey,<sup>7</sup> a program investigating critical information gaps about population-scale distributions of human exposures to contaminant mixtures. These analyses provide aggregate exposure data to evaluate many multimedia and media-specific risk management issues and to improve exposure methods and models.

EPA developed two new protocols for use in the Agency's endocrine disruptors screening and testing program, which were authorized by the Food Quality Protection Act of 1996<sup>8</sup> and the Safe Drinking Water Act Amendments of 1996.<sup>9</sup> The protocols will help EPA identify areas in which technologies can be applied to reduce and/or prevent human and environmental exposure to endocrine disruptor chemicals. In addition, EPA improved methods for quantifying mercury emissions from manmade sources. In FY 2002 the Agency produced a report<sup>10</sup> (<http://www.epa.gov/appcdwww/aptb/EPA-600-R-01-109corrected.pdf>, appendix: <http://www.epa.gov/appcdwww/aptb/EPA-600-R-01-109A.pdf>) on the parameters that affect

both the species of mercury in coal-fired utility boiler flue gas and the performance of promising mercury control technologies. This report will be used to help plan future research needed to outline, by December 2003, the Maximum Achievable Control Technology Requirements. This work supports EPA's December 2000 decision to regulate mercury emissions from coal-fired electric utility steam-generating plants. Releasing about 43 tons of mercury each year, coal-fired power plants are the largest source of human-caused mercury emissions in the United States. EPA has found that there are cost-effective ways of controlling mercury emissions from power plants.<sup>11</sup> Technologies available today and technologies expected to be available in the near future can eliminate most of the mercury from utilities at a cost far lower than 1 percent of utility industry revenues.

In the area of pollution prevention research, EPA developed improved pollution prevention tools, including (1) computer software that can estimate the potential environmental impact of chemical process designs, (2) a pest resistance management framework to delay or prevent the emergence of resistance in target insects to the toxins in transgenic crops, and (3) software to evaluate the inhalation impacts of metal finishing facilities on workers and nearby residents. Industry and state and local decision makers can use these tools to evaluate pollution levels, impacts, and costs of product, process, or system redesigns that will in turn inform decisions that better protect human health and the environment. In addition, EPA's Environmental Technology Verification program completed 20 stakeholder-approved and peer-reviewed testing protocols for commercially ready environmental technologies in 6 categories (environmental monitoring, air pollution control, drinking water treatment, greenhouse gas reduction, pollution prevention, and water quality protection). EPA will use the protocols to objectively evaluate a wide variety of environmental technologies so that purchasers and permittees will have an independent and credible assessment of the technologies they are buying or permitting. EPA is also developing

outcome-oriented goals and performance measures in these areas.

In FY 2002 the SAB issued 17 reports advising EPA on a broad range of scientific and technical issues.<sup>12</sup> One major report, *A Framework for Assessing and Reporting on Ecological Conditions*<sup>13</sup> (<http://www.epa.gov/sab/fiscal02.htm>), provided guidance that contributed to the Agency's design of its report on the environment, which the Agency plans to release in draft during FY 2003. The SAB guidance highlighted EPA's emphasis on measuring the impacts of Agency programs through scientifically credible indicators, and on protecting ecological resources. Other SAB peer-reviewed reports addressed environmental agents and cross-media issues, such as the review of particulate matter (<http://www.epa.gov/sab/fiscal02.htm>) and the trichloroethylene health risk assessment<sup>14</sup> (<http://www.epa.gov/sab/fiscal03.htm>). This last report will help EPA address an environmental contaminant affecting air, water, and multiple Superfund sites and improve the Agency's approach to several important areas in risk assessment, such as protection of children and other vulnerable populations, and cumulative risk.

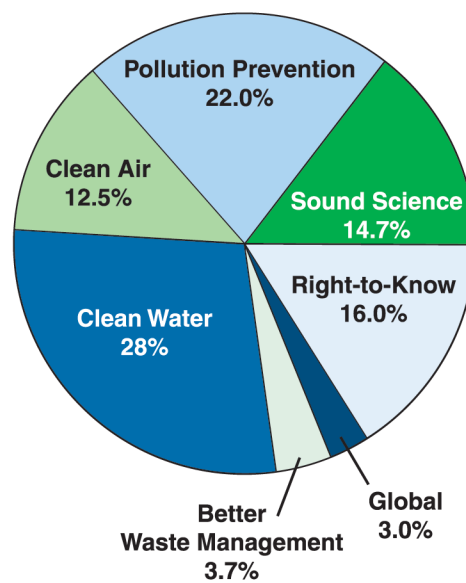
In FY 2002 the Regional Science and Technology organizations provided field sampling, analytical and data management support, and quality assurance to Agency programs nationwide and continued to expand the number of Centers of Applied Science (CASs). CASs support the development and application of new and innovative technologies by developing sampling, quality assurance, and analytical methodologies. These methodologies and technologies are shared both within EPA and with the Agency's partners. Some examples are (1) developing polymerase chain reaction as an analytical tool that would improve EPA's ability to detect protozoan parasites and other target organisms in drinking water and (2) developing a qualitative method of compound identification by X-ray diffraction, which, when combined with chemical analysis, has been valuable in determining the fate and transport of compounds in the environment. Advances in compound identification will help environmental decision

makers determine the most effective remedies at Superfund sites and assess water quality impacts from proposed or operating mineral resource facilities.

### Greater Innovation

The Regional Geographic Initiative (RGI) Program (<http://www.epa.gov/regional/rgi.htm>) is one of the most effective tools to help EPA regions achieve a balance between responding to state and local needs and national priorities.<sup>15</sup> In FY 2002 the 124 projects funded through the RGI Program provided EPA with flexibility to achieve environmental results by responding to strategic regional, state, and local priorities.<sup>16</sup> EPA fostered regional solutions to cross-programmatic environmental problems, promoted innovation, built partnerships, developed holistic approaches and, of particular significance, leveraged additional funds from state, local, and non-governmental organization sources. For example, Region 3's "Livable Neighborhoods for Philadelphia" project engages citizens to promote the conservation of municipal resources and initiate actions that will result in increased neighborhood safety, environmental and human health protection, greening, and capacity building.<sup>17</sup> Similarly, Region 7's "Kansas City WildLands" project involves citizen volunteers in conserving,

**FY 2002 Distribution of Regional Geographic Initiative Projects Across Agency Goals**



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restoring, and protecting remnant natural communities threatened by overgrowth of woody vegetation, invasive species, and the loss of ecological integrity.<sup>18</sup>

In FY 2002 EPA also made significant progress toward incorporating innovative approaches to environmental management so that the Agency and its external partners can achieve greater and more cost-effective public health and environmental protection results. EPA produced new economic work products on environmental impacts related to specific air, water, and agricultural issues. Additional EPA-sponsored economic research studies begun in 2002 will improve Agency decision making in a lengthy list of specialized areas: children's health valuation, value of statistical life, water quality benefits valuation, cancer risk reduction benefits, host community compensation, and municipal solid waste landfills.

In FY 2002 EPA's industry sector-based program (<http://www.epa.gov/projectxl/2002state.htm>) developed projects to help enhance performance in five U.S. industries: metal finishing, metal foundries and die casting, meat processing, shipbuilding and ship repair, and specialty-batch chemical production.<sup>19</sup> Such projects included sector-specific EMS templates, compliance assistance guides, and proposed RCRA regulatory changes to enhance waste recovery and reuse. Building on this program foundation, EPA will begin work with new industries to reduce regulatory and other barriers to improved environmental performance, while also providing tools and incentives to prompt many companies within each sector to develop environmental management systems. EPA outreach activities for small businesses and smart growth also expanded. The Agency responded to more than 15,000 calls on the Small Business Ombudsman Hotline for assistance regarding environmental regulations, and reached more than 10,000 individuals and organizations with information on Brownfields redevelopment through conference presentations and distribution of printed materials.<sup>20</sup>

EPA selected three state projects to be funded under its FY 2002 State Innovation Pilot

Grant Program (<http://www.epa.gov/innovation/stategrants/>). Specifically, the Agency requested projects that test innovative permitting approaches using incentives to motivate "beyond-compliance" environmental performance, or that move whole sectors toward improved environmental performance and could show results in 2 to 3 years. EPA selected projects from the Arizona Department of Environmental Quality, the Delaware Department of Natural Resources and Environmental Control, and the Massachusetts Department of Environmental Protection. These projects include efforts to develop a Web-based system that will simplify and expedite storm water permitting and an innovative permitting approach for auto body repair shops that are facing new air quality requirements. EPA has approved the final work plan and made the award for Arizona—the time line for results for the innovative storm water permitting project is December 31, 2003. The Massachusetts project, watershed-based permitting in the Assabet River watershed, is in final negotiation and the time lines are not yet final; however, based upon their pre-proposal the Agency anticipates final results by March 2004. Similarly with the Delaware project, the development of an innovative air permitting program for the auto body sector, EPA is negotiating the final agreement and anticipates results by January 2005.

In April 2002 EPA issued its innovation strategy—"Innovating for Better Environmental Results: A Strategy to Guide the Next Generation of Innovation at EPA" (<http://www.epa.gov/innovation/strategy/>). This strategy reflects the Agency's commitment to explore new and creative ways of achieving cleaner air, purer water, and better-protected land. This vision for the future includes four primary elements: (1) strengthen EPA's innovation partnerships with states and tribes; (2) focus the Agency's innovation efforts on four priority environmental problems—smog, greenhouse gases, water quality, and water infrastructure; (3) make full use of technology, market-based incentives, environmental management systems, and measurable performance goals; and (4) make EPA's culture and management systems more



“innovation-friendly.” EPA is tracking progress under this strategy and issued its first progress report in November 2002.

## Program Evaluation

In FY 2002 EPA completed the *Directory of Project Experiments and Results* (<http://www.epa.gov/projectxl/01report.htm>), which summarizes progress in meeting commitments and the unique issues and challenges in achieving the innovations for 51 innovation pilots under Project XL (eXcellence and Leadership). Each of the 51 projects has made progress in meeting commitments outlined in the formal Final Project Agreements. For the 19 projects that reported environmental progress during the period 1997 to 2001, cumulative environmental benefits accrued in a variety of areas. For example, XL projects cumulatively eliminated 28,319 tons of emissions of criteria air pollutants (NO<sub>x</sub>, SO<sub>x</sub>, carbon monoxide, particulate matter) and recycled 20,540 tons of solid waste. The report includes the cumulative and individual environmental results of projects that reported environmental data for the period 1997 to 2001. The Agency uses these data to determine opportunities for successful innovations and lessons learned to be applied to broader system change. For example, the results from the International Paper project in Jay, Maine, clarifies the application of new effluent technologies and will inform EPA’s future rulemaking regarding chemical oxygen demand and color at pulp and paper mills.

In FY 2002 EPA also issued the report *Mid-Term Evaluation: Piloting Superior Environmental Performance in Labs*, which presents lessons learned from the unique approach to laboratory management being tested by Project XL’s New England Labs innovation pilot at Boston College, the University of Massachusetts-Boston, and the University of Vermont. The report explains the environmental results of an approach that harmonizes Occupational Safety and Health Administration and Resource Conservation and Recovery Act requirements by using performance-based criteria for managing laboratory waste under an Environmental Management Plan tailored to each

institution. EPA is considering how the results of this evaluation should be incorporated into a proposed rulemaking.

## STATE AND TRIBAL PARTNER CONTRIBUTIONS

### State Contributions

The Nation’s 24 coastal states and Puerto Rico are partnering with EPA’s National Coastal Assessment (NCA) Program to build the scientific basis for representative cost-effective monitoring of conditions and trends in the country’s estuaries. State participation is essential to the success of the NCA Program to ensure that each state’s monitoring needs, as well as regional and national needs, are met. The states’ participation throughout the process provides important feedback on the appropriateness of the NCA Program for assessing their resources. This EPA-state collaboration has developed a compatible probabilistic design and a common set of survey indicators that measure factors such as water quality, sediment quality, and the quality of living resources. Each participating state employs this design and a set of core indicators to conduct the survey and assess the condition of its coastal resources. The information from these estimates can then be aggregated to assess conditions at the regional, biogeographical, and national levels. In conducting this joint coastal monitoring and assessment program, the coastal states and Puerto Rico are providing about 50 percent of total costs; EPA contributes the remaining half. All of the participating states either are evaluating or have already adopted for the long term this new and cost-effective approach to monitoring their coastal resources.

Under EPA’s innovation strategy, one of the primary goals is to work more closely with states to align Agency innovation priorities and look for collaborative opportunities. In FY 2002 the Environmental Results Program (ERP), an innovation initiative developed by EPA and Massachusetts, grew to include Rhode Island, Florida, Maryland, Tennessee, and the District of Columbia. The initiative seeks to cost-effectively

improve the environmental results of whole small business sectors through the use of linked regulatory tools. These tools educate small businesses about their environmental impacts and obligations, allow businesses to self-evaluate and certify compliance, and allow agencies to track environmental performance. ERP projects now cover several business sectors—printing, photo processing, dry cleaning, auto repair shops, auto salvage yards, auto body shops, and

underground storage tanks—in addition to the cross-sector initiative for new industrial boilers.

### **ASSESSMENT OF IMPACTS OF FY 2002 PERFORMANCE ON FY 2003 ANNUAL PERFORMANCE PLAN**

There are no changes to FY 2003 APGs based on results of FY 2002 performance.

## Goal 8: Sound Science

### Summary of FY 2002 Annual Performance Goals

**3** Goals Met

**0** Goals Not Met

**0** Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

#### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 8:	\$304,325
Goal 8 Share of Total:	3.2%

#### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 8 Costs:	\$325,622
Goal 8 Share of Total:	4.1%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs.  
Refer to page IV-11 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

### Strategic Objective: Provide the Scientific Understanding to Measure, Model, Maintain, and/or Restore, at Multiple Spatial Scales, the Present and Future Integrity of Highly Valued Ecosystems.

FY 2002 Cost (in thousands): \$112,647 (34.6% of FY 2002 Goal 8 Total Costs)

**Progress Toward Strategic Objective:** In FY 2002 EPA produced an analysis of data from streams and lakes in the Northeast, Mid-Atlantic, and upper Midwest that provides evidence that controls on acid deposition, taken in response to the Clean Air Act (CAA) Amendments of 1990, are working. Determining the results of environmental management policies such as these will in turn increase EPA's ability to maintain and restore the integrity and sustainability of highly valued ecosystems.

APG 55	Integrated Ecosystem Modeling	Planned	Actual
FY 2002	Produce a report on trends in acid deposition and the acidity of lakes and streams to assess progress toward reducing the impacts of acid rain. <b>Goal Met.</b>	1	1

**FY 2002 Results:** EPA produced a report on trends in acid deposition and the acidity of lakes and streams to assess progress toward reducing the impacts of acid rain. This report analyzed some of the key mechanisms preventing recovery in critical regions of the United States and will provide crucial information on the effectiveness of Title IV of the CAA Amendments of 1990. EPA will use the results in its biennial report to Congress on the Acid Rain Program.

### Strategic Objective: Improve the Scientific Basis to Identify, Characterize, Assess, and Manage Environmental Hazards and Exposures That Pose the Greatest Health Risks to the American Public By Developing Models and Methodologies to Integrate Information About Exposures and Effects From Multiple Pathways. This Effort Includes Focusing on Risks Faced by Susceptible Populations, Such As People Differentiated By Life Stage (e.g., Children and the Elderly) and Ethnic/Cultural Background.

FY 2002 Cost (in thousands): \$50,450 (15.5% of FY 2002 Goal 8 Total Costs)

**Progress Toward Strategic Objective:** In FY 2002 EPA completed a framework for conducting risk assessments for a variety of multimedia, multipathway pollutants of concern to the Agency. This framework will provide the Agency with a more complete understanding of the relationships between sources, exposures, doses, and effects and will enable EPA to conduct more accurate and reliable risk assessments. The Agency also continued to evaluate the exposures and effects of environmental contaminants affecting susceptible subpopulations and produced a series of reports on potential methods to assess pesticide-related health impacts in young children. These research efforts strengthened the Agency's ability to effectively prevent and/or manage risks to human health.

### Strategic Objective: Enhance EPA's Capabilities to Anticipate, Understand, and Respond to Future Environmental Development and Conduct Research in Areas That Combine Human Health and Ecological Considerations.

FY 2002 Cost (in thousands): \$50,345 (15.4% of FY 2002 Goal 8 Total Costs)

**Progress Toward Strategic Objective:** FY 2002 research efforts yielded protocols for use in EPA's endocrine disruptor (EDC) screening and testing program mandated under the Food Quality Protection Act and the Safe Drinking Water Act Amendments of 1996. EPA also examined the application of various technologies to effectively reduce and/or prevent environmental and human exposure to EDCs. Additional research focused on improving methods for quantifying mercury emissions from man-made sources, as well as enhancing EPA's ability to mitigate and prevent harm caused by biological agents. These research efforts help EPA anticipate and identify environmental changes before they affect human health and the environment.

**Strategic Objective: Provide Tools and Technologies to Improve Environmental Systems Management While Continuing to Prevent and Control Pollution and Reduce Human Health and Ecological Risks Originating From Multiple Economic Sectors.**

*FY 2002 Cost (in thousands): \$57,301 (17.6% of FY 2002 Goal 8 Total Costs)*

**Progress Toward Strategic Objective:** In FY 2002 EPA provided, to environmental decision makers, improved pollution prevention tools to estimate the potential environmental impact of chemical process designs, to delay resistance in target insects to toxins in transgenic crops, and to evaluate inhalation impacts of metal finishing facilities on workers and nearby residents. In addition, through the Environmental Technology Verification (ETV) program, EPA produced 20 protocols for verifying innovative environmental technologies. These research efforts strengthen the ability of the Agency and its customers to prevent and/or mitigate risks to human health and the environment.

APG 56	Pollution Prevention (P2) Tools and Methodologies	Planned	Actual
FY 2002	<p><b>Improve P2 tools for the industrial sector and other sectors by providing updated/new methods and approaches to help users simulate product, process or system redesign and evaluate resulting pollution levels, impacts and costs. <span style="color: green;">Goal Met.</span></b></p> <p><u>Performance Measures</u></p> <ul style="list-style-type: none"> <li>- Enhance the Waste Reduction Algorithm environmental impact assessment tool used to design or retrofit chemical processes with: (1) a better assessment methodology, and (2) new features (costing). <span style="float: right;">1 method</span> <span style="float: right; color: green;">1 method</span></li> <li>- Prepare a pest resistance management framework to prolong the effectiveness of genetically-modified corn pesticide characteristics for the Office of Pesticide Programs during product registration. <span style="float: right;">1 protocol</span> <span style="float: right; color: green;">1 protocol</span></li> <li>- Provide a PC-based tool for use by EPA and the metal finishing sector in evaluating exposure and inhalation health risks to workers and residents living near metal finishing facilities. <span style="float: right;">1 risk tool</span> <span style="float: right; color: green;">1 risk tool</span></li> </ul>		

**FY 2002 Result:** This APG provides tools that facilitate the use of preventative approaches to solve pollution problems posing the greatest risks to human health and the environment. Specifically, EPA improved P2 tools for the industrial sector and other sectors by providing updated/new methods and approaches to help users simulate product, process, or system redesign and evaluate resulting pollution levels, impacts, and costs. EPA successfully completed a variety of independent tools, including: (1) the Waste Reduction (WAR) Algorithm for process simulators, (2) the pest resistance management framework and genetically modified corn, and (3) computer-based evaluation of exposure and risk in metal finishing facilities. These low cost and easy to use products will enable EPA, regions, states, municipalities, and businesses to find cost-effective ways to reduce pollution at the source and potentially lead to improved environmental and human health.

APG 57	New Technologies	Planned	Actual
FY 2002	<p><b>Formalize generic testing protocols for technology performance verification, and provide additional performance verifications of pollution prevention, control and monitoring technologies in all environmental media. <span style="color: green;">Goal Met.</span></b></p> <p><u>Performance Measure</u></p> <ul style="list-style-type: none"> <li>- Complete 20 stakeholder approved and peer-reviewed test protocols in all environmental technology categories under Environmental Technology Verification (ETV), and provide them to testing organizations world-wide. <span style="float: right;">20</span> <span style="float: right; color: green;">20</span></li> </ul>		
FY 2001	<p><i>Develop, evaluate, and deliver technologies and approaches that eliminate, minimize, or control high risk pollutants from multiple sectors. Emphasis will be placed on preventive approaches for industries and communities having difficulty meeting control/emission/effluent standards. <span style="color: red;">Goal Not Met.</span></i></p> <p><u>Performance Measure</u></p> <ul style="list-style-type: none"> <li>- Deliver a Report to Congress on the status and effectiveness of the ETV Program during its first 5 years. <span style="float: right;">1</span> <span style="float: right; color: red;">0</span></li> </ul>		
FY 2000	<p><i>Complete development of one or more computer-based tools which simulate product, process, or system design changes, and complete proof-of-process structure for one or more generic technologies (applicable to more than one environmental problem) to prevent or reduce pollution in chemicals and industrial processes. <span style="color: green;">Goal Met.</span></i></p> <p><u>Performance Measures</u></p> <ul style="list-style-type: none"> <li>- Complete development of PARIS II Software tool to design environmentally benign solvents, and development and integration of WAR Algorithm into commercially available chemical process simulator. <span style="float: right;">9/30/00</span> <span style="float: right; color: green;">9/30/00</span></li> <li>- Complete Beta testing of a decision support tool for life-cycle analyses of municipal waste management options. <span style="float: right;">9/30/00</span> <span style="float: right; color: green;">9/30/00</span></li> </ul>		

**FY 2002 Result:** EPA formalized generic testing protocols for technology performance verification, and provided additional performance verifications of pollution prevention, control, and monitoring technologies in all environmental media. EPA successfully completed 20 stakeholder approved and peer-reviewed testing protocols for commercial-ready environmental technologies in six different categories

(environmental monitoring, air pollution control, drinking water treatment, greenhouse gas reduction, pollution prevention, and water quality protection). In addition, 30 verifications of commercial-ready environmental technologies were completed. These protocols and verifications are intended to provide decision making advancements and facilitate understanding by purchasers, permittees, and vendors of a variety of environmental technologies.

**Strategic Objective: Increase Partnership-Based Projects With Counties, Cities, States, Tribes, Resource Conservation Districts, and/or Bio-regions, Bringing Together Needed External and Internal Stakeholders, and Quantify the Tangible and Sustainable Environmental Results of Integrated, Holistic, Partnership Approaches.**

*FY 2002 Cost (in thousands): \$12,556 (3.9% of FY 2002 Goal 8 Total Costs)*

**Progress Toward Strategic Objective:** In FY 2002 under the Regional Geographic Initiatives Program, EPA supported projects that focus resources on problems that are not being addressed, wholly or in part, by existing national environmental programs because of their unique geographic or cross-media nature. Projects are accomplished by working in partnership with states, local governments, and the private sector. All of the projects support one or more of EPA's environmental goals. EPA has analyzed possible methods of identifying and quantifying the gains in environmental outcomes associated with the projects and has linked each of the projects to the Agency goal and objective it supports.

**Strategic Objective: Incorporate Innovative Approaches to Environmental Management into EPA Programs, So That EPA and External Partners Achieve Greater and More Cost-Effective Public Health and Environmental Protection.**

*FY 2002 Cost (in thousands): \$35,741 (11% of FY 2002 Goal 8 Total Costs)*

**Progress Toward Strategic Objective:** In FY 2002 EPA made significant progress toward incorporating innovative approaches to environmental management so that the Agency and its external partners can achieve greater and more cost-effective public health and environmental protection results. EPA's industry sector-based programs surpassed environmental performance targets, while outreach activities for small businesses and smart growth expanded. EPA responded to more than 15,000 calls on the Small Business Ombudsman Hotline and reached more than 10,000 individuals and organizations with information on Brownfields redevelopment through conference presentations and distribution of printed materials. Through a successful competitive process, EPA awarded three Innovation Grants to state agencies for the purpose of assisting the states in solving key environmental problems through innovative methods.

**Strategic Objective: Conduct Peer Reviews and Provide Other Guidance to Improve the Production and Use of the Science Underlying Agency Decisions.**

*FY 2002 Cost (in thousands): \$3,039 (.9% of FY 2002 Goal 8 Total Costs)*

**Progress Toward Strategic Objective:** In FY 2002 the EPA Science Advisory Board (SAB) completed 17 reports advising the Agency on a broad range of scientific and technical issues. Four reports provided guidance on protecting ecological resources. One report, *A Framework for Assessing and Reporting on Ecological Condition*, provided guidance that EPA is using to design its forthcoming report on the state of the environment. The SAB's guidance not only helped to heighten EPA's emphasis on measuring the impacts of Agency programs through scientifically credible indicators, but also affected the Agency's plans to emphasize protection of ecological resources in the forthcoming report.

**Strategic Objective: Demonstrate Regional Capability to Assist Environmental Decision Making By Assessing Environmental Conditions and Trends, Health and Ecological Risks, and the Environmental Effectiveness of Management Action in Priority Geographic Areas.**

*FY 2002 Cost (in thousands): \$3,543 (1.1% of FY 2002 Goal 8 Total Costs)*

**Progress Toward Strategic Objective:** The Regional Science & Technology (RS&T) organizations support EPA's air, water, waste, and toxic substances programs by providing field sampling, analytical and data management support, and quality assurance to Agency programs nationwide. Regions have developed special capabilities and expertise (Centers of Applied Science) based on unique geographic and demographic issues. Centers have been designated in the areas of ambient air monitoring—environmental biology, chemistry, and microbiology—and analytical pollution prevention methodologies. The RS&T organizations continue to strengthen their operations by implementing Corrective Action Plans in response to Laboratory Assessments of both internal quality system reviews and external technical systems audits (eight assessments completed). Quality assurance programs in the EPA regions ensure the integrity of environmental data by overseeing management of monitoring programs, approving data collection activity plans, and evaluating monitoring and laboratory practices.

**Prior Year Annual Performance Goals Without Corresponding FY 2002 Goals**

(Actual Performance Data Available in FY 2002 and Beyond)

		Planned	Actual
FY 1999	<i>Develop and verify innovative methods and models for assessing the susceptibilities of population to environmental agents, aimed at enhancing risk assessment and management strategies and guidelines.</i>		<i>target year is FY 2008</i>

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**FY 2001 Annual Performance Goals** (No Longer Reported for FY 2002)

*Establish baseline conditions from which changes, and ultimately trends, in the ecological condition of the nation's estuaries can be confidently documented, and from which the results of environmental management policies can be evaluated at regional scales.*

*EPA will implement significant improvements to core Agency functions identified as high environmental or economic impact identified during FY 2000 priority setting (Project eXcellence and Leadership—XL).*

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*An Approach to Developing a Research Agenda for Environmental Economics: An SAB Consultation*, EPA-SAB-EEAC-CON-02-003 (2002).

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## GOAL 9: A CREDIBLE DETERRENT TO POLLUTION AND GREATER COMPLIANCE WITH THE LAW

EPA will ensure full compliance with laws intended to protect human health and the environment.

### PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES

A vigorous enforcement and compliance program remains a priority of EPA and is central to achieving the Agency's mission of protecting human health and the environment. Integral to achieving this mission is ensuring compliance with environmental laws on the part of the regulated community. EPA focuses its efforts on developing strategies that combine assistance, incentives, and enforcement in order to mitigate significant environmental risk and ensure compliance. As a result of these strategies, the regulated community corrects violations of environmental law, returns to compliance, and reduces the quantity of pollutants released into the environment.

EPA is improving the quality and accuracy of enforcement and compliance data through the design and implementation of the new Integrated Compliance Information System (ICIS). Already partially implemented, this system will enhance the ability of the Agency and states to identify and target inspections and enforcement toward the most serious non-compliance and address the most significant air, water, and land pollution problems; and the most significant human health risks.<sup>1</sup>

EPA also continues to review and improve the analyses of the compliance and environmental data routinely collected through its monitoring, compliance incentives, compliance assistance, and enforcement programs. The effort is designed to better evaluate the outcomes achieved by ensuring compliance with federal environmental statutes. For FY 2002 EPA is now able to better report the results of settled enforcement cases in gallons of polluted groundwater to be treated—2.8 billion, the

pounds of contaminated soils to be cleaned up—503 million, and the acres of wetlands to be protected—about 40,000.<sup>2</sup>

EPA consistently exceeds its annual goals to promote compliance within the regulated community through voluntary compliance incentive and assistance programs. Over the past 3 years, 5,421 facilities took advantage of voluntary programs to identify, self-disclose, and correct compliance violations. EPA is expanding efforts to encourage disclosure by companies suspected of having serious violations. In the past 3 years, nearly 1.5 million entities have received compliance assistance materials and have visited EPA Compliance Assistance Centers more than 1.6 million times.<sup>3</sup>

### FY 2002 PERFORMANCE

During FY 2002 EPA, along with state and tribal partners, provided assistance to help facilities comply with environmental laws, completed agreements with companies to conduct their own self-audits and correct violations, and took civil and criminal enforcement actions to address noncompliance associated with serious environmental problems and ensure fairness in the marketplace. In FY 2002 approximately 157,000 pounds of pollutants were reduced, treated, or properly managed per enforcement workyear; approximately \$2.4 million of injunctive relief was collected per enforcement workyear; and approximately \$34,000 was committed to Supplemental Environmental Projects (SEPs) per enforcement workyear.<sup>4</sup>

### Enforcing the Law, Achieving Results

EPA continues to focus its enforcement efforts on resolving the worst environmental

problems and achieving environmental results by bringing the most egregious violators into compliance with environmental laws. Through these efforts, EPA seeks to maintain a level playing field for the Nation's industries by ensuring that no company secures a competitive advantage through noncompliance. When enforcement actions are necessary, the vast majority of civil enforcement actions require facilities to take direct action to correct illegal discharges of pollutants and/or change facility management and information practices, such as record keeping. The Agency does not, however, establish quotas for the number of enforcement cases to be pursued. The anticipated amounts of pollutants to be reduced during a fiscal year are estimates based on the results of concluded enforcement actions from previous years, and often vary dramatically from year to year. During FY 2002 the Agency secured 261 million pounds of pollutants to be reduced through settled enforcement cases, falling short of its target of 300 million pounds.

In FY 2002 EPA conducted 17,668 inspections and 541 intensive civil compliance investigations to determine the compliance status of regulated facilities and to help deter facilities from lapsing into noncompliance.<sup>5</sup> These inspections and investigations resulted in the identification of a number of serious environmental violations, including, but not limited to, pollutant releases not allowed by permit, illegal storage of hazardous waste, and the discharge of oil in harmful quantities into U.S. waters. Findings from a recent analysis of the effectiveness of compliance inspections indicate that 50 percent of all stationary air and water inspections, pesticide and toxic chemical laboratory facility inspections, and lead-based paint building inspections resulted in the identification of environmental violations.<sup>6</sup> Ten percent of the inspections prompted corrective action to immediately address environmental and human health risks from excessive air and water pollution.

EPA calculates statistically valid compliance rates to determine the level of compliance for an entire population, not just for the subset of inspected facilities.<sup>7</sup> The Agency analyzes

compliance across an entire regulatory population, rather than assessing a subset of inspected facilities in order to obtain a more accurate picture of compliance patterns across sectors and states. EPA uses analyses of compliance trends to determine where the most significant environmental problems are, and where best to focus its resources. In FY 2002 EPA calculated statistically valid compliance rates for the following areas: municipality compliance with the nine minimum controls to prevent, monitor, and control combined sewer overflows; commercial facilities compliance with Clean Air Maximum Achievable Control Technology standards for ethylene oxide; municipality compliance with biological oxygen demand and total suspended solid permit limits; and petroleum refining facilities compliance with ammonia permit limits. EPA also calculated statistically valid compliance rates from self-reported data under the Clean Water Act for compliance of municipalities with biological oxygen demand and total suspended solids permitted discharge limits, and compliance of oil refineries with ammonia-N permitted discharge limits. These inspection numbers include state and local inspections as well as federal inspections. The results will be available in the second quarter of FY 2003.

EPA's FY 2002 enforcement actions resulted in the prevention and/or reduction of emissions or discharges by an estimated 261 million pounds of pollutants, the treatment of an additional 503 million pounds of contaminated soil and sediments, and 2.8 billion gallons of contaminated groundwater to be treated. In FY 2002, 37 percent of concluded enforcement actions directed improvements in the use or handling of pollutants, such as changes in industrial processes or storage and disposal practices. About 62 percent of actions directed improvements in facility environmental management practices, including testing, training, and overall improvements to environmental management systems. In FY 2002 polluters were required to invest more than \$3.9 billion in injunctive relief (actions necessary to correct violations), and to take additional steps to protect the environment. The settlement of

## HOMELAND SECURITY ACCOMPLISHMENTS

EPA's criminal enforcement program effectively responded to the terrorist events of September 11, 2001. Throughout FY 2002 EPA provided crisis and consequence management support—investigative, forensic, technical—to federal, state, county, local, and tribal governments and training for homeland security related environmental, chemical, or biological incidents involving violations of environmental law. EPA supported federal security efforts at designated National Security Special Events including the Superbowl and the Winter Olympics. Agency investigative and technical forensic personnel participated in the federal government's Capitol Hill anthrax investigations in the Hart, Ford, Longworth, and Dirksen office buildings, and at the General Services Administration facility in Springfield, Virginia. EPA also provided personal protective equipment training to a number of major county sheriffs departments, and provided environmental threat identification and warning assistance to 95 Department of Justice Anti-terrorism Task Forces.

enforcement cases often produces SEPs, through which violators perform additional environmentally beneficial projects beyond any injunctive relief in exchange for a penalty reduction. SEPs totaled \$56.4 million in FY 2002.<sup>8</sup>

EPA addresses noncompliance with enforcement actions appropriate to the violation. Civil administrative and judicial actions and civil referrals to the Department of Justice (DOJ), civil judicial settlements, or criminal referrals to DOJ serve as a deterrent for other potential noncompliers, secure environmental benefits, protect communities and the environment, and ensure fairness to companies that invest in compliance with environmental laws. EPA enforcement actions against noncomplying facilities often result in outcomes such as improvements in environmental management practices by facilities, improved or enhanced monitoring and reporting, special projects benefitting the environment, and significant reductions of pollutant discharges to the air, water, or land.

During FY 2002 EPA conducted a strong criminal enforcement program, emphasizing environmental results and effective partnerships with federal, state, tribal, and local governments. The criminal enforcement program focused on investigations of knowing and willful violations that pose a significant threat to human health and the environment. The cases taken provide an effective deterrent by incorporating high fines, restitution, and jail sentences. EPA helped

prosecute cases that resulted in 215 years of incarceration and \$62 million in fines and restitution in FY 2002.<sup>9</sup>

In FY 2002 EPA initiated 3,062 civil, judicial, and administrative enforcement actions; opened 674 criminal investigations, 190 of which were counterterrorism related; and referred 250 criminal cases to the DOJ, as illustrated by the following significant civil and criminal enforcement cases.<sup>10</sup>

### **City of Baltimore Settlement:** In

September 2002 the U.S. District Court entered a consent decree to implement a settlement between EPA and the city to end discharge of untreated sewage. Consent Decree in *United States et al. v. Mayor and City of Baltimore*, JFM 02 CV1524 (September 30, 2002). Because of years of neglect, an estimated 30 million gallons of untreated sewage was discharged annually, contaminating Baltimore's water with bacteria, pathogens, and other harmful pollutants. Complaint in *United States et al. v. Mayor and City of Baltimore*, JFM 02 CV1524. The city was assessed a civil penalty of \$600,000. The facility improvements required under this enforcement action will cost Baltimore about \$940 million to rehabilitate and repair pumping stations and eliminate raw sewage discharge. Consent Decree at Sections VI and VIII in *United States et al. v. Mayor and City of Baltimore*, JFM 02 CV1524 (September 30, 2002). The city also agreed to implement a SEP to design, install, and operate a biological nutrient-reduction facility at the city-owned Patapsco Wastewater Treatment

Plant that will improve the water quality of the Chesapeake Bay by significantly reducing the amount of nitrogen nutrient runoff entering the bay. Consent Decree at Section X in *United States et al. v. Mayor and City of Baltimore*, JFM 02 CV1524 (September 30, 2002).

**PSEG Fossil LLC Settlement:** In FY 2002 EPA and the State of New Jersey concluded a major settlement with PSEG for violations of the Clean Air Act (CAA) at its coal-fired power plants in Jersey City and Hamilton, New Jersey. Consent Decree in *United States et al. v. PSEG Fossil LLC*, Civil Action No. 02-340 (JCL) (July 26, 2002) <http://www.epa.gov/compliance/resources/cases/civil/caa/psegllc.html>. PSEG paid a \$1.4 million civil penalty and will spend about \$337 million to install state-of-the-art pollution controls to reduce the emissions of sulfur dioxide (SO<sub>2</sub>) by 90 percent and reduce nitrogen oxides (NO<sub>x</sub>) more than 80 percent. These improvements will ultimately reduce 36,000 tons of SO<sub>2</sub> and 18,000 tons of NO<sub>x</sub> per year. Consent Decree at Sections IV and X in *United States et al. v. PSEG Fossil LLC*, Civil Action No. 02-340 (JCL) (July 26, 2002). The company also agreed to three SEPs that will cost the company \$6 million to (1) voluntarily reduce carbon dioxide emissions by 15 percent; (2) contribute to New Jersey's ongoing efforts to recover and use methane gas from landfills; and (3) develop ways to reduce and monitor mercury emissions from its plants. Consent Decree at Section VIII in *United States et al. v. PSEG Fossil LLC*, Civil Action No. 02-340 (JCL) (July 26, 2002).

**Lee Brass Settlement:** EPA, the DOJ, and the State of Alabama concluded a judicial action against Lee Brass Company, Inc., for violations of the Resource Conservation and Recovery Act (RCRA) that resulted in public exposure to excessive levels of lead. See <http://www.epa.gov/Compliance/resources/cases/civil/rcra/leebrass.html>; Consent Decree in *United States et al. v. Lee Brass, Inc.* Civil Action No. 01-B-2422 (April 25, 2002). The lead-contaminated sand had been donated to county and city governments for use as fill on playgrounds and ballfields. Some lead levels were more than four times the 400 parts per

million exposure limit. Lead exposure is known to have significant human health effects, including developmental effects on children (available at <http://www.epa.gov/lead>). It is estimated that annually 0.5 million to 1 million pounds of sand containing about 500 to 1,000 pounds of lead had been sent off-site. The implementation of the settlement will reduce thousands of pounds of lead releases to the environment and eliminate public contact with the sand. EPA also issued an emergency order (imminent and substantial endangerment) to address the assessment and potential cleanup of the sand that had been sold or donated.

**Ashland, Incorporated Settlement:** Ashland Inc., in Covington, Kentucky, pled guilty to criminal charges of negligent endangerment under the CAA, and to submitting a false certification to environmental regulators. The CAA violations led to an explosion and fire at a refinery that injured five persons, one severely. The agreement requires Ashland to pay \$3.5 million to the severely injured man and to pay medical costs for him and his family. The other four injured workers will receive \$10,000 each. Ashland has agreed to a \$3.5 million criminal fine and was required to pay \$50,000 to each fire department that responded to the incident. Ashland must also perform \$3.7 million in upgrades to the pollution control system at the refinery. *United States v. Ashland, Inc.*, U.S. District Court of Minnesota. CR 02-152.

### Increasing Compliance Through Assistance

In FY 2002 EPA developed a wide range of information tools and services to help the regulated facilities, industry sectors, trade associations, compliance assistance providers, and the public to understand environmental compliance requirements. The Agency reached 589,566 entities in FY 2002 through compliance assistance activities that resulted in process or management changes that reduce emissions and noncompliance.<sup>11</sup>

In FY 2002 small and medium size businesses, local governments, federal facilities, and the public visited the 10 Internet-based

Compliance Assistance Centers more than 676,000 times, an increase of 39 percent from FY 2001. EPA created these Internet-based centers to help small and medium-sized businesses, local governments, and federal facilities to understand and comply with regulatory requirements. The 10 centers provide information and assistance for local governments, federal facilities, and the following industries: printing, metal finishing, automotive services and repair, agriculture, chemical manufacturers, paints and coatings, transportation, and printed wiring board manufacturers. In FY 2001 surveys of center users, 74 percent of survey respondents stated they had realized one or more environmental improvements as a result of center assistance, and 65 percent stated they had realized a cost savings. Compliance Assistance Center users will be surveyed again in FY 2003.<sup>12</sup>

EPA created an inventory of the Agency's existing compliance assistance tools and guides in FY 2002 to support the Business Compliance One-Stop Initiative. EPA also created The National Environmental Compliance Assistance Clearinghouse (<http://www.epa.gov/clearinghouse>), which is the repository for EPA's compliance assistance tools and guides. The clearinghouse, launched in FY 2001, is a Web-based, searchable reference tool that provides quick access to compliance assistance materials and allows interaction with EPA, states, and other compliance assistance providers. These initiatives support a Presidential Management Agenda reform for e-government.

Compliance assistance is also provided during EPA compliance inspections. In FY 2002 EPA conducted an assessment of about 4,000 inspections in 4 media programs and found that compliance assistance was provided during 76 percent of the inspections.<sup>13</sup>

### **Increasing Compliance Through Incentives**

In FY 2002 EPA's Audit and Self-Policing Policy<sup>14</sup> continued to provide a significant incentive for many regulated facilities to detect, disclose, and correct environmental violations in exchange for a waiver or significant reduction in

penalties.<sup>15</sup> The benefit to the public from this policy is that facilities come into compliance quickly, fewer government resources are expended to produce compliance, and emissions are reduced or eliminated. In FY 2002 more than 252 companies used this EPA policy to report and resolve violations at 1,467 facilities. Through initiatives to use the policy to improve environmental management at facilities, EPA actively solicits companies or industry sectors.

The Bakery Partnership Program (BPP),<sup>16</sup> designed to ensure full compliance with requirements protecting the ozone layer, was initiated in FY 2002 with the participation of 43 companies owning 250 baking facilities. The Compliance Assurance Program initiative,<sup>17</sup> a structured self-audit, was developed in coordination with the largest trade association representing the baking industry. The BPP involved an audit of 250 baking facilities that identified equipment releasing a refrigerant that causes ozone depletion. A schedule of penalties was established at the outset to ensure that owners would be aware of the penalties they would face as a result of the program. More than 800 machines, some containing thousands of pounds of refrigerant, now use non-ozone-depleting refrigerant as a result of this program.<sup>18</sup> Companies completing conversions before the start date of the initiative were assured that no penalties would be assessed.

EPA also promotes self-auditing by regulated facilities through developing audit protocols that can be used as part of an Environmental Management System (EMS).<sup>19</sup> An EMS is a continual cycle of planning, implementing, reviewing, and improving the processes and actions that an organization undertakes to meet its business and environmental goals. The Agency included EMS provisions in 90 settlements of enforcement cases.<sup>20</sup> EMSs affected more than 95 facilities because many recent settlements containing EMS provisions require a company to use EMSs corporate-wide.

## STATE AND TRIBAL PARTNER CONTRIBUTIONS

As a result of delegation authority provided for by most statutes, state, tribal, and local governments bear much of the responsibility for ensuring the compliance of regulated facilities and other entities. Nationally, states conduct the majority of all federally related inspection and formal enforcement actions and provide most of the data retained in EPA's enforcement and compliance data systems. State, tribal, and local law enforcement agencies continue to contribute to EPA's cooperative law enforcement efforts by participating in 93 criminal task forces and law enforcement coordinating committees across the country. To help build the capacity of state, local, and tribal programs, EPA sponsors a number of training courses and assists with enforcement inspections. In the past 3 years, EPA conducted 2,689 joint inspections with states, localities, and tribes.<sup>21</sup> In FY 2002 EPA trained 7,439 state, local government, and tribal personnel in inspection and enforcement skills. The data provided by states and tribal partners adds to national enforcement and compliance environmental performance information, thereby allowing the Agency to more accurately track its environmental and human health benefits to the public.

In addition to the responsibilities of state, tribal, and local governments discussed above, EPA partners make other significant contributions to ensure compliance with the Nation's environmental laws. Partners provide important feedback during the biennial selection of national priorities. Groups that represent the interests of state program partners also work closely with EPA.<sup>22</sup> These include such entities as the Environmental Council of the States (ECOS) and the National Association of Attorneys

General (NAAG), as well as media-specific associations like the State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Officials, Association of State and Interstate Water Pollution Control Administrators, and Association of State and Territorial Solid Waste Management Officials.

Through rigorous competition EPA selected 16 projects out of a total of 220 proposals submitted by states, tribes, and state universities for the support of inspector training, performance measurement, collaborative work planning, and data management. The 16 selected projects are part of an Agency funding program to build and support state and tribal compliance capabilities.<sup>23</sup> The selected proposals totaled \$2.05 million for projects to be carried out during FY 2003–2004. For example, the grant awarded to the Colorado Department of Public Health and Environment will supplement the use of traditional output measures with measures that assess the status and trends of regulatory compliance and environmental improvements resulting from enforcement and compliance assistance activities.<sup>24</sup> This will be a multimedia (air, water, and waste) system. In FY 2002 EPA began construction of a Web site to showcase the products of grants awarded during the past 4 years hoping that others can use the results of successful projects.

## ASSESSMENT OF IMPACTS OF FY 2002 PERFORMANCE ON THE FY 2003 ANNUAL PERFORMANCE PLAN

For FY 2003 Goal 9 proposed two new measures—environmental justice and public access to enforcement policy guidance. These two measures were formerly in Goal 7. One target for environmental justice grants was reduced due to performance results from previous years.

# Goal 9: A Credible Deterrent to Pollution

## Summary of FY 2002 Annual Performance Goals

**7** Goals Met

**1** Goals Not Met

**0** Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 9:	\$451,345
Goal 9 Share of Total:	4.8%

### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 9 Costs:	\$387,545
Goal 9 Share of Total:	4.8%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs. Refer to page IV-11 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

### Strategic Objective: EPA and Its State, Tribal, and Local Partners Will Improve the Environment and Protect Public Health By Increasing Compliance With Environmental Laws Through a Strong Enforcement Presence.

FY 2002 Cost (in thousands): \$330,072 (85.2% of FY 2002 Goal 9 Total Costs)

**Progress Toward Strategic Objective:** Over the last 3 fiscal years, EPA prevented an estimated 1.6 billion pounds of pollutants from entering the air, waterways, and soil as a result of enforcement settlement provisions that require polluters to adopt better waste management practices; maintain permit levels for emissions, effluent, and runoff; and improve record keeping. The majority of enforcement settlements resolved in FY 2001 and FY 2002 required polluters to take decisive measures to reduce pollution, and change facility management and information practices. Over the past 3 fiscal years, EPA conducted 1,633 criminal investigations, 1,569 civil investigations, and 55,603 inspections. EPA-assisted inspections and training courses improved both inspection capability nationwide and the quality of environmental data collected by state and tribal regulators. EPA consistently meets its hazardous waste tracking responsibilities and homeland security support responsibilities that reduce the likelihood of United States-initiated transboundary hazardous waste pollution, and improve America's response and deterrence capability to combat domestic terrorism.

APG 58	Non-Compliance Reduction	Planned	Actual
FY 2002	EPA will direct enforcement actions to maximize compliance and address environmental and human health problems; 75% of concluded enforcement actions will require environmental or human health improvements such as pollutant reductions and/or changes in practices at facilities. <b>Goal Not Met.</b>		
	<u>Performance Measures</u>		
	- 75% of concluded enforcement actions require physical action that result in pollutant reductions and/or changes in facility management or information practices.	75%	77%
	- Millions of pounds of pollutants required to be reduced through enforcement actions settled this fiscal year.	300 M	261 M
	- Develop and use valid compliance rates or other indicators of compliance for selected populations.	5 populations	5 pop.
	- Reduce by 2 percentage points overall the level of significant noncompliance recidivism among CAA, CWA, and RCRA programs from FY 2000 levels.	2%	data available in FY 2003
	- Increase by 2% over FY 2000 levels the proportion of significant noncomplier facilities under CAA, CWA, and RCRA which returned to compliance in less than 2 years.	2%	data available in FY 2003
	- Produce report on the number of civil and criminal enforcement actions initiated and concluded.	1	data available in FY 2003
FY 2001	Same Goal, different targets. <b>Goal Met.</b>		
	<u>Performance Measures</u>		
	- 75% of concluded enforcement actions require pollutant reductions and/or changes in facility management or information practices.	75%	79%
	- Estimated pounds of pollutants reduced.	350 M	660 M

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- Increase or maintain existing compliance rates or other indicators of compliance for populations with established baselines, or develop additional rates for newly selected populations.	5 populations	6
- Reduce by 2 percentage points overall the level of significant non-compliance recidivism among the Clean Air Act (CAA), Clean Water Act (CWA), and Resource Conservation and Recovery Act (RCRA) programs from FY 2000 levels.	2%	2.4%
- Increase by 2% over FY 2000 levels the proportion of significant non-complier facilities under CAA, CWA, and RCRA which returned to compliance in less than 2 years.	2%	1.33%
- Produce a report on the number of civil and criminal enforcement actions initiated and concluded.	1	1

FY 2000 Same Goal, different targets. *Goal Met.*

Performance Measures

- Percent of actions which require pollutant reductions.	35%	13.6
- Estimated pounds of pollutants reduced (aggregate).	300M	714M
- Establish statistically valid noncompliance rates or other indicators for selected environmental problems.	5	5
- Establish a baseline to measure percentage of significant violators with reoccurring significant violations within 2 years of returning to compliance.	1	1
- Establish a baseline to measure average length of time for significant violators to return to compliance or enter enforceable plans/agreements.	1	1
- Produce report on the number of civil and criminal enforcement actions initiated and concluded.	1	1

**FY 2002 Result:** Currently, data are available for three of the six performance measures under this goal. Because the missed pollution reduction measure is a key element for determining goal status, the Agency was able to designate this APG as not met without data for the remaining three measures. The remaining performance data are expected to be available by February 2003.

During 2002 the Agency achieved a level of 261 million pounds of pollutants to be reduced through enforcement, falling short of its target of 300 million pounds. Because the Agency does not establish quotas for the number of enforcement cases to be pursued, the anticipated pollution reduction target is an estimate based on the results of concluded enforcement actions from previous years, and frequently displays wide variation from year to year. Of enforcement settlements this fiscal year, 77% required polluters to take decisive measures to reduce pollution and change facilities management and information practices around the country. EPA met its goal to develop statistically valid compliance rates for five new populations. The Agency uses these analyses of compliance trends to determine where the most significant environmental problems are, and where best to focus its resources. In FY 2002 EPA calculated statistically valid compliance rates for the following areas: municipality compliance with nine minimum controls to prevent, monitor, and control combined sewer overflows (CSOs); commercial facilities' compliance with Clean Air Act Maximum Achievable Control Technologies (MACTs) for ethylene oxide; municipality compliance with biological oxygen demand and total suspended solid permit limits; and petroleum refining facilities' compliance with ammonia permit limits.

**FY 2001 Result Available in FY 2002:** This performance result has been updated to reflect information received after the FY 2001 Annual Report date of publication.

APG 59	Inspections/Investigations	Planned	Actual
FY 2002	EPA will conduct inspections, criminal investigations, and civil investigations targeted to areas that pose risks to human health or the environment, display patterns of non-compliance or include disproportionately exposed populations. <i>Goal Met.</i>		
	<u>Performance Measures</u>		
	- Number of EPA inspections conducted.	15,500	17,668
	- Number of criminal investigations.	400	674
	- Number of civil investigations.	200	541
FY 2001	Same Goal, different targets. <i>Goal Met.</i>		
	<u>Unit Measures</u>		
	- Number of inspections.	17,000	17,812
	- Number of criminal investigations.	450	482
	- Number of civil investigations.	250	368
FY 2000	Same Goal, different targets. <i>Goal Not Met.</i>		
	<u>Performance Measures</u>		
	- Number of EPA inspections.	13,500	20,123
	- Number of civil investigations.	150	660
	- Number of criminal investigations.	500	477
	- Percent of inspections and investigations (civil and criminal) conducted at priority areas.	50%	15%
FY 1999	Deter non-compliance by maintaining levels of field presence and enforcement actions, particularly in high risk areas and/or where populations are disproportionately exposed. In 1999, EPA will conduct 15,000 inspections and undertake 2,600 enforcement actions. <i>Goal Met.</i>	15,000 2,600	21,410 3,935

Goal 9 - A Credible Deterrent to Pollution



**FY 2002 Result:** EPA greatly exceeded its performance goal to provide a credible deterrent to polluters through a strong enforcement presence. In 2002 EPA exceeded performance targets for investigations and inspections, performing 674 criminal and 541 civil investigations, and 17,668 inspections. A strong enforcement presence in the field provides a strong incentive for industries and other regulated entities to continue to comply with environmental laws, and ensures that polluters do not experience financial benefits from persistent non-compliance.

APG 60	Capacity Building	Planned	Actual
<b>FY 2002</b>	<b>Improve capacity of states, localities and tribes to conduct enforcement and compliance assurance programs. EPA will provide training as well as assistance with state and tribal inspections to build capacity, including implementation of the inspector credentials program for tribal law enforcement personnel. <i>Goal Met.</i></b>		
	<u>Performance Measures</u>		
	- Number of EPA training classes/seminars delivered to states, localities and tribes to build capacity.	200	319
	- Conduct EPA-assisted inspections to help build state program capacity.	400	1,081
	- Provide tribal governments with 50 computer-based training (CBT) modules.	50	116
	- Total number of state and local students trained.	4,900	6,631
	- Train tribal personnel.	95	808
<i>FY 2001</i>	<i>Same Goal, different targets. <i>Goal Met.</i></i>		
	<u>Performance Measures</u>		
	- Number of EPA training classes/seminars delivered to states, localities and tribes to build capacity.	220	128
	- Conduct EPA-assisted inspections to help build state program capacity.	150	895
	- The National Enforcement Training Institute will provide tribal governments with 50 computer-based modules.	50	235
	- Total number of state and local students trained.	4,900	4,727
	- The National Enforcement Training Institute will train tribal personnel.	105	428
<i>FY 2000</i>	<i>Same Goal, different targets. <i>Goal Met.</i></i>		
	<u>Performance Measures</u>		
	- Number of EPA-assisted inspections to build capacity.	100	713
	- Number of EPA training classes/seminars delivered to state/localities and tribes to build capacity.	200	154
<i>FY 1999</i>	<i>Assist states and tribes with their enforcement and compliance assurance and incentive programs. EPA will provide specialized assistance and training, including 83 courses, to state and tribal officials to enhance the effectiveness of their programs. <i>Goal Met.</i></i>	83	218

**FY 2002 Result:** Capacity building efforts greatly assist EPA in meeting annual performance targets each year as the bulk of statutory reporting requirements is delegated to state and tribal entities. Better understanding of environmental requirements and inspection techniques improves the consistency of enforcement and compliance work, thereby improving the quality of environmental data collected and reported. For FY 2002, the Agency collected training performance data from EPA regional offices, whereas in the past, EPA headquarters training performance data were the only data collected. Therefore, performance for state, local, and tribal capacity building training is considerably above the planned performance target for FY 2002, and more accurately depicts the full spectrum of EPA capacity building nationwide. Beginning in FY 2003, EPA will track these performance measures internally.

APG 61	Quality Assurance	Planned	Actual
<b>FY 2002</b>	<b>Maintain and improve quality and accuracy of EPA's enforcement and compliance data to identify noncompliance and focus on human health and environmental problems. <i>Goal Met.</i></b>		
	<u>Performance Measures</u>		
	- Operate 14 information systems housing national enforcement and compliance assurance data with a minimum of 95% operational efficiency.	95%	95%
	- Have Phase I of the Integrated Compliance Information System (ICIS) fully operational in March 2002.	Phase 1	Phase 1
<i>FY 2001</i>	<i>Same Goal, different targets. <i>Goal Met.</i></i>		
	<u>Performance Measures</u>		
	- Continue operation and maintenance/user support of 14 information systems housing national enforcement and compliance assurance data with a minimum of 95% operational efficiency.	95%	95%
	- Complete Phase I of Integrated Compliance Information System (ICIS) development (programming) and begin design of Phase II.	Phase 1	Phase 1
	- Complete Quality Management Plan (QMP) project for additional data systems.	3	0
	- Complete detailed design (development of screens, prototypes) including a pilot NPDES	1	1

Goal 9 - A Credible Deterrent to Pollution

- *permitting desk model for Permit Compliance System (PCS) system modernization.*
- *Conduct four data analyses of environmental problems in Indian Country using the American Indian Lands Environmental Support Project (AILESP) and the baseline assessment survey.* 4 12

**FY 2002 Result:** Data modernization efforts begun in previous fiscal years resulted in the implementation of the Integrated Compliance Information System (ICIS) in June 2002. ICIS will enhance environmental data analysis capabilities and allow for more informed decision-making for populations of the regulated community that emit a disproportionate share of pollution, or those regulated entities that persistently violate environmental laws and permits.

APG 62	International Enforcement	Planned	Actual
FY 2002	<b>Ensure compliance with legal requirements for proper handling of hazardous waste imports and exports. Goal Met.</b>		
	<b>Performance Measure</b>		
	- Evaluate 100% of the notices for transboundary movement of hazardous wastes, ensuring their proper management in accordance with international agreements.	100%	100%
FY 2001	Same Goal. Goal Met.	100%	100%
FY 2000	Same Goal, different targets. Goal Met.		
	<b>Performance Measure</b>		
	- Ensure compliance with legal requirements by assuring that hazardous waste exports from the United States are properly handled (number of import and export notices filed and reviewed).	1,500	1,584

**FY 2002 Result:** In FY 2002 EPA met its goal to prevent transboundary discharge of hazardous waste from sources in the United States.

APG 63	Homeland Security	Planned	Actual
FY 2002	<b>EPA will provide direct investigative, forensic, and technical support to the Office of Homeland Defense, FBI and/or other federal, state and local law enforcement agencies to help detect and prevent, or respond to, terrorist-related environmental, biological or chemical incidents. Goal Met.</b>	100%	100%

**FY 2002 Result:** EPA met its goal to provide homeland security support to federal, state, and local entities in FY 2002.

**Strategic Objective: EPA and Its State, Tribal, and Local Partners Will Promote the Regulated Communities' Compliance With Environmental Requirements Through Voluntary Compliance Incentives and Assistance Programs.**

*FY 2002 Cost (in thousands): \$57,473 (14.8% of FY 2002 Goal 9 Total Costs)*

**Progress Towards Strategic Objective:** EPA encourages regulated sectors to maintain compliance through a variety of incentive programs tailored for specific sectors that represent the greatest need due to past compliance patterns or for sectors that are highly motivated to improve their environmental performance. Initiatives undertaken this fiscal year provided enhanced ozone layer and watershed protection, among other environmental and human health benefits. The total number of facilities that voluntarily implement better self-monitoring of waste streams, emissions, and runoff continues to increase as more members of the regulated community respond to incentives to disclose environmental violations for reduced financial penalties. Over the past 3 fiscal years, 5,421 facilities participated in voluntary incentive programs to identify and correct violations at facilities around the country. These incentive programs expand the reach of EPA's regulatory efforts by increasing the total number of facilities monitored over and above the population of facilities that receive conventional enforcement inspections and investigations in a given fiscal year.

APG 64	Compliance Incentives	Planned	Actual
FY 2002	<b>Increase opportunities through new targeted sector initiatives for industries to voluntarily self-disclose and correct violations on a corporate-wide basis. Goal Met.</b>		
	<b>Performance Measure</b>		
	- Facilities voluntarily self-disclose and correct violations with reduced or no penalty as a result of EPA self-disclosure policies.	500	1,467
FY 2001	Same Goal. Goal Met.	500	1,754
FY 2000	Increase entities self-policing and self-correction of environmental problems through use of EPA incentive policies: small business, small community and audit policies over FY 1997 levels. Goal Met.		
	<b>Performance Measure</b>		
	- Number of facilities that self-disclose potential violations.	346	2,200

Goal 9 - A Credible Deterrent to Pollution

**FY 2002 Result:** The number of facilities that participated in voluntary self-audit programs to monitor and assess compliance with environmental requirements greatly exceeded initial performance targets by more than 400 facilities. Self-disclosure programs increase the number of facilities in compliance at any given time through more frequent environmental monitoring that protects human health and the environment from accidental release of excessive pollution and quick detection of permit and statutory violations. Voluntary compliance incentive programs increase the frequency of environmental monitoring at facilities, augmenting the total number of facilities participating in environmental protection efforts. These voluntary programs encourage facilities to disclose pollution violations and set timetables for meeting legal requirements for maximum pollution release limits.

APG 65	Environmental Management Systems	Planned	Actual
FY 2002	Promote the use of Environmental Management Systems (EMS) to address known compliance and performance problems. <b>Goal Met.</b>		
	<b>Performance Measure</b>		
	- Increase EMS use by developing tools, such as training, best practice manuals, and other resources that encourage improved environmental performance.	3	27
FY 2001	Same Goal, different target. <b>Goal Met.</b>	3	10

**FY 2002 Result:** EPA exceeded this APG through an increased emphasis on EMS outreach to the regulated community. The Agency provided additional guidance on development of better management practices to protect the environment and initiated numerous site visits to encourage application of EMSs within the regulated community. In FY 2002 EPA renewed its emphasis on encouraging noncompliers to adopt better management practices through enforcement settlement agreements that require the adoption of EMSs at facilities. EPA responded to environmental management problems at federal facilities by increasing assistance provided to these regulated entities. Multiple EMS courses provided to states, regions, and federal facilities throughout FY 2002 also contributed to superior EMS performance.

## Notes:

1. U.S. EPA, Office of Enforcement and Compliance Assurance, ICIS Phase I, implemented June 2002. Internal EPA database; non-enforcement sensitive data available to the public through the Freedom of Information Act (FOIA).
2. U.S. EPA, Office of Enforcement and Compliance Assurance, Case Conclusion Data Sheets (CCDS). Forms available at <http://www.epa.gov/compliance/resources/publicatines/>.
3. The data in this paragraph were taken from the U.S. EPA, Office of Enforcement and Compliance Assurance, Measures of Success (MOS) Reports 1999–2001. Copies of 2000 and 2001 available at <http://www.epa.gov/compliance/planning/results/mos.html>. *FY 1999 RECAP Measures of Success Report Management Report*, signed April 12, 2000.
4. U.S. EPA, Office of Enforcement and Compliance Assurance, Case Conclusion Data Sheets (CCDS).
5. U.S. EPA, Office of Enforcement and Compliance Assurance, Integrated Data for Enforcement Analysis (IDEA) database. Information for accessing non-enforcement sensitive data available at <http://www.epa.gov/compliance/planning/data/multimedia/idea/users.html>.
6. This information was collected manually through the U.S. EPA, Office of Enforcement and Compliance Assurance, Inspection Conclusion Data Sheets (ICDS). This information is internal to EPA and not currently accessible through a database or Web site.
7. U.S. EPA, Office of Enforcement and Compliance Assurance, *National Performance Measures Strategy—Final Report for Public Distribution*, signed February 1998.
8. U.S. EPA, Office of Enforcement and Compliance Assurance, Case Conclusion Data Sheets (CCDS).
9. U.S. EPA, Office of Enforcement and Compliance Assurance, ICIS Phase I.
10. U.S. EPA, Office of Enforcement and Compliance Assurance, Integrated Data for Enforcement Analysis (IDEA) database.
11. The information in this paragraph was collected from exit surveys completed by users of the National Compliance Assistance Centers found at <http://www.assistancecenters.net/>.
12. Ibid.
13. This information was collected manually through the U.S. EPA, Office of Enforcement and Compliance Assurance, Inspection Conclusion Data Sheets (ICDS).
14. U.S. EPA, EPA's Audit and Self-Policing Policy, Incentives for Self Policing: Discovery, Disclosure, Correction and Prevention of Violations (65 FR 19,618; April 11, 2000).
15. U.S. EPA, Office of Enforcement and Compliance Assurance, Compliance Incentives & Auditing. Available at <http://www.epa.gov/compliance/incentives/auditing/auditpolicy.html>.
16. The Bakery Partnership Program (BPP) was proposed on December 10, 2001, at 66 FR 63696; final promulgation was February 6, 2002, at 67 FR 5586.
17. U.S. EPA, Office of Enforcement and Compliance Assurance, Compliance and Enforcement. Partnership and links to the *Federal Register* citations available at <http://www.epa.gov/compliance/civil/programs/caa/bakery/index.html>.
18. U.S. EPA, Office of Enforcement and Compliance Assurance, Compliance and Enforcement. Available at [http://www.epa.gov/compliance/resources/policies/docket\\_hcsearch.html](http://www.epa.gov/compliance/resources/policies/docket_hcsearch.html) and search for Docket EC-2001-007 for a listing of participating companies.
19. U.S. EPA, Office of Enforcement and Compliance Assurance, Environmental Management Systems. Information available at <http://www.epa.gov/ems>.
20. U.S. EPA, Office of Enforcement and Compliance Assurance, Case Conclusion Data Sheets (CCDS).
21. U.S. EPA, Office of Enforcement and Compliance Assurance, Integrated Data for Enforcement Analysis (IDEA) database.
22. U.S. EPA, Office of Enforcement and Compliance Assurance, State and Tribal Partner Contribution, 65 FR 68786.
23. U.S. EPA, Office of Enforcement and Compliance Assurance, State and Tribal Partner Contribution, 67 FR 72184.
24. U.S. EPA, Office of Enforcement and Compliance Assurance, State and Tribal Assistance Grants #BG998474.

## GOAL 10: EFFECTIVE MANAGEMENT

**EPA will maintain the highest quality standards for environmental leadership and for effective internal management and fiscal responsibility by managing for results.**

### PROGRESS TOWARD THE STRATEGIC GOAL AND OBJECTIVES

EPA promotes effective management and fiscal responsibility by focusing on services that enable EPA program offices to make results-based decisions and meet environmental protection goals in a cost-effective manner. The accomplishments highlighted in this chapter demonstrate EPA's management abilities in human resources, information technology, financial management, procurement, and accountability. They also highlight the Agency's work to advance the President's Management Agenda (PMA),<sup>1</sup> and to protect human health and the environment.

### FY 2002 PERFORMANCE

EPA's most significant management accomplishments reflect strides in managing human capital, streamlining business processes and meeting customer needs, improving financial performance, investing in infrastructure, protecting children's health, and improving management and program operations. The steps taken under these initiatives are intended to provide resources, technology, and financial information directly to EPA program managers for decision making purposes. As of September 30, 2002, EPA was one of only two federal agencies that received *green* progress ratings from the Office of Management and Budget (OMB) on all five of the PMA initiatives tracked in the Executive Branch Management Scorecard.<sup>2</sup> In addition, EPA was selected as 1 of the 7 finalists from 100 nominations government-wide for the 2002 President's Quality Award Program, for its accomplishments in Budget and Performance Integration.

### Managing Human Capital

EPA has set in motion a variety of human capital initiatives aimed at investing in its employees and addressing its hiring needs to ensure that the Agency has the skill base and the diversified workforce to accomplish its mission. EPA faces significant challenges in obtaining a workforce with the highly specialized skills and knowledge required to accomplish its work. Retirement projections for FY 2002 through FY 2007 indicate that 27 percent of the EPA workforce will be eligible to retire within the next 5 years—including 26 percent of the scientific-technical workforce and 54 percent of the Senior Executive Service (SES).<sup>3</sup> EPA's human capital strategy,<sup>4</sup> aligned with the PMA goals, and several initiatives in FY 2002 were aimed at addressing the expected loss of talent at all levels of the Agency. EPA has submitted its Five-Year Restructuring Plan, which focuses on how the Agency is addressing the most critical workforce issues through realistic, creative approaches.<sup>5</sup> The plan's strategies will provide for an EPA workforce that is innovative and skilled at applying the most productive ways to address significant environmental problems in a more cost-effective manner. To align human capital activities with the Agency's Strategic Plan revisions, EPA is developing a Workforce Planning System that links competencies to mission needs along core business lines. Specifically, in FY 2002 the Agency made significant progress in implementing the workforce development strategy, which is a major component of the human capital strategy.

EPA is making progress in implementing its human capital strategy by launching an SES Candidate Development Program, hiring its fifth class of EPA interns, developing programs for its workforce, and completing the first phase of a

Strategic Workforce Planning system. FY 2002 accomplishments are highlighted below:

- Selection of 51 candidates from a pool of 655 applicants for the Agency's SES Candidate Development Program. Candidates will undergo a rigorous 15- to 18-month developmental program that will prepare them for placement into future SES vacancies.
- Hiring of 41 interns as part of the EPA intern program. Since its inception in 1998, the program has selected a total of 152 interns, exceeding the Agency's original target of 120 interns. EPA selected this diverse cadre of young people based on academic accomplishments, leadership potential, commitment to a career in public service, and interest in environmental issues. This new class and those that preceded it will help to prepare the Agency for the projected loss through retirement of its most senior people. This centrally funded program continues to receive senior management support.
- Implementation of programs geared toward better preparing the Agency's workforce for the challenges of the future. EPA's Management Development Program reestablished a curriculum of courses for Agency supervisors and managers. The Mid-level Development Program provides five courses that focus on building cross-cutting competencies and skills that all employees need to work effectively. About 400 employees per year receive this training. The New Skills/New Options program supports administrative staff development through the use of structured self-assessments, career planning tools, and online learning.
- Implementation of the strategic workforce planning system. EPA highlighted public and private sector best practices; completed 112 pilot office interviews; finalized the requirements analysis, line of business document, and competencies report; and submitted the Strategic Workforce Planning Methodology Options Report.

## **Streamlining Business Processes and Meeting Customer Needs**

In FY 2002 EPA increased the services that it offers electronically to its employees and customers and provided greater accessibility to grants information through electronic government initiatives. These actions were taken in direct response to the President's e-government initiative as outlined in the PMA.

- EPA expanded e-government opportunities by making grant opportunities available to prospective recipients electronically as well as by incorporating into its new Grants Competition Policy the requirement to use the Federal Business Opportunities (FedBizOpps) Web site for posting grant solicitations.<sup>6</sup> EPA participated in work groups that defined standard data elements and format for grant solicitations. EPA also joined the Intergovernmental Online Registry, a system for handling funds transferred between agencies in interagency agreements (IAGs). It is expected that this registry will be used to order goods and services through IAGs.
- In the area of acquisitions, EPA extended the use of electronic signatures, developed interfaces with current Agency-wide systems involved in the buying and paying process, and developed a business case for the replacement of the legacy small purchases system.

EPA continued its use of performance-based contracts that allow the contractor flexibility to propose innovative ways of achieving environmental results with limited government intervention. The Agency increased its percentage of performance-based awards from 10 percent in FY 2001 to 17 percent in FY 2002.<sup>7</sup> Although the goal of 20 percent was not achieved, considerable efforts have been made to negotiate individual performance-based work assignments or task orders under existing contracts. EPA plans to continue these efforts for both existing and new contracts in FY 2003.

In support of the PMA Initiative for competitive sourcing, the Agency has made

substantial progress in implementing competitive sourcing within EPA. The Agency identified 90 positions, or 100 percent of EPA's FY 2002/2003 competitive sourcing goal, for competitive review or conversion. The Agency directly converted 36 positions to the private sector and began reviews of 21 additional positions, thus exceeding its FY 2002 goal. An interoffice team was convened to develop a more strategic and sustainable approach to competitive sourcing. The team's focus will include identifying similar functions across Agency program offices that can be *bundled* for competitive review.

### Improving Financial Performance

EPA continues to strengthen its financial management practices, as required by the PMA, to enhance customers' confidence in the delivery of the Agency's environmental results. In FY 2002 EPA improved its status score for financial management on OMB's Executive Branch Management Scorecard from *red* to *yellow* in recognition of significant progress. FY 2002 accomplishments are highlighted below:

- EPA corrected and resolved all four of its standing material weaknesses. This marks the first time in the Agency's 20-year history of complying with the Federal Managers Financial Integrity Act requirements that EPA will not report any material weaknesses. (*Refer to Section III, "Management Accomplishments and Challenges," for further discussion.*)
- Upgrading of software applications, which resulted in improved quality and greater ease in generating financial statements. In FY 2002 the Agency again received a clean opinion for its FY 2002 financial statements and developed the capability to produce statements on a quarterly basis. This improvement will help meet accelerated year-end and periodic reporting requirements. In addition, EPA began development of a new financial reporting approach involving business intelligence tools that will produce real-time program information and help managers to make

better business and program management decisions.

- EPA is replacing its Integrated Financial Management System and related systems. In FY 2002 the Agency performed a strategic assessment of existing systems and their functions, current business processes, and potential business needs. Based on the assessment, EPA began developing requirements and architecture options for a comprehensive new system, including cost estimates for various commercial off-the-shelf software.
- The Agency assessed its vulnerability to erroneous payments in response to OMB requirements and the PMA. EPA created a task force to review existing processes and controls over the Clean Water and Drinking Water State Revolving Funds. The task force found the occurrence of erroneous payments to be as low as 0.13 percent and 0.04 percent for the respective funds and the controls to be excellent. In addition, EPA's Office of the Inspector General found the Agency's controls to be effective in identifying and correcting duplicate payments.
- EPA's new grant competition policy<sup>8</sup> became effective on October 1, 2002. The policy directly supports the PMA initiative on financial management to implement an effective grant competition policy and strengthen grant oversight.<sup>9</sup>

### Investing in EPA's Infrastructure

In FY 2002 EPA completed 56 physical security vulnerability risk assessments.<sup>10</sup> As a result, the Agency strengthened its perimeter, entrances and exits, interior, and security planning capabilities by increasing guard services and procuring and installing perimeter countermeasures, security equipment, and emergency communications systems.

EPA completed state-of-the-art construction projects at Research Triangle Park, North Carolina, and the Region 7 office in Kansas City that will better prepare the Agency and its



Aerial view of EPA's Campus at Research Triangle Park, North Carolina. Photograph taken by "Flying Fotos" in Chapel Hill, NC, on October 10, 2001.

employees to face the environmental scientific challenges of the 21<sup>st</sup> century. The new EPA campus at Research Triangle Park, the largest facility ever designed and built by the Agency, operates on an environmentally friendly, cost-effective, and highly functional basis. The facility provides state-of-the-art laboratories and offices and represents EPA's commitment to scientific excellence in the pursuit of human health and environmental protection.

The Agency also completed its move into the Federal Triangle complex, the new headquarters for EPA. In conjunction with the Department of Energy, EPA provided technical advice to pilot laboratory partners from the federal, public, and private sectors by sharing technical information and innovative whole-laboratory designs for reducing energy and water consumption and pollution as a result of its experience at the Federal Triangle site.<sup>11</sup>

### Protecting Children's Health

Protecting children from environmental threats remains a priority for EPA. In FY 2002 the Agency continued its efforts toward developing knowledge about the relationship between environmental factors and children's health. These efforts include the issuance of a second report on trends in measures reflecting environmental factors that might affect the health and well-being of children, an intra-agency

effort across programs to develop information on children's exposure to environmental contaminants, and the revision of EPA's cancer risk assessment guidelines to include consideration of children.

States play a critical role in protecting children's health. EPA forged relationships with the Environmental Council of the States (ECOS) and the Association of State and Territorial Health Officials (ASTHO). In FY 2002 ASTHO convened a series of meetings of state health and environment officials with the purpose of developing a national action agenda to reduce environmental triggers of childhood asthma. EPA is also working with the National Conference of State Legislatures, which launched an online database of state children's environmental health legislation, conducted a national workshop for state legislators on children's environmental health, and is developing a legislative guide that explores policy options for states on children's environmental health issues.

EPA is supporting the American Academy of Pediatrics, which recently conducted its third workshop for chief pediatric residents on children's environmental health. With EPA's support, the American Nurses Association



EPA led a multi-agency effort to celebrate Children's Health Month in October 2002. For information on topics and tips to discover the rewards of healthy children, check out EPA's Web site at <http://www.childrenshealth.gov>.



published three continuing education modules on children’s environmental health and conducted children’s environmental health workshops at four meetings of professional nursing organizations.

In August–September 2002 EPA successfully launched an international partnership on children’s environmental health indicator development at the World Summit for Sustainable Development in Johannesburg, South Africa. The Commission for Environmental Cooperation produced an agenda for action on children’s environmental health in the United States, Mexico, and Canada and has started implementing projects on risk assessment and indicators. EPA sponsored a major conference on children’s environmental health in Southeast Asia, generating interest in the subject from policy makers, researchers, non-governmental organizations, and health care professionals.

### Improving Management and Program Operations

In response to recommendations of EPA’s Office of the Inspector General (OIG), the Agency undertook action that contributed to cost savings, improvements in business practices, and increased environmental results. The Agency took action in the following areas:

- At EPA’s request, several communities implemented the OIG-recommended best practices and solutions to improve operations and reduce costs in resolving the combined sewer overflow discharges of untreated domestic, commercial, and industrial wastewater.<sup>12</sup>
- Investigation of an environmental services company doing scientific testing for EPA resulted in the company’s conviction for conspiring to alter scientific test data and its assessment of \$18 million in criminal and civil fines and penalties.<sup>13</sup>
- Completion of audits, evaluations, and the issuance of advice by the OIG resulted in the recommendation of more than \$35 million in savings, questioned costs, and improvements in EPA’s programs and operational performance.<sup>14</sup> For example, the OIG recommended that EPA develop

### OIG PROFILE OF PERFORMANCE

✓ Questioned Costs/Savings (millions)	\$35
✓ Fines, Recoveries, Settlements (millions)	\$20
✓ Criminal, Civil, Administrative Actions	79
✓ Environmental Program Actions/Improvements	29
✓ Management Operational Actions Improvements	95
✓ Recommendations (Environmental & Operational)	384
✓ Customer Service Rating	79%

Source: Inspector General Operations and Reporting System, and the OIG Performance and Results Measurement System. All data originate from audits and evaluations done in conformance with Professional Standards of the Comptroller General, official records of legal and administrative proceedings, and direct independent surveys with OIG clients and stakeholders.

regulations, qualification protocols, and risk-based targeting and apply them to control the open market trading of air emissions credits.<sup>15</sup>

- Ongoing investigative initiatives continued to uncover criminal activity in EPA’s assistance agreements and contracts, laboratory fraud, and cyber fraud in partnership with other government agencies.
- The OIG also developed a Web-enabled interactive Compendium of Federal Environmental Programs, through the President’s Council on Integrity and Efficiency, for more efficient program collaboration between federal environmental agencies.

In FY 2002 the OIG improved its organizational planning and performance. The OIG issued its first Annual Performance Report as a best practice among the federal Inspector General community, for which it received high praise by the Mercatus Center. The OIG Web site, <http://www.epa.gov/oig/earth>, contains information on its Annual Performance Report, Semiannual Reports, Strategic Plan, and other reports and facts. In addition, under the OIG statutory requirement for reporting on the Agency’s Top Management Challenges, two new challenges were added: Air Toxics Program and Management of Biosolids. These challenges are described in Section III of this report, Management Accomplishments and Challenges.

## **Program Evaluations**

Appendix A contains descriptions of program evaluations completed in FY 2002 that support the overall Effective Management Goal.

## **STATE AND TRIBAL PARTNER CONTRIBUTIONS**

Because much of the day-to-day work to protect human health and the environment is done by state and tribal governments through federally delegated programs, EPA invites early input from its regulatory partners when setting long-range priorities and evaluating progress. In FY 2002 the ECOS and tribal representatives participated in EPA's FY 2004 Annual Planning Meeting to present recommendations for consideration during development of the Agency's budget priorities. EPA regional offices, in turn, consulted with states and tribes on overall EPA budget priorities and the development of regional budget initiatives. In spring 2002, as the Agency developed options

for a new strategic goal framework, it solicited the state perspective on the greatest challenges and opportunities in environmental and human health protection that the Agency and the Nation would likely face in the coming 5 to 10 years and carefully considered the states' viewpoint as EPA officials developed recommendations for presentation to the Administrator. When the new five-goal structure was announced, EPA continued consulting with states to help determine more precisely the desired results to be achieved under each of the new strategic goals. In FY 2003 EPA will continue to consult extensively with states in completing its revised Strategic Plan, due to the Congress and the public by September 30, 2003.

## **ASSESSMENT OF IMPACTS OF FY 2002 PERFORMANCE ON FY 2003 ANNUAL PERFORMANCE PLAN**

There are no changes to FY 2003 APGs based on the results of FY 2002 performance.

# Goal 10: Effective Management

## Summary of FY 2002 Annual Performance Goals

**5** Goals Met

**1** Goals Not Met

**0** Data Lags

A description of the quality of the data used to measure EPA's performance can be found in Appendix B.

### FY 2002 Obligations (in thousands):

EPA Total:	\$9,447,202
Goal 10:	\$427,794
Goal 10 Share of Total:	4.5%

### FY 2002 Costs (in thousands):

EPA Total:	\$7,998,422
Goal 10 Costs:	\$390,191
Goal 10 Share of Total:	4.9%

Refer to page I-13 of the Overview (Section I) for an explanation of difference between obligations and costs.  
Refer to page IV-11 of the Financial Statements for a consolidated statement of net cost by goal.

## Annual Performance Goals (APG) and Measures FY 1999–FY 2002 Results

### Strategic Objective: Provide Vision, National and International Leadership, Executive Direction, and Support for All Agency Programs.

FY 2002 Cost (in thousands): \$48,467 (12.4% of FY 2002 Goal 10 Total Costs)

**Progress Toward Strategic Objective:** The Immediate Office of the Administrator and its regional counterparts provided the vision and leadership needed to enable EPA to meet its commitments to protect public health and the environment. Vision and leadership, as well as executive direction and policy oversight for all Agency programs are ongoing, evolving objectives. EPA continues its commitment to protect children's health and will continue to direct resources toward the programs that reduce risks to children from a range of environmental hazards. The Agency continues to work diligently to process all Title VII internal employment discrimination complaints and will continue to administer and monitor the implementation of affirmative employment programs. Furthermore, EPA will continue to manage special-emphasis programs designed to improve the representation, utilization, and retention of minorities, women, and persons with disabilities in the Agency's workforce and monitor the external compliance, including Title VI of the Civil Rights Act of 1964, which prohibits discrimination in programs and activities that receive financial assistance from EPA.

### Strategic Objective: Demonstrate Leadership in Managing for Results By Providing the Management Services, Administrative Policies, and Operations to Enable the Agency to Achieve Its Environmental Mission and to Meet Its Fiduciary and Workforce Responsibilities and Mandates.

FY 2002 Cost (in thousands): \$60,921 (15.6% of FY 2002 Goal 10 Total Costs)

**Progress Toward Strategic Objective:** EPA's progress toward effective management and fiscal responsibilities is highlighted by quick response to changing needs while maintaining the highest quality standards for resource stewardship and management, managing changing needs for workforce skills, and keeping pace with new technology. EPA provided the management operations and customer service needed to support Agency environmental results.

APG 66	GPRA Implementation	Planned	Actual
FY 2002	EPA strengthens goal-based decision making by developing and issuing timely planning and resource management products that meet customer needs. <b>Goal Met.</b>  <u>Performance Measures</u> - Agency's audited financial statements and Annual Report are submitted on time. - Agency's audited financial statements receive an unqualified opinion and provide information that is useful and relevant to the Agency and external parties.	3/01/02 1	2/27/02 1
FY 2001	Same Goal. <b>Goal Met.</b>	3/01/01 (timelines) 1 (opinion)	3/01/01 (timelines) 1 (opinion)
FY 2000	100% of EPA's Government Performance Results Act (GPRA) implementation components (planning, budgeting, financial management, accountability, and program analysis) are completed on time and meet customer needs. <b>Goal Not Met.</b>	100%	85%
FY 1999	By the end of 1999, the Agency can plan and track performance against annual goals and capture 100% of costs through the new Planning, Budgeting, Analysis, and Accountability structure, based on modified budget and financial accounting systems, a new accountability process, and new cost accounting mechanisms. <b>Goal Met.</b>	9/30/99	9/30/99

Goal 10 - Effective Management

**FY 2002 Result:** EPA prepared and submitted, by the statutory due date of February 27, 2002, the FY 2001 financial statements and received a clean audit opinion from EPA's Office of the Inspector General (OIG). These statements, for the first time, included comparative schedules. In addition, the OIG did not cite any material weaknesses or recommend any additional corrective actions.

APG 67	GPRA Performance Measurement	Planned	Actual
FY 2002	<b>EPA continues improving how it measures progress in achieving its strategic objectives and annual goals by increasing external performance goals and measures characterized as outcomes by 2% in the FY 2003 Annual Performance Plan and Congressional Justification compared to FY 2002. <span style="color: green;">Goal Met.</span></b>	<b>2%</b>	<b>10%</b>
FY 2001	Same Goal, different targets. <span style="color: green;">Goal Met.</span>	4%	4%

**FY 2002 Result:** EPA exceeded the goal of a 2-percentage-point increase in outcome-oriented Annual Performance Goals (APGs) and Performance Measures (PMs). In FY 2002 EPA released the FY 2003 Annual Plan which included 49 APGs and 114 PMs that were subsequently classified as outcomes. The percentage of outcome-oriented APGs changed from 29% for FY 2002 to 36% for FY 2003 (an increase of 7 percentage points), while the percentage of outcome PMs changed from 29% to 40% (an increase of 11 percentage points). If APGs and PMs are added together, outcomes increased by 10 percentage points—from 29% for FY 2002 to 39% for FY 2003.

**Strategic Objective: Effectively Conduct Planning and Oversight for Building Operations and Provide Employees With a Quality Work Environment That Considers Safety, New Construction, and Repairs and That Promotes Pollution Prevention Within EPA and With Our State, Tribal, Local, and Private Partnerships.**  
*FY 2002 Cost (in thousands): \$227,568 (58.3% of FY 2002 Goal 10 Total Costs)*

**Progress Toward Strategic Objective:** The Agency has made strides in ensuring that all of its employees are provided a safe and energy-efficient work environment by either consolidating employees into a central location or building new facilities. EPA met its strategic objective by consolidating thousands of employees in a well-planned central location that offers greater efficiency, comfort, and safety and lower operating costs, while maintaining consistency with its environmental mission. With its new facilities, EPA has ensured that its buildings are as energy-efficient and sustainable as possible to serve as models of healthy workplaces with minimal environmental impacts. Through innovative technologies and holistic approaches to design, construction, renovation, and use, the Agency is "living its mission" by practicing sound environmental management.

APG 68	Facilities Projects - Personnel	Planned	Actual
FY 2002	<b>EPA will ensure personnel are relocated to new space as scheduled. <span style="color: green;">Goal Met.</span></b> <u>Performance Measure</u> - <b>Percentage of EPA personnel consolidated into Headquarters complex.</b>	<b>72%</b>	<b>72%</b>
FY 2001	Same Goal, different targets. <span style="color: green;">Goal Met.</span>	52%	52%

**FY 2002 Result:** EPA successfully relocated 72% of its headquarters employees to quality work environments that are safe and energy-efficient. This relocation was the conclusion of a 10-year effort by the Agency to improve the working conditions of employees in the Washington, DC area.

APG 69	Facilities Projects - Construction	Planned	Actual
FY 2002	<b>EPA will ensure that all new and ongoing construction projects are progressing and completed as scheduled. <span style="color: green;">Goal Met.</span></b> <u>Performance Measure</u> - <b>Percentage of complete build out of Customs and Connection Wing buildings.</b>	<b>100%</b>	<b>100%</b>
FY 2001	Same Goal, different targets. <span style="color: green;">Goal Met.</span> <u>Performance Measures</u> - Percentage of the new Research Triangle Park (RTP) building construction completed.	100%	95%
	- Percentage of the Interstate Commerce Commission (ICC) building construction completed.	100%	100%
FY 2000	Same Goal, different targets. <span style="color: green;">Goal Met.</span> <u>Performance Measures</u> - Percentage of new RTP building construction completed.	80%	80%
	- Percentage of the ICC construction completed.	80%	80%
	- Percentage of EPA personnel consolidated into Headquarters complex.	40%	40%
FY 1999	Complete at least 50% of construction of the consolidated research lab at RTP, North Carolina. <span style="color: green;">Goal Met.</span>	50%	60%

Goal 10 - Effective Management

Continue renovation of the new consolidated Headquarters complex, completing 100% build out of the Ariel Rios north and Wilson Building, and 50% of the ICC, and moving 38% of EPA personnel from vacated spaces to the new consolidated complex. <i>Goal Met.</i>	100%	90%
	50%	50%
	38%	31%

**FY 2002 Result:** Renovation and build-out of the final building in the Federal Triangle Complex were successfully completed. EPA's new space houses the cafeteria, as well as additional offices and services. The historic space is in keeping with the Agency's goal to provide a quality work environment that is safe and energy-efficient.

APG 70	Energy Reduction Technology	Planned	Actual
FY 2002	EPA will initiate a demonstration fuel cell at Ft. Meade Laboratory. <i>Goal Not Met.</i>		
	<u>Performance Measures</u>		
	- Percentage of fuel cell components in place.	50%	0%
	- Percentage of structure completed.	100%	0%
FY 2001	Same Goal. <i>Goal Not Met.</i>	10%	0%

**FY 2002 Result:** This project is a joint project involving EPA, the Department of Energy, the Department of Defense, Siemens Westinghouse, and the electric utility industry. At the beginning of FY 2002, the project consortium concluded that the output of the originally proposed fuel cell would not work properly with available standard-sized steam turbines, rendering the project economically unfeasible. The Agency then attempted to reconfigure the fuel cell project and establish a new funding partnership. Since adequate funding could not be found, the project is being terminated.

**Strategic Objective: Provide Audit, Evaluation, and Investigative Products and Advisory Services Resulting in Improved Environmental Quality and Human Health.**

*FY 2002 Cost (in thousands): \$53,235 (13.7% of FY 2002 Goal 10 Total Costs)*

**Progress Toward Strategic Objective:** The OIG made progress toward its objective by focusing on customer needs and investing its resources on evaluations of national environmental issues to identify improvements and solutions. The OIG is also providing advisory assistance to the Agency on GPRA, accountability, and data quality processes as well as promoting more collaborative approaches and techniques.

APG 71	Audit and Advisory Services <sup>16</sup>	Planned	Actual
FY 2002	Improve environmental quality and human health by recommending 50 improvements across Agency environmental goals, identifying and recommending solutions to reduce 15 of the highest environmental risks, and identifying 15 best environmental practices. <i>Goal Met.</i>	50 15 15	100 18 16
FY 2001	Office of Audit provides independent audits, evaluations, and advisory services, responsive to customers and clients, leading to improved economy, efficiency and effectiveness in Agency business practices and attainment of its environment goals. <i>Goal Met.</i>		
	<u>Performance Measures</u>		
	- Potential monetary value of recommendations, questioned costs, savings and recoveries.	40M	\$67.2M
	- Examples of Office of Inspector General (OIG) recommendations/advice or actions taken to improve the economy, efficiency, and effectiveness of business practices and environmental programs.	55	80
	- Overall customer and stakeholder satisfaction with audit products and services (timeliness, relevancy, usefulness and responsiveness).	77%	80%
FY 2000	Same Goal, different targets. <i>Goal Met.</i>	64M 63 75% recommendations satisfaction	\$55.3M 78 76%
FY 1999	In 1999, the OIG will provide objective, timely and independent auditing, consulting, and investigative services through such actions as completing 15 construction grant closeout audits. <i>Goal Met.</i>	15	24

**FY 2002 Result:** The OIG exceeded the targets for this goal. The OIG is continuing its pursuit of improved environmental outcomes by focusing its product line on national environmental problems, issues, and results; promoting partnering relationships across governmental entities; and investing in additional follow-up to fully recognize the environmental benefits of its work. During the year, the OIG reported more than \$55 million in combined potential costs savings and recoveries; conducted 79 criminal civil or administrative

actions preventing the loss of resources and program integrity; and identified more than 384 recommendations, best practices, or risks. The OIG also received a 79% client satisfaction rating on the quality, timeliness, and usefulness of its staff products.<sup>17</sup>

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**FY 2001 Annual Performance Goals** (No Longer Reported for FY 2002)

*Evaluate the effectiveness of the Children's Valuation Handbook.*

## Notes:

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2. Office of Management and Budget, Executive Office of the President. Executive Branch Management Scorecard, Agency Scorecard: U.S. EPA (July 15, 2002). Available at [http://www.whitehouse.gov/omb/budintegration/scorecards/epa\\_scorecard.html](http://www.whitehouse.gov/omb/budintegration/scorecards/epa_scorecard.html).
3. U.S. EPA, Office of Administration and Resources Management, Office of Human Resources and Organizational Services, EPA Personnel System data report (August 10, 2002).
4. U.S. EPA, Office of Administration and Resources Management, Office of Human Resources and Organizational Services, *Investing in Our People: EPA's Strategy for Human Capital 2001 through 2003*.
5. U.S. EPA, Office of Administration and Resources Management, Office of Human Resources and Organizational Services, *EPA's Five Year Restructuring Plan* (May 2002).
6. U.S. EPA, Office of Administration and Resources Management, Office of Human Resources and Organizational Services, Policy for Competition in Assistance Agreements, EPA Order 5700.5 (September 12, 2002).
7. U.S. EPA, Office of Administration and Resources Management, Office of Human Resources and Organizational Services, Office of Acquisition Management, internal tracking.
8. U.S. EPA, Office of Administration and Resources Management, Office of Human Resources and Organizational Services, Policy for Competition in Assistance Agreements, EPA Order 5700.5 (September 12, 2002).
9. Ibid.
10. U.S. Marshall Service, *Vulnerability Assessments at Federal Facilities* (June 28, 1995).
11. Office of the President, Greening the Government Through Efficient Energy Management, Executive Order 13123 (1999).
12. U.S. EPA, Office of the Inspector General, OIG Audit Report 2002 P 00012 (2002).
13. U.S. EPA, Office of the Inspector General, *OIG Semiannual Report to Congress October 1, 2001 through March 31, 2002*, EPA 350-K-02-001.
14. U.S. EPA, Office of the Inspector General.
15. U.S. EPA. Office of the Inspector General, OIG Audit Report 2002 P 00019 (2002).
16. The OIG uses an internal Performance Results and Measurement Database to categorize and accumulate performance results from its products and services designed to influence improvements in EPA's implementation of its environmental programs.
17. U.S. EPA, *Office of the Inspector General, Annual Performance Report*. Available at [http://www.epa.gov/oigearth/ereading\\_room/Perfm5.pdf](http://www.epa.gov/oigearth/ereading_room/Perfm5.pdf).

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*Section III*

**Management  
Accomplishments  
and Challenges**

## **MANAGEMENT ACCOMPLISHMENTS AND CHALLENGES**

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## MANAGEMENT ACCOMPLISHMENTS AND CHALLENGES

EPA senior managers are aware of the complex management challenges the Agency must address to achieve program results, and they work diligently to identify strategies to maintain integrity and strengthen the public's confidence in the Agency. The President's Management Agenda,<sup>1</sup> an initiative to improve management, performance, and accountability government-wide, has placed additional emphasis on effective program management. In FY 2002 the Agency accelerated efforts to address its most serious management problems and corrected all four of its material weaknesses as well as a number of its other management challenges—deficiencies in program policies, guidance, or procedures that might impair the Agency's ability to achieve its mission.

The Agency uses a system of internal program reviews, independent reviews, and audits by the General Accounting Office (GAO) and EPA's Office of the Inspector General (OIG); program evaluations; and performance measurements to ensure that program activities are effectively carried out in accordance with applicable laws and sound management policy and provide reasonable assurance that Agency resources are protected against fraud, waste, abuse, and mismanagement. As a result EPA is quick to identify and develop strategies to address integrity weaknesses and major management challenges.

For some management problems the Agency has put annual performance goals in place to track progress. Three of the four material weaknesses corrected in FY 2002 and six of the nine additional management challenges have associated Government Performance and Results Act (GPRA) annual performance goals and measures. Although EPA does not have specific GPRA goals or measures for all integrity weaknesses and major management challenges, the Agency's senior leadership monitors all problems closely as discussed later in this section.

Section III provides a comprehensive discussion of EPA's management and

performance challenges and its strategy to resolve these issues. (The most significant of these and their relevance to the achievement of the Agency's mission are also addressed in the Section II goal chapters.) This section also meets the reporting requirements of the Federal Managers Financial Integrity Act (Integrity Act);<sup>2</sup> the Inspector General Act of 1978, as amended;<sup>3</sup> and the Reports Consolidation Act of 2000,<sup>4</sup> as discussed below.

### FISCAL YEAR 2002 ANNUAL ASSURANCE STATEMENT

I am pleased to give an unqualified statement of assurance that the Agency's programs and resources are protected from fraud, waste, and mismanagement, based on EPA's annual self-assessments of the Agency's internal controls, management, and financial control systems.



Christine Todd Whitman  
Administrator

Under the Integrity Act all federal agencies must submit an annual Integrity Act Report to the President and Congress and provide reasonable assurance that their policies, procedures, and guidance are adequate to support the achievement of their intended mission, goals, and objectives. Agencies also must report material weaknesses—those deficiencies found to impair achievement of the agencies' missions—and identify corrective action strategies that have been developed and are under way to remedy the problems. EPA senior managers periodically report to the Administrator on progress to address material weaknesses and other less serious but important problems.

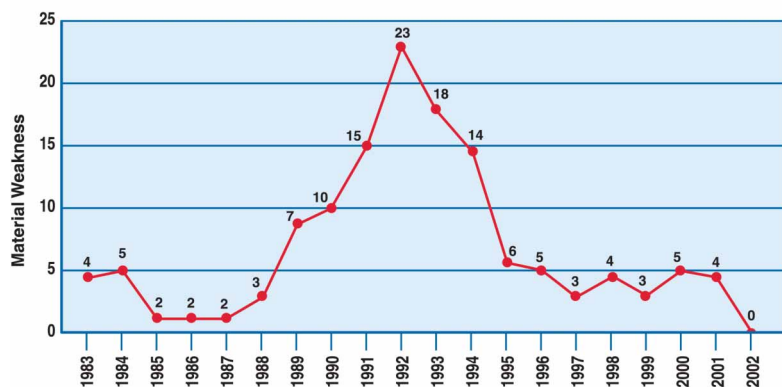
The Inspector General Act of 1978,<sup>5</sup> as amended, requires federal agencies to report to Congress twice a year on the status of efforts to

carry out corrective actions and reach final action on OIG audits. The Reports Consolidation Act of 2000<sup>6</sup> gives agencies the authority to consolidate various management reports (including management's report on audits) into a single annual report. EPA managers have greatly improved the timeliness and effectiveness of their audit management practices, and since FY 1999 they have decreased by 58 percent the number of audits without final action 1 year after the management decision (from 72 in FY 1999 to 23 in FY 2002).<sup>7</sup>

## FY 2002 INTEGRITY ACT REPORT

Since 1982 EPA has identified and reported 49 material weaknesses and 18 financial nonconformances.<sup>8</sup> By the end of FY 2002 the Agency had corrected all of these material weaknesses and financial nonconformances, closing the last four material weaknesses during FY 2002. EPA's record in correcting its management challenges has steadily improved over the past decade, and, for the first time in the 20-year history of the Integrity Act, EPA has no material weaknesses. The progress in correcting material weaknesses and financial nonconformances exemplifies EPA's strong commitment to improving integrity and accountability in all programs, organizations, and functions.

### After 20 Years EPA Sets Record With No Material Weakness



The four material weaknesses corrected in FY 2002 are National Pollutant Discharge Elimination System Permits, Construction Grants Closeout, Information System Security, and Backlog of Title VI (Civil Rights Act of 1964)

As required by the Reports Consolidation Act of 2000, OIG's list of top management challenges facing the Agency, along with its assessment of EPA's progress in addressing these challenges, is included at the end of this section. OIG tiered the challenges to reflect its consideration of their significance and severity of impact on the Agency's mission. The Agency's response to the OIG statement is included as part of the discussion of corrective action strategies for integrity weaknesses and major management challenges.

Discrimination Complaints. The Agency's corrective action strategy and determination that these weaknesses had been resolved are discussed below.

### Material Weaknesses Corrected During FY 2002

#### 1. Reduce the Backlog of National Pollutant Discharge Elimination System (NPDES)

**Permits<sup>9</sup> (Goal 2):** Based on Permit Compliance System (PCS) data in November 1998, 26 percent of permits for major facilities had not been reissued following expiration, and 48 percent of permits for minor facilities had not been reissued. In 1999 the Agency estimated that the backlog in EPA-issued major permits had tripled over the past 10 years; likewise, the

backlog in state-issued permits had doubled over that time. Expired NPDES permits might not reflect the most recent applicable effluent guidelines, water quality standards, or Total Maximum Daily Loads, posing a threat to the environment. Without timely issuance of high-quality permits, necessary improvements in water quality could be delayed. *(FY 1998–2002 OIG management challenge—tier 2 management challenge in 9/6/02 OIG memo to the Administrator on EPA's Key Management Challenges, declared a material weakness FY 1998.)*

**Corrective Action Strategy:** Since the Agency identified this weakness in 1998, it has achieved 56 percent of targeted reduction in the backlog

of major point source permits and achieved 58 percent of targeted reduction in the backlog for minor point source permits. EPA's comprehensive strategy for improving the NPDES permit program<sup>10</sup> has resulted in noteworthy progress, and it establishes a management control framework for continued improvement. EPA is deploying guidance and tools designed to help regions and states prioritize permits that have the greatest environmental impact and to automate the permit writing process.<sup>11</sup> EPA believes it has addressed the materiality of this issue and put the management controls in place for continued progress. EPA is supporting a number of efforts to strengthen the NPDES Program: (1) two pilot projects with states to develop systems to address permits on a watershed basis, (2) an EPA/state project to identify permit streamlining opportunities, (3) expanded use of general permits to address increases in the permitting universe, and (4) ongoing permit quality reviews. (Also see *OIG's Key Management Challenges*.)

## **2. Construction Grants Closeout (Goal 2):**

Without timely closeouts of construction grants, millions of dollars in potentially ineligible program costs cannot be recovered for use in other high-priority state clean water projects. (*FY 1992 OMB candidate material weakness, declared an Agency weakness FY 1992, elevated to a material weakness FY 1996.*)

*Corrective Action Strategy:* Since 1990 the Agency has worked to accelerate the completion and closeout of construction grants by annually assessing the remaining workload in each region, identifying the bottlenecks, and agreeing on a closeout plan and follow-up actions to bring the program to completion. Forty-seven states and 8 regions have met the "success" criteria of no more than 5 open grants per state and 10 open grants per region.<sup>12</sup> The Agency-wide goal for correcting this weakness is 100 open grants. EPA has exceeded this goal with 84 open grants. The remaining open grants are concentrated in a few states and will be closed out once the grantees have exhausted all appeal mechanisms. EPA will monitor the open grants closely through mechanisms such as annual state work plans and closeout strategies.

## **3. Information System Security (Goal 7):**

EPA needs a centralized security program with strong oversight processes to adequately address risks and ensure that valuable information technology resources and environmental data are secure. (*FY 1997–2002 OIG major management challenge—tier 2 management challenge in 9/6/02 OIG memo to the Administrator on EPA's Key Management Challenges, FY 2001 GAO major management challenge, declared a material weakness FY 1997 and an expanded material weakness FY 2000.*)

*Corrective Action Strategy:* EPA has made substantial progress in keeping pace with the evolving challenges of information security. In FY 2002 the Agency developed and began implementing a comprehensive strategy to systematically address security-related deficiencies in accordance with the Government Information Security Reform Act.<sup>13</sup> This strategy included initiating annual security risk assessments for the Agency's systems, as well as instituting regular monitoring and reporting of system owners' follow-up actions in response to the assessments. EPA has completed risk assessments for its critical applications and systems and has implemented regular evaluations of its security network and data, network intrusion detection and monitoring controls, and formal security plan reviews. Recent reviews conducted in FY 2002 show that EPA has an improved information security program that assesses, identifies, and mitigates risks to the Agency's data and systems.<sup>14</sup> Recent network penetration tests validated that controls successfully deter penetration attempts. To improve on this performance, the Agency plans to enhance its ability to monitor activities at the subnetwork level to ensure deeper protection and guard against possible unauthorized access or internal exploitation.

EPA plans to sustain improvements through consistent security control implementation and ongoing evaluation and regular testing to ensure that the policies and procedures are effective. The Agency's validation strategy<sup>15</sup> employs a variety of methods, processes, and mechanisms to ensure EPA's information security meets the criteria of the best industry practices and

federal requirements. Validation methods include (1) comprehensive risk assessments of major applications and general support systems using the security self-assessment methodology published by the National Institute of Standards and Technology,<sup>16</sup> (2) implementation of central automated monitoring for assessing compliance with security standards, and (3) internal and external network penetration testing. (Also see OIG's *Key Management Challenges*.)

#### **4. Backlog of Title VI (Civil Rights Act of 1964)<sup>17</sup> Discrimination Complaints**

**(Goal 10):** Title VI prohibits discrimination on the basis of race, color, or national origin by any entity that receives federal financial assistance. By June 2001 the number of Title VI administrative complaints that required an investigation or a jurisdictional determination by EPA had reached 66. Regulations at 40 CFR Part 7<sup>18</sup> require EPA to process complaints of discrimination filed under the Civil Rights Act

of 1964 within 180 days after acceptance of the complaint. EPA's program to investigate Title VI complaints did not meet regulatory deadlines for processing and investigating complaints. (*Declared a material weakness in FY 2000.*)

*Corrective Action Strategy:* On June 1, 2001, the Administrator announced a comprehensive strategy for addressing the backlog and improving the Title VI program within 2 years. EPA formed a 13-member interoffice Task Force to eliminate the backlog.<sup>19</sup> The Office of Civil Rights, which leads the Task Force, also initiated new policies and procedures to prevent increases in the backlog. The backlog of 66 cases has been reduced by half. All remaining cases have been analyzed and preliminary determinations made as to how they should be processed. There are no new cases in backlog status. EPA expects to eliminate the backlog by July 2003 and validate the effectiveness of management controls to ensure timely resolution of new cases.

## **MAJOR MANAGEMENT CHALLENGES**

Following are brief descriptions and summaries of activities planned in response to management challenges identified by GAO, OMB, OIG, or EPA itself. The Agency will continue to use the tools available under GPRA and other management statutes to assist in addressing these issues. Six of EPA's management challenges are being addressed as internal Agency weaknesses for which the Agency develops specific and measurable corrective actions and reports on progress to the Administrator.

**1. Protecting Critical Infrastructure from Non-traditional Attacks (Cross-Goal):** EPA has the responsibility of helping to secure the Nation's drinking and wastewater infrastructure, of promoting security in the chemical industry and hazardous materials sector, and of responding to and recovering from biological, chemical, certain radiological, and other terrorist attacks. To achieve its goals, the Agency needs to apply technical, organizational, resource, training, and communication assets to complex issues with unprecedented dispatch. Success

requires simultaneous attention to questions of threat, capabilities and deficiencies, preparedness, management and oversight, and efficiency and effectiveness. (*FY 2002 OIG major management challenge—tier 1 management challenge in 9/6/02 OIG memo to the Administrator on EPA's Key Management Challenges.*)

*Corrective Action Strategy:* EPA has taken measures to respond to terrorist incidents and is taking steps to better prepare for, and respond to, future incidents based on lessons learned. The Agency carried out its mission and accomplished a remarkable achievement in responding to three national incidents during the same time period in response to the attacks on the World Trade Center and the Pentagon, and the cleanup of anthrax contamination in the Capitol Complex and other facilities around the country. One of these tasks, cleaning up anthrax contamination from the Capitol Hill Complex, defied the customary thinking that the cleanup of an anthrax-contaminated building was impossible.

Since the terrorist attacks of September 11, 2001, the federal government has taken action to prepare and protect the public against terrorist threats. The President created the Office of Homeland Security (OHS) and recently signed legislation creating a cabinet-level Department of Homeland Security. The July 2002 *National Strategy for Homeland Security*<sup>20</sup> designated EPA as the lead agency for protecting critical drinking and wastewater infrastructure and promoting security in the chemical industry and hazardous materials sectors. The November 2002 Reorganization Plan for the Department of Homeland Security also identifies some areas where EPA will coordinate efforts with the Department.

In testimony before the Senate Committee on Environment and Public Works on September 24, 2002,<sup>21</sup> the EPA Administrator described in detail the aggressive and effective actions EPA has taken to build on existing strengths to meet new security challenges. EPA worked to define its role in homeland security and to make decisions regarding where the Agency should allocate existing and new resources, authority, and personnel to ensure the safety of human health and the environment. The Agency conducted two major reviews of lessons learned, one relating to the incidents of September 11 and the other related to EPA's anthrax response. EPA used objective outside sources to conduct extensive interviews with Agency personnel, from front line staff to senior managers, to examine what EPA had learned from its response activities.

EPA chairs the interagency National Response Team (NRT), which has an excellent track record for federal-state coordination. In April 2002 the OHS asked the NRT to be an OHS work group providing interagency policy coordination assistance on terrorist incident preparedness and response. The NRT also completed anthrax and World Trade Center and Pentagon lessons learned documents for use by member agencies, and developed anthrax cleanup technical assistance documents for use by planners and responders at all levels of government.<sup>22</sup>

EPA aggressively developed vulnerability assessment tools for drinking water and

wastewater utilities, funded vulnerability assessments at the Nation's 424 largest drinking water facilities serving nearly half the population, sped up establishment of a secure Information Sharing and Analysis Center for the water sector, provided threat information to utilities as required under Public Law 107-188,<sup>23</sup> and initiated high-priority water security research projects. The Agency developed EPA's Threat Warning System and Protective Measures, including facility protective measures, emergency preparedness and response activities, and protection of facilities in the water sectors and chemical industry. EPA implemented this system on September 10, 2002, when the country went to "orange" threat status, and is now revising the system in response to lessons learned from this first implementation. Implementation has included providing alerts and protective information to members of the water sectors and chemical industry.

The lessons learned reports<sup>24</sup> have generally concluded that EPA responded successfully; however, it can do better. In October 2002 the Administrator announced EPA's Strategic Plan for Homeland Security,<sup>25</sup> which supports the President's *National Strategy for Homeland Security*<sup>26</sup> and the efforts to be undertaken by the new Department of Homeland Security. The plan serves as a blueprint on how to enhance EPA's ability to meet its homeland security responsibilities. The activities and initiatives in the plan represent an enhancement of EPA's capabilities to detect, prepare for, prevent, respond to, and recover from terrorist incidents. As the federal government continues to address the issue of protecting the Nation, the plan will continue to be revised and improved. Some of the activities identified in the plan might eventually be carried out by the Department of Homeland Security or other agencies. The Federal Homeland Security Advisor commended EPA for its Homeland Security Strategic Plan, noting that it can serve as a model for other departments and agencies.

In context of the urgency and national significance of addressing these infrastructure issues, the Agency's activities during the past year have revealed significant management

strengths. (Also see OIG's *Key Management Challenges*.)

## **2. Working Relationship with the States**

**(Cross-Goal):**<sup>27</sup> The National Environmental Performance Partnership System (NEPPS) established EPA-state working partnerships to accomplish complex environmental issues with scarce resources. One of the primary tools for implementing NEPPS, performance partnership grants (PPGs), allows states and tribes to combine multiple EPA grants into one. In implementing the NEPPS program, including PPGs, the following are required to fully integrate NEPPS principles: leadership providing a clear direction and expectations, training and guidance, and goals and related performance measures to monitor and measure progress on achieving better environmental results. (*FY 1999–2001 GAO major management challenge; FY 2000–2002 OIG major management challenge—tier 2 management challenge in 9/6/02 OIG memo to the Administrator on EPA's Key Management Challenges*.)

*Corrective Action Strategy:* EPA works closely with states, tribes, other federal agencies, and other stakeholders to protect public health and the environment. Under NEPPS, the Agency committed to long-term collaboration with state agencies to improve EPA and state management of national environmental programs. NEPPS is a framework to build a result-based management system, focus on joint planning and priority setting, and use environmental indicators and outcome measures for accountability. Although EPA and states recognize that existing implementation approaches are no longer efficient and effective, they have not yet agreed on how states will have flexibility while being accountable for environmental results. For several years, EPA and the states have been implementing NEPPS with mixed results. As a result of an ongoing program evaluation conducted jointly with the states, EPA is developing an implementation plan that will address the implementation issues identified.

Through NEPPS, the Agency is improving EPA-state partnerships by working with the

states to establish priorities, improve performance measures, and promote results-based management under the Performance Partnership System. The Agency is also developing tools that state and EPA NEPPS negotiators can use to clarify the appropriate performance expectations. In addition EPA and the Environmental Council of the States (ECOS) have an active joint work group to address continuing implementation issues and work to identify and remove remaining barriers to effective implementation of the Performance Partnership System.

In FY 2002 the Agency developed issue papers on performance partnerships that were discussed with Agency senior leaders, ECOS, and the performance partnership practitioner community. The Agency integrated NEPPS principles in its planning, budgeting, and accountability systems and has included NEPPS Core Performance Measures in EPA's Annual Report. EPA continued development of a NEPPS primer on policies and practices, revised its Web site to provide historical information and best management practices, organized a national training conference, and continued biannual reporting on the states' use and application of PPGs.<sup>28</sup>

In FY 2003 EPA plans to meet with the states to identify a set of national, state, and regional priorities, in the context of NEPPS information from environmental indicators and performance work. The results will be incorporated into EPA's national strategic planning, budgeting, and accountability process in FY 2004. EPA and the states will also jointly review roles, responsibilities, and resources to improve efficiency and environmental impact. EPA will implement a communication strategy on the successes and benefits of the Performance Partnership System and recognize those who have made improvements. The Agency will continue a joint annual evaluation of performance partnership agreements and review recommendations from the PPG Task Force on mitigating conflicts between performance partnership principles and categorical grants guidance. (*Also see OIG's Key Management Challenges*.)



### **3. Management of Biosolids (Cross-Goal):**

EPA needs to implement a national biosolids program and establish a strong enforcement program to meet the Clean Water Act (CWA) requirements to reduce environmental risks and maximize the beneficial use of sewage sludge.<sup>29</sup> (*FY 2002 tier 2 management challenge in 9/6/02 OIG memo to the Administrator.*)

*Corrective Action Strategy:* EPA continues to meet its statutory obligations under the CWA pertaining to sewage sludge. Although there has been concern as to the adequacy of the sewage sludge rule, and there is a need for some additional scientific research in this area, the inclusive process EPA has launched will adequately address those concerns. The Agency requested that the National Research Council (NRC) make a second evaluation of the biosolids program, specifically of the scientific basis supporting the CWA Part 503 rule.<sup>30</sup> The second NRC report, issued in July 2002,<sup>31</sup> concluded that there was no documented scientific evidence that EPA's Part 503 sewage sludge standards failed to protect public health. The NRC stated that additional scientific work is needed to reduce persistent uncertainty about the potential for adverse human health effects from exposure to biosolids that are applied to the land. The Agency has set into motion a process for developing a response to the NRC's recommendations and the OIG's concerns. A committee is being established to provide an open process, including seeking public comments on Agency plans. Following receipt of these comments, EPA will publicly announce its final plan for taking actions. The Agency intends to complete this process by the end of 2003. As part of the process, the Agency will seek public comment on its proposed determination on whether to regulate additional pollutants in biosolids as required by section 405(d)(20)(C) of the CWA.<sup>32</sup> EPA also will publicly announce its final decision on regulating additional pollutants under Part 503.

In the meantime, the Agency will continue to communicate information on applying biosolids. The information will include a brief summary of additional research that is now being conducted to reduce public uncertainty,

and that, if needed, will result in the modification of the biosolids regulation or land application practices. EPA has taken actions to address biosolids violations and will continue to address instances where biosolids pose an immediate endangerment to human health or the environment. Regions and states have the flexibility and responsibility to address situations where compliance assistance and enforcement actions to address biosolids are appropriate and necessary. EPA also developed a Biosolids Data Management System (BDMS).<sup>33</sup> Although the Agency has not undertaken or completed all of the specific studies described in the preamble to Part 503, it has undertaken a variety of studies associated with biosolids recycling that it believes to be very relevant today and is undertaking new studies. In addition, studies by others outside the Agency have helped to resolve many of the issues of concern discussed in the preamble. (*Also see OIG's Key Management Challenges.*)

### **4. Challenges in Addressing Air Toxics Program Phase 1 and Phase 2 Goals (Goal 1):**

Because of budget constraints and new guidelines established for processing regulation packages, there have been delays in completing the 10-year Maximum Achievable Control Technology (MACT) standards and possible delays in the residual risk program. (*FY 2001 Agency weakness; FY 2002 OIG tier 1 management challenge in 9/6/02 OIG memo to the Administrator on EPA's Key Management Challenges.*)

*Corrective Action Strategy:* EPA is developing a comprehensive approach to air toxics and is continuing to shift the emphasis from a technology-based to a more risk-based program using the National Air Toxics Assessment<sup>34</sup> (NATA) to help set programs and guide priorities. EPA published the NATA 1996 national-scale assessment in FY 2002, which took into account peer review comments from the Science Advisory Board (SAB).

EPA has made significant progress in reducing air toxics. Since 1990 air toxics have been reduced by over 1.5 million tons per year, a 34 percent reduction. Most of those

reductions are from major industrial sources and mobile sources. There will be even greater reductions as EPA completes the MACT program (technology-based standards for major stationary sources), implements mobile source standards (including non-road), and sets standards for area sources of air toxics. EPA has worked successfully to integrate the air toxics program, addressing risks from all sources of toxics—major, area, mobile, and indoor sources.

Regarding the technology-based program, the Clean Air Act requires EPA to set standards for all major sources of air toxics. This is an ambitious requirement, and EPA has already set 63 standards covering 105 source categories. While EPA is behind schedule on the remaining sources, it has now proposed all of the remaining 34 standards (covering 64 source categories) and will promulgate final standards for these sources no later than February 2004.<sup>35</sup>

After implementing the technology-based program, EPA is to evaluate the remaining risks at these sources. EPA has begun this “residual risk” program and is currently assessing more than 1,000 sources in 20 different source categories. While the statutory requirements are extensive, EPA is working to streamline the program and focus on the most important sources of air toxics by updating health assessments on critical pollutants, using risk-assessment methodologies, and working cooperatively with industry to collect the best available data. The Agency is also developing exemption options for low-risk facilities and identifying economically feasible risk reduction options for sources with high risk impacts.

Finally, EPA has been supporting states’ toxics monitoring since 1987. EPA realized, however, the need for a consistent, national monitoring network to provide more information on ambient levels of toxics and overall trends. The SAB identified protocols for the monitoring program in March 2000. EPA also developed a strategy with state partners and has now initiated a 13-city national trends network for toxics. The final network will include 30 sites. EPA is also funding regional networks, which will include some mobile platforms, allowing measurement

of some potential hot spots. Including all the state monitors, there are about 390 sites monitoring year-round and over 2,000 with some form of monitoring. (Also see OIG’s *Key Management Challenges*.)

### **5. Information Resources Management (IRM) and Data Quality and Environmental and Performance Information Management**

**(Goal 7):** Consistent, complete, and current data are needed to support full and effective information sharing, environmental monitoring, and enforcement. If EPA and the states apply different data definitions and sometimes collect and input different data, the result can be reporting of inconsistent, incomplete, or obsolete data. EPA needs to continue developing and implementing its information management strategy to address Agency information management challenges such as data gaps. *(FY 1998–2002 GAO major management challenge; FY 1998–2002 OIG major management challenge—tier 1 management challenge in 9/6/02 OIG memo to the Administrator on EPA’s Key Management Challenges combining previous management challenge on IRM with Data Quality management challenge; IRM data management declared an Agency weakness FY 1994; scope of weakness expanded FY 2000, and target correction date extended to FY 2004.)*

*Corrective Action Strategy:* EPA is working in partnership with the states to improve the management, comprehensiveness, consistency and reliability, and accuracy of its data. Better data management will reduce inefficiencies and support better assessment of environmental results and Agency priority-setting to protect human health and the environment. EPA has carried out a number of actions to improve data management practices. The Agency developed and approved six key environmental data standards,<sup>36</sup> and in FY 2002 it completed four data standards while initiating work on additional standards. Meanwhile, EPA is working with states and EPA system and program managers to implement these data standards in major environmental systems. The Agency instituted an Integrated Error Correction Process<sup>37</sup> and drafted a Data and Information Quality Strategic

Plan to present recommendations for improving the quality and management of currently collected data. The Agency completed guidance for the EPA Web site and is developing guidance on administrative control designations. EPA is also revising its IRM Strategic Plan and developing an Enterprise Architecture to address the integration and management of environmental data. Other corrective actions under way include developing a Strategic Information Plan for addressing data gaps, developing an Agency data architecture, developing and putting in place appropriate data management policies and procedures, and improving data collection processes through the use of the Central Data Exchange. EPA expects to release for public discussion this year the State of the Environment Report on environmental indicators. The Agency will continue efforts to identify data needed to manage programs and work with partners to provide timely, accurate, and consistent data. (Also see *OIG's Key Management Challenges*.)

#### **6. Linking Mission and Management (Goal 10):**

EPA works with its regional offices and state and federal partners to develop appropriate outcome measures and accounting systems that track environmental and human health results across the Agency's goals. This information must then become an integral part of senior management's decision making process. (*OIG major management challenge for FY 2002—tier 1 management challenge in 9/6/02 OIG memo to the Administrator on EPA's Key Management Challenges combines FY 2001 management challenges on accountability and managerial accounting.*)

*Corrective Action Strategy:* EPA has long focused on improving the way it manages for results and uses cost and performance information in decision making. The Agency has made substantial progress and achieved the following results in FY 2002: (1) an increased focus on performance and results as key criteria for developing EPA's FY 2004 budget, (2) the Administrator's decision to adopt fewer, more outcome-oriented goals in EPA's revised Strategic Plan, and (3) successful efforts to establish Business Objects as the Agency's standard

financial reporting tool and expand the Financial Data Warehouse to make more information available to managers. EPA has been recognized for its achievements in integrating budget and performance.<sup>38</sup> The OIG has identified important improvement opportunities, and in FY 2003 EPA expects to build on progress made as it completes the revision of its Strategic Plan, implements the recommendations of the Managing for Improved Results Steering Group, and adopts business intelligence tools Agency-wide. In FY 2003 EPA will continue to enhance its cost accounting capabilities to strengthen the linkages between resources and performance in Agency program offices. (Also see *OIG's Key Management Challenges*.)

#### **7. Employee Competencies/Human Capital**

**(Goal 10):** To place the right people with the appropriate skills where they are needed, EPA must make human capital management an integral part of its strategic and programmatic approaches to accomplishing its mission. The Agency needs to determine how human capital actions can best help achieve goals, identify milestones for key actions, and establish results-oriented performance measures for human capital initiatives. With its Human Capital Strategic Plan in place, the Agency has a blueprint for the initial and longer-term steps needed to begin addressing this weakness.<sup>39</sup> (*FY 1998–2002 OIG major management challenge—tier 1 management challenge in 9/6/02 OIG memo to the Administrator on EPA's Key Management Challenges, FY 2000–2002 GAO major management challenge, declared an internal Agency weakness FY 2000.*)

*Corrective Action Strategy:* EPA has made significant progress toward addressing this weakness and meeting the objectives of the President's Management Agenda initiative on Strategic Management of Human Capital. Ongoing efforts include aligning the Agency's human capital planning activities with its strategic planning and budgeting processes, as well as continuing to implement EPA's Human Capital Strategic Plan. The Agency is developing a Workforce Planning System that will link competencies to mission needs along core

business lines. In addition, EPA's Workforce Development Strategy (WDS) is a comprehensive program that focuses on training and development at all levels of the organization. As part of the WDS, the Agency developed and implemented a number of training programs: the New Skills and New Options Program for administrative staff with electronic learning accounts available to eligible employees; the Mid-Level Development Program, which introduces the SES core competencies to most EPA employees; and a management development program that includes supervisory and management training. In addition, EPA selected 51 participants for an SES Candidate Development Program. The Agency has established goal teams to set appropriate baselines to track advances in measuring results and programmatic benefits. The Agency is also working toward better alignment of its human capital strategy with annual performance goals/measures, strategic sub-objectives, and Agency activities. This effort will help the Agency develop human capital measures and set targets for environmental and programmatic outcomes and track its costs and economic impacts. (Also see *OIG's Key Management Challenges*.)

### **8. Improved Management of Assistance**

**Agreements (Goal 10):** EPA needs to improve overall grants management by implementing a competitive award policy and process and by improving prioritization, oversight, and enforcement procedures. EPA needs to address problems repeatedly identified in audit reports concerning EPA's use of assistance agreements to accomplish its mission. (*FY 2002 OMB and OIG candidate material weakness; FY 2000–2002 OIG major management challenge—tier 1 management challenge in 9/6/02 OIG memo to the Administrator on EPA's Key Management Challenges; grants closeout and oversight of assistance agreements was declared a material weakness in FY 1996, reported corrected in FY 1999 and redesignated as an internal Agency weakness; grants closeout was corrected in FY 2000; and improved management of assistance agreements was declared an internal Agency weakness in FY 2000.*)

*Corrective Action Strategy:* During the past year the Agency has made significant progress

in strengthening its grants management. OMB recognized this progress in its most recent Executive Branch Scorecard.<sup>40</sup> A major premise underlying the OIG's recommendation and OMB's concerns was the absence of a policy for competing discretionary grant funds. EPA has squarely addressed that issue by developing a new grant competition policy, which went into effect October 1, 2002.

EPA also continues to make progress in improving post-award management, as evidenced by the high quality of the 2002 post-award monitoring plans, the corrective actions taken by headquarters and regional offices in response to validation reviews, and the development of a new consolidated post-award monitoring policy.<sup>41</sup>

EPA's strategies to improve grants management are solidly based on the risk involved. Each fiscal year, EPA awards approximately \$3 billion in grants to support the environmental programs of state and local governments.<sup>42</sup> These grants constitute more than 87 percent of the grant funds awarded by EPA annually. The concerns raised by the OIG do not demonstrate systemic mismanagement of these funds. This means that the primary area of risk involves other categories of grants that receive relatively small amounts of money (e.g., grants to nonprofit organizations, which receive about 6 percent of EPA's grant dollars each fiscal year). EPA is appropriately managing that risk by making cost-effective improvements to its already extensive set of management controls, including initiatives on post-award monitoring, procurement oversight and environmental results, recipient training and technical assistance, and, most important, strategic planning. These enhancements ensure that the deficiencies the OIG identified do not significantly impair the accomplishment of the Agency's mission, making a material weakness designation unwarranted.

EPA believes that the actions taken in FY 2002 to address the existing Agency weakness have strengthened EPA's grants management program and does not recommend raising grants management to a material weakness. Neverthe-

less, recent EPA validation reviews show that further improvement is needed, a finding supported by OIG audit reports. The Agency will carry the existing Agency weakness into FY 2004 while the long-term strategic plan is implemented and further improvements are made and validated.

#### **9. Innovative Regulatory Programs (Goal 10):**

EPA needs the flexibility to use innovative approaches to address complex and intractable environmental problems that warrant new and more cost-effective approaches. In the absence of specific legislative changes that would provide the authority for EPA to allow states and others to use innovative approaches, the Agency needs to closely monitor the new approaches to ensure they are more effective than the traditional approaches. (*FY 2002 GAO major management challenge.*)

*Corrective Action Strategy:* EPA continues initiatives to fully support and manage innovations and address concerns about flexibility. In April 2002 the EPA Administrator released a new innovation strategy that had resulted from an intensive 9-month task force review of EPA's innovation efforts.<sup>43</sup> The strategy's goals are being implemented through program and regional commitments to specific actions that

have been documented and are being tracked by the Agency's Innovation Action Council. EPA, states, localities, industry, and nongovernmental organizations have been developing, testing, and implementing innovative approaches for more than a decade. These efforts have produced a number of successful innovations, such as the Brownfields revitalization program.

As is always the case when new approaches or alternative ways are tried, some projects did not meet expectations. EPA has taken significant, concrete steps to establish Agency-wide controls that result in better priority setting, planning, and monitoring of results. The Agency has several ongoing efforts to evaluate and learn from particular innovations that represent the best candidates for broader application. EPA has nearly completed an effort to evaluate pilot projects that seek to streamline pollution prevention considerations and infuse them into air permits, and the Agency is beginning to evaluate several innovative approaches to manage hazardous wastes in university labs. The new State Innovation Grants program requires that states receiving grants develop measures and performance outcomes over the lifetime of their projects.<sup>44</sup>

### **FY 2002 MANAGEMENT'S REPORT ON AUDITS**

EPA continues to make progress in reducing the number of audits without final corrective action as well as strengthening its audit management practices Agency-wide. In FY 2002 EPA was responsible for addressing the OIG's recommendations and tracking follow-up activities on 412 audits. During the fiscal year the Agency achieved final action on 164 audits.<sup>45</sup>

Following is a summary of the Agency's audit management activities for FY 2002:

**Final Corrective Action Taken:** EPA completed final corrective action on 24 performance audits and 140 financial audits. Of the 140 financial audits, the OIG questioned costs of more than \$22 million. After careful review, the OIG and the Agency agreed to disallow \$11 million of these questioned costs. For this period, EPA

management and the OIG did not identify audits for which resources could be better utilized (i.e., funds put to better use) based upon findings in a performance audit.

**Final Corrective Action Not Taken:** As of September 30, 2002, 118 audits were without final action (excluding those audits with management decisions under administrative appeal by the grantee). Of these 118 audits, EPA officials had not completed final action on 23 audits (20 percent) within 1 year after the management decision.

**Audits Awaiting Decision on Appeal:** EPA regulations allow grantees to appeal management decisions on financial assistance audits that seek monetary reimbursement from the recipient. In the case of an appeal, EPA must not take

action to collect the account receivable until the Agency issues a decision on the appeal. As of September 30, 2002, 68 management decisions were in administrative appeal status.

### **Audits Pending Final Corrective Action**

**Beyond 1 Year:** Because of the complexity of the issues, it often takes Agency management longer than 1 year after management decisions are reached with the OIG to complete corrective actions on audits. Beginning October 1, 2002, management will track 23 audits with outstanding corrective actions after the 1-year period.

These audits are categorized by three types: program performance audits (14), assistance agreement audits (4), and single audits (5). These audits are discussed below by category and identified by title and responsible office. Additional information on these audits is available, upon request, from OCFO's Audit Management Team (202-564-3633).

*Audits of Program Performance:* Final action for program performance audits occurs when all corrective actions have been implemented. This process might take longer than 1 year when corrections are complex and lengthy. These audits include audits of EPA's financial statements. EPA is tracking 14 audits in this category.

### **Office of Prevention, Pesticides & Toxic Substances:**

101378 Pesticides Inerts  
304030 Pesticides Banned (follow-up)

### **Office of Solid Waste and Emergency Response:**

P00007 RCRA Financial Assurances  
P00028 RCRA Corrective Actions  
S00007 EPA Actions Concerning Libby SF Site  
P00011 Superfund Interagency Agreements

### **Office of Enforcement & Compliance Assurance:**

P00018 Multimedia Enforcement  
P00019 Air Enforcement Stack Tests

### **Office of Administration and Resource Management:**

P00029 Interagency Agreements Follow-up  
P00011 Superfund Interagency Agreements

### **Office of Environmental Information:**

501240 PCIE Application Maintenance

### **Office of Water:**

701142 Animal Waste Disposal Issues  
701223 Mining Financial Assurance

### **Region 2:**

P00001 Combined Sewer Overflows

*Audits of Assistance Agreements:* Final action for assistance agreement audits can take longer than 1 year because the grantee may appeal, refuse to repay, or be placed on a repayment plan that spans several years. The Agency's Audit Follow-Up Coordinators are tracking four audits with financial or associated corrective actions taking longer than 1 year to complete.

### **Region 3:**

102023 Bath County Service Auth VA

### **Region 5:**

100001 Sauget  
103115 Galion, OH  
104047 Indianapolis, IN 4

*Single Audits:* Final action for single audits occurs when non-monetary compliance actions are completed. This might take longer than 1 year to implement if the findings are complex or the grantee does not have the resources to take corrective action. Single audits are conducted of nonprofit organizations, universities, and state and local governments. EPA is tracking completion of corrective action on five single audits for the period beginning April 1, 2002.

### **Region 2:**

300108 United States Virgin Islands

### **Region 5:**

300047 Red Lake Band of Chippewa Indians  
300048 Red Lake Band of Chippewa Indians

### **Region 9:**

805053 Colorado River Indian Tribes, AZ  
805059 Colorado River Indian Tribes, AZ

DISALLOWED COSTS AND FUNDS PUT TO BETTER USE				
Category	Disallowed Cost (Financial Audits)		Better Use (Performance Audits)	
	Number	Value	Number	Value
Audits with management decisions but without final action at the beginning of FY 2002	102	\$153,237,895	30	\$0
Audits for which management decisions were reached in FY 2002	131	\$7,015,479	19	\$0
Total audits pending final action during FY 2002	233	\$160,253,374	49	\$0
Final action taken during FY 2002:	140	\$10,434,962	24	\$0
(i) Recoveries				
(a) Offsets		\$5,179,343		
(b) Collection		\$1,795,202		
(c) Value of Property		\$0		
(d) Other		\$0		
(ii) Write-offs		\$281,354		
(iii) Reinstated Through Grantee Appeal		\$3,179,063		
(iv) Value of recommendations completed				\$0
(v) Value of recommendations management decided should/could not be completed				\$0
Audits without final action at end of FY 2002	93	\$149,818,412	25	\$0

## KEY MANAGEMENT CHALLENGES

*(Prepared by EPA's Office of the Inspector General)*

### TIER ONE

#### Linking Mission and Management

EPA can be viewed as a business which must deliver improved environmental and human health protection to its customers, the American people, at a reasonable cost. To tell its story of performance in relationship to goals, the Agency must develop more outcome-based strategic and annual targets in collaboration with its partners. EPA has output data on activities, but few environmental performance goals and measures, and little data supporting the Agency's ability to measure environmental outcomes and impacts. Reliance on output measures has made it

difficult for EPA to provide the regions and states the flexibility they need to (1) direct resources to their highest priority activities, or (2) assess the impact of Agency work on human health and the environment. Better performance measurement and financial accountability can be achieved through clearly linked, meaningful performance measures with defined environmental outcome goals. To be accountable to the American people, EPA and its partners need to capture and report consistently meaningful and timely environmental and human health results, along with cost information.<sup>46</sup>

The Agency plans to issue a draft report on the environment in FY 2003 that will bring

together national, regional, and program office indicator efforts to describe the condition of critical environmental areas and human health concerns. Perfecting this report will be a multi-year process, but preparing the report is a significant step forward. It will allow the Agency to inventory and report on existing indicators, identify data gaps, and develop plans to address the challenges in filling these gaps.<sup>47</sup>

In response to the need for reliable cost information, the Office of the Chief Financial Officer (OCFO) has purchased a financial management business intelligence reporting tool for managerial cost accounting and reporting. OCFO will work with selected offices to define and develop program-specific and executive reports to help managers analyze data to support resource decisions, manage costs, and gauge program results.<sup>48</sup> As the Agency implements cost accounting, its success will rely on how well EPA program offices (1) define their mission-critical activities; (2) identify data needs, determine whether such data exists and, if so, where it resides; (3) link information systems to optimize data usability and minimize data integrity concerns; and (4) technically design program-specific and executive cost reports using the new reporting tool. OCFO will need to work closely with each program office in these areas for its cost accounting solution to be successful Agency-wide.

During the past year, EPA examined options for improvements in its ability to manage for results and account for resources. In June 2002, senior Agency leaders issued a draft report to the Administrator recommending specific changes in four areas: Planning, Performance Measurement, Accountability and Feedback, and the Agency's Capacity to Manage for Results. The steering group also suggested improvements for the 2004 budget process, and will develop a change strategy for memorandum of understanding agreements between national program managers and regions regarding annual work planning.<sup>49</sup>

EPA has begun developing the process for linking costs to goals but must follow through by working with its regional offices and state and

federal partners to develop appropriate outcome measures and accounting systems that track environmental and human health results across the Agency's goals. This information must then become an integral part of senior management's decision-making process.<sup>50</sup>

### **Information Resources Management and Data Quality**

EPA faces a number of challenges with the data it uses to make decisions and monitor progress against environmental goals. Those challenges cover a broad range of interrelated activities including (1) using enterprise and data architecture strategies to guide integration and management of data; (2) implementing data standards to facilitate data sharing; and (3) establishing quality assurance practices to improve the reliability, accuracy, and scientific basis of environmental data, including data derived from laboratories.<sup>51</sup> EPA and most states often apply different data definitions supporting their own information systems, and sometimes collect and input different data resulting in inconsistent, incomplete, and obsolete consolidated national data.

EPA acknowledges IRM data management as an Agency-level weakness and has specifically targeted various components for improvement. However, developing a robust data management program remains a complex and elusive effort, and several areas still need to be completed.<sup>52</sup> For example, the Agency has yet to implement a 1998, agreed-upon, OIG recommendation to formally revise its policies and procedures supporting an Agency standards program.<sup>53</sup> EPA developed and formally approved seven data standards; however, states will be allowed to decide whether or not to adopt these standards.<sup>54</sup> Data standards are a fundamental component for implementing EPA's National Environmental Information Exchange Network and other e-government initiatives.<sup>55</sup> If EPA's exchange network infrastructure is to work effectively, the use of data standards should be a required condition for receiving money under the Exchange Grant Program.



EPA estimates that the first six standards will not be implemented in major environmental systems until the end of FY 2003.<sup>56</sup> During the interim, EPA is working with the Environmental Council of States (ECOS) to identify and develop additional data standards. However, past experiences suggest that the overall process needs to move forward in a more timely and structured manner.<sup>57</sup>

Data reliability is another major aspect of data management that needs further attention. Recent audits indicate systems used by EPA's Enforcement, Superfund, and Water programs have inconsistent, incomplete, and obsolete data. For example, we are concerned that the system EPA uses to manage its drinking water programs, SDWIS-FED, is not well designed and implemented.<sup>58</sup> Also, data in two major Agency systems contain significant error rates in crucial data fields used to track environmental progress on Government Performance and Results Act (GPRA) goals and measures.<sup>59</sup> For example, over 90 percent of the cases reviewed within EPA's National Enforcement Docket System contained errors.<sup>60</sup>

The Agency has responded to data quality concerns by instituting an Integrated Error Correction Process, which provides a mechanism for reporting and resolving errors identified by the public on EPA Web sites.<sup>61</sup> Last year, EPA drafted a Data Quality Strategic Plan to prioritize recommendations for improving the quality of currently collected data, but the draft plan did not address the long-recognized problem of data gaps.<sup>62</sup> EPA plans to issue its first *Environmental Indicators Report* in 2002, which should help identify gaps between existing and needed environmental data.<sup>63</sup>

Questionable analyses by laboratories raise concerns about the effectiveness of environmental decisions and lead to additional costs and unnecessary delays when EPA has to identify and assess the impact of the fraudulent data and undertake additional sampling. In a June 1999 memorandum to the Acting Deputy Administrator, the OIG suggested actions the Agency could take to better identify data of questionable quality. Ongoing lab fraud

investigations in FY 2002 indicate that despite Agency efforts to ensure improved data quality, manipulated data continues to be generated and supplied to EPA.

OIG reviews and investigations have disclosed a disturbing trend in the number of environmental laboratories that are providing misleading and fraudulent data to the states for monitoring the Nation's public water supplies. For example, several current lab fraud investigations involve severe manipulation of data used to evaluate the compliance of public water supplies with federal drinking water standards. Many other EPA programs (e.g., Superfund, Resource Conservation and Recovery Act, National Pollution Elimination and Discharge System, air toxins, underground storage tanks, and pesticides) have also been impacted by laboratory fraud.<sup>64</sup>

The Agency has conducted extensive technical systems assessment audits at all EPA regional and research laboratories. In addition, EPA has provided fraud detection and awareness training and ethics training; studied electronic methods for screening data; and issued guidance discussing the level of quality assurance given the intended use of data. These efforts should help to improve the quality assurance systems and documentation throughout the Agency's environmental laboratories. However, until the impact of these and any other recommended actions is realized, EPA must continue to assess and improve its controls over laboratory data quality.<sup>65</sup> In its mid-year Integrity Act report for FY 2002, the Agency considered laboratory quality to be an Agency weakness.<sup>66</sup>

As a result of current shortcomings, EPA will not have the foundation needed to share or compare information, or to monitor environmental activities in the near future. EPA's ability to make environmental decisions, enforce environmental laws and evaluate the outcomes of its programs in terms of environmental changes may continue to be limited by gaps and inconsistencies in data quality. EPA needs to continue to identify what data is necessary to manage its programs and work with its partners

to capture and report timely, accurate, and consistent information.<sup>67</sup>

## Employee Competencies

One of the Agency's greatest challenges is the development and implementation of a workforce planning strategy that links employee development to its goals. To achieve its environmental goals and objectives, EPA must have a competent, well-trained, and motivated workforce with the right mix of skills and experience, and a system for holding employees accountable for achieving strategic goals.<sup>68</sup>

The General Accounting Office (GAO) reported that EPA needs to implement a workforce planning strategy to determine the skills and competencies essential for meeting current and future needs and improve employee training.<sup>69</sup> A number of OIG reports also highlighted the need for improved training at EPA.<sup>70</sup> Acknowledging that appropriate training is critical to ensuring the credibility of its actions, the Agency (1) fostered a series of management development programs; (2) established a contract to develop training for mid-level professionals and managers; and (3) initiated a contract to create a workforce planning model to identify skills needs and gaps, and target recruitment and retention for critical occupations.<sup>71</sup>

GAO recently testified that EPA has made substantial progress in developing a strategy to manage its workforce, yet it also acknowledged that EPA still needs to integrate this strategy into its daily business practices. In particular, EPA must:

- Specifically address how human capital activities will help achieve environmental goals.
- Identify milestones for completing actions to implement its human capital objectives.
- Further its commitment to deploy the strategy by dedicating resources.
- Help regions and program offices develop specific technical training plans that link into the human capital strategic plan.

- Establish results-oriented performance measures.<sup>72</sup>

The Agency recognized human capital as a key Agency priority in its FY 2001 Strategic Plan. In response to OIG and GAO recommendations, EPA also began implementing a Human Capital Strategic Plan. The plan calls for identifying the skills needed in every program unit by assessing future needs, identifying skills gaps, and tying skill needs to future budget requests. In calendar year 2003, EPA plans to complete a model workforce planning process and deploy a system that will meet the Agency's competency-based workforce planning needs.<sup>73</sup>

While progress has been made and additional work is planned, this area continues to be a key challenge. In a recent briefing, EPA provided information to the OIG concluding that staff has limited experience in non-traditional, collaborative approaches to environmental problem solving. Training is needed to develop management skills to better focus on outcomes and do business with EPA partners.<sup>74</sup> The OIG will continue to monitor the Agency's progress in developing a system that ensures a well-trained and motivated workforce with the right mix of skills and experience. Implementation of the Human Capital Strategic Plan is an Agency-level weakness under the Federal Managers Financial Integrity Act.<sup>75</sup>

## EPA's Use of Assistance Agreements to Accomplish Its Mission

Assistance agreements constitute approximately one-half of EPA's budget and are the primary vehicles through which the Agency delivers environmental and human health protection.<sup>76</sup> Thus, it is important that EPA and the public receive the value for which the Agency has paid.

OIG audit work has repeatedly identified problems in this area. Recent OIG audits reported that some EPA assistance recipients did not have adequate financial and internal controls to ensure federal funds were managed properly. As a result, EPA had limited assurance that grant funds were used in accordance with work plans

and met negotiated environmental targets. For example, an EPA Region 5 grantee could not adequately account for over half of its \$300,000 in EPA funds.<sup>77</sup> Also, a Region 1 grantee had submitted multiple financial status reports with different ending balances, had excess federal funds on hand, and could not support that it had met the minimum cost-sharing requirement.<sup>78</sup> Misuse of grant funds also resulted in the City of Cleveland agreeing to settle a civil lawsuit charging that its Air Pollution Control Program improperly spent over \$429,000 in grant funds.<sup>79</sup>

Further, in May 2001, the OIG reported that EPA did not have a policy for competitively awarding \$1.3 billion in discretionary assistance funds and recommended such a policy be developed. The Agency agreed and is drafting a policy to address competition in the award of discretionary assistance funds.<sup>80</sup>

The Agency has taken several actions to improve its oversight controls over assistance agreements, including requiring additional training for all project officers and issuing policy on project officer and grant management oversight roles and responsibilities.<sup>81</sup> However, recent reports and ongoing work indicate that Agency efforts to improve assistance agreement management are still not uniformly effective. In March 2002 the OIG reported that the Agency did not always measure whether assistance agreements awarded as surveys, studies, investigations, and special purpose grants achieved results that contributed to protecting human health and the environment.<sup>82</sup> The OIG reported that EPA lacked assurance that \$187 million spent by assistance agreement recipients for procurements was used to obtain the best products, at the best price, from the most qualified firms.<sup>83</sup>

Ongoing OIG work shows that some Agency actions to address grant oversight weaknesses have not been effective. For example, the Office of Administration and Resources Management developed post-award monitoring policies, but these policies were not always followed. On-site evaluations, and oversight and baseline monitoring of assistance agreements by grant specialists were not sufficient to assure that

agreement recipients were complying with the requirements of the grants and are appropriately using EPA funds.<sup>84</sup> In May 2002 OIG recommended the Agency elevate this issue from an Agency weakness to a material weakness under the Integrity Act.<sup>85</sup>

### **Protecting Critical Infrastructure From Non-Traditional Attacks**

In 2001 OIG reported that EPA had yet to fulfill its responsibilities under Presidential Decision Directive (PDD) 63 regarding the development of a national framework for protecting critical physical and cyber-based infrastructures.<sup>86</sup> In the past year the Agency reported that it had made significant progress in completing many of the tasks outlined in a draft 1998 plan to develop a National Infrastructure Assurance Plan.<sup>87</sup> However, the attacks of September 11, 2001, greatly increased the scope and priority of EPA's mission in protecting critical infrastructure.

The July 2002 *National Strategy for Homeland Security*, issued by the Office of Homeland Security, designates EPA as the lead agency for protecting critical infrastructure and key assets in the water and chemical industry and hazardous materials sectors.<sup>88</sup> This responsibility is consistent with the Agency's traditional oversight role in water and wastewater infrastructure security and the cleanup of chemical, biological, and certain radiological attacks; and as the primary regulator of chemical facilities. Thus, EPA must be prepared to fulfill crisis and consequence management responsibilities in the wake of a terrorist incident and it must be prepared to help detect, prevent, protect against, respond to, and recover from a terrorist attack against the United States.<sup>89</sup> Moreover, Public Law 107-188, the Public Health Security and Bio-terrorism Response Act, signed in June 2002, specifically tasked EPA with funding and overseeing water system vulnerability assessments and the resulting response.<sup>90</sup> The Agency's infrastructure protection needs have been further defined by the lessons it learned from the World Trade Center response and the cleanup of the anthrax-contaminated buildings.<sup>91</sup> These combined

challenges are identified and addressed in EPA's draft Strategic Plan for Homeland Security. Among the many infrastructure protection challenges contained in the plan are the following:

- To assist water and waste water utilities in every community in the United States to (1) access the best scientific information, training, and technical expertise on water security; (2) assess their utility's vulnerabilities to a possible attack; (3) take action to improve security; and (4) respond effectively and efficiently in the event that an incident occurs.<sup>92</sup>
- To develop a water utility security research plan and establish a technology verification program for water utility security as well as to evaluate promising technologies.<sup>93</sup>
- To support and develop the preparedness of state and local governments and private industry to respond to, recover from, and continue operations following a terrorist attack. For example, EPA will work with other agencies to ensure that building air protection guidance is produced and widely disseminated, and that training on such guidance is available. EPA will also work with our partners in other federal agencies, academia, industry, and public health organizations to identify and conduct research on needed technologies, as appropriate.<sup>94</sup>

To achieve the goals in EPA's Strategic Plan, the Agency will need to apply technical, organizational, resource, training, and communication assets to complex issues with unprecedented dispatch. Success will require simultaneous attention to questions of threat, capabilities and deficiencies, preparedness, management and oversight, and efficiency and effectiveness. The OIG plans to address these issues in its multi-year oversight of the Agency's implementation of its homeland security plan in support of the Office of Homeland Security.<sup>95</sup>

## **Challenges in Addressing Air Toxics Program Phase 1 and Phase 2 Goals**

Toxic air pollution remains one of the most significant health and environmental problems in the United States, causing cancer, neurological, immunological, and other serious health problems.<sup>96</sup> Despite the potential for serious harm, EPA is nearly 2 years behind in fulfilling its statutory responsibilities for issuing all Phase 1 air toxics standards (also known as MACT standards<sup>97</sup>) by the November 2000 statutory deadline.<sup>98</sup> Of 174 air toxics categories that EPA is required to regulate under the 1990 Clean Air Act,<sup>99</sup> EPA has issued MACT standards for about 86 categories.<sup>100</sup> The Agency's most recent estimate for completing the Phase 1 MACT standards is 2004.<sup>101</sup> EPA's delay in issuing the Phase 1 MACT standards was identified as an Agency weakness in 2001.<sup>102</sup>

Of even more importance is that Phase 1 is solely a technology-based approach to emissions reductions, and may not provide acceptable health protections from exposure to air toxics.<sup>103</sup> EPA will assess the health risks of the 188 toxic air pollutants in the second phase of the two-phased approach, known as the "residual risk" phase.<sup>104</sup> No Phase 2 residual risk standards have been completed.<sup>105</sup> The Science Advisory Board has questioned EPA's early efforts at assessing residual risks,<sup>106</sup> including whether the Agency might seek statutory relief from Phase 2. The Phase 2 residual risk determinations are expected to be expensive and controversial based on the limited amount of air toxics health data available and the projected costs of compliance for industry.<sup>107</sup> Although the Clean Air Act listed 188 air toxics that EPA must control, to date the Agency has focused largely on 33 of the suspected worse air toxics prevalent in urban areas.<sup>108</sup> Significant data gaps in our understanding of these 33 highest priority air toxics still exist.<sup>109</sup> Additionally, EPA has limited health and ecological effects information, exposure data, emissions data, source characterization data, and ambient data on many of the remaining 155 air toxics.<sup>110</sup>

At the present time, the air toxics program relies heavily on industry emissions data for its

GPRA measures, some of which are generated by using inferior emission estimation techniques.<sup>111</sup> The lack of a robust set of ambient monitoring data on the quantity and concentrations of air toxics is also a concern.<sup>112</sup> The Agency estimates that mobile sources may contribute half of all air toxics emissions,<sup>113</sup> and there is little health data on the synergistic impacts of exposures to multiple air toxics, such as the exposures that routinely occur in urban areas—the types of exposures that some scientists believe are the leading health impact from air toxics.<sup>114</sup>

EPA requested \$118 million for all air toxics activities for FY 2003, or about 20 percent of its clean air budget.<sup>115</sup> About one-third of the air toxics budget goes to 112 state and local agencies that have authority to implement existing air toxics regulations, including permitting and inspecting sources for air toxics.<sup>116</sup> EPA's goal is to eliminate the risks of cancer and other significant health problems from air toxics emissions for 95 percent of the U.S. population by 2020.<sup>117</sup> We will continue to monitor the progress EPA makes in addressing this important issue.<sup>118</sup>

## **TIER TWO**

### **EPA's Working Relationship With the States**

According to ECOS, in FY 2001, the authority to implement about 80 percent of the environmental programs rested with the states, which provided about 65 percent of the financial resources to EPA's 35 percent. Accordingly, the Agency relies to a great extent on the states for environmental results, the data used to measure performance against standards, and for enforcement actions against violators. Yet, the Agency and states have been unable to agree on state flexibility and accountability issues. Relations remain strained due to disagreements over (1) respective roles and the extent of federal oversight; (2) priorities and budgets; and (3) results-oriented performance measures, milestones, and data. EPA can improve its working relationship with states by establishing a structure to mutually set direction, establish

goals, provide training, oversee accomplishments, and ensure accountability.<sup>119</sup>

The National Environmental Performance Partnership System (NEPPS) established EPA-state working partnerships to address complex environmental issues with scarce resources. One of the primary tools for implementing NEPPS, performance partnership grants (PPGs), allows states and tribes to combine multiple EPA grants into one.

A series of OIG audits on regional and state NEPPS program implementation (including PPGs) reported that NEPPS principles were not well-integrated into EPA because of the lack of (1) leadership providing a clear direction and expectations, (2) training and guidance, (3) trust in NEPPS due to fear of change and losing control, and (4) goals and related performance measures to monitor and measure progress on achieving better environmental results.<sup>120</sup>

Since the OIG began reporting on NEPPS, the Agency has been working to fulfill its potential. To address the lack of leadership and clear direction for NEPPS, the Agency formally designated the Assistant Administrator for the Office of Congressional and Intergovernmental Relations (OCIR) as the National Program Manager for NEPPS. OCIR has developed a strategy for NEPPS issues and is developing tools to promote better understanding of NEPPS and clarify appropriate expectations.<sup>121</sup>

The current Administrator has also expressed a personal commitment to seeing NEPPS succeed and expand by (1) requiring regular reports from the Regional Administrators on how NEPPS is working; and (2) asking the Assistant Administrators, regions and states to jointly identify areas where flexibility is available and encourage testing new measures of program performance. In addition, EPA and ECOS are working jointly to remove remaining barriers to effective implementation of NEPPS. The Agency also solicited formal input from ECOS and the Tribal Caucus on state and tribal priorities for the EPA FY 2003 and 2004 annual planning and budgeting process. This information will be incorporated into EPA's strategic and annual planning processes and will influence the

development of performance goals and targets under GPRA.<sup>122</sup>

Although the Agency has taken some notable actions to improve EPA's working relationship with states, the OIG believes much remains to be done. For example, EPA and state managers continue struggling with ways of providing states flexibility to address their highest environmental priorities while implementing and reporting on core program requirements. In addition, EPA has not defined its performance measures and related milestones to monitor EPA and state progress toward accomplishing NEPPS and PPG goals. OIG is continuing to monitor the Agency's progress in addressing this important issue.<sup>123</sup>

### **EPA's Information Systems Security**

EPA's information systems collect, process, store, and disseminate vast amounts of information used to help make sound regulatory and program decisions. Therefore, it is essential that the Agency prevent intrusion and abuse of these systems and protect the integrity of its data.

Under the leadership of the Office of Environmental Information (OEI), EPA is working toward its goal to make information on its computer systems available, while protecting the confidentiality and integrity of its information. The Agency has substantially enhanced its Information Security Program through improved risk assessment and planning processes, major new technical and procedural controls, issuance of new policies, and initiation of a regular process of testing and evaluation.

The dynamic nature of security, however, requires continued emphasis and vigilance. We believe the following actions are needed to protect the Agency's information and systems.

- Implement a formal incident response plan. OEI is trying to address this need through draft guidelines and a strong working relationship with the OIG's Computer Crimes Unit. Also, a contract to develop an incident response capability will soon be awarded. Furthermore, an informal process has been agreed upon for timely referral of potential

incidents, coordination, securing of evidence, and other vital actions.

- Establish a robust quality assurance (QA) program. Without regular, effective oversight processes, EPA management will continue to place unsubstantiated trust in its many components to fully implement, practice, and document security requirements. Moreover, the public and Congress may continue to question how well the Agency plans for and protects its information resources. EPA's decentralized organizational structure makes it essential that OEI provide strong leadership and oversight to ensure the effectiveness of its entity-wide computer security program. OEI has begun addressing these responsibilities, but additional resources are needed to fully develop and implement QA processes Agency-wide.<sup>124</sup>
- Implement an organizational structure under which Information Security Officers (ISOs) are accountable directly to the OEI. EPA's decentralized Wide Area Network infrastructure and its security procedures create serious vulnerabilities. Since intrusion detection sensors on the central network cannot track subnetwork activity, subnetwork security relies upon the expertise of assigned ISOs. The experience and training of the ISOs, as well as their methods of obtaining information and providing security maintenance vary greatly. Furthermore, OEI has no direct supervisory relationship over them since they report to and are evaluated by the regional or program offices to which they are assigned. This relationship makes it difficult for OEI to mandate Agency-wide changes, deal with personnel issues and inefficiencies, resolve security conflicts, or detect and respond to security vulnerabilities on a subnetwork level.<sup>125</sup> In its mid-year Integrity Report for FY 2002, the Agency considered information security to be a material weakness.<sup>126</sup>

## **Backlog of National Pollutant Discharge Elimination System (NPDES) Permits**

The Clean Water Act specifies that NPDES permits expire in 5 years.<sup>127</sup> Permittees wishing to continue discharging beyond that term must apply for permit renewal at least 6 months prior to the expiration date of their permit.<sup>128</sup> If the permitting authority receives a renewal application but does not reissue the permit prior to expiration, the permit may be “administratively continued.”<sup>129</sup>

Administratively continued, or “backlogged,” permits are a major concern because conditions may have subsequently changed since the original permit was issued, and new restrictions on permits may now apply. However, “backlogged” permits would not contain these new terms and conditions, thereby delaying potential environmental improvements to waters.<sup>130</sup>

The Agency recognizes that the backlog of NPDES permits is a nationwide problem and has developed a corrective action plan.<sup>131</sup> The plan includes (1) using new technology to streamline the permit development process, (2) providing environmental assessments and permit assistance to the states, and (3) communicating the importance of this issue to the states and EPA regional offices and receiving their firm commitments to reduce the backlog.<sup>132</sup>

Last year, EPA’s goal was to reduce the backlog of NPDES permits for major facilities to 10 percent by the end of calendar year 2001 and to 10 percent for major and minor permits by the end of calendar year 2004.<sup>133</sup> As of February 2002, only 18 states had met the 10 percent backlog goal for majors.<sup>134</sup> During FY 2002, EPA drafted a system for prioritizing and reissuing backlogged permits to focus on those with the most significant environmental impact, but the Agency no longer expects to meet its 2004 goal.<sup>135</sup> Corrective actions are not expected to be completed until the end of FY 2005.<sup>136</sup>

The Agency realizes it needs to find new ways of implementing the NPDES program or the problem will increase.<sup>137</sup> Accordingly, it is

considering several innovative solutions to expedite permit renewal and prevent backlogs, such as issuing general permits for a class of similar facilities<sup>138</sup> and using information technology to expedite the entire permit development process.<sup>139</sup> It is also committing to provide increased contractor capacity for state permit issuance work.<sup>140</sup>

This issue was identified as an Integrity Act material weakness in 1998 and was reduced to an Agency weakness at the end of FY 2002.<sup>141</sup> OIG will continue monitoring EPA’s progress in addressing this important issue.<sup>142</sup> Eliminating the backlog and making the permit issuance process more efficient will release resources for other important activities.<sup>143</sup>

## **Management of Biosolids**

Approximately 6 million tons of sewage sludge (“biosolids”) are produced annually by sewage treatment plants in the United States.<sup>144</sup> With inadequate treatment these biosolids may contain a wide variety of chemicals and pathogens, the remains of the sewage treatment process.<sup>145</sup> The OIG believes that EPA (1) does not know whether current regulations, when adhered to, are protective of public health;<sup>146</sup> (2) does not have an overall understanding of the magnitude and quality of biosolids production and disposal practices;<sup>147</sup> and (3) does not know if the enforcement and compliance resources committed to managing biosolids are adequate to ensure that the regulations are adhered to.<sup>148</sup>

EPA has not conducted the basic research needed to determine the risk associated with certain biosolids disposal practices.<sup>149</sup> The Agency has taken the position that biosolids management is a low-risk activity.<sup>150</sup> As a result, EPA has failed to adhere to its commitment to comprehensively assess the extent of the risk.<sup>151</sup> EPA issued Part 503 of Title 40 of the Code of Federal Regulations (“The Sludge Rule”) to govern the use and disposal of biosolids in February 1993 under court order. When the Agency issued the rule, it committed to conducting a comprehensive research program to assess the risks associated with land

application of biosolids; however, it has not yet done so.<sup>152</sup> In June 2002 the National Academy of Sciences (NAS) recommended additional research.<sup>153</sup> EPA is currently studying those recommendations, and has committed to producing a research work plan by the end of 2003, nearly 11 years after committing to do so.<sup>154</sup>

EPA uses the Permit Compliance System (PCS) to manage water quality activities of point source dischargers such as sewage treatment plants, but the Office of Water (OW) has acknowledged that PCS is inadequate for managing biosolids.<sup>155</sup> EPA is unable to answer basic questions such as how much biosolids is land-applied.<sup>156</sup> As a result of this data gap, OW developed an independent system, the Biosolids Data Management System (BDMS), to track compliance with biosolids regulations.<sup>157</sup> EPA is revising PCS, but has not yet decided whether to incorporate BDMS into this new version. According to OW, “the ultimate usefulness of the BDMS on a national basis is likely dependent upon its adoption into PCS.”<sup>158</sup>

EPA has diverted compliance and enforcement resources away from this program.

The safety of biosolids land application depends on the adherence to highly technical treatment standards by land applicators across the country. In a 2000 report OIG found inadequacies in EPA’s management and enforcement of the biosolids program.<sup>159</sup> In a status report on the biosolids program published 2 years later, OIG reported a further 44 percent reduction in full-time equivalent (FTE) positions (from 18 to 10).<sup>160</sup> This is a particular concern because EPA runs the biosolids program in 45 states.<sup>161</sup> Adequate oversight of this program is critical for ensuring regulatory compliance. To date, EPA has not committed the resources needed to fulfill its oversight responsibilities.

In convening a committee to study the NAS recommendations EPA is beginning to address these issues. Several issues remain unsettled and the OIG is not convinced that the Agency is directing adequate resources to resolving these concerns. OIG will continue to monitor EPA’s progress in this area until these issues are settled.<sup>162</sup> In May 2002 the OIG recommended this issue as an Agency weakness under the Federal Managers Financial Integrity Act.<sup>163</sup>



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  120. *Improving Region 5's EnPPA/PPG Program*, 2000-P-00008 (February 29, 2000); *EPA Needs Better Integration of the National Environmental Performance Partnership System*, 2000-M-000828-000011 (March 31, 2000); *Region 8 Needs to Improve Its Performance Partnership Grant Program to Ensure Accountability and Improved Environmental Results*, 1999-000209-R8-100302 (September 29, 1999); *Region 4's Implementation and Oversight of Performance Partnership Grants*, 1999-P-00216 (September 27, 1999); *Region 6 Oversight of Performance Partnership Grants*, 1999-000208-R6-100282 (September 21, 1999).
  121. *Water Enforcement: State Enforcement of Clean Water Act Dischargers Can Be More Effective*, 2001-P-00013 (August 2001).
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  123. *EPA's Progress Using the Government Performance and Results Act to Manage for Results*.
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  127. U.S. EPA, *Backlog Reduction: Overview*. Available at <http://cfpub.epa.gov/npdes/permitissuance/backlog.cfm>; accessed December 23, 2002.
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  129. *Ibid.*
  130. U.S. EPA, *Fact Sheet—NPDES Permit Backlog Reduction*, p. 1. Available at <http://cfpub.epa.gov/npdes/permitissuance/reductiondocs.cfm>; accessed December 23, 2002.

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132. U.S. EPA, *Fiscal Year 2001 Annual Report*, p. III-18.
133. *Ibid.*, p. III-3; *Backlog Reduction Goals and Current Rates*, available at <http://cfpub.epa.gov/npdes/permitissuance/goals.cfm>, accessed December 23, 2002.
134. A backlog status report that is updated every quarter is available at <http://cfpub.epa.gov/npdes/permitissuance/backstat.cfm>.
135. U.S. EPA, *Fiscal Year 2001 Annual Report*, p. III-3.
136. *Ibid.*
137. *Ibid.*, p. III-18.
138. U.S. EPA, Office of Water, Office of Wastewater Management, p. 2-2; U.S. EPA, *Fiscal Year 2001 Annual Report*, p. III-18.
139. U.S. EPA, Office of Water, Office of Wastewater Management, p. 5-4; U.S. EPA, *Fiscal Year 2001 Annual Report*, p. III-3.
140. U.S. EPA, Office of Water, Office of Wastewater Management, p. 5-5.
141. U.S. EPA, *Fiscal Year 2001 Annual Report*, p. III-3. Auditor's Note: The Agency has noted that it will report the NPDES permit backlog as corrected in the 2002 Annual Report and will continue to monitor this backlog as an Agency-level weakness. (U.S. EPA, *Financial Management Five-Year Plan FY 2002–FY 2007* (September 2002), p. AI-13).
142. U.S. EPA, *Fiscal Year 2001 Annual Report*, p. III-18.
143. U.S. EPA, *Financial Management Five-Year Plan FY 2002–2007*, p. AI-14; U.S. EPA, *Fiscal Year 2001 Annual Report*, p. III-18.
144. National Academy of Sciences, *Sewage Sludge Standards Need New Scientific Basis*. Available at <http://www4.nas.edu/news.nsf/isbn/0309084865?OpenDocument>.
145. *Ibid.*
146. *Biosolids Management and Enforcement*, p. ii.
147. *Ibid.*, p. 30.
148. *Ibid.*, p. 18.
149. National Academy of Sciences.
150. *Land Application of Biosolids*, 2002-S-000004 (March 28, 2002), p. i.
151. *Ibid.*, p. ii.
152. *Ibid.*, p. 18.
153. National Academy of Sciences.
154. Letter from Tracy Mehan and Paul Gilman to EPA regions and State Commissioners (October 31, 2002).
155. *Biosolids Management and Enforcement*, pp. 30, 44.
156. *Ibid.*, p. ii.
157. *Ibid.*, p. 20.
158. Memorandum from Office of Water responding to OIG's nomination of biosolids as a major management challenge (e-mail from Brigid Rapp of OCFO to Kwai Chan and Dan Engelberg, August 29, 2002), p. 2.
159. *Biosolids Management and Enforcement*, p. ii.
160. *Land Application of Biosolids*, p. i.
161. *Ibid.*
162. OIG Conclusion.
163. Memorandum from Nikki Tinsley to Linda Combs (May 20, 2002), p. 4.



*Section IV*

**FY 2002 Annual  
Financial  
Statements**

## **FY 2002 ANNUAL FINANCIAL STATEMENTS**

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# CHIEF FINANCIAL OFFICER'S ANALYSIS OF EPA'S FISCAL YEAR 2002 AND 2001 FINANCIAL STATEMENTS

## *Summary of Auditor's Report and Opinions*

The Environmental Protection Agency (EPA) prepared the following Fiscal Year (FY) 2002 Financial Statements: Statement of Financial Position (Balance Sheet), Statement of Changes in Net Position, Statement of Net Cost, Statement of Budgetary Resources, Statement of Financing, and Statement of Custodial Activity. In addition, we prepared a Statement of Net Cost by Goal for each of the Agency's 10 Strategic Goals.

The Office of Inspector General (OIG) stated: "In our opinion, the consolidating financial statements present fairly the consolidated and individual assets, liabilities, net position, net cost, net cost by goal, changes in net position, reconciliation of net cost to budgetary obligations, and custodial activity of the U.S. Environmental Protection Agency and its subsidiary funds, the Superfund Trust Fund and All Other Appropriated Funds, as of and for the years ended September 30, 2002 and 2001, and budgetary resources as of and for the year ended September 30, 2002, in accordance with generally accepted accounting principles."

## Report on Internal Controls

The OIG's Audit Report on the EPA's Fiscal 2002 and 2001 Financial Statements did not identify any material weaknesses.<sup>1</sup> However, the Report cited seven reportable conditions. These reportable conditions are summarized below, along with a short statement of the Agency's position with respect to each of those items.

- **Documentation and Approval of Journal Vouchers**—The OIG noted that the Agency did not always adequately document journal vouchers and standard vouchers prior to the transactions being entered into the Agency's Integrated Financial Management System (IFMS). The OIG ascertained that most of the entries appeared to be correct but was concerned about the vulnerability associated with executing transactions without proper documentation and supervisory review and approval. The Office of the Chief Financial Officer (OCFO) will issue a general reminder to the staff to fully document and support all entries to IFMS.
- **Reconciling Superfund State Cost Share Contracts**—The OIG noted that improvement was needed in reconciling unearned revenue for State Superfund Contracts (SSC). EPA did not reconcile the unearned revenue from SSC for FY 2002 because the Agency relied on its accounting system's internal controls and regional year-end adjustments to unearned revenue. As a result, the Agency could not ensure the accuracy of the SSC unearned revenue accounts, which totaled approximately \$45 million.

EPA agrees that improvement is needed. As a result of the audit findings and the subsequent reconciliation, the Agency was able to make on-top adjustments for most of the regional errors and reduce the overall variance to avoid a material misstatement of Unearned Advances. In the future, the Agency will calculate the SSC revenue and perform a reconciliation at year end to validate the unearned revenue remaining after the regional SSC accruals have been posted. The OCFO will issue additional written guidance to the regions on how to calculate the accruals and increase their oversight.

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<sup>1</sup> A material weakness is a reportable condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatement of amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions.

- **Reconciliation of Deferred Cashouts**—The OIG found that EPA regions did not periodically reconcile the uncollected receivables for Superfund cashouts to the general ledger liability accounts. Cashouts represent money that potentially responsible parties agree to pay EPA to fund future cleanup work at Superfund sites. The OCFO agrees with the need to prepare written guidance for reconciling uncollected cashout accounts and will issue written guidance for reconciliation.
- **Integrated Grants Management System Security Plan Compliance with Federal Requirements**—The OIG noted the Integrated Grants Management System (IGMS) Security Plan did not adequately describe the security requirements nor the controls used to protect the System and its data. The Office of Grants and Debarment agrees with the OIG’s recommendation to revise the IGMS Security Plan to include requirements identified in the Joint Financial Management Improvement Program (JFMIP) standards for financial systems and the National Institute of Standards and Technology Standard 800-18.
- **Automated Application Processing Controls**—As part of the OIG’s FY 2002 financial statement audit, the OIG evaluated the Agency’s Integrated Financial Management System (IFMS) replacement activities and found that EPA has taken tangible steps to replace IFMS through the Financial Replacement System project. The OIG believes that EPA is moving in a credible fashion towards replacing IFMS and made no recommendations in this area at this time.
- **Capitalization of Superfund Contractor-Held Property**—The OIG recommended that the OCFO capitalize current Superfund site-specific contractor-held property costs meeting capitalization thresholds and only remove property from the general Property, Plant, and Equipment accounts in accordance with Statement of Federal Financial Accounting Standards (SSFAS) No. 6, *Accounting for Property, Plant, and Equipment*. EPA agrees with the OIG’s recommendation and will issue written guidance on capitalization criteria.
- **Revenue Recognition on Cashouts**—The OIG cited the Agency for not restating the FY 2001 statements to properly characterize a \$53 million on-top adjustment as unearned revenue from future costs or earned revenue from past costs. In response, EPA restated in the FY 2002 statements its FY 2001 Balance Sheet, Statement of Net Cost, Statement of Changes in Net Position, and Statement of Financing to correctly reflect the prior year’s revenue and net position. The OCFO also has implemented additional internal controls to ensure that the Agency complies with financial reporting standards for reporting corrections of errors.

## Compliance with Laws and Regulations

### Noncompliance Issues with Federal Financial Management Improvement Act (FFMIA)

The OIG identified no substantial noncompliance issues with FFMIA. However, they did note four other noncompliances.

- **EPA did not comply with the Managerial Cost Accounting Standard**—The OIG believed the OCFO did not comply with the FFMIA concerning the SSFAS No. 4, *Managerial Cost Accounting Concepts and Standards for the Federal Government*. While the OCFO agrees that improvements in cost accounting can be made, and has continued to take initiative as a federal leader in this area, we also believe that the Agency substantially complies with this Standard.

The OIG recommends that the OCFO set a goal to provide EPA managers with useful and timely reports that present the full costs of their outputs and programs by the end of the fiscal year. The OIG also recommended that we change the Agency’s cost accounting outputs so that they correspond to discrete products and services that the Agency produces. However, we believe that

having the capability to provide information at the subobjective level is appropriate for defining “products and services” and that this information is useful to managers. The Agency is now moving from ten goals to five in the new Strategic Plan and will further evaluate what information EPA managers need under that new structure. The OCFO believes the new structure will provide more detailed accounting for Agency resources and programs. We also are continuing to enhance our management reporting tools and capabilities.

- **Reconciliation of intra-governmental transactions is not in compliance with Office of Management and Budget (OMB) and Treasury Financial Manual requirements**—The OIG reported that EPA continues to experience difficulties in reconciling some of its intragovernmental assets and liabilities because some federal entities do not perform corresponding reconciliations. The OIG noted that this is a government-wide issue and they made no recommendations at this time. They encouraged EPA to continue their proactive efforts in reconciling the Agency’s intra-governmental transactions in order to comply with federal financial reporting requirements. We appreciate the OIG’s recognition of our efforts. The OCFO will continue to participate in government-wide initiatives to overcome the difficulties of reconciling intergovernmental transactions between agencies.
- **The Contract Payment System (CPS) is not in compliance with the Joint Financial Management Improvement Program system requirements**—The OIG stated that during FY 2002 CPS was not in compliance with JFMIP mandatory system requirements because no report existed to reconcile the total number of dollars and transactions transferred daily between CPS and IFMS. Subsequent to the OIG review, OCFO staff modified the CPS reporting package to address the OIG’s concerns.
- **The fiscal 1999 Remediation Plan to correct some FFMIA issues has not been completed**—The OIG reported that EPA had not yet completed two key action items from the Office of Chief Financial Officer’s 1999 Remediation Plan for achieving compliance with FFMIA requirements. The OCFO is taking action to correct the remaining issues. Specifically, the OCFO will work with the Office of Administration and Resources Management to firm up milestone dates for establishing a security certification process for key personnel and will revise the Remediation Plan to identify responsibility for the security certification process, set a target date for completion of the action, and provide a revised status report to OMB to disclose the changes made.

### **Compliance with the Food Quality Protection Act of 1996**

The OIG found that the Agency was not in compliance with the requirements of the Food Quality Protection Act of 1996 (the Act) because it exceeded the amount of maintenance fees that could be used for expedited processing. The Agency subsequently made adjustments to correct the noncompliance and will closely monitor future amendments to the Act to identify any potential revisions that will affect compliance requirements.

### **Compliance with the Treasury Financial Manual**

The OIG found that the Agency does not prepare the SF 224 Statement of Transactions in accordance with the Treasury Financial Manual. The OCFO concurs and has taken appropriate action to develop, document, and implement procedures to ensure that the Agency’s financial processes relating to SF 224 reporting, reconciliation, and maintenance of fund balances with Treasury are in line with the Treasury Financial Manual.

## Progress in Correcting Previously Identified Problems

OCFO management believes that audit followup is an integral part of good management and that corrective actions are essential to improving the effectiveness and efficiency of government operations. To resolve long-standing audit recommendations, the OCFO formed an Audit Followup Council in July 2000 to review progress on audit findings, discuss approaches to resolving audit issues, and provide coordination and support across the OCFO on audit related matters.

As a result of the Council's efforts, the Agency has resolved several long-standing issues. During the audit of the FY 2001 financial statements, the OIG noted substantial progress in completing a number of corrective actions from prior years. In FY 2002 EPA completed corrective action for the interagency agreement invoice approval process by implementing an automated project officer notification. The Agency and the OIG are working to resolve three remaining issue areas from prior financial statements audits. Those areas are as follows:

- **Automated Application Processing Controls for IFMS**—The OIG acknowledges that the Agency plans to replace IFMS with a new automated accounting system. Until the Agency implements the new accounting system, the OIG states that they will continue to mention this area as a reportable condition.
- **Financial System Security Plans**—The OIG determined that two related corrective actions in EPA's Remediation Plan were incomplete. The Agency is taking corrective action.
- **Managerial Cost Accounting Standards**—The OIG no longer views this audit issue area as a substantial noncompliance because of Agency enhancements to its reporting capabilities and additional ongoing initiatives.

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**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATING BALANCE SHEET**  
**AS OF SEPTEMBER 30, 2002 AND 2001 (Restated\*See Notes 36 and 37)**  
(Dollars in Thousands)

	Superfund Trust Fund FY 2002	Superfund Trust Fund FY 2001*	All Others FY 2002	All Others FY 2001	Combined Totals FY 2002
<b>ASSETS</b>					
Intragovernmental:					
Fund Balance with Treasury (Note 2)	\$ 32,229	\$ 6,706	\$11,688,934	\$11,272,374	\$ 11,721,163
Investments (Note 4)	3,309,975	3,724,044	1,952,052	1,778,818	5,262,027
Accounts Receivable, Net (Note 5)	33,309	31,178	72,298	69,977	105,607
Other (Note 6)	4,520	5,521	4,578	4,386	9,098
Total Intragovernmental	<u>\$ 3,380,033</u>	<u>3,767,449</u>	<u>13,717,862</u>	<u>13,125,555</u>	<u>17,097,895</u>
Cash and Other Monetary Assets (Note 3)	0	0	10	0	10
Accounts Receivable, Net (Note 5)	411,437	466,038	49,398	75,027	460,835
Loans Receivables, Net - Nonfederal (Note 7)	0	0	64,646	75,552	64,646
Property, Plant and Equipment, Net (Notes 9 and 37)	38,746	40,169	551,336	526,893	590,082
Other (Note 6)	780	8,876	4,937	1,128	5,717
Total Assets	<u>\$ 3,830,996</u>	<u>\$ 4,282,534</u>	<u>\$14,388,189</u>	<u>\$13,804,155</u>	<u>\$ 18,219,185</u>
<b>LIABILITIES</b>					
Intragovernmental					
Accounts Payable and Accrued Liabilities (Note 8)	\$ 116,239	\$ 123,537	\$ 43,983	\$ 41,659	\$ 160,222
Debt Due to Treasury (Note 10)	0	0	24,290	31,124	24,290
Custodial Liability (Note 11)	0	0	69,706	77,778	69,706
Other (Note 12)	23,727	21,308	26,381	27,507	50,108
Total Intragovernmental	<u>139,966</u>	<u>144,845</u>	<u>164,360</u>	<u>178,068</u>	<u>304,326</u>
Accounts Payable and Accrued Liabilities (Note 8)	145,805	137,735	511,236	655,274	657,041
Pensions and Other Actuarial Liabilities (Note 14)	7,698	7,731	31,759	31,902	39,457
Environmental Cleanup Costs (Note 20)	0	0	13,309	14,528	13,309
Cashout Advances, Superfund (Notes 15 and 36)	337,139	447,955	0	0	337,139
Commitments and Contingencies (Note 18)	0	3,778	20	6,020	20
Payroll and Benefits Payable (Note 33)	39,136	35,111	177,432	163,730	216,568
Other (Notes 12 and 13)	45,515	27,659	47,479	60,536	92,994
Total Liabilities	<u>\$ 715,259</u>	<u>\$ 804,814</u>	<u>\$ 945,595</u>	<u>\$ 1,110,058</u>	<u>\$ 1,660,854</u>
<b>NET POSITION</b>					
Unexpended Appropriations (Note 16)	\$ 0	\$ 0	\$ 10,923,889	\$ 10,358,961	\$ 10,923,889
Cumulative Results of Operations (Notes 36 & 37)	<u>3,115,737</u>	<u>3,477,720</u>	<u>2,518,705</u>	<u>2,335,136</u>	<u>5,634,442</u>
Total Net Position	<u>3,115,737</u>	<u>3,477,720</u>	<u>13,442,594</u>	<u>12,694,097</u>	<u>16,558,331</u>
Total Liabilities and Net Position	<u>\$ 3,830,996</u>	<u>\$ 4,282,534</u>	<u>\$ 14,388,189</u>	<u>\$ 13,804,155</u>	<u>\$ 18,219,185</u>

\* Cashout Advances; Property, Plant and Equipment, Net; and Cumulative Results of Operations, Superfund, are restated for FY 2001.

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATING BALANCE SHEET**  
**AS OF SEPTEMBER 30, 2002 AND 2001 (Restated\*See Notes 36 and 37)**  
(Dollars in Thousands)

	Combined Totals FY 2001*	Intra-agency Elimination FY 2002	Intra-agency Elimination FY 2001	Consolidated Totals FY 2002	Consolidated Totals FY 2001*
<b>ASSETS</b>					
Intragovernmental					
Fund Balance With Treasury (Note 2)	\$ 11,279,080	\$ 0	\$ 0	\$ 11,721,163	\$ 11,279,080
Investments (Note 4)	5,502,862	0	0	5,262,027	5,502,862
Accounts Receivable, Net (Note 5)	101,155	(47,412)	(48,128)	58,195	53,027
Other (Note 6)	9,907	(4,447)	(5,739)	4,651	4,168
<b>Total Intragovernmental</b>	<b>\$ 16,893,004</b>	<b>\$ (51,859)</b>	<b>\$ (53,867)</b>	<b>\$ 17,046,036</b>	<b>\$ 16,839,137</b>
Cash and Other Monetary Assets (Note 3)	0	0	0	10	0
Accounts Receivable, Net (Note 5)	541,065	0	0	460,835	541,065
Loans Receivable, Net - Nonfederal (Note 7)	75,552	0	0	64,646	75,552
Property, Plant and Equipment, Net (Note 9 and 37)	567,062	0	0	590,082	567,062
Other (Note 6)	10,006	0	0	5,717	10,006
<b>Total Assets</b>	<b>\$ 18,086,689</b>	<b>\$ (51,859)</b>	<b>\$ (53,867)</b>	<b>\$ 18,167,326</b>	<b>\$ 18,032,822</b>
<b>LIABILITIES</b>					
Intragovernmental					
Accounts Payable and Accrued Liabilities (Note 8)	\$ 165,196	\$ (47,480)	\$ (48,512)	\$ 112,742	\$ 116,684
Debt Due to Treasury (Note 10)	31,124	0	0	24,290	31,124
Custodial Liability (Note 11)	77,778	0	0	69,706	77,778
Other (Note 12)	48,815	(4,379)	(5,355)	45,729	43,460
<b>Total Intragovernmental</b>	<b>\$ 322,913</b>	<b>\$ (51,859)</b>	<b>\$ (53,867)</b>	<b>\$ 252,467</b>	<b>\$ 269,046</b>
Accounts Payable and Accrued Liabilities (Note 8)	793,009	0	0	657,041	793,009
Pensions and Other Actuarial Liabilities (Note 14)	39,633	0	0	39,457	39,633
Environmental Cleanup Costs (Note 20)	14,528	0	0	13,309	14,528
Cashout Advances, Superfund (Notes 15 and 36)	447,955	0	0	337,139	447,955
Commitments and Contingencies (Note 18)	9,798	0	0	20	9,798
Payroll and Benefits Payable (Note 33)	198,841	0	0	216,568	198,841
Other (Notes 12 and 13)	88,195	0	0	92,994	88,195
<b>Total Liabilities</b>	<b>\$ 1,914,872</b>	<b>\$ (51,859)</b>	<b>\$ (53,867)</b>	<b>\$ 1,608,995</b>	<b>\$ 1,861,005</b>
<b>NET POSITION</b>					
Unexpended Appropriations (Note 16)	\$ 10,358,961	\$ 0	\$ 0	\$ 10,923,889	\$ 10,358,961
Cumulative Results of Operations (Notes 36 & 37)	5,812,856	0	0	5,634,442	5,812,856
<b>Total Net Position</b>	<b>16,171,817</b>	<b>0</b>	<b>0</b>	<b>16,558,331</b>	<b>16,171,817</b>
<b>Total Liabilities and Net Position</b>	<b>\$ 18,086,689</b>	<b>\$ (51,859)</b>	<b>\$ (53,867)</b>	<b>\$ 18,167,326</b>	<b>\$ 18,032,822</b>

\* Cashout Advances; Property, Plant and Equipment, Net; and Cumulative Results of Operations, Superfund, are restated for FY 2001.

**The accompanying notes are an integral part of these statements.**



**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATING STATEMENT OF NET COST**  
**FOR THE YEARS ENDED SEPTEMBER 30, 2002 AND 2001 (Restated\*See Notes 36 and 37)**  
(Dollars in Thousands)

	<b>Superfund Trust Fund FY 2002</b>	<b>Superfund Trust Fund FY 2001*</b>	<b>All Others FY 2002</b>	<b>All Others FY 2001*</b>	<b>Combined Totals FY 2002</b>
<b>Costs</b>					
Intragovernmental	\$ 348,980	\$ 426,499	\$ 782,110	\$ 710,290	\$ 1,131,090
With the Public	1,209,338	1,177,849	5,678,789	5,784,628	6,888,127
Expenses from Other Appropriations (Note 23)	<u>114,297</u>	<u>103,654</u>	<u>(114,297)</u>	<u>(103,654)</u>	<u>0</u>
Total Costs (Note 37)	\$ 1,672,615	\$ 1,708,002	\$ 6,346,602	\$ 6,391,264	\$ 8,019,217
Less:					
Earned Revenues, Federal (Note 19)	22,932		104,318		127,250
Earned Revenues, Nonfederal (Note 19)	<u>477,768</u>		<u>24,927</u>		<u>502,695</u>
Total Earned Revenues (Notes 19 and 36)	\$ 500,700	435,141	\$ 129,245	77,933	\$ 629,945
<b>NET COST OF OPERATIONS</b>	<u>\$ 1,171,915</u>	<u>\$ 1,272,861</u>	<u>\$ 6,217,357</u>	<u>\$ 6,313,331</u>	<u>\$ 7,389,272</u>

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATED STATEMENT OF NET COST**  
**FOR THE YEARS ENDED SEPTEMBER 30, 2002 AND 2001 (Restated\*See Notes 36 and 37)**  
(Dollars in Thousands)

	<b>Combined Totals FY 2001*</b>	<b>Intra-agency Eliminations FY 2002</b>	<b>Intra-agency Eliminations FY 2001</b>	<b>Consolidated Totals FY 2002</b>	<b>Consolidated Totals FY 2001*</b>
<b>Costs</b>					
Intragovernmental	\$ 1,136,789	\$ (20,795)	\$ (19,627)	\$ 1,110,295	\$ 1,117,162
With the Public	6,962,477	0	0	6,888,127	6,962,477
Expenses from Other Appropriations (Note 23)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Costs (Note 37)	\$ 8,099,266	\$ (20,795)	\$ (19,627)	\$ 7,998,422	\$ 8,079,639
Less:					
Earned Revenues, Federal (Note 19)		(20,795)		106,455	
Earned Revenues, Nonfederal (Note 19)		<u>0</u>		<u>502,695</u>	
Total Earned Revenues (Notes 19 and 36)	<u>513,074</u>	<u>\$ (20,795)</u>	<u>(19,627)</u>	<u>\$ 609,150</u>	<u>493,447</u>
<b>NET COST OF OPERATIONS</b>	<u>\$ 7,586,192</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 7,389,272</u>	<u>\$ 7,586,192</u>

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATED STATEMENT OF NET COST BY GOAL**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2002**  
(Dollars in Thousands)

	Clean Air	Clean and Safe Water	Safe Food	Pollution Prevention	Better Waste Management	Global Risks
<b>COSTS</b>						
Intragovernmental	\$ 101,347	\$ 183,063	\$ 37,022	\$ 55,734	\$ 440,640	\$ 36,020
With the Public	487,461	3,264,051	91,795	253,462	1,488,511	206,938
Total Costs	<u>588,808</u>	<u>3,447,114</u>	<u>128,817</u>	<u>309,196</u>	<u>1,929,151</u>	<u>242,958</u>
Less:						
Earned Revenue, Federal	266	3,744	109	1,497	92,691	4,081
Earned Revenue, Nonfederal	25	2,290	14,960	1,193	473,739	586
Total Earned Revenue (Note 19)	<u>291</u>	<u>6,034</u>	<u>15,069</u>	<u>2,690</u>	<u>566,430</u>	<u>4,667</u>
Management Cost Allocation	<u>59,337</u>	<u>87,575</u>	<u>26,585</u>	<u>37,863</u>	<u>143,513</u>	<u>16,636</u>
<b>NET COST OF OPERATIONS</b>	<u>\$ 647,854</u>	<u>\$ 3,528,655</u>	<u>\$ 140,333</u>	<u>\$ 344,369</u>	<u>\$ 1,506,234</u>	<u>\$ 254,927</u>

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATED STATEMENT OF NET COST BY GOAL**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2001** *(Restated\*See Notes 36 and 37)*  
(Dollars in Thousands)

	Clean Air	Clean and Safe Water	Safe Food	Pollution Prevention	Better Waste Management*	Global Risks
<b>COSTS</b>						
Federal	\$ 87,360	\$ 156,900	\$ 30,210	\$ 41,065	\$ 465,452	\$ 39,816
With the Public	458,256	3,482,906	77,687	236,933	1,441,486	186,919
Total Costs (Note 37)	<u>545,616</u>	<u>3,639,806</u>	<u>107,897</u>	<u>277,998</u>	<u>1,906,938</u>	<u>226,735</u>
Less:						
Earned Revenue (Note 36)	702	4,966	17,051	1,545	457,649	7,286
Total Earned Revenue (Note 19)	<u>702</u>	<u>4,966</u>	<u>17,051</u>	<u>1,545</u>	<u>457,649</u>	<u>7,286</u>
Management Cost Allocation	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>
<b>NET COST OF OPERATIONS</b>	<u>\$ 610,872</u>	<u>\$ 3,711,968</u>	<u>\$ 124,503</u>	<u>\$ 318,520</u>	<u>\$ 1,553,091</u>	<u>\$ 242,731</u>

Detailed descriptions of the above Goals are provided in *EPA's FY 2002 Annual Report, Section II – Performance Results*.

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATED STATEMENT OF NET COST BY GOAL**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2002**  
(Dollars in Thousands)

	Environ. Info	Sound Science	Credible Deterrent	Effective Management	Not Assigned to Goals**	Consolidated Totals
<b>COSTS</b>						
Intragovernmental	\$ 60,624	\$ 62,030	\$ 106,374	\$ 23,393	\$ 4,048	\$ 1,110,295
With the Public	193,241	263,592	281,171	366,798	(8,893)	6,888,127
Total Costs	<u>253,865</u>	<u>325,622</u>	<u>387,545</u>	<u>390,191</u>	<u>(4,845)</u>	<u>7,998,422</u>
Less:						
Earned Revenue, Federal	130,237	800	234	(125,025)	(2,179)	106,455
Earned Revenue, Nonfederal	154	84	914	3,300	5,450	502,695
Total Earned Revenue (Note 19)	<u>130,391</u>	<u>884</u>	<u>1,148</u>	<u>(121,725)</u>	<u>3,271</u>	<u>609,150</u>
Management Cost Allocation	28,089	30,408	81,910	(511,916)	0	0
<b>NET COST OF OPERATIONS</b>	<u>\$ 151,563</u>	<u>\$ 355,146</u>	<u>\$ 468,307</u>	<u>\$ 0</u>	<u>\$ (8,116)</u>	<u>\$ 7,389,272</u>

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATED STATEMENT OF NET COST BY GOAL**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2001** *(Restated\*See Notes 36 and 37)*  
(Dollars in Thousands)

	Environ. Info	Sound Science	Credible Deterrent	Effective Management	Not Assigned to Goals**	Consolidated Totals
<b>COSTS</b>						
Federal	\$ 41,540	\$ 58,804	\$ 100,116	\$ 66,461	\$ 29,438	\$ 1,117,162
With the Public	126,154	290,056	299,021	424,036	(60,977)	6,962,477
Total Costs (Note 37)	<u>167,694</u>	<u>348,860</u>	<u>399,137</u>	<u>490,497</u>	<u>(31,539)</u>	<u>8,079,639</u>
Less:						
Earned Revenue (Note 36)	324	706	786	4,330	(1,898)	493,447
Total Earned Revenue (Note 19)	<u>2,335,136</u>	<u>10,358,961</u>	<u>786</u>	<u>10,358,961</u>	<u>(1,898)</u>	<u>493,447</u>
Management Cost Allocation						
<b>NET COST OF OPERATIONS</b>	<u>\$ (2,167,442)</u>	<u>\$ (2,654,016)</u>	<u>\$ 398,351</u>	<u>\$ (2,512,379)</u>	<u>\$ (29,641)</u>	<u>\$ 7,586,192</u>

\*\*See Note 30.

Detailed descriptions of the above Goals are provided in EPA's FY 2002 Annual Report, Section II – Performance Results.

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATING STATEMENT OF CHANGES IN NET POSITION**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2002**  
(Dollars in Thousands)

	Cumulative Results of Operations Superfund Trust Fund	Cumulative Results of Operations All Others	Unexpended Appropriations All Others	Cumulative Results of Operations Consolidated Totals*	Unexpended Appropriations Consolidated Totals*
Net Position - Beginning of Period, restated (Notes 36 and 37)	\$ 3,477,720	\$ 2,335,136	\$ 10,358,961	\$ 5,812,856	\$ 10,358,961
Budgetary Financing Sources:					
Appropriations Received	0	0	7,356,085	0	7,356,085
Appropriations Transferred In/Out (Note 31)	0	0	28,598	0	28,598
Other Adjustments (Note 34)	0	0	(35,460)	0	(35,460)
Appropriations Used	0	6,784,295	(6,784,295)	6,784,295	(6,784,295)
Nonexchange Revenue (Notes 17 and 35)	108,038	260,111	0	368,149	0
Transfers In/Out (Note 31)	(103,448)	63,672	0	(39,776)	0
Trust Fund Appropriations (Note 17)	676,292	(676,292)	0	0	0
Income from Other Appropriations (Note 23)	114,297	(114,297)	0	0	0
Total Budgetary Financing Sources	<u>\$ 795,179</u>	<u>\$ 6,317,489</u>	<u>\$ 564,928</u>	<u>\$ 7,112,668</u>	<u>\$ 564,928</u>
Other Financing Sources:					
Transfers In/Out (Note 31)	47	398	0	445	0
Imputed Financing Sources (Note 32)	14,706	83,039	0	97,745	0
Total Other Financing Sources	<u>\$ 14,753</u>	<u>\$ 83,437</u>	<u>\$ 0</u>	<u>\$ 98,190</u>	<u>\$ 0</u>
Net Cost of Operations	<u>(1,171,915)</u>	<u>(6,217,357)</u>	<u>0</u>	<u>(7,389,272)</u>	<u>0</u>
Net Position - End of Period	<u>\$ 3,115,737</u>	<u>\$ 2,518,705</u>	<u>\$ 10,923,889</u>	<u>\$ 5,634,442</u>	<u>\$ 10,923,889</u>

\* This statement does not have any intra-agency eliminations for FY 2002.

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATING STATEMENT OF CHANGES IN NET POSITION**  
**FOR THE YEARS ENDED SEPTEMBER 30, 2001** *(Restated\*See Notes 36 and 37)*  
(Dollars in Thousands)

	<b>Superfund Trust Fund FY 2001*</b>	<b>All Others FY 2001</b>	<b>Combined Totals FY 2001*</b>	<b>Intra-agency Eliminations FY 2001</b>	<b>Consolidated Totals FY 2001*</b>
Net Cost of Operations (Notes 36 and 37)	\$ 1,272,861	\$ 6,313,331	\$ 7,586,192	\$ 0	\$ 7,586,192
Financing Sources					
(Other Than Exchange Revenues):					
Appropriations Used	0	6,867,762	6,867,762	0	6,867,762
Taxes & Non Exchange Interest (Note 17)	226,861	276,346	503,207	0	503,207
Other Non Exchange Revenue	2,775	11,878	14,653	0	14,653
Imputed Financing (Notes 32)	13,686	77,855	91,541	0	91,541
Trust Fund Appropriations (Note 17)	633,603	(633,603)	0	0	0
Transfers-In (Note 31)	0	62,861	62,861	(47,894)	14,967
Transfers-Out (Note 31)	(127,927)	0	(127,927)	47,894	(80,033)
Income from Other Appropriations (Note 23)	103,654	(103,654)	0	0	0
Net Change in Cumulative Results of Operations	(420,209)	246,114	(174,095)	0	(174,095)
Increases/Decreases in Unexpended Appropriations	0	239,122	239,122	0	239,122
Change in Net Position	(420,209)	485,236	65,027	0	65,027
Net Position - Beginning of Period	3,875,439	12,208,861	16,084,300	0	16,084,300
Prior Period Adjustment (Note 37)	22,490		22,490		22,490
Adjusted Net Position - Beginning of Period	3,897,929	12,208,861	16,106,790	0	16,106,790
Net Position - End of Period (Notes 36 and 37)	\$ 3,477,720	\$ 12,694,097	\$ 16,171,817	\$ 0	\$ 16,171,817

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**COMBINED STATEMENT OF BUDGETARY RESOURCES**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2002**  
(Dollars in Thousands)

	<b>Superfund Trust Fund FY 2002</b>	<b>All Others FY 2002</b>	<b>Combined Totals FY 2002</b>
<b>Budgetary Resources</b>			
Budget Authority:			
Appropriations Received	\$ 0	\$ 7,371,085	\$ 7,371,085
Borrowing Authority	0	0	0
Net Transfers	1,329,490	101,010	1,430,500
Other	0	0	0
Unobligated Balances:			
Beginning of Period	714,321	1,911,304	2,625,625
Net Transfers, Actual	0	500	500
Anticipated Transfers Balance	0	0	0
Spending Authority from Offsetting Collections:			
Earned and Collected	193,835	262,102	455,937
Receivable from Federal Sources	3,523	1,410	4,933
Change in Unfilled Customer Orders			
Advance Received	(22,548)	2,133	(20,415)
Without Advance from Federal Sources	1,749	62,549	64,298
Anticipated for Rest of Year	0	0	0
Transfers from Trust Funds	0	48,671	48,671
Total Spending Authority from Collections	\$ 176,559	\$ 376,865	\$ 553,424
Recoveries of Prior Year Obligations (Note 26)	230,628	89,440	320,068
Permanently Not Available (Note 26)	(2,000)	(42,292)	(44,292)
Total Budgetary Resources (Note 25)	<u>\$ 2,448,998</u>	<u>\$ 9,807,912</u>	<u>\$ 12,256,910</u>
<b>Status of Budgetary Resources</b>			
Obligations Incurred:			
Direct	\$ 1,548,650	\$ 7,514,054	\$ 9,062,704
Reimbursable	149,354	248,610	397,964
Total Obligations Incurred (Note 25)	\$ 1,698,004	\$ 7,762,664	\$ 9,460,668
Unobligated Balances:			
Apportioned (Note 27)	726,589	1,917,637	2,644,226
Exempt from Apportionment	0	0	0
Unobligated Balances Not Available (Note 27)	24,405	127,611	152,016
Total Status of Budgetary Resources	<u>\$ 2,448,998</u>	<u>\$ 9,807,912</u>	<u>\$ 12,256,910</u>
<b>Relationship of Obligations to Outlays</b>			
Obligations Incurred, Net	\$ 1,290,817	\$ 7,296,359	\$ 8,587,176
Obligated Balances, Net - Beginning of Period	2,108,696	9,324,855	11,433,551
Accounts Receivable	3,694	72,577	76,271
Unfilled Customer Orders from Federal Sources	66,448	253,348	319,796
Undelivered Orders, Unpaid	(1,831,268)	(9,277,925)	(11,109,193)
Accounts Payable	(260,633)	(656,652)	(917,285)
Total Outlays (Note 25)	<u>\$ 1,377,754</u>	<u>\$ 7,012,562</u>	<u>\$ 8,390,316</u>
Disbursements	\$ 1,549,041	\$ 7,323,740	\$ 8,872,781
Collections	(171,287)	(311,178)	(482,465)
Less: Offsetting Receipts (Note 28)	(248,252)	(687,650)	(935,902)
Net Outlays	<u>\$ 1,129,502</u>	<u>\$ 6,324,912</u>	<u>\$ 7,454,414</u>

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATING STATEMENT OF FINANCING**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2002**  
(Dollars in Thousands)

	<b>Superfund Trust Fund FY 2002</b>	<b>All Others FY 2002</b>	<b>Consolidated Totals* FY 2002</b>
<b>Resources Used to Finance Activities:</b>			
Budgetary Resources Obligated			
Obligations Incurred	\$ 1,698,004	\$ 7,762,664	\$ 9,460,668
Less: Spending Authority from Offsetting Collections and Recoveries	(407,187)	(466,305)	(873,492)
Obligations, Net of Offsetting Collections	\$ 1,290,817	\$ 7,296,359	\$ 8,587,176
Less: Offsetting Receipts (Note 28)	(248,252)	(687,650)	(935,902)
Net Obligations	\$ 1,042,565	\$ 6,608,709	\$ 7,651,274
Other Resources			
Transfers In/Out without Reimbursement, Property (Note 31)	\$ 47	\$ (47)	\$ 0
Imputed Financing Sources (Note 32)	14,706	83,039	97,745
Income from Other Appropriations (Note 23)	114,297	(114,297)	0
Net Other Resources Used to Finance Activities	\$ 129,050	\$ (31,305)	\$ 97,745
<b>Total Resources Used To Finance Activities</b>	<b>\$ 1,171,615</b>	<b>\$ 6,577,404</b>	<b>\$ 7,749,019</b>
<b>Resources Used to Finance Items Not Part of Net Cost of Operations</b>			
Change in Budgetary Resources Obligated	\$ 64,738	\$ (422,293)	\$ (357,555)
Resources that Fund Prior Period Expenses (Note 29)	(1,590)	(399)	(1,989)
Budgetary Offsetting Collections and Receipts that Do Not Affect Net Cost of Operations			
Credit Program Collections Increasing Loan Liabilities for Guarantees of Subsidy Allowances	0	4,394	4,394
Offsetting Receipts Not Affecting Net Cost	248,252	11,358	259,610
Resources that Finance Asset Acquisition	(6,587)	(53,692)	(60,279)
Adjustments to Expenditure Transfers that Do Not Affect Net Cost	(48,758)	48,670	(88)
<b>Total Resources Used to Finance Items Not Part of the Net Cost of Operations</b>	<b>\$ 256,055</b>	<b>\$ (411,962)</b>	<b>\$ (155,907)</b>
<b>Total Resources Used to Finance the Net Cost of Operations</b>	<b>\$ 1,427,670</b>	<b>\$ 6,165,442</b>	<b>\$ 7,593,112</b>

\* This statement did not have any intra-agency eliminations for FY 2002.

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATING STATEMENT OF FINANCING**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2002**  
(Dollars in Thousands)

	<b>Superfund Trust Fund FY 2002</b>	<b>All Others FY 2002</b>	<b>Consolidated Totals* FY 2002</b>
<b>Components of Net Cost of Operations</b>			
<b>That Will Not Require or Generate</b>			
<b>Resources in the Current Period</b>			
Components Requiring or Generating Resources in Future Periods			
Increase in Annual Leave Liability (Note 29)	\$ 0	\$ 0	\$ 0
Increase in Environmental and Disposal Liability (Note 29)	0	578	578
Up/Downward Reestimates of Subsidy Expense	0	(371)	(371)
Increase in Public Exchange Revenue Receivable	(305,035)	(2,422)	(307,457)
Increase in Workers Compensation Costs (Note 29)	0	0	0
Total Components of Net Cost of Operations that Requires or Generates Resources in the Future	<u>\$ (305,035)</u>	<u>\$ (2,215)</u>	<u>\$ (307,250)</u>
Components Not Requiring/Generating Resources			
Depreciation and Amortization	7,854	27,022	34,876
Revaluation of Assets or Liabilities	0	0	0
Expenses Not Requiring Budgetary Resources	<u>41,426</u>	<u>27,108</u>	<u>68,534</u>
Total Components of Net Cost of Operations that Will Not Require or Generate Resources	<u>\$ 49,280</u>	<u>\$ 54,130</u>	<u>\$ 103,410</u>
Total Components of Net Cost of Operations That Will Not Require or Generate Resources in the Current Period	<u>(255,755)</u>	<u>51,915</u>	<u>(203,840)</u>
Net Cost of Operations	<u>\$ 1,171,915</u>	<u>\$ 6,217,357</u>	<u>\$ 7,389,272</u>

\* This statement did not have any intra-agency eliminations for FY 2002.

**The accompanying notes are an integral part of these statements.**



**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATING STATEMENT OF FINANCING**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2002 (Restated \*See Notes 36 and 37)**  
(Dollars in Thousands)

	Superfund Trust Fund FY 2001*	All Others FY 2001	Consolidated Totals FY 2001**
<b>Obligations and Nonbudgetary Resources</b>			
Obligations Incurred	\$ 1,570,056	\$ 7,431,802	\$ 9,001,858
Less: Spending Authority from Offsetting Collections			
Earned Reimbursements			
Collected	(311,271)	(227,827)	(539,098)
Receivable from Federal Sources	3,716	6,306	10,022
Change in Unfilled Customer Orders	(41,203)	(36,273)	(77,476)
Transfers from Trust Funds	0	(46,178)	(46,178)
Recoveries of Prior Year Obligations	(196,644)	(76,814)	(273,458)
Imputed Financing for Cost Subsidies (Note 32)	13,686	77,855	91,541
Income from Other Appropriations (Note 23)	103,654	(103,654)	0
Transfers In/Out of Nonmonetary Assets	0	0	0
Exchange Revenue Not in the Entity's Budget (Note 36)	(128,757)	(2,072)	(130,829)
Total Obligations and Nonbudgetary Resources	<u>1,013,237</u>	<u>7,023,145</u>	<u>8,036,382</u>
<b>Resources that Do Not Fund Net Cost of Operations</b>			
Change in Amount of Goods/Services Ordered But			
Not Yet Provided - (Increases)/Decreases	145,931	(117,998)	27,933
Change in Unfilled Customer Orders, etc.	41,203	36,273	77,476
Costs Capitalized on the Balance Sheet			
General Plant, Property, and Equipment (Note 37)	(12,530)	(74,092)	(86,622)
Purchases of Inventory		52	52
Adjustments to Costs Capitalized on the Balance Sheet	(40)	(4)	(44)
Collections that Decrease Credit Program Receivables or			
Increase Program Liabilities	0	7,722	7,722
Adjustment for Trust Fund Outlays that Do Not Affect Net Cost	(47,894)	(587,424)	(635,318)
Total Resources that Do Not Fund Net Costs of Operations	<u>126,670</u>	<u>(735,471)</u>	<u>(608,801)</u>
<b>Components of Costs that Do Not Require or Generate Resources</b>			
Depreciation and Amortization (Note 37)	7,091	19,333	26,424
Bad Debt Related to Uncollectible Receivables	133,761	2,881	136,642
Loss (Gain) on Disposition of Assets	(9,426)	895	(8,531)
Other Expenses Not Requiring Budgetary Resources	699	(5,686)	(4,987)
Total Costs That Do Not Require Resources	<u>132,125</u>	<u>17,423</u>	<u>149,548</u>
<b>Financing Sources Yet to be Provided</b>	<u>829</u>	<u>8,234</u>	<u>9,063</u>
<b>Net Costs of Operations (Notes 36 and 37)</b>	<u>\$ 1,272,861</u>	<u>\$ 6,313,331</u>	<u>\$ 7,586,192</u>

\*\* This statement did not have any intra-agency eliminations for FY 2001.

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**CONSOLIDATED STATEMENT OF CUSTODIAL ACTIVITY**  
**FOR THE YEARS ENDED SEPTEMBER 30, 2002 AND 2001**  
(Dollars in Thousands)

	<b>FY 2002</b>	<b>FY 2001</b>
<b>Revenue Activity:</b>		
<b>Sources of Collections:</b>		
Fines and Penalties	\$ 94,237	\$ 114,830
Other	9,322	31,754
	<u>103,559</u>	<u>146,584</u>
Total Cash Collections	\$ 103,559	\$ 146,584
Accrual Adjustment	(8,070)	(24,692)
	<u>95,489</u>	<u>121,892</u>
Total Custodial Revenue (Note 24)	\$ 95,489	\$ 121,892
<b>Disposition of Collections:</b>		
Transferred to Others (General Fund)	\$ 103,818	\$ 147,045
Increases/Decreases in Amounts To Be Transferred	(8,329)	(25,153)
	<u>95,489</u>	<u>121,892</u>
Total Disposition of Collections	\$ 95,489	\$ 121,892
Net Custodial Revenue Activity (Note 24)	<u>\$ 0</u>	<u>\$ 0</u>

**The accompanying notes are an integral part of these statements.**

**ENVIRONMENTAL PROTECTION AGENCY**  
**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 01-09, and the Agency’s accounting policies which are summarized in this note. In addition, to the guidance in Bulletin 01-09, the Statement of Net Cost has been prepared by the EPA strategic goals. 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 2002 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. The Superfund Trust Fund 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 other 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 the

Leaking Underground Storage Tank (LUST) Trust Fund and the Oil Spill Response Trust Fund. General Fund appropriations are the 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 appropriation activities that no longer receive current definite appropriations but have unexpended authority are the Asbestos Loan Program and Energy, Research and Development. Revolving Funds include the Federal Insecticide, Fungicide and Rodenticide Act (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 one 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. Monies were appropriated to the Oil Spill Response Trust Fund in 1993. 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 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 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 2002 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 S&T appropriation is accounted for under Treasury symbol 0107.

The EPM appropriation 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; 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 IG 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 LUST Trust Funds are appropriated under those Trust Fund accounts and are transferred to the IG account. The audit function provides contract, internal and performance, and financial and grant audit services. The IG 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 B&F appropriation provides for the construction, repair, improvement, extension, alteration, and purchase of fixed equipment or facilities that are owned or used by the Agency. The B&F 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 disburses the subsidy to the Financing Fund for increases in the subsidy. The Financing Fund receives the subsidy payment, borrows from Treasury, 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 FIFRA Revolving Fund was authorized by the Federal Insecticide, Fungicide and Rodenticide Act of 1972 as amended and 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 collected and 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 WCF includes two activities: computer support services and postage. WCF derives revenue from these activities based upon a fee for services. WCF's customers currently consist solely of Agency program offices. Accordingly, revenues 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.

Allocations and 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 transfer allocations are accounted for under Treasury symbols 0200, 1010, and 4542; and the appropriation transfers are accounted for under 0108.

Clearing Accounts include the Budgetary suspense account, Unavailable Check Cancellations and Overpayments, and Undistributed IPAC Payments and Collections. Clearing accounts are accounted for under Treasury symbols 3875, 3880, and 3885.

Deposit funds include Fees for Ocean Dumping; Nonconformance Penalties; Clean Air Allowance Auction and Sale; Advances without Orders; and 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, 6266, 6275, and 6500.

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, 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 and EPM appropriations 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. The expense allocation methodology is a financial statement estimate that presents EPA's programs at full cost. Superfund may charge some costs directly to the fund and charge the remainder of the costs to the All Other Funds in the Agency-wide appropriations. These amounts are presented as

Expenses from Other Appropriations on the Statement of Net Cost and as Income from Other Appropriations on the Statement of Changes in Net Position and the Statement of Financing.

The Superfund Trust Fund is allocated to 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 were \$53.5 million for FY 2001 and \$49.1 million for FY 2002.

### **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 appropriations 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 costs of the loans and another for the remaining non-subsidized portion of the loans. Congress adapted a one year appropriation, available for obligation in the fiscal year for which it was 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 did not represent long term cost was financed under a permanent indefinite borrowing authority established with the Treasury. A permanent indefinite appropriation is available to finance the costs of subsidy re-estimates that occur after the year in which the loan was disbursed.

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 are 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 appropriation is reduced at Treasury.

Clearing accounts, deposit accounts, and receipt accounts receive no budget. The 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 U.S. 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 program receives most of its funding through appropriations that may be used, within specific statutory limits, for operating and capital expenditures (primarily equipment). Additional financing for the Superfund program is obtained through reimbursements from other federal agencies under Inter-Agency Agreements (IAGs), state cost share payments under Superfund State Contracts (SSCs), and settlement proceeds from Potentially Responsible Parties (PRPs), under CERCLA section 122(b)(3), placed in special accounts. Special accounts were previously limited to settlement amounts for future costs; however, beginning in FY 2001 cost recovery amounts received under CERCLA section 122(b)(3) settlements could be placed in special accounts. Cost recovery settlements that are not placed in special accounts continue to be deposited in the Superfund Trust Fund.

### ***All Other Funds***

The majority of All Other Funds appropriations 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 to support the subsidy cost of loans through appropriations which may be used with statutory limits. The Asbestos Direct Loan Financing fund, an off-budget fund, receives additional funding to support the outstanding loans through collections from the Program fund for the subsidized portion of the loan. The last year Congress provided appropriations to make new loans was 1993. 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. (See Note 2)

## **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. No provision is made for unrealized gains or losses on these securities because, in the majority of cases, they are held to maturity. (See Note 4)

## **H. Notes Receivable**

### ***Superfund***

The Agency records notes receivable at their face value and any accrued interest as of the date of receipt. (See Note 6)

## **I. Marketable Equity Securities**

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. Currently EPA does not hold any marketable securities.

## **J. Accounts Receivable and Interest Receivable (See Note 5)**

### ***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 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.

## **K. 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. (See Note 6)

## **L. 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 is disclosed in Note 7. 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.

## **M. 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. (See Note 17)

## **N. Property, Plant, and Equipment**

### ***Superfund and All Other Funds***

The Fixed Assets Subsystem (FAS), implemented in FY 1997, maintains EPA's personal property, real property, and capital software records in accordance with Statement of Federal Financial Accounting Standards No. 6, "Accounting for Property, Plant and Equipment," (SFFAS No. 6). The FAS automatically generates depreciation entries monthly based on acquisition dates. Purchases of EPA-held and contractor-held personal property are capitalized if valued at \$25 thousand or more with 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. This modified straight-line method is still used for contractor-held property. All EPA-held personal property purchased before the implementation of FAS was assumed to have an estimated useful life of five years. New acquisitions of EPA-held personal property are depreciated using the straight-line method for specific assets with useful lives ranging from two to 15 years.

Superfund contractor-held property used as part of the remedy for site-specific response actions is capitalized in accordance with Agency's capitalization threshold. This property is part of the remedy at the site and eventually becomes part of the site itself. Once the response action has been completed and the remedy implemented, EPA will retain control of the property, e.g., pump and treat facility, for

10 years or less, and will transfer its interest in the facility to the respective state for mandatory operation and maintenance – usually 20 years or more. Consistent with EPA’s 10 year retention period, depreciation for this property will be based on a 10-year life. However, if any property is transferred to a state in a year or less, this property will be charged to expense. If any property is sold prior to EPA relinquishing interest, the proceeds from the sale of that property shall be applied against contract payments or refunded as required by the Federal Acquisition Regulations.

In FY 1997 the EPA’s Working Capital Fund, a revenue generating activity, implemented requirements to capitalize software if the purchase price was \$100,000 or more with an estimated useful life of two years or more. In FY 2001 the Agency began capitalizing software for All Other Funds whose acquisition value is \$500,000 or more in accordance with the provisions of SFFAS No. 10, “Accounting for Internal Use Software.” Software is depreciated using the straight-line method over the specific assets’ useful lives ranging from two to ten 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 were valued at an estimated original cost basis and land was valued at fair market value if purchased prior to FY 1997. Real property purchased during and after FY 1997 are valued at actual costs. 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. Additions to property and improvements not meeting the capitalization criteria, expenditures for minor alterations, and repairs and maintenance are expensed as incurred. (See Note 9)

## **O. 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.

## **P. 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.

## **Q. 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 2001 and FY 2002 there was no outstanding interest payable to Treasury since payment was made through September 30.

## **R. Accrued Unfunded Annual Leave**

### ***Superfund and All Other Funds***

Annual, sick, and other leave is expensed as taken during the fiscal year. Sick 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 Balance Sheet as a component of "Payroll and Benefits Payable." (See Note 33)

## **S. Retirement Plan**

### ***Superfund and All Other Funds***

There are two primary retirement systems for federal employees. Employees hired prior to January 1, 1984, may participate in the Civil Service Retirement System (CSRS). On January 1, 1984, 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, elected to either join FERS and Social Security or remain in CSRS. A primary feature of FERS is that it offers a savings plan to which the Agency automatically contributes 1 percent of pay and matches any employee contributions up to an additional 4 percent of pay. The Agency also contributes the employer's matching share for Social Security.

With the issuance of SFFAS No.5, "Accounting for Liabilities of the Federal Government," (SFFAS No. 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 No. 5 requires that the employing agencies recognize the cost of pensions and other retirement benefits during their employees' active years of service. SFFAS No. 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.

## **T. Prior Period Adjustments**

Prior period adjustments will be made in accordance with SFFAS No. 21, "Reporting Corrections of Errors and Changes in Accounting Principles," which is effective for FY 2002. EPA will make prior period adjustments for material errors as follows in accordance with SFFAS No. 21. Prior period adjustments will only be made for material prior period errors to (1) the current period financial statements and (2) the prior period financial statements presented for comparison. Adjustments related to changes in accounting principles will only be made to the current period financial statements, but not to prior period financial statements presented for comparison. (See Notes 36 and 37)

## Note 2. Fund Balances with Treasury

Fund Balances with Treasury as of September 30, 2002 and 2001, consist of the following (in thousands):

	FY 2002			FY 2001		
	Entity Assets	Non-Entity Assets	Total	Entity Assets	Non-Entity Assets	Total
<b>Trust Funds:</b>						
Superfund	\$ 32,229	\$ 0	\$ 32,229	\$ 6,706	\$ 0	\$ 6,706
LUST	16,405	0	16,405	18,158	0	18,158
Oil Spill	3,796	0	3,796	3,156	0	3,165
<b>Revolving Funds:</b>						
FIFRA/Tolerance	3,028	0	3,028	3,496	0	3,496
Working Capital	57,380	0	57,380	51,267	0	51,267
<b>Appropriated</b>	11,504,638	0	11,504,638	11,088,824	0	11,088,824
<b>Other Fund Types</b>	<u>99,575</u>	<u>4,112</u>	<u>103,687</u>	<u>88,218</u>	<u>19,246</u>	<u>107,464</u>
<b>Total</b>	<u>\$ 11,717,051</u>	<u>\$ 4,112</u>	<u>\$ 11,721,163</u>	<u>11,259,834</u>	<u>\$ 19,246</u>	<u>\$ 11,279,080</u>

Entity fund balances include balances that are available to pay current liabilities and to finance authorized purchase commitments. Also, Entity Assets, Other Fund Types consist of the Environmental Services Receipt account. The Environmental Services Receipt account is a special fund receipt account. Upon Congress appropriating the funds, EPA will use the receipts in the S&T and the EPM appropriations.

The non-entity Other Fund Type consist of clearing accounts and deposit funds. These funds are awaiting documentation for the determination of proper accounting disposition.

For FY 2002 the amounts on the financial statements are \$2,828 thousand less than the balances on Treasury's records. These differences consist mainly of unrecorded transactions from the last two months of FY 2002 that will be recorded by the agency early in FY 2003. The differences for Superfund and All Other Funds are \$1,301 thousand and \$1,527 thousand, respectively.

## Note 3. Cash

In All Others, as of September 30, 2002, Cash consisted of imprest funds totaling \$10 thousand.

## Note 4. Investments

As of September 30, 2002 and 2001, investments consisted of the following:

		<b>Unamortized (Premium) Cost</b>	<b>Discount</b>	<b>Interest Receivable</b>	<b>Investments, Net</b>	<b>Market Value</b>
<b>SUPERFUND</b>						
<b>Intragovernmental Securities:</b>						
Non-Marketable	FY 2002	\$ 3,234,352	\$ (62,650)	\$ 12,973	\$ 3,309,975	\$ 3,309,975
	FY 2001	\$ 3,630,186	\$ (33,967)	\$ 59,891	\$ 3,724,044	\$ 3,724,044
<b>ALL OTHERS</b>						
<b>Intragovernmental Securities:</b>						
Non-marketable	FY 2002	\$ 1,892,769	\$ (36,752)	\$ 22,531	\$ 1,952,052	\$ 1,952,052
	FY 2001	\$ 1,703,909	\$ (52,551)	\$ 22,358	\$ 1,778,818	\$ 1,778,818

CERCLA, as amended by SARA, authorizes EPA to recover monies to clean up Superfund sites from responsible parties (RP). Some RPs 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 securities of the reorganized company. The Agency does not intend to exercise ownership rights to these securities and instead will convert these securities to cash as soon as practicable.

## Note 5. Accounts Receivable

The Accounts Receivable for September 30, 2002 and 2001, consist of the following:

	<b>FY 2002</b>		<b>FY 2001</b>	
	<b>Superfund</b>	<b>All Others</b>	<b>Superfund</b>	<b>All Others</b>
<b>Intragovernmental Assets:</b>				
Accounts & Interest Receivable	\$ 33,309	\$ 72,298	\$ 31,178	\$ 69,977
<b>Total</b>	<b>\$ 33,309</b>	<b>\$ 72,298</b>	<b>\$ 31,178</b>	<b>\$ 69,977</b>
<b>Non-Federal Assets:</b>				
Unbilled Accounts Receivable	\$ 87,443	\$ 2,210	\$ 86,470	\$ 1,668
Accounts & Interest Receivable	783,279	101,392	949,566	133,787
Less: Allowance for Uncollectibles	(459,285)	(54,204)	(569,998)	(60,428)
<b>Total</b>	<b>\$ 411,437</b>	<b>\$ 49,398</b>	<b>\$ 466,038</b>	<b>\$ 75,027</b>

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

## Note 6. Other Assets

For FY 2002 inventory and operating materials and supplies were included in Other Nonfederal Assets. In FY 2001 these items were originally reported on a separate line.

Other Assets for September 30, 2002, consist of the following:

	<b>Superfund Trust Fund</b>	<b>All Others</b>	<b>Combined Totals</b>
<b>Intragovernmental Assets:</b>			
Advances to Federal Agencies	\$ 141	\$ 4,163	\$ 4,304
Advances to Working Capital Fund	4,379	0	4,379
Advances for Postage	0	415	415
<b>Total Intragovernmental Assets</b>	<b>\$ 4,520</b>	<b>\$ 4,578</b>	<b>\$ 9,098</b>
<b>Nonfederal Assets:</b>			
Travel Advances	\$ (13)	\$ (911)	\$ (924)
Letter of Credit Advances	0	2,388	2,388
Grant Advances	0	3,054	3,054
Other Advances	793	148	941
Operating Materials and Supplies	0	216	216
Inventory for Sale	0	42	42
<b>Total Nonfederal Assets</b>	<b>\$ 780</b>	<b>\$ 4,937</b>	<b>\$ 5,717</b>

Other Assets for September 30, 2001, consist of the following:

	<b>Superfund Trust Fund</b>	<b>All Others</b>	<b>Combined Totals</b>
<b>Intragovernmental Assets:</b>			
Advances to Federal Agencies	\$ 166	\$ 4,265	\$ 4,431
Advances to Working Capital Fund	5,355	0	5,355
Advances for Postage	0	121	121
<b>Total Intragovernmental Assets</b>	<b>\$ 5,521</b>	<b>\$ 4,386</b>	<b>\$ 9,907</b>
<b>Nonfederal Assets:</b>			
Travel Advances	\$ 7	\$ (854)	\$ (847)
Letter of Credit Advances	0	315	315
Grant Advances	0	1,322	1,322
Other Advances	769	92	861
Bank Card Payments	1	0	1
Operating Materials and Supplies	0	252	252
Inventory for Sale	0	1	1
Bankruptcy Settlement*	8,101	0	8,101
<b>Total Nonfederal Assets</b>	<b>\$ 8,878</b>	<b>\$ 1,128</b>	<b>\$ 10,006</b>

\* Bankruptcy Settlement: A promissory note in the amount of \$8.1 million was issued to the Superfund in a bankruptcy settlement by Joy Global, Inc. The note was paid off in FY 2002.

## Note 7. Loans Receivable, Net—Nonfederal

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 as of September 30, 2002 and 2001, is provided in the following sections.

	FY 2002			FY 2001		
	Loans Receivable, Gross	Allowance*	Value of Assets Related to Direct Loans	Loans Receivable, Gross	Allowance*	Value of Assets Related to Direct Loans
Direct Loans Obligated Prior to FY 1992	\$ 41,181	\$ 0	\$ 41,181	\$ 49,683	\$ 0	\$ 49,683
Direct Loans Obligated After FY 1991	<u>38,664</u>	<u>(15,199)</u>	<u>23,465</u>	<u>42,779</u>	<u>(16,910)</u>	<u>25,869</u>
<b>Total</b>	<b>\$ <u>79,845</u></b>	<b>\$ <u>(15,199)</u></b>	<b>\$ <u>64,646</u></b>	<b>\$ <u>92,462</u></b>	<b>\$ <u>(16,910)</u></b>	<b>\$ <u>75,552</u></b>

\* Allowance for Pre-Credit Reform loans (Prior to FY 1992) is the Allowance for Estimated Uncollectible Loans and the Allowance for Post Credit Reform Loans (After FY 1991) is the Allowance for Subsidy Cost (present value).

### Subsidy Expenses for Post Credit Reform Loans:

	Interest Differential	Expected Defaults	Fee Offsets	Total
Direct Loan Subsidy Expense - FY 2002	\$ 115	\$ 157	\$ 0	\$ 272
Downward Subsidy Reestimate - FY 2002	<u>(496)</u>	<u>(816)</u>	<u>0</u>	<u>(1,312)</u>
<b>FY 2002 Totals</b>	<b>\$ <u>(381)</u></b>	<b>\$ <u>(659)</u></b>	<b>\$ <u>0</u></b>	<b>\$ <u>(1,040)</u></b>
Direct Loan Subsidy Expense - FY 2001	<u>1,227</u>	<u>2,353</u>	<u>0</u>	<u>3,580</u>



## Note 8. Accounts Payable and Accrued Liabilities

The Accounts Payable and Accrued Liabilities, both federal and nonfederal, are current liabilities consisting of the following amounts as of September 30, 2002:

<b>Federal:</b>	<b>Superfund Trust Fund</b>	<b>All Other Funds</b>	<b>Combined Total</b>
Accounts Payable to Other Federal Agencies	\$ 4,964	\$ 620	\$ 5,584
Liability for Allocation Transfers	20,017		20,017
Expenditure Transfers Payable to other EPA Funds	45,701		45,701
Accrued Liabilities, Federal	45,577	43,363	88,920
<b>Total Federal Accounts Payable &amp; Accrued Liabilities</b>	<b>\$ 116,239</b>	<b>\$ 43,983</b>	<b>\$ 160,222</b>
<b>Nonfederal:</b>			
Accounts Payable, nonfederal	\$ 43,344	\$ 74,260	\$ 117,604
Advances Payable, nonfederal	14	3	17
Interest Payable	333	1	334
Grant Liabilities	14,590	348,474	363,064
Other Accrued Liabilities, nonfederal	87,524	88,498	176,022
<b>Total nonfederal Accounts Payable &amp; Accrued Liabilities</b>	<b>\$ 145,805</b>	<b>\$ 511,236</b>	<b>\$ 657,041</b>

The Accounts Payable and Accrued Liabilities, both federal and nonfederal, consisted of the following amounts as of September 30, 2001:

<b>Federal:</b>	<b>Superfund Trust Fund</b>	<b>All Other Funds</b>	<b>Combined Total</b>
Accounts Payable to other Federal Agencies	\$ 759	\$ 1,118	\$ 1,877
Liability for Allocation Transfers	20,163		20,163
Expenditure Transfers Payable to other EPA Funds	44,887		44,887
Accrued Liabilities, Federal	57,728	40,541	98,269
<b>Total Federal Accounts Payable &amp; Accrued Liabilities</b>	<b>\$ 123,537</b>	<b>\$ 41,659</b>	<b>\$ 165,196</b>
<b>Nonfederal:</b>			
Accounts Payable, nonfederal	\$ 39,746	\$ 91,050	\$ 130,796
Advances Payable, nonfederal	5	33	38
Interest Payable	126		126
Grant Liabilities	16,921	476,749	493,670
Other Accrued Liabilities, nonfederal	80,937	87,442	168,379
<b>Total Nonfederal Accounts Payable &amp; Accrued Liabilities</b>	<b>\$ 137,735</b>	<b>\$ 655,274</b>	<b>\$ 793,009</b>

## Note 9. General Plant, Property, and Equipment

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 software; real, EPA-Held and Contractor-Held personal, and capitalized-leased property.

As of September 30, 2002, Plant, Property, and Equipment consisted of the following:

	Superfund			All Others		
	Acquisition Value	Accumulated Depreciation	Net Book Value	Acquisition Value	Accumulated Depreciation	Net Book Value
EPA-Held Equipment	\$ 25,968	\$ (15,245)	\$ 10,723	\$ 148,693	\$ (92,920)	\$ 55,773
Software	961	(85)	876	26,358	(2,520)	23,838
Contractor-Held Property:						
Superfund Site-Specific	32,472	(12,065)	20,407	0	0	0
General	10,407	(3,667)	6,740	18,412	(9,689)	8,723
Land and Buildings	0	0	0	521,515	(85,238)	436,277
Capital Leases	0	0	0	41,614	(14,889)	26,725
<b>Total</b>	<u>\$ 69,808</u>	<u>\$ (31,062)</u>	<u>\$ 38,746</u>	<u>\$ 756,592</u>	<u>\$ (205,256)</u>	<u>\$ 551,336</u>

As of September 30, 2001, Plant, Property, and Equipment consisted of the following (as restated; see Note 37):

	Superfund			All Others		
	Acquisition Value	Accumulated Depreciation	Net Book Value	Acquisition Value	Accumulated Depreciation	Net Book Value
EPA-Held Equipment	\$ 23,832	\$ (15,031)	\$ 8,801	\$ 161,253	\$ (105,484)	\$ 55,769
Software	559	(5)	554	10,398	(148)	10,250
Contractor-Held Property:						
Superfund Site-Specific	32,472	(8,818)	23,654	0	0	0
General	9,447	(2,287)	7,160	16,752	(7,647)	9,105
Land and Buildings	0	0	0	500,854	(76,951)	423,903
Capital Leases	0	0	0	40,992	(13,126)	27,866
<b>Total</b>	<u>\$ 66,310</u>	<u>\$ (26,141)</u>	<u>\$ 40,169</u>	<u>\$ 730,249</u>	<u>\$ (203,356)</u>	<u>\$ 526,893</u>

## Note 10. Debt

The Debt consisted of the following as of September 30, 2002 and 2001:

	FY 2002			FY 2001		
	Beginning Balance	Net Borrowing	Ending Balance	Beginning Balance	Net Borrowing	Ending Balance
<b>All Others</b>						
Other Debt: Debt to Treasury	<u>\$ 31,124</u>	<u>\$ (6,834)</u>	<u>\$ 24,290</u>	<u>\$ 37,922</u>	<u>\$ (6,798)</u>	<u>\$ 31,124</u>
Classification of Debt:						
Intragovernmental Debt			<u>\$ 24,290</u>			<u>\$ 31,124</u>
<b>Total</b>			<u>\$ 24,290</u>			<u>\$ 31,124</u>

## Note 11. Custodial Liability

Custodial Liability represents the amount of net accounts receivable that, when collected, will be deposited to the General Fund of the Treasury. Included in the custodial liability are amounts for fines and penalties, interest assessments, repayments of loans, and miscellaneous other accounts receivable.

## Note 12. Other Liabilities

The Other Liabilities, both intragovernmental and nonfederal, for September 30, 2002, are as follows:

Other Liabilities - Intragovernmental	Covered by Budgetary Resources	Not Covered by Budgetary Resources	Total
<b>Superfund - Current</b>			
Employer Contributions & Payroll Taxes	\$ 3,169	0	\$ 3,169
Other Advances	2,470	0	2,470
Advances, HRSTF Cashout	16,618	0	16,618
Deferred HRSTF Cashout	30	0	30
Resources Payable to Treasury	0	0	0
<b>Superfund - Non-Current</b>			
Unfunded FECA Liability	<u>0</u>	<u>1,440</u>	<u>1,440</u>
<b>Total Superfund</b>	<u>\$ 22,287</u>	<u>\$ 1,440</u>	<u>\$ 23,727</u>
<b>All Other - Current</b>			
Employer Contributions & Payroll Taxes	\$ 13,883	\$ 0	\$ 13,883
WCF Advances	4,379	0	4,379
Other Advances	1,435	0	1,435
Liability for Deposit Funds	(91)	0	(91)
Resources Payable to Treasury	2	0	2
Subsidy Payable to Treasury	371	0	371
<b>All Other - Non-Current</b>			
Unfunded FECA Liability	<u>0</u>	<u>6,402</u>	<u>6,402</u>
<b>Total All Other</b>	<u>\$ 19,979</u>	<u>\$ 6,402</u>	<u>\$ 26,381</u>
<b>Other Liabilities - Nonfederal</b>			
<b>Superfund - Current</b>			
Unearned Advances, Nonfederal	<u>\$ 45,515</u>	<u>\$ 0</u>	<u>\$ 45,515</u>
<b>Total Superfund</b>	<u>\$ 45,515</u>	<u>\$ 0</u>	<u>\$ 45,515</u>
<b>All Other - Current</b>			
Unearned Advances, Nonfederal	\$ 6,569	\$ 0	\$ 6,569
Deferred Credits	0	0	0
Liability for Deposit Funds, Nonfederal	4,181	0	4,181
<b>All Other - Non-Current</b>			
Capital Lease Liability	<u>0</u>	<u>36,729</u>	<u>36,729</u>
<b>Total All Other</b>	<u>\$ 10,750</u>	<u>\$ 36,729</u>	<u>\$ 47,479</u>

The Other Liabilities, both intragovernmental and nonfederal, for September 30, 2001, are as follows:

<b>Other Liabilities - Intragovernmental</b>	<b>Covered by Budgetary Resources</b>	<b>Not Covered by Budgetary Resources</b>	<b>Total</b>
<b>Superfund - Current</b>			
Employer Contributions & Payroll Taxes	\$ 2,682	\$ 0	\$ 2,682
Other Advances	1,045	0	1,045
Advances, HRSTF Cashout	15,208	0	15,208
Deferred HRSTF Cashout	947	0	947
Resources Payable to Treasury	0	0	0
<b>Superfund - Non-Current</b>			
Unfunded FECA Liability	0	1,426	1,426
<b>Total Superfund</b>	<u>\$ 19,882</u>	<u>\$ 1,426</u>	<u>\$ 21,308</u>
<b>All Other - Current</b>			
Employer Contributions & Payroll Taxes	\$ 11,935	\$ 0	\$ 11,935
WCF Advances	5,355	0	5,355
Other Advances	2,646	0	2,646
Liability for Deposit Funds	(85)	0	(85)
Resources Payable to Treasury	2	0	2
Subsidy Payable to Treasury	1,313	0	1,313
<b>All Other - Non-Current</b>			
Unfunded FECA Liability	0	6,341	6,341
<b>Total All Other</b>	<u>\$ 21,166</u>	<u>\$ 6,341</u>	<u>\$ 27,507</u>
<b>Other Liabilities - Nonfederal</b>			
<b>Superfund - Current</b>			
Unearned Advances, Nonfederal	\$ 27,659	\$ 0	\$ 27,659
<b>Total Superfund</b>	<u>\$ 27,659</u>	<u>\$ 0</u>	<u>\$ 27,659</u>
<b>All Other - Current</b>			
Unearned Advances, Nonfederal	\$ 4,275	\$ 0	\$ 4,275
Deferred Credits	0	0	0
Liability for Deposit Funds, Nonfederal	19,331		19,331
<b>All Other - Non-Current</b>			
Capital Lease Liability	0	36,930	36,930
<b>Total All Other</b>	<u>\$ 23,606</u>	<u>\$ 36,930</u>	<u>\$ 60,536</u>

## Note 13. Leases

The Capital Leases as of September 30, 2002 and 2001, consist of the following:

### Capital Leases, All Other Funds:

Summary of Assets Under Capital Lease:	FY 2002	FY 2001
Real Property	\$ 40,913	\$ 40,913
Personal Property	701	79
<b>Total</b>	<u>\$ 41,614</u>	<u>\$ 40,992</u>
Accumulated Amortization	<u>\$ 14,889</u>	<u>\$ 13,126</u>

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). EPA has one capital lease for a Xerox copier that expired in FY 2002 and capital leases for seven shuttle buses terminating in FY 2007. The real property leases terminate in fiscal years 2010, 2013, and 2025. The charges are expended out of the Environmental Programs and Management (EPM) appropriation. The total future minimum lease payments of the capital leases are listed below.

Future Payments Due:	All Others
<b>Fiscal Year</b>	
2003	\$ 6,439
2004	6,439
2005	6,439
2006	6,439
2007	6,331
After 5 Years	<u>83,605</u>
Total Future Minimum Lease Payments	115,692
Less: Imputed Interest	<u>(78,963)</u>
<b>Net Capital Lease Liability</b>	<u>36,729</u>
<b>Liability Not Covered by Budgetary Resources (See Note 12)</b>	<u>\$ 36,729</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 during FY 2002. 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). Two of these operating leases expired in FY 2002. Two of these operating leases that were due to expire in FY 2002 were extended: one until FY 2004 and the other on a monthly basis. Two others expire in fiscal years 2017 and 2020. The fifth lease that

expired in FY 2001 was extended until FY 2007. The charges are expended out of the EPM appropriation. The total minimum future costs of operating leases are listed below.

Fiscal Year	Superfund	All Others	Total Land & Buildings
2002	\$ 0	\$ 2,102	\$ 2,102
2003	0	74	74
2004	0	74	74
2005	0	74	74
2006	0	74	74
Beyond 2006	0	920	920
Total Future Minimum Lease Payments	<u>\$ 0</u>	<u>\$ 3,318</u>	<u>\$ 3,318</u>

### Note 14. Pension and Other Actuarial Liabilities

FFECA provides income and medical cost protection to covered federal civilian employees injured on the job, employees who have incurred a work-related occupational disease, and beneficiaries of employees whose death is attributable to a job-related injury or occupational disease. Annually, EPA is allocated the portion of the long term FECA actuarial liability attributable to the entity. The liability is calculated to estimate the expected liability for death, disability, medical, and miscellaneous costs for approved compensation cases. The liability amounts and the calculation methodologies are provided by the Department of Labor.

The FECA Actuarial Liability at September 30, 2002 and 2001, consisted of the following:

	FY 2002		FY 2001	
	Superfund	All Others	Superfund	All Other
FECA Actuarial Liability	\$ <u>7,698</u>	\$ <u>31,759</u>	\$ <u>7,731</u>	\$ <u>31,902</u>

The FY 2002 present value of these estimates was calculated using a discount rate of 5.2 percent. The estimated future costs are recorded as an unfunded liability.

## Note 15. Cashout Advances and Deferrals, Superfund

Cashouts are funds received by EPA, a state, or another Potentially Responsible Party under the terms of a settlement agreement (e.g., consent decree) to finance response action costs at a specified Superfund site. Under CERCLA section 122(b)(3), cashout funds received by EPA are placed in site-specific, interest bearing accounts known as special accounts and are used in accordance with the terms of the settlement agreement. Funds placed in special accounts may be used without further appropriation by Congress.

## Note 16. Unexpended Appropriations

As of September 30, 2002 and 2001, the Unexpended Appropriations consisted of the following for All Other Funds:

<b>Unexpended Appropriations:</b>	<b>FY 2002</b>	<b>FY 2001</b>
Unobligated		
Available	\$ 1,725,016	\$ 1,635,071
Unavailable	52,896	64,930
Undelivered Orders	<u>9,145,977</u>	<u>8,658,960</u>
<b>Total</b>	<u>\$ 10,923,889</u>	<u>\$ 10,358,961</u>

## Note 17. 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 and the environmental tax on corporations also 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 maintained by the U.S. Department of Treasury as of September 30, 2002 and 2001. The amounts contained in these statements have been provided by the Treasury and are audited. Outlays represent amounts received by EPA's Superfund Trust Fund; such funds are eliminated on consolidation with the Superfund Trust Fund maintained by Treasury.

<b>SUPERFUND FY 2002</b>	<b>EPA</b>	<b>Treasury</b>	<b>Combined</b>
<b>Undistributed Balances</b>			
Available for Investment	\$ 0	\$ 1,876	\$ 1,876
Total Undisbursed Balance	??	??	??
Interest Receivable	0	12,973	12,973
Investments, Net of Discounts	2,762,430	534,572	3,297,002
Total Assets	\$ 2,762,430	\$ 549,421	\$ 3,311,851
<b>Liabilities &amp; Equity</b>			
Equity	\$ 2,762,430	\$ 549,421	\$ 3,311,851
Total Liabilities and Equity	\$ 2,762,430	\$ 549,421	\$ 3,311,851
<b>Receipts</b>			
Corporate Environmental	\$ 0	\$ 7,466	\$ 7,466
Cost Recoveries	0	248,252	248,252
Fines & Penalties	0	1,444	1,444
Total Revenue	0	257,162	257,162
Appropriations Received	0	676,292	676,292
Interest Income	0	110,577	110,577
Total Receipts	\$ 0	\$ 1,044,031	\$ 1,044,031
<b>Outlays</b>			
Transfers to/from EPA, Net	\$ 1,329,490	\$(1,329,490)	\$ 0
Transfers to CDC	0	(49,502)	(49,502)
Total Outlays	1,329,490	(1,378,992)	(49,502)
Net Income	\$ 1,329,490	\$ (334,961)	\$ 994,529



<b>SUPERFUND FY 2001</b>	<b>EPA</b>	<b>Treasury</b>	<b>Combined</b>
<b>Undistributed Balances</b>			
Available for Investment	\$ 0	\$ 768	\$ 768
Total Undisbursed Balance	??	??	??
Interest Receivable	0	59,891	59,891
Investments, Net of Discounts	<u>2,837,243</u>	<u>826,910</u>	<u>3,664,153</u>
Total Assets	<u>\$ 2,837,243</u>	<u>\$ 887,569</u>	<u>\$ 3,724,812</u>
<b>Liabilities &amp; Equity</b>			
Equity	<u>\$ 2,837,243</u>	<u>\$ 887,569</u>	<u>\$ 3,724,812</u>
Total Liability and Equity	<u>\$ 2,837,243</u>	<u>\$ 887,569</u>	<u>\$ 3,724,812</u>
<b>Receipts</b>			
Petroleum-Imported	\$ 0	\$ 2,471	\$ 2,471
Petroleum-Domestic	0	(12)	(12)
Certain Chemicals	0	32	32
Imported Substances	0	5	5
Corporate Environmental	0	3,861	3,861
Cost Recoveries	0	202,132	202,132
Fines & Penalties	<u>0</u>	<u>2,112</u>	<u>2,112</u>
Total Revenue	0	210,601	210,601
Appropriations Received	0	633,603	633,603
Interest Income	<u>0</u>	<u>220,504</u>	<u>220,504</u>
Total Receipts	<u>0</u>	<u>1,064,708</u>	<u>1,064,708</u>
<b>Outlays</b>			
Transfers to EPA	1,227,360	(1,227,360)	0
Transfers to CDC	<u>0</u>	<u>(74,835)</u>	<u>(74,835)</u>
Total Outlays	<u>1,227,360</u>	<u>(1,302,195)</u>	<u>(74,835)</u>
Net Income	<u>\$ 1,227,360</u>	<u>\$ (237,487)</u>	<u>\$ 989,873</u>

### **LUST (Audited)**

LUST is supported primarily by a sales tax on motor fuels to clean up LUST waste sites. In FY 2002 there were no fund receipts from cost recoveries, and only \$40 thousand in cost recoveries were received in FY 2001. 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 audited. Outlays represent appropriations received by EPA's LUST Trust Fund; such funds are eliminated on consolidation with the LUST Trust Fund maintained by Treasury.

LUST FY 2002	EPA	Treasury	Combined
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**Undistributed Balances**

Available for Investment	\$ 0	\$ 12,232	\$ 12,232
Total Undisbursed Balance	<u>0</u>	<u>12,232</u>	<u>12,232</u>
Interest Receivable	0	22,531	22,531
Investments, Net of Discounts	80,875	1,848,646	1,929,521
Total Assets	<u>\$ 80,875</u>	<u>\$ 1,883,409</u>	<u>\$ 1,964,284</u>

**Liabilities & Equity**

Equity	<u>\$ 80,875</u>	<u>\$ 1,883,409</u>	<u>\$ 1,964,284</u>
Total Liabilities and Equity	<u>\$ 80,875</u>	<u>\$ 1,883,409</u>	<u>\$ 1,964,284</u>

**Receipts**

Highway TF Tax	\$ 0	\$ 173,351	\$ 173,351
Airport TF Tax	0	13,199	13,199
Inland TF Tax	0	474	474
Refund Gasoline Tax	0	(2,167)	(2,167)
Refund Diesel Tax	0	(3,357)	(3,357)
Refund Aviation Tax	0	(310)	(310)
Total Revenue	<u>0</u>	<u>181,190</u>	<u>181,190</u>
Interest Income	<u>0</u>	<u>67,563</u>	<u>67,563</u>
Total Receipts	<u>0</u>	<u>248,753</u>	<u>248,753</u>

**Outlays**

Transfers to/from EPA, Net	<u>72,912</u>	<u>(72,912)</u>	<u>0</u>
Total Outlays	<u>72,912</u>	<u>(72,912)</u>	<u>0</u>
Net Income	<u>\$ 72,912</u>	<u>\$ 175,841</u>	<u>\$ 248,753</u>

<b>LUST FY 2001</b>	<b>EPA</b>	<b>Treasury</b>	<b>Combined</b>
<b>Undistributed Balances</b>			
Available for Investment	\$ 0	\$ 12,211	\$ 12,211
Total Undisbursed Balance	0	12,211	12,211
Interest Receivable	0	22,358	22,358
Investments, Net of Discounts	83,460	1,673,000	1,756,460
Total Assets	\$ 83,460	\$ 1,707,569	\$ 1,791,029
<b>Liabilities &amp; Equity</b>			
Equity	\$ 83,460	\$ 1,707,569	\$ 1,791,029
Total Liability and Equity	\$ 83,460	\$ 1,707,569	\$ 1,791,029
<b>Receipts</b>			
Highway TF Tax	\$ 0	\$ 167,408	\$ 167,408
Airport TF Tax	0	16,114	16,114
Inland TF Tax	0	582	582
Refund Gasoline Tax	0	(834)	(834)
Refund Diesel Tax	0	(1,584)	(1,584)
Refund Aviation Tax	0	(19)	(19)
Refund Aviation Fuel Tax	0	(123)	(123)
Cost Recovery	0	40	40
Total Revenue	0	181,584	181,584
Interest Income	0	94,802	94,802
Total Receipts	0	276,386	276,386
<b>Outlays</b>			
Transfers to EPA	74,617	(74,617)	0
Total Outlays	74,617	(74,617)	0
Net Income	\$ 74,617	\$ 201,769	\$ 276,386

## **Note 18. Commitments and Contingencies**

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

- Various personnel actions, suits, 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 Section 106(a), EPA issues administrative orders that require parties to clean up contaminated sites. CERCLA Section 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 Section 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 one CERCLA Section 106(b) administrative claim. If the claimant is successful, the total losses on the administrative and judicial claims could amount to approximately \$17.8 million. The Environmental Appeals Board has not yet issued final decisions on the administrative claim; therefore, a definite estimate of the amount of the contingent loss cannot be made. The claimant's chance of success overall is characterized as reasonably possible.

### **All Other**

There is one material claim which may be considered threatened litigation involving all other appropriated funds of the Agency. If the claimant is successful, the total losses of the claim could amount to \$82.8 million. The claim is currently being evaluated by GSA contracting officials and their private sector claims consultant. The claimant's chance of success overall is characterized as reasonably possible.

### **Judgement Fund**

In cases that 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. Until these claims are settled or a court judgement is assessed and the Judgement Fund is determined to be the appropriate source for the payment, claims that are probable and estimable must be recognized as an expense and liability of the agency. For these cases, at the time of settlement or judgement, the liability will be reduced and an imputed financing source recognized. See Interpretation of Federal Financial Accounting Standards No. 2, Accounting for Treasury Judgement Fund Transactions.

As of September 30, 2002, there are no material claims pending in the Treasury Judgement Fund.

## **Note 19. Exchange Revenues, Statement of Net Cost**

For FY 2002, the exchange revenues reported on the Statement of Net Cost are separated into Federal and nonfederal portions. Exchange revenues were reported only in total for the FY 2001 Statement of Net Cost. Exchange revenues on the Statement of Net Cost include income from services provided, non-custodial interest revenue (with the exception of interest earned on trust fund investments), and non-custodial miscellaneous earned revenue.

## **Note 20. Environmental Cleanup Costs**

The EPA has one site that requires clean up stemming from its activities. Costs amounting to \$20 thousand may be paid out of the Treasury Judgement Fund. (The \$20 thousand represents the lower end of a range estimate, of which the maximum of the range will total \$200 thousand.) The claimant's chance of success is characterized as probable. 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 cleanup costs. However, it is expected that the Department of Defense and GSA will bear all or most of the cost of remediation.

### **Accrued Cleanup Cost**

The EPA has 14 sites that will require future cleanup associated with permanent closure and one site with cleanup presently underway. The estimated costs will be approximately \$13.4 million. Since the cleanup 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 and record changes to the estimate in subsequent years.

The FY 2002 estimate for unfunded cleanup costs increased by \$1 million resulting from a Denver facility move from an existing site to a newly renovated building at the Denver Federal Center. Of the remaining \$13.3 million in estimated cleanup costs, approximately \$6 million represents the estimated expense to close the current RTP facility. These costs will be incurred within the next year. The remaining amount represents the future decontamination and decommissioning costs of EPA's other research facilities. There was a net decrease of approximately \$1.8 million in funded cleanup costs from FY 2001 to FY 2002. EPA could also be potentially liable for cleanup costs, at a GSA-leased site; however, the amounts are not known.

## **Note 21. 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 borne by the states. Credit is limited to state site-specific expenses EPA has determined to be reasonable, documented, direct out-of-pocket expenditures of nonfederal 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, 2002, total remaining state credits have been estimated at \$11.2 million. The estimated ending credit balance on September 30, 2001 was \$10.7 million.

## Note 22. Superfund Preauthorized Mixed Funding Agreements

Under Superfund preauthorized mixed funding agreements, PRPs agree to perform response actions at their sites with the understanding that EPA will reimburse the PRPs a certain 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 agreed to under a mixed funding agreement. As of September 30, 2002, EPA had 15 outstanding preauthorized mixed funding agreements with obligations totaling \$37.4 million. A liability is not recognized for these amounts until all work has been performed by the PRP and has been approved by EPA for payment. Further, EPA will not disburse any funds under these agreements until the PRP's application, claim, and claims adjustment processes have been reviewed and approved by EPA.

## Note 23. 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 Fiscal Years 2002 and 2001 EPA had one appropriation which funded a variety of programmatic and non-programmatic activities across the Agency, subject to statutory requirements. The EPM appropriation was created to fund personnel compensation and benefits, travel, procurement, and contract activities.

All of the expenses from EPM 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.

	FY 2002			FY 2001		
	Income From Other Appropriations	Expenses From Other Appropriations	Net Effect	Income From Other Appropriations	Expenses From Other Appropriations	Net Effect
<b>Superfund</b>	\$ 114,297	\$ (114,297)	\$ 0	\$ 103,654	\$ (103,654)	\$ 0
<b>All Others</b>	(114,297)	114,297	0	(103,654)	103,654	0
<b>Total</b>	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

## Note 24. Custodial Revenues and Accounts Receivable

EPA uses the accrual basis of accounting for the collection of fines, penalties, and miscellaneous receipts. Collectibility by EPA of the fines and penalties is based on the responsible parties' willingness and ability to pay.

	FY 2002	FY 2001
<b>Fines, Penalties, and Other Misc Revenue (EPA)</b>	\$ 95,489	\$ 121,892
<b>Accounts Receivable for Fines, Penalties, and Other Miscellaneous Receipts</b>		
Accounts Receivable	\$ 107,779	\$ 123,966
Less: Allowance for Doubtful Accounts	39,383	46,186
<b>Total</b>	<u>\$ 68,396</u>	<u>\$ 77,780</u>

## Note 25. Statement of Budgetary Resources

Reconciliations of budgetary resources, obligations incurred, and outlays, as presented in the audited Statements of Budgetary Resources, to amounts included in the Budget of the United States Government for the years ended September 30, 2002 and 2001, are as follows:

FY 2002	Budgetary Resources	Obligations Incurred	Outlays
<b>SUPERFUND</b>			
<b>Statement of Budgetary Resources</b>	\$ 2,448,998	\$ 1,698,004	\$ 1,377,754
Adjustments to Unliquidated Obligations, Unfilled Customer Orders, and Other	(17,463)	(17,463)	(1,313)
<b>Budget of the United States Government</b>	<u>\$ 2,431,535</u>	<u>\$ 1,680,541</u>	<u>\$ 1,376,441</u>
<b>ALL OTHER</b>			
<b>Statement of Budgetary Resources</b>	\$ 9,807,912	\$ 7,762,664	\$ 7,012,562
Less: Funds Reported by Other Federal Entities	(24,419)	(24,066)	(24,582)
Adjustments to Unliquidated Obligations, Unfilled Customer Orders, and Other	0	(622)	(26)
<b>Budget of the United States Government</b>	<u>\$ 9,783,493</u>	<u>\$ 7,737,976</u>	<u>\$ 6,987,954</u>
<b>FY 2001</b>			
<b>SUPERFUND</b>			
<b>Statement of Budgetary Resources</b>	\$ 2,284,377	\$ 1,570,056	\$ 1,199,748
Adjustments to Unliquidated Obligations, Unfilled Customer Orders and Other	(3,650)	13,813	0
<b>Budget of the United States Government</b>	<u>\$ 2,280,727</u>	<u>\$ 1,583,869</u>	<u>\$ 1,199,748</u>
<b>ALL OTHER</b>			
<b>Statement of Budgetary Resources</b>	\$ 9,343,106	\$ 7,431,802	\$ 7,015,605
Less: Funds Reported by Other Federal Entities	(26,148)	(25,677)	(25,342)
Adjustments to Unliquidated Obligations, Unfilled Customer Orders and Other	(5,229)	(5,229)	0
<b>Budget of the United States Government</b>	<u>\$ 9,311,729</u>	<u>\$ 7,400,896</u>	<u>\$ 6,990,263</u>

## Note 26. Recoveries and Permanently Not Available, Statement of Budgetary Resources

Details of Recoveries of Prior Year Obligations and Permanently Not Available on the Statement of Budgetary Resources are represented by the following categories:

	FY 2002	FY 2001
<b>SUPERFUND</b>		
Recoveries of Prior Year Obligations	\$ 230,628	\$ 196,644
Less: Rescinded Authority	<u>(2,000)</u>	<u>0</u>
<b>Total</b>	<u>\$ 228,628</u>	<u>\$ 196,644</u>
<b>ALL OTHERS</b>		
Recoveries of Prior Year Obligations	\$ 89,440	\$ 76,815
Adjustments to Beginning Unobligated Balances	0	0
Less: Payments to Treasury	(6,834)	(6,798)
Rescinded Authority	(1,588)	(15,668)
Canceled Authority	<u>(33,870)</u>	<u>(36,254)</u>
<b>Total</b>	<u>\$ 47,148</u>	<u>\$ 18,095</u>

## Note 27. Unobligated Balances Available

Availability of unobligated balances are shown comparatively for FY 2002 and FY 2001. The unexpired authority is available to be apportioned by the Office of Management and Budget for new obligations at the beginning of FY 2003. Expired authority is available for upward adjustments of obligations incurred as of the end of the fiscal year.

	FY 2002	FY 2001
<b>SUPERFUND</b>		
Unexpired Unobligated Balance	\$ 726,589	\$ 714,321
Authority Available for Apportionment	24,386	0
Expired Unobligated Balance	<u>19</u>	<u>0</u>
<b>Total</b>	<u>\$ 750,994</u>	<u>\$ 714,321</u>
<b>ALL OTHERS</b>		
Unexpired Unobligated Balance	\$ 1,917,637	\$ 1,791,475
Authority Available for Apportionment	1,150	0
Expired Unobligated Balance	<u>126,461</u>	<u>119,829</u>
<b>Total</b>	<u>\$ 2,045,248</u>	<u>\$ 1,911,304</u>



## Note 28. Offsetting Receipts

Distributed offsetting receipts credited to the general fund, special fund or trust fund receipt accounts offset gross outlays. For FY 2002 the following receipts were generated from these activities:

	<b>FY 2002</b>
<b>SUPERFUND</b>	
Trust Fund Recoveries	\$ 248,252
<b>Total</b>	<u>\$ 248,252</u>
<b>ALL OTHERS</b>	
Special Fund Environmental Service	11,358
Trust Fund Appropriation	676,292
<b>Total</b>	<u>\$ 687,650</u>

## Note 29. Statement of Financing

Specific components requiring or generating resources in future periods and resources that fund expenses recognized in prior periods are related to changes in liabilities not covered by budgetary resources. For FY 2002 the following line items are reconciled to the increases or decreases in those liabilities.

	<b>Superfund Trust Fund</b>	<b>All Other Funds</b>	<b>Combined Total</b>
<b>Statement of Financing lines</b>			
Resources that fund expenses recognized in prior periods	\$ (1,590)	\$ (399)	\$ (1,989)
Increases in environmental liabilities	<u>0</u>	<u>578</u>	<u>578</u>
<b>Total</b>	<u>\$ (1,590)</u>	<u>\$ 179</u>	<u>\$ (1,411)</u>
<b>Increases (Decreases) in Liabilities Not Covered by Budgetary Resources and Reconciling Items</b>			
Unfunded Annual Leave Liability	\$ 2,206	\$ 5,375	\$ 7,581
Unfunded Contingent Liability	(3,778)	(6,000)	(9,778)
Unfunded Workers Compensation Liability	14	61	75
Actuarial Workers Compensation Liability	(32)	(143)	(175)
Subsidy Payable to Treasury	0	(942)	(942)
Unfund Clean-up Costs Liability	0	578	578
Negative subsidy entries	0	616	616
Subsidy re-estimate entries	<u>0</u>	<u>634</u>	<u>634</u>
<b>Total</b>	<u>\$ (1,590)</u>	<u>\$ 179</u>	<u>\$ (1,411)</u>

## Note 30. Costs Not Assigned to Goals

FY 2002's Statement of Net Cost by Goal has -\$4.8 million in gross costs not assigned to goals. This amount is comprised of decreases of \$6.0 million in unfunded contingent liabilities and \$2.5 million in bad debt expenses; offset by increases of \$2.0 million interest on borrowing, \$0.6 million in environmental cleanup costs, \$0.6 million in undistributed federal payroll-related costs, and \$0.5 million in other interest costs.

For FY 2001's Statement of Net Cost by Goal, -\$31.5 million in gross costs were not assigned to goals. This amount was comprised of a decrease of \$57.0 million to the year-end grant accruals; partially offset by \$19.7 million in bad debt expense not assigned to goals, \$2.4 million in interest on Treasury borrowing, \$3.1 million in undistributed imputed costs, and \$0.3 million in miscellaneous expenses.

## Note 31. Transfers-In and Out, Statement of Changes in Net Position

### Appropriation Transfers, In/Out:

For FY 2002 the Appropriation Transfers under Budgetary Financing Sources on the Statement of Changes in Net Position are comprised of nonexpenditure transfers which affect Unexpended Appropriations for non-invested appropriations. These amounts are included in the Budget Authority, Net Transfers and Prior Year Unobligated Balance, Net Transfers lines on the Statement of Budgetary Resources. Detail of the Appropriation Transfers on the Statement of Changes in Net Position and a reconciliation with the Statement of Budgetary Resources follow:

Fund/Type of Account	Superfund	All Other Funds
GSA Building Fund	\$ 0	\$ 23,948
EPM (from current year balances)	0	3,750
EPM (from prior year balances)	0	500
STAG	0	400
Total of Appropriation Transfers	\$ 0	28,598
Net Transfers to Invested Funds*	1,329,490	72,912
Total of Net Transfers on Statement of Budgetary Resources	\$ 1,329,490	\$ 101,510

\* Portion of transfers on Statement of Budgetary Resources that are not part of Appropriation Transfers on Statement of Changes in Net Position

### Transfers In/Out Without Reimbursement, Budgetary:

For FY 2002 Transfers In/Out under Budgetary Financing Sources on the Statement of Changes in Net Position are comprised of transfers to or from other federal agencies and between EPA funds. These transfers affect Cumulative Results of Operations. A breakdown of the transfers-in and transfers-out, expenditure and nonexpenditure, follows:

Type of Transfer/Funds	Superfund	All Other Funds
Transfers-in (out), expenditure, Superfund to S&T fund	\$ (36,891)	\$ 36,891
Transfers-in (out), expenditure, Superfund to OIG fund	(11,867)	11,867
Transfers-out, nonexpenditure, from Superfund to other Federal agencies	(5,188)	
Transfers-out, nonexpenditure, from Treasury trust fund to CDC	(49,502)	
Transfers-in, nonexpenditure, Oil Spill		15,000
Transfer-in (out) adjustments, canceled funds		(86)
Total Transfers in (out) without Reimbursement, Budgetary	\$ (103,448)	63,672

### Transfers In/Out without Reimbursement, Other Financing Sources:

For FY 2002, Transfers In(Out) without Reimbursement under Other Financing Sources on the Statement of Changes in Net Position are comprised of 1) transfers of property, plant, and equipment between EPA funds and 2) transfers of negative subsidy to a special receipt fund for the credit reform funds. The amounts reported on the Statement of Changes in Net Position are as follows:

Type of Transfer/Fund	Superfund	All Other Funds
Transfer-in(out) of Property, Between Superfund and EPM	\$ 47	\$ (47)
Transfer-out of FY 2002 Negative Subsidy, to be Paid in FY 2003		(371)
Adjustment to Transfer-out of FY 2001 Negative Subsidy, Paid out in FY 2002 and Adjusted to Funded Expenses		816
Total Transfers in(out) Without Reimbursement, Budgetary	\$ <u>47</u>	\$ <u>398</u>

For FY 2001 the consolidated amounts shown as transfers-in on the Statement of Changes in Net Position are comprised of transfers from other federal agencies in accordance with applicable legislation. The consolidated amounts shown as transfers-out are nonexpenditure transfers to other Hazardous Substance Superfund allocation agency funds, such as HHS and Labor. Elimination transactions consist of intra-agency transfers between EPA funds.

### Note 32. Imputed Financing

In accordance with Statement of Federal Financial Accounting Standard No. 5 (Liabilities of the Federal Government), federal agencies must recognize the portion of employees' pensions and other retirement benefits to be paid by the Office of Personnel Management (OPM) trust funds. These amounts are recorded as imputed costs and imputed financing for the agency. Each year the OPM provides federal agencies with cost factors to calculate these imputed costs and financing that apply to the current year. These cost factors are multiplied by the current year's salaries or number of employees, as applicable, to provide an estimate of the imputed financing that the OPM trust funds will provide for each agency. The estimates for FY 2002 were \$14.7 million and \$83.0 million for Superfund and All Other Funds, respectively. For FY 2001 the estimates were \$13.4 million and \$76.5 million for Superfund and All Other Funds, respectively.

In addition to the pension and retirement benefits described above, EPA also records imputed costs and financing for Treasury Judgement Fund payments on behalf of the agency. Entries are made in accordance with the Interpretation of Federal Financial Accounting Standards No. 2, Accounting for Treasury Judgement Fund Transactions. For FY 2002, no Judgement Fund payments were made on EPA's behalf. For FY 2001, entries for Judgement Fund payments totaled \$0.3 million and \$1.3 million for Superfund and All Other Funds, respectively.

### Note 33. Payroll and Benefits Payable

The amounts that relate to payroll and benefits payable to EPA employees for the years ending September 30, 2002 and 2001, are detailed in the following tables.

FY 2002 Payroll and Benefits Payables	Covered by Budgetary Resources	Not Covered by Budgetary Resources	Total
<b>Superfund - Current</b>			
Accrued Funded Payroll and Benefits	\$ 9,146	\$ 0	\$ 9,146
Withholdings Payable	6,897	0	6,897
Employer Contributions Payable, nonfederal (TSP)	443	0	443
Other Post-employment Benefits Payable	3	0	3
Accrued Unfunded Annual Leave	0	22,647	22,647
<b>Total - Superfund - Current</b>	<b>\$ 16,489</b>	<b>\$ 22,647</b>	<b>\$ 39,136</b>
<b>All Other Funds - Current</b>			
Accrued Funded Payroll and Benefits	\$ 41,309	\$ 0	\$ 41,309
Withholdings Payable	30,233	0	30,233
Employer Contributions Payable, nonfederal (TSP)	1,943	0	1,943
Other Post-employment Benefits Payable	29	0	29
Accrued Funded Leave, WCF	320	0	320
Accrued Unfunded Annual Leave	0	103,598	103,598
<b>Total - All Other Funds - Current</b>	<b>\$ 73,834</b>	<b>\$ 103,598</b>	<b>\$ 177,432</b>
<b>FY 2001 Payroll and Benefits Payables</b>			
<b>Superfund - Current</b>			
Accrued Funded Payroll and Benefits	\$ 8,361	\$ 0	\$ 8,361
Withholdings Payable	5,935	0	5,935
Employer Contributions Payable, nonfederal (TSP)	372	0	372
Other Post-employment Benefits Payable	3	0	3
Accrued Unfunded Annual Leave	0	20,440	20,440
<b>Total - All Other Funds - Current</b>	<b>\$ 14,671</b>	<b>\$ 20,440</b>	<b>\$ 35,111</b>
<b>All Other Funds - Current</b>			
Accrued Funded Payroll and Benefits	\$ 37,099	\$ 0	\$ 37,099
Withholdings Payable	26,410	0	26,410
Employer Contributions Payable, nonfederal (TSP)	1,645	0	1,645
Other Post-employment Benefits Payable	33	0	33
Accrued Funded Leave, WCF	320	0	320
Accrued Unfunded Annual Leave	0	98,223	98,223
<b>Total - All Other Funds - Current</b>	<b>\$ 65,507</b>	<b>\$ 98,223</b>	<b>\$ 163,730</b>

### Note 34. Other Adjustments, Statement of Changes in Net Position

The Other Adjustments under Budgetary Financing Sources on the Statement of Changes in Net Position are comprised of rescissions to appropriated funds and cancellations of funds that expired on September 30, 1997. These amounts affected Unexpended Appropriations for All Other Funds for FY 2002.

Rescissions to Appropriate Funds	\$	1,588
Canceled Authority		<u>33,872</u>
<b>Total Other Adjustments</b>	<b>\$</b>	<b><u>35,460</u></b>

### Note 35. Nonexchange Revenue, Statement of Changes in Net Position

The Nonexchange Revenue, Budgetary Financing Sources on the Statement of Changes in Net Position for FY 2002 is comprised of the following items:

	<b>Superfund Trust Fund</b>	<b>All Other Funds</b>	<b>Combined Total</b>
Interest on Trust Fund Investments	\$ 110,577	\$ 67,563	\$ 178,140
Tax Revenue, Net of Refunds	7,466	181,190	188,656
Fines and Penalties Revenue *	(10,005)	0	(10,005)
Special Receipt Fund Revenue	0	11,358	11,358
Total Nonexchange Revenue	<u>\$ 108,038</u>	<u>\$ 260,111</u>	<u>\$ 368,149</u>

\* Fines and penalties revenue included the following negative items: a \$9,664 thousand write-off and \$1,339 thousand allowance for uncollectible accounts.

### Note 36. Correction of Error in Revenue, Prior Year, Superfund

In FY 2001 in accordance with agency General Counsel opinions, EPA started placing both past and future cost settlement amounts into site-specific accounts that could be used immediately without a Congressional appropriation. (See also Note 15, Cashout Advances, Superfund.) In that same fiscal year a material error was made in accruing revenue from the cashout advance account. That error resulted in an overstatement of earned revenue of \$53,256 thousand for FY 2001 for Superfund. The applicable statements are restated in accordance with Statement of Federal Financial Standards No. 21, Paragraphs 10 and 11.

The FY 2001 Statements of Changes in Net Position and Financing are restated in the same format as the FY 2001 EPA Audited Financial Statements. Because extensive format changes to these statements were required in FY 2002 by OMB Bulletin No. 01-09, Form and Content of Agency Financial Statements, these statements will not be comparative. The lines affected on the FY 2001 Statement of Financing were "Exchange Revenue not in the Entity's Budget" and "Net Cost of Operations."

The effect of the change on Earned Revenue, Net Cost of Operations, and Net Position, Superfund, for FY 2001 are as follows:

	Amount on FY 2001 Statements	Revenue Restatement Increase/ (Decrease)	Property Restatement (See Note 37) Increase/(Decrease)	Restated Amount
Earned Revenue (applied to Strategic Goal of Better Waste Management)	\$ 488,397	\$ (53,256)	--	\$ 435,141
Net Cost of Operations	1,220,769	53,256	\$ (1,164)	1,272,861
Net Position	3,507,433	(53,256)	23,654	3,477,720

### Note 37. Correction of Error in Contractor-held Property, Prior Years, Superfund

Prior to FY 2002 Superfund contractor-held property used on site-specific response actions were charged to expense in the period acquired. While some of this site-specific property was transferred to states for mandatory operation and maintenance, other items were held by EPA for a period in excess of two years. These items should have been capitalized and depreciated in accordance with federal accounting standards for property, plant, and equipment.

The omission of these Superfund site-specific items resulted in material errors in prior years' statements from FY 1996 to FY 2001. In accordance with SFFAS No. 21, "Reporting Corrections of Errors and Changes in Accounting Principles", the FY 2001 statements presented have been restated. The effect on statements for fiscal years prior to FY 2001 is reported as a prior period adjustment increase of \$22,490 thousand to FY 2001's beginning net position. The effect on relevant statement lines for Superfund for the fiscal years 1996 to 2001 are presented below.

The FY 2001 Statements of Changes in Net Position and Financing are restated in the same format as the FY 2001 EPA Audited Financial Statements. Because extensive format changes to these statements were required in FY 2002 by OMB Bulletin No. 01-09, Form and Content of Agency Financial Statements, these statements will not be comparative. The lines affected on the FY 2001 Statement of Financing were "Costs Capitalized on the Balance Sheet-General Property, Plant, and Equipment", "Depreciation and Amortization", and "Net Cost of Operations."

#### Effect on Property, Plant and Equipment, Net, Superfund:

FY	Effect on Cost	Effect on Depreciation	Net Effect	Cumulative Effect	Amount Reported on Statements	Corrected Balances (FY 2001 Restated)
1996	\$ 1,359	\$ 68	\$ 1,291	\$ 1,291	\$ 8,735	\$ 10,026
1997	8,410	815	7,595	8,886	6,485	15,371
1998	4,129	1,053	3,076	11,962	6,560	18,522
1999	6,040	1,540	4,500	16,462	13,407	29,869
2000	8,334	2,306	6,028	22,490	13,581	36,071
2001	4,224	3,060	1,164	23,654	16,515	40,169

**Effect on Total Costs\*, Superfund:**

<b>Fiscal Year</b>	<b>Amount Reported on Statements</b>	<b>Not Effect of Error (from previous table)</b>	<b>Corrections Balances (FY 2001 Restated)</b>
1996**	\$ 1,542,925	\$ (1,291)	\$ 1,541,634
1997	1,489,086	(7,595)	1,481,491
1998	1,505,963	(3,076)	1,502,887
1999	1,744,559	(4,500)	1,740,059
2000**	1,644,516	(6,028)	1,638,488
2001	1,709,166	(1,164)	1,708,002

**Effect on Net Position, Superfund:**

<b>Fiscal Year</b>	<b>Amount Reported on Statements</b>	<b>Cumulative Effect of Error (from previous table)</b>	<b>Revenue Restatement (see Note 36)</b>	<b>Corrected Balances (FY 2001 restated)</b>
1996**	\$ 6,106,381	\$ 1,291		\$ 6,107,672
1997	5,649,530	8,886		5,658,416
1998	5,064,268	11,962		5,076,230
1999	4,301,250	16,462		4,317,712
2000**	3,875,439	22,490		3,897,929
2001	3,507,322	23,654	\$ (53,256)	3,477,720

\* Because of changes in OMB Form and Content Bulletin requirements, for FY 1996 and 1997 "Total Funded Costs" plus "Unfunded Expenses" provided the closest comparison with later years' statements' "Total Costs." For years in which the Statement of Net Cost by Goal was presented, the costs were applied to the Strategic Goal of "Better Waste Management."

\*\* As restated on the following year's Audited Financial Statements.

**ENVIRONMENTAL PROTECTION AGENCY**  
**REQUIRED SUPPLEMENTAL INFORMATION**  
**AS OF SEPTEMBER 30, 2002**  
(Dollars in Thousands)  
(Unaudited)

**Deferred Maintenance**

The EPA classifies tangible property, plant, and equipment as follows: 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. No deferred maintenance was reported for any of the four categories.

**Intragovernmental Assets**

Intragovernmental amounts represent transactions between all federal departments and agencies and are reported by trading partner (entities that EPA did business with during FY 2002).

EPA confirmed its investment balances with the Bureau of the Public Debt, Department of the Treasury. In addition, EPA sent out requests to trading partners to reconcile and confirm intra-governmental receivables and transfers. Responses or inquiries were received from the Department of Commerce, Department of the Treasury, Department of Housing and Urban Development, the Nuclear Regulatory Commission, the Tennessee Valley Authority, and the National Science Foundation.

Trading Partner Code	Agency	Investments		Accounts Receivable		Other	
		Superfund	All Other	Superfund	All Other	Superfund	All Other
04	Government Printing Office	\$ 0	\$ 0	\$ 0	\$ 0	\$ 47	\$ 1,683
11	Executive Office of the President				3		
12	Department of Agriculture			115	4		
13	Department of Commerce				61	4	22
14	Department of Interior			13,583	568		5
15	Department of Justice			80		58	
17	Department of the Navy		70	468			
18	U. S. Postal Service		16				415
19	Department of State				20		2,418
20	Department of the Treasury	3,309,975	1,952,052	35	155		
21	Department of the Army			8,120	23		
31	Nuclear Regulatory Commission			2	1		
45	Equal Employment Opportunity Commission				53		
47	General Services Administration			6	2		
57	Department of the Air Force			131	185		
58	Federal Emergency Management Agency				9,549		
68	EPA (between Superfund and All Other)				47,412	4,387	60
69	Department of Transportation				9,695		
72	Agency for International Development				1,153		
75	Department of Health and Human Services			510	442		
80	National Aeronautics and Space Administration				10		
86	Department of Housing and Urban Development				46		



Trading Partner Code	Agency	Investments		Accounts Receivable		Other	
		Superfund	All Other	Superfund	All Other	Superfund	All Other
89	Department of Energy			124	399		
96	U.S. Army Corps of Engineers			8	1,344		
97	U.S. Department of Defense			10,509	60		
99	Treasury General Fund				371		
00	Unassigned	0	0	0	274	24	(25)
Total		\$3,309,975	\$1,952,052	\$ 33,309	\$ 72,298	\$ 4,520	\$ 4,578

## Intragovernmental Liabilities

EPA received a few requests for intragovernmental liabilities reconciliation from trading partners. EPA was able to confirm balances with the National Science Foundation (49), the Department of Commerce (13), the Department of Justice (15), the Office of Personnel Management (24), the Nuclear Regulatory Commission (31), the Department of the Treasury (20), and the Department of Labor (16).

Trading Partner Code	Agency	Accounts Payable		Accrued Liabilities		Other Liabilities	
		Superfund	All Other	Superfund	All Other	Superfund	All Other
03	Library of Congress	\$ 0	\$ 0	\$ 13	\$ 194	\$ 0	\$ 0
04	Government Printing Office			60	1,023		
12	Department of Agriculture		84	877	991	2,119	(5)
13	Department of Commerce	889		947	2,819		187
14	Department of Interior	901		3,566	2,415	4	90
15	Department of Justice	617	58	4,183	96	1,232	
16	Department of Labor	2,258		147	477	1,440	6,402
17	Department of the Navy	351			89	872	47
18	United States Postal Service			2	2	15	
19	Department of State				208		
20	Department of the Treasury			44	266		372
21	Department of the Army			27		896	
24	Office of Personnel Management			47	367	2,318	10,163
31	U.S. Nuclear Regulatory Commission			2	9		20
36	Dept. of Veterans Affairs				74		
45	EEOC				40		
47	General Services Administration			4,473	15,315	8,750	(91)
49	National Science Foundation			6	91		
57	Department of the Air Force					2,673	
58	Federal Emergency Management Agency	15,317		21	66		
59	Nat'l Foundation on Arts and Humanities			12			
64	Tennessee Valley Authority				74		36
68	EPA (between Superfund and All Others)	45,742	27	1,711			4,379
69	Department of Transportation			4,128	3,420		17
72	Agency for International Development				5		
75	Department of Health and Human Services	16		3,431	7,850		
80	National Aeronautics and Space Administration				239		
86	Department of Housing and Urban Development						827
89	Department of Energy			378	4,407		164
93	Federal Mediation Service				22		
95	Independent Agencies			5	508	1,490	

Trading Partner Code	Agency	Accounts Payable		Accrued Liabilities		Other Liabilities	
		Superfund	All Other	Superfund	All Other	Superfund	All Other
96	U.S. Army Corps of Engineers	4,613	438	21,191	1,533	5	19
97	Office of the Secretary of Defense			49	338	1,044	33
99	Treasury General Fund					851	3,721
00	Unassigned	(22)	13	237	425	18	
Total		\$ 70,682	\$ 620	\$ 45,557	\$ 43,363	\$ 23,727	\$ 26,381

For All Other Funds' remaining intragovernmental liabilities, \$24,290 thousand in Debt is assigned to the Department of the Treasury (trading partner Code 20), and \$69,706 thousand in Custodial Liability is assigned to the Treasury General Fund (trading partner Code 99).

### Intragovernmental Revenues and Costs

EPA's intragovernmental earned revenues are not reported by trading partners because they are below OMB's threshold of \$500 million.

	Superfund	All Others
Intragovernmental Earned Revenue	\$ 22,932	\$ 104,318
Associated Costs to generate above Revenue (Budget Functional Classification 304)	22,932	104,318

**ENVIRONMENTAL PROTECTION AGENCY**  
**REQUIRED SUPPLEMENTAL INFORMATION**  
**SUPPLEMENTAL STATEMENT OF BUDGETARY RESOURCES**  
**AS OF SEPTEMBER 30, 2002**  
(Dollars in Thousands)

	STAG	Environmental Programs & Management	Science & Technology	FIFRA	LUST Trust Fund	All Other	Total All Other
<b>Budgetary Resources:</b>							
Budget Authority:							
Appropriations Received	\$ 3,738,276	\$ 2,093,511	\$ 788,397	\$ 0	\$ 0	\$ 750,901	\$ 7,371,085
Borrowing Authority	0	0	0	0	0	0	0
Net Transfers	400	3,750	0	0	72,912	23,948	101,010
Other	0	0	0	0	0	0	0
Unobligated Balances:							
Beginning of Period	1,299,314	306,938	200,941	1,917	6,220	95,974	1,911,304
Net Transfers, Actual	0	500	0	0	0	0	500
Anticipated Transfers Balance	0	0	0	0	0	0	0
Spending Authority-Offsetting Collections:							
Earned and Collected	16,944	66,735	7,823	17,802	2	152,796	262,102
Receivable from Federal Sources	0	6,161	(5,908)	0	0	1,157	1,410
Change in Unfilled Customer Orders							
Advance Received	0	166	475	(1)	0	1,493	2,133
Without Advance from Federal Sources	0	59,663	1,610	0	0	1,276	62,549
Anticipated for Rest of Year	0	0	0	0	0	0	0
Transfers from Trust Funds	0	0	36,891	0	0	11,780	48,671
Total Spending Authority from Collections	\$ 16,944	\$ 132,725	\$ 40,891	\$ 17,801	\$ 2	\$ 168,502	\$ 376,865
Recoveries of Prior Year Obligations	62,743	15,315	2,072	0	1,032	8,278	89,440
Permanently Not Available	0	(27,868)	(6,533)	0	0	(7,891)	(42,292)
Total Budgetary Resources	\$ 5,117,677	\$ 2,524,871	\$ 1,025,768	\$ 19,718	\$ 80,166	\$ 1,039,712	\$ 9,807,912
<b>Status of Budgetary Resources:</b>							
Obligations Incurred:							
Direct	\$ 3,751,750	\$ 2,091,207	\$ 798,823	\$ 0	\$ 76,939	\$ 795,335	\$ 7,514,054
Reimbursable	0	79,514	1,468	19,342	0	148,286	248,610
Total Obligations Incurred	\$ 3,751,750	\$ 2,170,721	\$ 800,291	\$ 19,342	\$ 76,939	\$ 943,621	\$ 7,762,664
Unobligated Balances:							
Apportioned	1,365,927	249,695	203,607	376	3,227	94,805	1,917,637
Exempt from Apportionment	0	0	0	0	0	0	0
Unobligated Balances Not Available	0	104,455	21,870	0	0	1,286	127,611
Total Status of Budgetary Resources	\$ 5,117,677	\$ 2,524,871	\$ 1,025,768	\$ 19,718	\$ 80,166	\$ 1,039,712	\$ 9,807,912
<b>Relationship of Obligations to Outlays:</b>							
Obligations Incurred, Net	\$ 3,672,063	\$ 2,022,681	\$ 757,328	\$ 1,541	\$ 75,905	\$ 766,841	\$ 7,296,359
Obligated Balances, Net - Beginning	7,917,132	783,265	492,591	1,547	83,186	47,134	9,324,855
Accounts Receivable	0	15,680	41,803	0	0	15,094	72,577
Unfilled Customer Orders-Federal Sources	0	179,292	10,575	0	0	63,481	253,348
Undelivered Orders	(7,886,623)	(704,134)	(543,042)	(839)	(74,673)	(68,614)	(9,277,925)
Accounts Payable	(349,388)	(191,514)	(72,695)	(1,782)	(7,146)	(34,127)	(656,652)
Total Outlays	\$ 3,353,184	\$ 2,105,270	\$ 686,560	\$ 467	\$ 77,272	\$ 789,809	\$ 7,012,562
Disbursements	\$ 3,370,128	\$ 2,172,171	\$ 731,059	\$ 18,267	\$ 77,274	\$ 954,841	\$ 7,323,740
Collections	(16,944)	(66,901)	(44,499)	(17,800)	(2)	(165,032)	(311,178)
Less: Offsetting Receipts	0	0	0	0	0	(687,650)	(687,650)
Net Outlays	\$ 3,353,184	\$ 2,105,270	\$ 686,560	\$ 467	\$ 77,272	\$ 102,159	\$ 6,324,912

**ENVIRONMENTAL PROTECTION AGENCY  
 REQUIRED SUPPLEMENTAL INFORMATION  
 WORKING CAPITAL FUND  
 SUPPLEMENTAL BALANCE SHEET  
 AS OF SEPTEMBER 30, 2002  
 (Dollars in Thousands)**

	<b>Unaudited</b>
<b>ASSETS</b>	
Intragovernmental	
Fund Balance With Treasury	\$ 57,380
Accounts Receivable, Net Federal	10,754
Other	419
Total Intragovernmental	\$ 68,553
General Property, Plant and Equipment, Net	11,746
Other Nonfederal Assets	43
Total Assets	\$ 80,342
<b>LIABILITIES</b>	
Intragovernmental	
Accounts Payable & Accrued Liabilities, Federal	\$ 1,978
Other Federal Liabilities	29,206
Total Intragovernmental	\$ 31,184
Accounts Payable & Accrued Liabilities, Nonfederal	16,450
Payroll and Benefits Payable Nonfederal	1,683
Other Nonfederal Liabilities	
Total Liabilities	\$ 49,317
<b>NET POSITION</b>	
Cumulative Results of Operations	\$ 31,025
Total Net Position	31,025
Total Liabilities and Net Position	\$ 80,342

**ENVIRONMENTAL PROTECTION AGENCY  
REQUIRED SUPPLEMENTAL INFORMATION  
WORKING CAPITAL FUND  
SUPPLEMENTAL STATEMENT OF NET COST  
FOR THE YEAR ENDED SEPTEMBER 30, 2002  
(Dollars in Thousands)**

	<u>Unaudited</u>
<b>COSTS:</b>	
Intragovernmental	\$ 17,836
With the Public	112,735
Total Costs	\$ <u>130,571</u>
Less:	
Earned Revenues, Federal	131,178
Earned Revenues, Nonfederal	<u>(32)</u>
Total Earned Revenues	\$ <u>131,146</u>
<b>Net Cost of Operations</b>	<u><u>\$ (575)</u></u>

**ENVIRONMENTAL PROTECTION AGENCY  
REQUIRED SUPPLEMENTAL INFORMATION  
WORKING CAPITAL FUND  
SUPPLEMENTAL STATEMENT OF CHANGES IN NET POSITION  
FOR THE YEAR ENDED SEPTEMBER 30, 2002  
(Dollars in Thousands)**

	<u>Unaudited</u>
Net Position - Beginning of Period	\$ 28,708
Prior Period Adjustments	<u>0</u>
Beginning Balances, as adjusted	\$ 28,708
Budgetary Financing Sources:	
Transfers In/Out	0
Other	<u>0</u>
Total Budgetary Financing Sources	\$ 0
Other Financing Sources:	
Transfers In/Out	0
Imputed Financing Sources	1,742
Other	<u>0</u>
Total Other Financing Sources	\$ 1,742
Net Cost of Operations	<u>575</u>
Net Position - End of Period	<u><u>\$ 31,025</u></u>

**ENVIRONMENTAL PROTECTION AGENCY  
REQUIRED SUPPLEMENTAL INFORMATION  
WORKING CAPITAL FUND  
SUPPLEMENTAL STATEMENT OF BUDGETARY RESOURCES  
FOR THE YEAR ENDED SEPTEMBER 30, 2002  
(Dollars in Thousands)**

<b>Budgetary Resources</b>	<b><u>Unaudited</u></b>
Budgetary Authority:	
Appropriations Received	\$ 0
Borrowing Authority	0
Net Transfers	0
Other	0
Unobligated Balances:	
Beginning of Period	23,034
Net Transfers, Actual	0
Anticipated Transfers Balance	0
Spending Authority from Offsetting Collections:	
Earned and Collected	130,822
Receivable from Federal Sources	328
Change in Unfilled Customer Orders	
Advance Received	1,621
Without Advance from Federal Sources	(699)
Anticipated for Rest of Year	0
Transfers from Trust Funds	<u>0</u>
Total Spending Authority from Offsetting Collections	\$ 132,072
Recoveries of Prior Year Obligations	2,415
Permanently Not Available	<u>0</u>
Total Budgetary Resources	<u>\$ 157,521</u>
<b>Status of Budgetary Resources</b>	
Obligations Incurred:	
Reimbursable	\$ 130,359
Unobligated Balances:	
Apportioned	27,162
Exempt from Apportionment	0
Unobligated Balances Not Available	<u>0</u>
Total Status of Budgetary Resources	<u>\$ 157,521</u>
<b>Relationship of Obligations to Outlays</b>	
Obligations Incurred, Net	\$ (4,128)
Obligated Balances, Net - Beginning of Period	28,232
Accounts Receivable	114
Unfilled Customer Orders from Federal Sources	3,675
Undelivered Orders	(14,993)
Accounts Payable	(19,014)
Total Outlays	<u>\$ (6,114)</u>
Disbursements	\$ 126,330
Collections	(132,444)
Less: Offsetting Receipts	<u>0</u>
Net Outlays	<u>\$ (6,114)</u>

**ENVIRONMENTAL PROTECTION AGENCY  
REQUIRED SUPPLEMENTAL INFORMATION  
WORKING CAPITAL FUND  
SUPPLEMENTAL STATEMENT OF FINANCING  
FOR THE YEAR ENDED SEPTEMBER 30, 2002  
(Dollars in Thousands)**

<b>Resources Used to Finance Activities:</b>	<u><b>Unaudited</b></u>
Budgetary Resources Obligated	
Obligations Incurred	\$ 130,359
Less: Spending Authority from Offsetting Collections and Recoveries	(134,487)
Obligations Net of Offsetting Collections and Recoveries	\$ (4,128)
Less: Offsetting Receipts	0
Net Obligations	\$ (4,128)
Other Resources	
Transfers In/Out Without Reimbursement, Property	\$ 0
Imputed Financing Sources	1,742
Other (+/-)	0
Income from Other Appropriations	0
Net Other Resources Used to Finance Activities	\$ 1,742
Total Resources Used To Finance Activities	\$ (2,386)
<b>Resources Used to Finance Items Not Part of Net Cost of Operations</b>	
Change in Budgetary Resources Obligated	\$ (597)
Resources that Fund Prior Period Expenses	(170)
Budgetary Offsetting Collections and Receipts that Do Not Affect Net Cost of Operations	0
Credit Program Collections Increasing Loan Liabilities for Guarantees of Subsidy Allowances	0
Offsetting Receipts Not Affecting Net Cost of Operations	0
Resources that Finance the Acquisition of Assets	(1,717)
Other Resources or Adjustments to Net Obligated Resources that Do Not Affect Net Cost of Operations	0
Total Resources Used to Finance Items Not Part of Net Cost of Operations	\$ (2,484)
Total Resources Used to Finance the Net Cost of Operations	\$ (4,870)
<b>Components of the Net Cost of Operations that Will Not Require or Generate Resources in the Current Period</b>	
Components Requiring or Generating Resources in Future Periods	
Increase in Annual Leave Liability	\$ 0
Increase in Environmental and Disposal Liability	0
Upward/Downward Reestimates of Credit Subsidy Expense	0
Increase in Exchange Revenue Receivable from the Public	0
Increase in Workers Compensation Costs	0
Total Components of Net Cost of Operations that Will Require or Generate Resources in Future Periods	\$ 0
Components Not Requiring or Generating Resources	
Depreciation and Amortization	\$ 4,326
Revaluation of Assets or Liabilities	0
Other Expenses Not Requiring Budgetary Resources	(31)
Total Components of Net Cost of Operations that Will Not Require or Generate Resources	\$ 4,295
Total Components of Net Cost of Operations That Will Not Require or Generate Resources in the Current Period	\$ 4,295
Net Cost of Operations	\$ (575)

**ENVIRONMENTAL PROTECTION AGENCY**  
**REQUIRED SUPPLEMENTAL STEWARDSHIP INFORMATION**  
**FOR THE YEAR ENDED SEPTEMBER 30, 2002**  
(Dollars in Thousands)

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

Public and private sector institutions have long been significant contributors to our Nation's environment and human health research agenda. The Environmental Protection Agency's (EPA) 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. Science enables us to identify the most important sources of risk to human health and the environment, and by so doing, informs our priority-setting, ensures credibility for our policies, and guides our deployment of resources. It gives us the understanding and technologies we need to detect, abate, and avoid environmental problems. Science provides the crucial underpinning for EPA decisions and challenges us to apply the best available science and technical analysis to our environmental problems and to practice more integrated, efficient, and effective approaches to reducing environmental risks.

Among the Agency's highest priorities are research programs that address the effects of the environment on children's health, the potential risks of unregulated contaminants in drinking water, the health effects of air pollutants such as particulate matter, and the protection of the Nation's ecosystems. For FY 2002 the full cost of the Agency's Research and Development activities totaled over \$682.5 million. Below is a breakout of the expenses (dollars in thousands):

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Programmatic Expenses	507,828	543,777	541,117	555,794	559,218
Allocated Expenses	53,322	58,728	59,523	90,039	123,307

**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 Grants Program, which is being phased out, and two State Revolving Fund (SRF) 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 SRFs.

**State Revolving Funds:** EPA 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 wastewater and drinking 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 also is appropriated funds to finance the construction of infrastructure outside the SRFs. These are reported below as Other Infrastructure Grants.

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

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Construction Grants	444,817	414,528	55,766	63,344	149,841
Clean Water SRF	1,109,017	925,744	1,564,894	1,548,270	1,389,048
Safe Drinking Water SRF	94,936	387,429	588,116	728,921	708,528
Other Infrastructure Grants	138,363	245,606	212,124	282,914	367,259
Allocated Expenses	187,649	213,117	266,299	424,999	576,536

## STEWARDSHIP LAND

The Agency acquires title to certain land and land rights under the authorities provided in CERCLA section 104 (J) related to remedial cleanup sites. The land rights are in the form of easements to allow access to clean up sites or to 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 cleanup. A site with "land acquired" may have more than one acquisition property. Sites are not counted as a withdrawal until all acquired properties have been transferred.

As of September 30, 2002, the Agency possesses the following land and land rights:

### Superfund Sites with Easements

Beginning Balance	29
Additions	2
Withdrawals	<u>0</u>
Ending Balance	<u>31</u>

### Superfund Sites with Land Acquired

Beginning Balance	25
Additions	1
Withdrawals	<u>2</u>
Ending Balance	<u>24</u>

## 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.

The Agency's expenses related to investments in the Human Capital are outlined below (dollars in thousands):

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Training and Awareness Grants	39,131	46,630	49,265	48,697	49,444
Fellowships	11,084	10,239	9,570	11,451	8,728
Allocated Expenses	5,273	6,142	6,472	9,744	12,827

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**SUMMARY OF OIG'S AUDIT REPORT**

**Audit Report 2003-1-00045**

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# INSPECTOR GENERAL'S REPORT ON EPA'S FISCAL 2002 AND 2001 FINANCIAL STATEMENTS

The Administrator  
U.S. Environmental Protection Agency

We have audited the consolidating balance sheets of the U.S. Environmental Protection Agency (EPA, or the Agency) and its subsidiary funds, the Superfund Trust Fund (Superfund) and All Other Appropriated Funds (All Other), as of September 30, 2002 and 2001, and the related consolidating statements of net cost, changes in net position and financing, and consolidated statements of net cost by goal and custodial activity for the years then ended, and the related combined statement of budgetary resources for the year ended September 30, 2002. These financial statements are the responsibility of EPA's management. Our responsibility is to express an opinion on these financial statements based upon our audit.

We conducted our audit in accordance with generally accepted auditing standards; the standards applicable to financial statements contained in Government Auditing Standards, issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin 01-02, *Audit Requirements for Federal Financial Statements*. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

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 amount undeterminable 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.<sup>1</sup> 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 assets of the Agency's activities.

In our opinion, the consolidating financial statements present fairly the consolidated and individual assets, liabilities, net position, net cost by goal, changes in net position, reconciliation of net cost to budgetary obligations, and custodial activity of the U.S. Environmental Protection Agency and its subsidiary funds, the Superfund Trust Fund and All Other Appropriated Funds, as of and for the years ended September 30, 2002 and 2001, and budgetary resources as of and for the year ended September 30, 2002, in accordance with generally accepted accounting principles.

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

## Review of EPA's Required Supplemental Stewardship Information, Required Supplemental Information, and Management Discussion and Analysis

We inquired of EPA's management as to their methods for preparing Required Supplemental Stewardship Information (RSSI), Required Supplemental Information, and Management Discussion and Analysis, and reviewed this information for consistency with the financial statements. However, our audit was not designed to express an opinion and, accordingly, we do not express an opinion.

We did not identify any material inconsistencies between the information presented in EPA's financial statements and the information presented in EPA's RSSI, Required Supplemental Information, and Management Discussion and Analysis. OMB Bulletin No. 01-09, *Form and Content of Agency Financial Statements*, requires agencies to report, as Required Supplemental Information, their intragovernmental assets and liabilities by federal trading partner. We did find that, through no fault of EPA, other federal agencies were unable to reconcile EPA's reported transactions with their records (see Attachment 2 for additional details on this issue).

## Evaluation of Internal Controls

As defined by OMB, internal control, as it relates to the financial statements, is a process, affected by the Agency's management and other personnel, designed to provide reasonable assurance that the following objectives are met:

**Reliability of financial reporting** - Transactions are properly recorded, processed, and summarized to permit the timely and reliable preparation of the financial statements and RSSI in accordance with generally accepted accounting principles; and assets are safeguarded against loss from unauthorized acquisition, use, or disposition.

**Reliability of performance reporting** - Transactions and other data that support reported performance measures are properly recorded, processed, and summarized to permit the preparation of performance information in accordance with criteria stated by management.

**Compliance with applicable laws and regulations** - Transactions are executed in accordance with laws governing the use of budget authority and other laws and regulations that could have a direct and material effect on the financial statements or RSSI; and any other laws, regulations, and government-wide policies identified by OMB.

In planning and performing our audit, we considered EPA's internal controls over financial reporting by obtaining an understanding of the Agency's internal controls, determined whether internal controls had been placed in operation, assessed control risk, and performed tests of controls in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements. We limited our internal control testing to those controls necessary to achieve the objectives described in OMB Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*, as supplemented by an OMB memorandum dated January 4, 2001, *Revised Implementation Guidance for the Federal Financial Management Improvement Act*. We did not test all internal controls relevant to operating objectives as broadly defined by the Federal Managers' Financial Integrity Act of 1982, such as those controls relevant to ensuring efficient operations. The objective of our audit was not to provide assurance on internal controls and, accordingly, we do not express an opinion on internal controls.

Our consideration of the internal controls over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be reportable conditions. Under standards issued by the American Institute of Certified Public Accountants, reportable conditions are matters coming to our attention relating to significant deficiencies in the design or operation of the

internal control that, in our judgment, could adversely affect the Agency's ability to record, process, summarize, and report financial data consistent with the assertions by management in the financial statements. Material weaknesses are reportable conditions in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Because of inherent limitations in internal controls, misstatements, losses, or noncompliance may nevertheless occur and not be detected. We noted certain matters discussed below involving the internal control and its operation that we consider to be reportable conditions, although none of the reportable conditions is believed to be a material weakness.

In addition, we considered EPA's internal control over the RSSI by obtaining an understanding of the Agency's internal controls, determined whether these internal controls had been placed in operation, assessed control risk, and performed tests of controls as required by OMB Bulletin No. 01-02. Our procedures were not designed to provide assurance on these internal controls and, accordingly, we do not express an opinion on such controls.

Finally, with respect to internal controls related to performance measures presented in *EPA's Fiscal Year 2002 Annual Report*, Section 1, Overview and Analysis (which addresses requirements for a Management's Discussion and Analysis), we obtained an understanding of the design of significant internal controls relating to the existence and completeness assertions, as required by OMB Bulletin No. 01-02. Our procedures were not designed to provide assurance on internal control over reported performance measures and, accordingly, we do not express an opinion on such controls.

## **Reportable Conditions**

Reportable conditions are internal control weakness matters coming to the auditor's attention that, in the auditor's judgment, should be communicated because they represent significant deficiencies in the design or operation of internal control that could adversely affect the organization's ability to meet the OMB objectives for financial reporting discussed above.

In evaluating the Agency's internal control structure, we identified seven reportable conditions, as follows:

### ***Documentation and Approval of Journal Vouchers***

EPA's Financial Reports and Analysis Branch did not always adequately document journal vouchers and standard vouchers prior to the transactions being entered into the Integrated Financial Management System (IFMS). For example, of 447 transaction documents reviewed, 39 did not have adequate backup to support entries, and 3 did not have appropriate signatures. After performing additional work we were able to determine that most of the entries appeared to be correct. However, we are concerned about the vulnerability associated with executing transactions without proper documentation and supervisory review and approval. The review and approval process would reduce the potential for errors occurring.

### ***Reconciling Superfund State Cost Share Contracts***

EPA did not reconcile the unearned revenue from State Superfund Contracts for FY 2002. When EPA assumes the lead for a Superfund site remedial action in a state, the State Superfund Contract clarifies EPA and state responsibilities. EPA records unearned revenue when a state is billed for its share of the estimated remedial action costs on the site and recognizes earned revenue as it incurs costs. However, EPA's Financial Management Division did not reconcile the unearned revenue from State Superfund Contracts to the general ledger liability account -

Unearned Advances, Nonfederal. This was because EPA relied on its accounting system's internal controls and regional year-end adjustments to unearned revenue. As a result, EPA could not ensure the accuracy of the State Superfund Contract unearned revenue accounts. Additional work performed by the OIG enabled the Agency to post adjustments to reduce the variance.

### ***Reconciliation of Deferred Cashouts***

EPA did not properly reconcile Superfund cashouts at the regional level. Cashouts represent money that potentially responsible parties agree to pay EPA for cleanups. We found that EPA's regions did not periodically reconcile the uncollected receivables for Superfund cashouts to the general ledger liability accounts Deferred Cashouts Federal and Deferred Cashouts Nonfederal. This occurred because the Financial Management Division did not require the reconciliations or provide guidance. As a result, the regional finance offices were not able to reconcile their deferred cashouts and could not ensure the accuracy of the accounts, which totaled approximately \$44 million. While the combined net difference of the variances were under \$2 million, the individual variances in the regional offices were significant and could result in a material misstatement if proper reconciliations are not performed.

### ***IGMS Security Plan Compliance with Federal Requirements***

The Integrated Grants Management System (IGMS) security plan did not adequately describe the security requirements or the controls used to protect the system and its data. The IGMS security plan reflected only 41 percent of the 140 elements required by the National Institute of Standards and Technology's (NIST) Special Publication 800-18. In addition, the IGMS security plan included only 50 percent of the 30 Core Financial System technical requirements mandated by the Joint Financial Management Improvement Program (JFMIP). The IGMS security plan was missing many key elements required by federal regulations because the Director for Grants and Debarment used EPA's Information Security Planning Guidance as a benchmark for developing the IGMS security plan. Management agreed that addressing NIST and JFMIP system requirements would significantly raise the bar for evaluating security plans. As such, management has established a schedule for addressing unmet requirements.

### ***Automated Application Processing Controls***

We continue to be unable to assess the adequacy of the automated internal control structure as it relates to automated input, processing, and output controls for IFMS. IFMS applications have a direct and material impact on the Agency's financial statements. Therefore, an assessment of each application's automated input, processing, and output controls, as well as compensating manual controls, is necessary to determine the reliance we can place on the financial statements.

### ***Capitalization of Superfund Contractor-Held Property***

EPA did not capitalize and depreciate approximately \$33.3 million in Superfund contractor-held property in accordance with Statement of Federal Financial Accounting Standards (SFFAS) No. 6, *Accounting For Property, Plant, and Equipment*. Instead, the Agency expensed all costs for contractor-held property used for Superfund site-specific projects. The Agency explained that it expensed property on these Superfund remediation sites because the property would remain at the site and not be useful on future sites due to contamination. The \$33.3 million cumulative amount included approximately \$10.2 million for fiscal 2002 and \$23.1 million from prior years. By expensing these costs, the Agency is understating the value of its property in the possession of contractors and, therefore, the value of general

Property, Plant, and Equipment. Subsequently, the Agency adjusted the financial statements to capitalize contractor-held property used for Superfund site-specific projects.

### ***Revenue Recognition on Cashouts***

The Financial Management Division overstated by \$53 million a fiscal 2001 on-top financial statement adjustment for earned revenue from past costs in Superfund special accounts. This overstatement also affected the fiscal 2002 Superfund financial statements by understating liabilities and overstating income. EPA did not restate the financial statements because it lacked adequate internal controls for reporting corrections of errors. As a result, EPA's fiscal 2001 and 2002 financial statements would have been materially misstated without prompting by the OIG.

Attachment 1 of the OIG's complete audit report describes each of the above reportable conditions in more detail and contains our recommendations on actions that should be taken to correct these conditions. We will also be reporting other less significant matters involving the internal control structure and its operation in a separate management letter.

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

OMB Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*, requires us to compare material weaknesses disclosed during the audit with those material weaknesses reported in the Agency's Federal Managers' Financial Integrity Act (FMFIA or Integrity Act) report that relate to the financial statements and identify material weaknesses disclosed by audit that were not reported in the Agency's FMFIA report. EPA reports on Integrity Act decisions in EPA's *Fiscal Year 2002 Annual Report*. For a discussion on Agency reported Integrity Act material weaknesses and corrective action strategy, please refer to EPA's *Fiscal Year 2002 Annual Report*, Section III, FY 2002 Management Accomplishments and Challenges.

For reporting under FMFIA, material weaknesses are defined differently than they are for financial statement audit purposes. OMB Circular A-123, *Management Accountability and Control*, defines a material weakness as a deficiency that the Agency head determines to be significant enough to be reported outside the Agency.

For financial statement audit purposes, OMB defines material weaknesses in internal control as reportable conditions in which the design or operation of the internal control does not reduce to a relatively low level the risk that errors, fraud, or noncompliance in amounts that would be material in relation to the financial statements or RSSI being audited, or material to a performance measure or aggregation of related performance measures, may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our audit did not disclose any material weakness that was not reported by the Agency as part of the Integrity Act process.

The Agency did not report any material weaknesses for fiscal 2002 as part of the Integrity Act process.

## **Tests of Compliance with Laws and Regulations**

EPA management is responsible for complying with laws and regulations applicable to the Agency. As part of obtaining reasonable assurance about whether the Agency's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws and regulations, noncompliance with which could have a direct and material effect on the determination of financial statement amounts, and certain other laws and regulations specified in



OMB Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*, as supplemented by an OMB Memorandum dated January 4, 2001, *Revised Implementation Guidance for the Federal Financial Management Improvement Act*. The OMB guidance requires that we evaluate compliance with federal financial management system requirements, including the requirements referred to in the Federal Financial Management Improvement Act (FFMIA) of 1996. We limited our tests of compliance to these provisions and did not test compliance with all laws and regulations applicable to EPA.

Providing an opinion on compliance with certain provisions of laws and regulations was not an objective of our audit and, accordingly, we do not express such an opinion. There are a number of ongoing investigations involving EPA's grantees and contractors that could disclose violations of laws and regulations, but a determination about these cases has not been made.

None of the noncompliances discussed below would result in material misstatements to the audited financial statements.

### **Federal Financial Management Improvement Act Noncompliance**

Under FFMIA, we are required to report whether the Agency's financial management systems substantially comply with the federal financial management systems requirements, applicable federal accounting standards, and the United States Government Standard General Ledger at the transaction level. OMB Bulletin No. 01-02, as supplemented by an OMB memorandum dated January 4, 2001, *Revised Implementation Guidance for the Federal Financial Management Improvement Act*, substantially changed the guidance for determining whether or not an Agency substantially complied with the federal financial management systems requirements, applicable federal accounting standards, and the United States Government Standard General Ledger at the transaction level. The document is intended to focus Agency and auditor activities on the essential requirements of FFMIA. The document lists the specific requirements of FFMIA, as well as factors to consider in reviewing systems and for determining substantial compliance with FFMIA. It also provides guidance to Agency heads for developing corrective action plans to bring an Agency into compliance with FFMIA. To meet the FFMIA requirement, we performed tests of compliance with FFMIA section 803(a) requirements and used the OMB guidance, revised on January 4, 2001, for determining substantial noncompliance with FFMIA.

The results of our tests did not disclose any instances where the Agency's financial management systems did not substantially comply with the applicable federal accounting standard.

We recognize improvements the OCFO has made in cost accounting and believe that while there are still noncompliance issues with cost accounting, those noncompliances no longer meet OMB's definition of substantial noncompliance. However, the Agency was not in compliance with Statement of Federal Financial Accounting Standards No. 4 that requires EPA to provide full costs per output to management in a timely fashion.

We identified three other FFMIA noncompliances, related to reconciliation of intragovernmental transactions, Contract Payment System compliance with JFMIP system requirements, and completion of the fiscal 1999 FFMIA remediation plan. However, these noncompliances do not meet the definition of substantial noncompliance as described in OMB guidance.

Our tests also disclosed two other instances of noncompliance with laws and regulations, related to the Food Quality Protection Act of 1996 and the Treasury Financial Manual for preparation of SF 224 "Statement of Transactions."

Attachment 2 of the OIG's complete audit report provides additional details, as well as our recommendations on actions that should be taken on these matters. We will also be reporting other

less significant matters involving compliance with laws and regulations in a separate management letter.

## Prior Audit Coverage

During previous financial or financial-related audits, weaknesses that impacted our audit objectives were reported in the following areas:

- Complying with FFMIA requirements.
- Reconciliation and Reporting intragovernmental transactions, assets and liabilities by federal trading partner.
- Complying with SFFAS No. 4, including accounting for the cost to achieve goals and identifying and allocating indirect costs.
- Accounting for capitalized property.
- Recording accrued liabilities for grants.
- Interagency Agreement invoice approval process.
- Documenting EPA's IFMS.
- Complying with federal financial management system security requirements.
- Accounting for payments for grants funded from multiple appropriations.
- Documentation and approval of journal vouchers.
- Timely repayment of Asbestos Loan Debt to Treasury.
- Assessing automated application processing controls for the IFMS.
- Compliance of financial system security plans.

Attachment 3 of the OIG's complete audit report, Status of Prior Audit Report Recommendations, summarizes the current status of corrective actions taken on prior audit report recommendations with corrective actions in process.

The Chief Financial Officer, 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 Chief Financial Officer with various Assistant Administrators, Regional Administrators, and Office Directors before they can be completely resolved. A few issues have been unresolved for many years. The OIG will continue to work with the Office of Chief Financial Officer in helping to resolve all audit issues resulting from our financial statement audits.

## Agency Comments and OIG Evaluation

In a memorandum dated January 22, 2003, the Office of the Chief Financial Officer responded to our draft report. The OCFO generally concurred with our findings and is in the process of

implementing corrective actions. However, the OCFO did expand on comments in some areas to reflect their view that they have made substantial improvements.

The OCFO believes that they are complying with the Managerial Cost Accounting Standard by preparing quarterly subobjective level reports, taking actions to execute the Agency's plan for expanding cost information, and moving from 10 goals to 5 in the new Strategic Plan. We recognize improvements that the Agency has made in the area of Cost Accounting and believe that the new plan for expanding cost information will eventually provide manager's the cost information they need to manage. However, we do not agree with OCFO that the subobjective level reports provide useful, timely, and full cost information.

The OCFO also stated that they developed a new process and report for reconciling the Contract Payment System with IFMS that they believe satisfies the OIG's concerns. The OIG did not review the new process and report because they were developed after we completed our work.

The rationale for our conclusions and a summary of the Agency comments are included in the appropriate sections of this report, and the Agency's complete response is included as Appendix II to the complete audit.

This report is intended solely for the information and use of the management of EPA, OMB, and Congress, and is not intended to be and should not be used by anyone other than these specified parties.



Paul C. Curtis  
Assignment Manager  
Financial Audit Division  
Office of Inspector General  
U.S. Environmental Protection Agency  
January 22, 2003

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# Appendix A

*Comprehensive Listing of  
FY 2002 Program Evaluations*

## APPENDIX A: COMPREHENSIVE LISTING OF PROGRAM EVALUATIONS

EPA GOAL AND OBJECTIVE(S) COVERED BY EVALUATION, TITLE, AND SCOPE	FINDINGS OF THE EVALUATION	PLANNED RESPONSE	AUTHOR, REPORT NUMBER, ISSUE DATE, AND WHERE TO OBTAIN A COPY
<p>Goal 1, Objectives 1 and 2</p> <p><b>Environmental Protection: The Federal Government Could Help Communities Better Plan for Transportation That Protects Air Quality</b></p> <p>As Congress begins the reauthorization of the surface transportation programs, it will consider whether to continue or revise these initiatives. To help inform this work, the General Accounting Office (GAO) comments on (1) the impacts of surface transportation on air quality; (2) the benefits and limits of key federal surface transportation and clean air requirements and programs designed to mitigate these impacts; and (3) ways the federal government can use these requirements and programs to further reduce these impacts.</p>	<p>GAO had three key findings: (1) air pollution from vehicle emissions will continue to pose health and environmental risks to some communities, despite new technology and emissions limits; (2) federal laws and programs linking transportation to improved air quality have helped targeted communities control pollution but could be more comprehensive; and (3) planners have identified additional ways the federal government could help further limit transportation impacts on air quality, including financial incentives, technical assistance, and public outreach.</p>	<p>The program recognizes the importance of GAO's findings and where appropriate will incorporate them into program planning.</p>	<p>Testimony before the Committee on Environment and Public Works, U.S. Senate</p> <p>GAO-02-988T</p> <p>July 30, 2002</p> <p>Located at: <a href="http://www.gao.gov">http://www.gao.gov</a></p>
<p>Goal 1, Objective 1</p> <p><b>Consistency and Transparency in Determination of EPA's Anticipated Ozone Designations</b></p> <p>The purpose of this Office of the Inspector General (OIG) review was to determine whether each of the EPA regional offices used a specific process, method, or approach for obtaining stakeholder input for the 1-hour ozone designations; what process, method, or approach was used for the preliminary analysis of the 8-hour ozone designations; and the potential usefulness of the Multi-criteria Integrated Resource Assessment (MIRA) decision approach.</p>	<p>The OIG found that the guidance for the preliminary 8-hour ozone designations is more comprehensive than the approach EPA used in 1990, with respect to stakeholder participation and in terms of providing criteria that states should consider if proposing larger or smaller metropolitan nonattainment boundaries. The OIG, however, states that the preliminary 8-hour ozone guidance did not provide a methodical process for the regions and states to use when considering the 11 criteria. Without a consistent regional approach, the ozone designations might not be fair or equitable throughout the Nation. The OIG recommends that EPA use an approach similar to the MIRA approach used by Region 3 to address the preliminary 8-hour ozone designations, noting that this or a similar multi-criteria approach could be useful for all EPA regions.</p>	<p>EPA's Office of Air and Radiation (OAR) stated in its response to the draft report that it does not agree with the recommendation in the report and maintains that MIRA cannot be used as the sole tool for designating areas under the Clean Air Act. OAR believes that the primary approach for assigning designations should be a case-by-case consideration and evaluation of each area's unique situation and circumstances. OAR completed its final response to the August 15, 2002, report in October 2002.</p>	<p>U.S. EPA, Office of the Inspector General</p> <p>2002-S-00016</p> <p>August 15, 2002</p> <p>Located at: <a href="http://www.epa.gov/oigearth/ereading_room/list901/Mira.Final.08-15.pdf">http://www.epa.gov/oigearth/ereading_room/list901/Mira.Final.08-15.pdf</a></p>

EPA GOAL AND OBJECTIVE(S) COVERED BY EVALUATION, TITLE, AND SCOPE	FINDINGS OF THE EVALUATION	PLANNED RESPONSE	AUTHOR, REPORT NUMBER, ISSUE DATE, AND WHERE TO OBTAIN A COPY
<p>Goal 1, Objective 1</p> <p><b>Air: Open Market Trading Program for Air Emissions Needs Strengthening</b></p> <p>The objectives of the OIG's program evaluation were to determine (1) whether EPA's basis for proposing to approve selected air emissions open market trading (OMT) programs was adequate; (2) the extent of use of EPA-approved emissions quantification protocols and whether accurate, reliable data underlie OMT trades in these programs; and (3) the extent of EPA and state compliance assurance, enforcement, and oversight activities relative to OMT trades.</p>	<p>The OIG made several recommendations to the OAR based on its review of OMT programs in Michigan and New Jersey, including that EPA:</p> <ul style="list-style-type: none"> <li>• Develop and propose federal regulations for OMT programs.</li> <li>• Ensure that shutdown credits are not allowed to be traded in OMT programs.</li> <li>• Require the use of EPA- and state-approved emissions quantification protocols prior to allowing trades to occur.</li> <li>• Develop and require the use of a risk-based targeting approach for federal and state compliance assurance, enforcement, and oversight of OMT trades.</li> </ul>	<p>EPA provided comments on the draft report on September 26, 2002. EPA communicated its final response verbally to the IG and a final written response was sent to the IG, at the end of January 2003.</p>	<p>U.S. EPA, Office of the Inspector General 2002-P-00019 September 30, 2002</p> <p>Located at: <a href="http://www.epa.gov/oigearth/ereading_room/omt.pdf">http://www.epa.gov/oigearth/ereading_room/omt.pdf</a></p>
<p>Goal 1, Objectives 1 and 2</p> <p><b>Environmental Protection: Federal Incentives Could Help Promote Land Use That Protects Air and Water Quality</b></p> <p>Congress asked GAO to examine the extent to which local transportation planners, state air quality managers, and water quality officials consider the impacts of land use on the environment and to identify actions federal agencies can take to help these officials assess land use impacts.</p>	<p>In its report, GAO recommends several key actions:</p> <ul style="list-style-type: none"> <li>• EPA should target available financial incentives in ways that encourage transportation planners, environmental officials, and local decision makers to collaboratively consider the impacts of transportation and land use on air quality and should take more action to educate the public and local decision makers about the air quality impacts of their transportation and land use decisions.</li> <li>• Both EPA and the Department of Transportation should provide more access to technical tools, such as staff and user-friendly models that integrate transportation, environmental protection, and land use, and better market these tools to transportation and local decision makers.</li> </ul>	<p>The program recognizes the importance of GAO's findings and where appropriate will incorporate them into program planning.</p>	<p>General Accounting Office GAO-02-12 October 31, 2001</p> <p>Located at: <a href="http://www.gao.gov">http://www.gao.gov</a></p>

EPA GOAL AND OBJECTIVE(S) COVERED BY EVALUATION, TITLE, AND SCOPE	FINDINGS OF THE EVALUATION	PLANNED RESPONSE	AUTHOR, REPORT NUMBER, ISSUE DATE, AND WHERE TO OBTAIN A COPY
<p>Goal 1, Objectives 1 and 2</p> <p><b>Public Participation in Louisiana's Air Permitting Program and EPA Oversight</b></p> <p>At EPA's request, the OIG performed a review of the public participation process in Louisiana, which is covered by EPA Region 6. Specifically, the OIG performed a review of the Louisiana Department of Environmental Quality's (LDEQ) Title V program. The review evaluated whether LDEQ allows for effective public participation in the implementation of its air permitting process and whether EPA Region 6 provides effective oversight of LDEQ's air permitting program.</p>	<p>The OIG found that LDEQ minimally met the public participation requirements for air permitting. However, the OIG states that LDEQ's records were often unorganized, incomplete, missing, or inaccessible. In addition, LDEQ did not clearly define the role of its public participation group; as a result, the public was unable to access, or had difficulty accessing, key records needed to effectively review, evaluate, and comment on facilities' proposed operations, thus hindering the public's ability to effectively comment on proposed permits. The OIG also found that EPA Region 6 did not perform adequate oversight of LDEQ's public participation activities. The OIG said that Region 6 generally did not review public comments before LDEQ issued permits because the Region did not require LDEQ to provide such comments to the Region until after the permit had been issued. It also asserted that Region 6 did not take a proactive approach to oversight of public participation issues or perform a thorough on-site review at LDEQ.</p>	<p>By November 5, 2002, EPA will have in place an Action Plan that responds to the OIG report. In addition, Region 6 will conduct an in-depth program review by the end of December 2002.</p>	<p>U.S. EPA, Office of the Inspector General 01351-2002-P-00011 August 7, 2002</p> <p>Located at: <a href="http://www.epa.gov/oigearth/ereading_room/2002P00011.pdf">http://www.epa.gov/oigearth/ereading_room/2002P00011.pdf</a></p>
<p>Goal 1, Objectives 1 and 2</p> <p><b>Evaluation Report: EPA and State Progress in Issuing Title V Permits</b></p> <p>The objectives of this OIG evaluation were to identify (1) factors delaying the issuance of Title V permits by selected state and local agencies and (2) practices contributing to more timely issuance of permits by selected state and local agencies.</p>	<p>The basic findings of this OIG report are as follows: (1) lack of state resources, complex EPA regulations, and conflicting priorities contributed to permit delays; (2) EPA oversight and technical assistance had limited impact; and (3) management support, partnerships, and site visits contributed to more timely issuance of Title V permits.</p>	<p>In general, OAR agreed with the OIG's conclusion that more could be done to improve EPA and state progress in issuing Title V permits. On July 11, 2002, EPA issued a memorandum to the OIG that responds to the OIG's recommendations and documents the OAR action plan for implementing the recommendations. OAR has continued to support the implementation of state operating permit programs, and at the end of FY 2002 more than 14,000 sources (73 percent) are operating under Title V permits.</p>	<p>U.S. EPA, Office of the Inspector General 2002-P-00008 March 29, 2002</p> <p>Located at: <a href="http://www.epa.gov/oigearth/ereading_room/TitleV.PDF">http://www.epa.gov/oigearth/ereading_room/TitleV.PDF</a></p>



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<p>Goal 1, Objectives 1, 2, and 4</p> <p><b>Estimating the Public Health Benefits of Proposed Air Pollution Regulations</b></p> <p>In 2000 Congress directed EPA to have the National Academy of Sciences (NAS) conduct a study on health benefits analysis methodology and recommend to the Agency a common methodology to be followed in all future analyses. Specifically, the Committee was asked to do the following: (1) consider issues important in estimating the health-risk-reduction benefits of air pollution regulations, including the scientific data, risk assessment approaches, populations affected, baseline used, assumptions, analysis of uncertainty, and identification of key indicators of exposure and population health status; (2) critically review methods used for recent estimates of regulatory health benefits; (3) identify methods used by federal regulatory agencies and others, recommend standard good-practice guidelines and principles for estimating health benefits, and delineate the data-gathering required to better assess health benefits in the future; (4) identify approaches to estimating regulatory health benefits when relevant information is limited; and (5) where applicable, recommend areas for further research and monitoring.</p>	<p>The findings of the National Research Council are centered around the key methodological issues in benefits analyses, including (1) regulatory options, boundaries, and baselines; (2) exposure assessment; (3) health outcomes; (4) concentration-response function; (5) analysis of uncertainty; and (6) presentation of results. Overall, the committee found that EPA has generally used a reasonable framework for conducting health benefits analysis when estimating the health benefits of proposed air pollution control regulations. In addition, the committee made recommendations on how EPA's implementation of the steps could be improved.</p>	<p>Although there is no formal response to this study, EPA is encouraged by NAS's affirmation of the methodology that EPA uses in its health benefits analyses of air pollution regulations. Estimating the health benefits of EPA's rules is an important component of the Agency's air quality management program, and EPA continuously works to ensure that it uses the best available methods to determine how its actions will protect the American public. The report confirms that EPA is doing a good job of analyzing the benefits of its regulations and gives the Agency a number of suggestions on how to further improve those analyses. EPA will study the recommendations and talk further with Academy members as it works to make its health benefits analyses the best possible.</p>	<p>National Academies, National Research Council, Committee on Estimating the Health-Risk-Reduction Benefits of Proposed Air Pollution Regulations and Board on Environmental Studies and Toxicology</p> <p>September 2002</p> <p>Located at: <a href="http://www.nap.edu/books/0309086094/html/">http://www.nap.edu/books/0309086094/html/</a></p>
<p>Goal 1, Objectives 1, 2, and 4</p> <p><b>Tribal Air Capacity Evaluation</b></p> <p>The purpose of this evaluation was to assess how effectively the program is using its resources to achieve the key objectives of building tribal capacity, addressing air quality problems, and providing the necessary tools.</p> <p>Contributors included numerous tribes across the United States; several tribal non-governmental organizations (the American Indian Science and Engineering Society, the Institute for Tribal Environmental Professionals, and the National Tribal Environmental Council); and EPA headquarters, regional, and program office staff.</p>	<p>The evaluation findings focused partly on the success the program has had since 1995, increasing the number of participating tribes from 9 to 117, and partly on the significant remaining needs for support, expertise, and coordination. The report provided 30 recommendations in the areas of building capacity, guidance and policy development, resources, and technical assistance. Resource issues were noted as constraints, but not specifically addressed.</p>	<p>Many of the recommendations were being implemented before the evaluation was complete, and several more will be implemented over time. EPA's Office of Air and Radiation (OAR) is also holding discussions with regional offices to ensure that the appropriate recommendations are adopted. Most recommendations have been or will be adopted or incorporated into the program in an ongoing manner.</p>	<p>Industrial Economics, Incorporated, and Ross &amp; Associates</p> <p>June 2002</p> <p>Located at: <a href="http://www.epa.gov/oar/tribal/announce.html">http://www.epa.gov/oar/tribal/announce.html</a></p>

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<p>Goal 1, Objectives 1, 2, and 4</p> <p><b>Memorandum Report: Clean Air Design Evaluation Results</b></p> <p>The purpose of this evaluation was to (1) identify and document the design of the Clean Air Program to achieve its Government Performance and Results Act (GPRA) goals; (2) identify any opportunities for improving the design of the program; and (3) recommend specific evaluations and audits to be conducted over a period of time to evaluate EPA's success in meeting Clean Air goals.</p>	<p>The OIG report presents several broad findings: (1) EPA might not be able to demonstrate achievement of long-term strategic goal under the current GPRA structure; (2) outcome information is available but not used within the GPRA framework for the Acid Rain Goal; (3) EPA's Annual Performance Report could be more focused on environmental outcomes; and (4) the role of enforcement is not linked to the Clean Air program.</p>	<p>EPA has made no formal response to the OIG report. OAR is continuing to work on demonstrating the link between annual work and long-term strategic goals in various documents. The work under way to revise the Agency's Strategic Plan will provide the key platform for improving these linkages.</p>	<p>U.S. EPA, Office of the Inspector General 2002-M-000013 April 23, 2002</p> <p>Located at: <a href="http://www.epa.gov/oigearth/ereading_room/AirEval042302.pdf">http://www.epa.gov/oigearth/ereading_room/AirEval042302.pdf</a></p>
<p>Goal 1, Objective 4</p> <p><b>Air Pollution: Emissions from Older Electricity Generating Units</b></p> <p>In May 2001 the administration issued <i>National Energy Policy</i>, a report that cited needs forecast by the Energy Information Administration for additional power plants over the next 20 years. In September 2001 the Committee on Environment and Public Works asked GAO to provide information on air emissions from future electricity generation. This report transmits information on emissions in 2000 (the most current data available at the time) from existing units that burned fossil fuel.</p>	<p>In this report, GAO identified (1) the proportions of sulfur dioxide, nitrogen oxides, and carbon dioxide emitted and electricity generated by older fossil-fuel units (as a group) relative to newer units (as a group) in 2000, as well as the locations and type of fuel burned by units responsible for the majority of the emissions, and (2) the proportions of older fossil-fuel units that, in 2000, emitted sulfur dioxide and nitrogen oxides at rates above the new source standards applicable to newer units, the location of these additional emissions, and the type of fuel burned by these units. GAO analyzed data on air emissions and electricity generation from units with a generating capacity greater than 15 megawatts. GAO obtained these data from Platts/RDI, a private vendor that integrates data on air emissions from EPA with data on electricity generation and the age of individual units from the Energy Information Administration. Although these data were the most comprehensive available, they might understate the total emissions from fossil-fuel units because some units are not required to report their emissions to regulatory agencies. The units that did not report emissions, however, generated less than 1 percent of the electricity from older units in 2000. Of the 1,396 operating older units, 1,157 (83 percent) reported emissions data in 2000.</p>	<p>There is no planned response.</p>	<p>General Accounting Office GAO-02-709 June 12, 2002</p> <p>Located at: <a href="http://www.gao.gov">http://www.gao.gov</a></p>

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<p>Goal 2, Objective 1</p> <p><b>Drinking Water: Key Aspects of EPA's Revolving Fund Program Needed to Be Strengthened</b></p> <p>The purpose of the evaluation was to assess (1) the accuracy of EPA's assessment of drinking water infrastructure needs; (2) EPA's efforts to monitor states' implementation of the Drinking Water State Revolving Fund (DWSRF) program; and (3) the extent to which states use the optional disadvantaged assistance provision in the DWSRF program.</p>	<p>GAO reported that (1) users of the needs assessment cannot get a sense of the estimate's accuracy because EPA did not calculate the level of precision achieved; (2) EPA is not taking full advantage of oversight tools because it has not yet finalized and consistently applied financial management and other program measures to assist in the annual review of state performance; (3) untimely and inconsistent preparation of program evaluation report reviews has hampered the Agency's ability to identify common or recurring problems; and (4) gaps in the financial audit coverage and a limited review of the completed audits undermine EPA's ability to fully assess the financial conditions of state DWSRF programs.</p> <p>GAO also noted that states were making limited use of the disadvantaged assistance provisions under the DWSRF, but made no recommendations in this area.</p>	<p>First, EPA has gone to great lengths to ensure accuracy in the surveys by requiring extensive documentation for reported needs and costs, conducting site visits to small systems, and performing quality assurance reviews of the responses to the survey questionnaire. With respect to the second and third findings, EPA has finalized financial measures and is developing program measures to assist in program oversight and is also working with its regional offices to address review shortcomings identified by GAO. Finally, the Office of Water is working with the Inspector General to initiate DWSRF audit coverage and improve interoffice communication of results of independent audit quality reviews.</p>	<p>General Accounting Office</p> <p>GAO-02-135</p> <p>January 24, 2002</p> <p>Located at: <a href="http://www.gao.gov">http://www.gao.gov</a></p>

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<p>Goal 2, Objectives 1, 2, and 3</p> <p><b>A Review of Statewide Watershed Management Approaches</b></p> <p>EPA's Office of Water (OW) conducted an evaluation of eight states' experiences with different models of the statewide watershed management approach. The study focused on the impact of the watershed approach on federal and state program management and coordination, public involvement, and the implementation of six core programs under the CWA and the Safe Drinking Water Act (SDWA). The evaluation approach consisted of discussion sessions with managers and staff in selected states, EPA regions, and state watershed organizations.</p>	<p>The evaluation found that most state managers were positive about their states' experience with the watershed approach and identified specific benefits: (1) an increase in the quality and quantity of monitoring data, (2) better-focused water quality assessments and planning, (3) more efficient and equitable permitting programs, (4) improved coordination and integration of state water program functions and goals, and (5) greater public involvement in state water quality program decision making. State water quality monitoring and National Pollutant Discharge Elimination System (NPDES) permitting programs are most involved and have received the greatest benefits from a statewide watershed approach. States identified several constraints, however, to effective implementation of statewide watershed approaches: (1) programmatic requirements under the CWA and SDWA can sometimes conflict with states' efforts to plan and implement core programs on a basin or watershed basis and (2) more EPA involvement at the watershed level would enhance states' watershed efforts and provide EPA with a better understanding of local/basin issues.</p>	<p>EPA's OW plans to integrate a number of the study's recommendations into its current strategies and planning documents.</p>	<p>U.S. EPA, Office of Water</p> <p>April 2002</p> <p>Located at: <a href="http://www.epa.gov/owow/watershed/approaches_fr.pdf">http://www.epa.gov/owow/watershed/approaches_fr.pdf</a></p>

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<p>Goal 2, Objective 2</p> <p><b>2002 National Estuary Program Implementation Review</b></p> <p>The purpose of this evaluation was to assess the progress made by 19 of 28 National Estuary Programs in implementing their Comprehensive Conservation Management Plans developed under section 320 of the CWA. The findings are used to determine whether an estuary program is eligible for continued funding under CWA section 320. The next implementation review for these estuary programs will take place in 2005.</p>	<p>The evaluation findings identified one estuary program that was required to respond to substantial concerns raised by EPA in order to be eligible for continued funding under section 320. The other 18 estuary programs were found to be making substantial progress implementing their management plans and therefore are eligible for continued funding. The review results are documented in letters to each of the estuary programs and include EPA's recognition of outstanding achievements as well as identification of challenges each program faces in its continued efforts to implement management plans to protect and restore its estuary.</p>	<p>Some challenges are common to most, if not all, of the estuary programs. For example, most estuary programs are struggling with developing a user-friendly system to track their progress in implementing their management plans. Another common challenge is finding the financial resources needed to implement the numerous recommended estuary protection and restoration action plans contained in the management plans. To help the estuary programs address common challenges such as these, EPA provides training and technical assistance.</p>	<p>Various headquarters and regional NEP Coordinators</p> <p>The 2002 National Estuary Program Implementation Review results are documented in letters addressed to each of the estuary programs. Copies of the letters are kept on file in the Coastal Management Branch (CMB) of EPA.</p> <p>Contact: 202-566-1240</p>
<p>Goal 5 Objective 1</p> <p><b>Information Technology—Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Data Quality Report</b></p> <p>The objective of this audit was to determine whether CERCLIS data for active and archived sites were accurate and reliable (timely, complete, and consistent).</p>	<p>This audit evaluated the accuracy, completeness, timeliness, and consistency of the data entered into CERCLIS. The weaknesses identified were caused by the lack of an effective quality assurance process and adequate internal controls over CERCLIS data quality.</p> <p>The report provided 11 recommendations to improve controls over CERCLIS data quality.</p>	<p>OSWER concurs with the recommendations contained in the audit. Due to the extended period of time since the inception of this audit, many of the identified problems have been corrected or actions that would address these recommendations are under way.</p>	<p>U.S. EPA, Office of the Inspector General 2002-P-00016 September 30, 2002 <a href="http://www.epa.gov/oigearth/eroom.htm">http://www.epa.gov/oigearth/eroom.htm</a></p>
<p>Goal 5, Objective 1</p> <p><b>Lessons Learned in the Aftermath of September 11, 2001</b></p> <p><b>Challenges Faced During the Environmental Protection Agency's Response to Anthrax and Recommendations for Enhancing Response Capabilities: A Lessons Learned Report</b></p> <p>The reports were commissioned so EPA could examine the successes and shortfalls of technical and oversight activities following the responses to September 11 and the detection of anthrax contamination across the United States and apply that knowledge to future responses.</p>	<p>These reports conclude that overall the Agency did an excellent job responding to these unprecedented acts of terrorism and successfully carried out its mission to protect human health and the environment.</p> <p>Recommendations were provided in the reports to help improve the Agency's response to similar situations in the future.</p>	<p>The Agency has taken numerous key actions to respond to the recommendations in the reports. In addition, many recommendations were incorporated into the Agency's Strategic Plan for Homeland Security, which was released October 2, 2002.</p>	<p>U.S. EPA, Office of Emergency and Remedial Response September 11 Report: February 2002 Anthrax Report: September 2002 Contact: Barbara Grimm-Crawford 202-566-0177 Helen DuTeau 703-603-8761</p>

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<p>Goal 5, Objective 1</p> <p><b>RCRA Hazardous Waste Delisting: The First 20 Years—Outcomes and Impacts of the Hazardous Waste Delisting Program Under the Resources Conservation and Recovery Act (RCRA)</b></p> <p>This evaluation describes the rationale for conducting a program evaluation, the results and outcomes of the delisting program. This evaluation was undertaken as part of EPA's implementation of GPRA.</p>	<p>The delisting program distinctly demonstrates a significant economic impact: reductions in deadweight loss to the economy totaling over \$100 million each year. Continued efficiencies and refinements in the delisting petition review process should only improve those results. The environmental impacts are not as clear, although EPA does not have reason to suspect that delisted wastes are causing environmental problems.</p>	<p>None currently identified.</p>	<p>U.S. EPA, Office of Solid Waste</p> <p>EPA-530-R-02-014</p> <p>June 2002</p> <p><a href="http://www.epa.gov/epaoswer/hazwaste/id/delist/index.htm">http://www.epa.gov/epaoswer/hazwaste/id/delist/index.htm</a></p>
<p>Goal 5, Objective 1</p> <p><b>Superfund Mega-Sites</b></p> <p>The preliminary research was directed toward answering the following questions: (1) How does achievement of the new GPRA environmental indicators for Superfund affect management of mega-site cleanups? (2) What resources are being spent and have been spent? What criteria are used in determining when and how resources are to be spent? How effectively are resources being spent? (3) What management practices have been used at mega-sites? Which management practices are best in efficiency, effectiveness, and cost?</p>	<p>The evaluation focused on two draft Superfund Environmental Indicators (EIs). EIs are specific measures of program performance used to assess progress toward cleaning up a hazardous waste site. This review was the initial component of the OIG's program evaluation of Superfund mega-sites. The draft EIs, Human Exposure Under Control and Contaminated Groundwater Migration Under Control, are measures of interim progress of Superfund program goals for all Superfund sites, including mega-sites. In general, the IG found that the indicators meet the needs of the program but gave specific implementation recommendations.</p>	<p>Many of the recommendations were being implemented before the evaluation was complete, and several more will be implemented over time. Most recommendations have been or will be adopted or incorporated into the program in an ongoing manner.</p>	<p>U.S. EPA, Office of the Inspector General</p> <p>2002-P-3</p> <p>December 27, 2001</p> <p>Contact: 202-566-2888</p>
<p>Goal 5, Objective 2</p> <p><b>Underground Storage Tank Operation and Maintenance: An Assessment of Available Training and Outreach</b></p> <p>The purpose of the evaluation was to determine the greatest training needs for underground storage tank (UST) inspectors, owners, and facility operators, and to recommend approaches for meeting those training needs.</p>	<p>The evaluation identified a number of training needs, including a need for facility-specific training/guidance, training that can reach people throughout the country, and practical field experience along with classroom training. The report provided numerous recommendations, with primary emphasis on developing computer-based training and customized outreach/education material.</p>	<p>Many of the recommendations are being implemented or are being seriously considered. EPA is developing a state/EPA work group to determine short-term and long-term training priorities. This report will serve as a foundation for the work group's discussions.</p>	<p>Industrial Economics, Incorporated, and Marasco Newton Group, with assistance from various EPA and state inspectors and program managers, as well as UST industry contacts and trainers.</p> <p>May 2002</p> <p>Contact: 703-603-7141</p>

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<p>Goal 5, Objective 2</p> <p><b>Environmental Contamination— Many Uncertainties Affect the Progress of the Spring Valley Cleanup</b></p> <p>The purpose of this evaluation was to obtain information about the roles and responsibilities of the government entities involved in addressing Spring Valley, assess the progress of environmental restoration, and estimate the cost of cleanup.</p>	<p>The government entities involved in the cleanup of Spring Valley have formed an active partnership to make cleanup decisions. Continued progress at the site will depend on this partnership.</p> <p>The government entities have identified and removed a large number of hazards, but the extent of remaining hazards is unknown. The primary health risks at Spring Valley are the possibility of injury or death from exploding or leaking ordnance and containers of chemical warfare agents and potential long-term health problems from exposure to arsenic-contaminated soil.</p> <p>The U.S. Army estimated that the remaining cleanup activities at Spring Valley would cost \$71.7 million and take 5 years to complete, but the reliability of these estimates is uncertain.</p>	<p>The U.S. Army Corps of Engineers is the lead agency at the site, and it is responsible for addressing the recommendations.</p> <p>EPA will continue to support the partnership and work closely with the U.S. Army Corps of Engineers and the District of Columbia.</p>	<p>General Accounting Office</p> <p>GAO-02-556</p> <p>May 20, 2002</p> <p>Located at: <a href="http://www.gao.gov">http://www.gao.gov</a></p>
<p>Goal 5, Objective 2</p> <p><b>Chemical Safety: Emergency Response Community Views on the Adequacy of Federally Required Chemical Information</b></p> <p>The purpose of this GAO report was to satisfy a mandate under Public Law 106-40 requiring GAO to report to Congress on the adequacy of chemical information required to be submitted to local emergency response personnel to help them respond to chemical incidents, the adequacy of delivery of that information, and the level of compliance with the requirement to submit the information.</p>	<p>GAO found that local responders in most of the communities contacted believe federal information required to be reported under section 112(r) of the Clean Air Act and Title III of the Superfund Amendments and Reauthorization Act generally meets their needs, but a few said that it was not adequate to help them respond to chemical incidents; representatives of national organizations were divided in their opinions on the adequacy of the information. Both local responders and national organization representatives made suggestions that they believe would improve the usefulness of the information.</p> <p>Other than reporting recommendations from survey respondents, GAO did not provide specific recommendations to EPA or Congress to address any of its findings.</p>	<p>As noted, the report generally finds that EPA is succeeding in its mission to provide chemical hazard information. The report does not contain specific GAO recommendations for Agency action. Some recommendations from members of the public are contained in the report, but GAO does not indicate which of those recommendations are appropriate for Agency action. Nevertheless, EPA is already acting on some of those recommendations to the extent they are consistent with Agency policies and resources (e.g., electronic reporting and availability of chemical inventory forms).</p>	<p>General Accounting Office</p> <p>GAO-02-799</p> <p>July 2002</p> <p>Located at: <a href="http://www.gao.gov">http://www.gao.gov</a></p>

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<p>Goal 6, Objective 1</p> <p><b>Great Lakes: EPA Needs to Define Organizational Responsibilities Better for Effective Oversight and Cleanup of Contaminated Areas</b></p> <p>Determination of EPA progress developing and implementing Remedial Action Plans (RAPs) and assessing effectiveness of EPA's RAP efforts.</p>	<p>All of the Great Lakes "Areas of Concern" have defined their environmental problems and half have selected measures to address the problems; however, none have been fully restored. EPA is not effectively fulfilling its Great Lakes Water Quality Agreement responsibilities to ensure that RAPs are developed and implemented and has not clearly delineated RAP oversight responsibility. Oversight was transferred from the Great Lakes National Program Office (GLNPO) to regional offices, and resources were reduced.</p> <p>GAO recommends that the EPA Administrator (1) clarify which office within EPA is responsible for ensuring RAP implementation and (2) identify actions, time periods, and resources for EPA to fulfill its RAP oversight responsibilities.</p>	<p>On September 25, 2002, EPA determined that GLNPO would assume overall program management by providing oversight, coordination, and reporting on RAP implementation. EPA proposes to identify additional means of enhancing RAP progress, being cognizant of existing fiscal constraints, Agency priorities and requirements, and the need to consult with Great Lakes states.</p>	<p>General Accounting Office</p> <p>GAO-02-563</p> <p>May 2002</p> <p>Located at: <a href="http://www.gao.gov">http://www.gao.gov</a></p>
<p>Goal 6, Objective 1</p> <p><b>The Challenge to Restore and Protect the Largest Body of Fresh Water in the World</b></p> <p>Biennial assessment by the International Joint Commission (IJC) of progress of the governments of the United States and Canada under the Great Lakes Water Quality Agreement (GLWQA).</p>	<p>The United States and Canada should continue to make progress under the GLWQA, particularly on (1) monitoring, assessing, and reporting on the state of the Great Lakes ecosystem; (2) cleanup of contaminated sediments; and (3) prevention and control of alien aquatic invasive species. The IJC report also includes findings regarding persistent, bioaccumulative toxic (PBT) goals on discharge reduction and elimination, persistent air toxics transport and deposition, groundwater protection, aging nuclear power plants, and other major GLWQA issues where EPA and Environment Canada work cooperatively with the public and private sectors.</p>	<p>EPA's Great Lakes National Program Office will draft a formal U.S. Government policy response to the recommendations.</p>	<p>International Joint Commission</p> <p>September 2002</p> <p>Located at: <a href="http://www.ijc.org/ijcweb-e.html">http://www.ijc.org/ijcweb-e.html</a></p>



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<p>Goal 6, Objective 1</p> <p><b>2002 LakeWide Management Plans (LaMP) Updates</b></p> <p>Assessment of goals, progress to date, and next steps in restoration and protection of the Great Lakes.</p>	<p>Progress has been made in the past 2 years in areas such as publication of fish advisories and beach closures, decreased toxics, and contaminated sediment cleanup. Governmental partners on LaMP committees have identified and prioritized “next steps” to achieve long-term goals, including addressing exotic species, restoring natural flow to tributaries, continuing to address contaminated sediments, and addressing air toxics from outside the basin.</p>	<p>EPA will work with state and local partners to identify additional means of enhancing LaMP progress, being cognizant of existing fiscal constraints and Agency priorities and requirements.</p>	<p>LaMP Committees</p> <p>April 2002</p> <p>Located at: <a href="http://www.epa.gov/glnpo/gl2000/lamps/index.html">http://www.epa.gov/glnpo/gl2000/lamps/index.html</a></p>
<p>Goal 6, Objective 1</p> <p><b>Mining Ideas 2</b></p> <p>Evaluation of 106 GLNPO habitat projects totaling more than \$17 million awarded 1992–2001.</p>	<p>The projects were to protect, restore, inventory, assess, classify, monitor, and study more than 17 million acres of the Great Lakes Basin. The projects were supported by 650 federal, state, local, tribal, non-governmental, and academic partners. Thus, for about a dollar an acre, more than 6,400 acres were protected from a variety of threats; the process of restoring more than 7,300 acres was begun; more than 900 people volunteered more than 3,800 hours for project activities; 1,250 schoolchildren and adults were educated and informed about Great Lakes ecosystems, and 62 full- and part-time jobs were created.</p>	<p>Response will be developed in early 2003.</p>	<p>U.S. EPA, Great Lakes National Program Office, Ecosystem Team</p> <p>EPA-905-R-02-006</p> <p>September 2002</p> <p>Located at: <a href="http://www.epa.gov/glnpo/">http://www.epa.gov/glnpo/</a></p>

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<p>Goal 6, Objective 5</p> <p><b>An Evaluation of EPA’s Safe Drinking Water Program in Central America</b></p> <p>This evaluation looks at the four components of the Program that were implemented in three countries—El Salvador, Nicaragua, and Honduras.</p>	<p>The Program led to improvements in four main areas of drinking water quality improvement. For instance, it (1) helped improve drinking water laboratories technically and managerially and (2) effectively demonstrated and taught the use of an analytical tool necessary for the national water utility to collect and analyze information needed to make sound decisions regarding existing plant operations and priorities for plant improvements.</p> <p>Example of recommendation regarding specific Program components: Additional support should be provided to strengthen the technical capacity of key drinking water analytical laboratories and assist these laboratories in achieving accreditation for analyses of critical importance to public health.</p> <p>Example of lessons learned regarding Program transferability: Develop aid programs through use of partnerships rather than top-down approaches.</p>	<p>The implementation of the recommendations related specifically to the Central America Program will depend on available funds and office priorities and are to be determined.</p> <p>These lessons learned are being applied and will be applied to future international water programs.</p>	<p>U.S. EPA, Office of International Affairs, with consulting support from Industrial Economics, Incorporated, Marasco Newton Group, and U.S. EPA, Office of Policy, Economics, and Innovation</p> <p>December 2002</p> <p>Contact: Eric Marsh 202-566-2198</p>

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<p>Goal 7, Objective 1</p> <p><b>Regulatory Reform: Compliance Guide Requirement Has Had Little Effect on Agency Practices</b></p> <p>The purpose of this study was to examine the implementation of section 212 of the Small Business Regulatory Enforcement Fairness Act (SBREFA) in selected agencies, one of which was EPA.</p>	<p>The evaluation findings focused on whether the agencies have published small entity compliance guides (SECGs) for each covered rule published in selected years and described how the agencies developed the guides and made them available to small entities affected by the rules, focusing on rules published during years 1999 and 2000.</p> <p>Although GAO found that “EPA had the narrowest view of the scope of the Regulatory Flexibility Act (RFA) and section 212,” EPA provided GAO with SECGs for “three rules that appeared to have been prepared in recognition of the compliance guide requirement and meticulously described how to satisfy the rules’ provisions.”</p> <p>GAO found that “there needs to be greater clarity and consistency with regard to how key terms in the RFA are defined and implemented.” They also stated that “changes are needed with regard to the requirements in section 212.”</p>	<p>GAO’s recommendations were directed at Congress; EPA does not need to respond.</p> <p>EPA found the report to be mostly favorable to the Agency.</p>	<p>General Accounting Office</p> <p>GAO-02-172</p> <p>December 2001</p> <p>Located at: <a href="http://www.gao.gov">http://www.gao.gov</a></p>

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<p>Goal 7, Objective 2</p> <p><b>Evaluation of Laboratory Quality Systems and Practices</b></p> <p>The Quality Staff coordinated and led technical reviews of EPA's National Program Office and Office of Research and Development Laboratories. The purpose of the assessments was to document implementation of quality practices supporting the data used by the Agency to make programmatic decisions and determine management and staff awareness of the Agency's position on improper laboratory practices.</p>	<p>The technical reviews identified (1) laboratory quality system and performance weaknesses that produce inadequate-quality analytical data, (2) inconsistencies in practices used to promote implementation, and performance, and (3) lack of established methods to detect and deter misconduct in laboratories.</p> <p>The findings identified weaknesses in the laboratory quality systems. In corrective action, a work group consisting of both EPA and non-EPA members developed a training course, <i>Tools to Detect Improper Laboratory Practices</i>, to assist laboratory assessors in evaluating laboratory systems and practices. The training course was presented for the first time in July 2002 at the National Environmental Laboratory Accreditation Conference (NELAC) annual conference, and it was repeated at the Region 6 Annual Quality Assurance Conference and the joint New York and Pennsylvania Environmental Laboratory Association Conference. A measurable outcome of this evaluation and training is evidenced in the NELAC standards, which now require ethics programs for all accredited laboratories.</p>	<p>The Quality Staff continues to work with the environmental laboratory community, including the industry trade association, and the American Council of Independent Laboratories to ensure that laboratory managers and staff understand the Agency's position on laboratory Quality Systems and their role in deterring and detecting improper practices. The course materials are to be posted on the Quality Web Site, and additional training sessions will be conducted as needed. This effort supports the Goal 7 objective of <i>providing access to tools for using environmental information and ensuring that the environmental data collected and used by the Agency are of the appropriate quality for their intended use.</i></p>	<p>Final reports on the technical reviews were issued in July 2002. Corrective actions resulting from the evaluations will rest with each laboratory's parent organization. Evaluations will be summarized in a capping report, which is expected by December 2002.</p> <p>Contact: Nancy Wentworth 202-564-6830 Fred Siegelman 202-564-5173</p>

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<p>Goal 7, Objective 3</p> <p><b>Government Information Security Reform Act (GISRA) Annual Security Program Review</b></p> <p><b>The U.S. Environmental Protection Agency FY 2002 Report to OMB on the Government Information Security Reform Act (GISRA)</b></p> <p>The purpose of this evaluation was to review the effectiveness of the Agency's security program in accordance with requirements included in GISRA.</p>	<p>This evaluation consists of two separate but related efforts. The first is an assessment conducted by the Chief Information Officer, in conjunction with EPA's senior program officials, of the Agency's 168 general support systems and major applications. Agency system owners, using the Security Self-Assessment for Information Technology Systems methodology developed by the National Institute of Standards and Technology, assessed the status of security of the systems under their control. Simultaneously, the OIG conducted an independent evaluation of the Agency's overall security program. This assessment confirmed that the Agency has continued to improve its security program and highlighted where resources should be focused in FY 2003 to ensure continued progress.</p>	<p>The Agency is developing a comprehensive Agency corrective action plan in response to the weaknesses identified in the self-assessments. The Agency's action plan will consist of individual plans of action with milestones (POA&amp;Ms) prepared in accordance with OMB direction. The POA&amp;Ms will define specific tasks, when the work will begin, when the task will end, and resource needs.</p>	<p>U.S. EPA, Office of Environmental Information and Office of the Inspector General</p> <p>2002-S-00017</p> <p>September 16, 2002</p> <p>Located at:  <a href="http://www.epa.gov/oigearth/ereading_room/gisrafinalv2.pdf">http://www.epa.gov/oigearth/ereading_room/gisrafinalv2.pdf</a></p>
<p>Goal 8, Objective 7</p> <p><b>Project XL 2001 Comprehensive Report: Directory of Project Experiments and Results</b></p> <p>Summarizes objectives and results for 51 innovative pilot projects.</p>	<p>Each project has made progress in meeting the commitments outlined in the formal Final Project Agreements. However, each project faces unique issues and challenges in achieving the innovations. The results are based on data collected between August and November 2001.</p>	<p>The Agency continues to monitor and address issues with the individual projects as appropriate. The Agency continues to seek opportunities for successful innovations and lessons learned to be applied to broader system change.</p>	<p>U.S. EPA, Office of Policy, Economics and Innovation</p> <p>EPA-100-R-01-003</p> <p>December 2001</p> <p>Located at:  <a href="http://www.epa.gov/projectxl/01report.htm">http://www.epa.gov/projectxl/01report.htm</a></p>

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<p>Goal 8, Objective 7</p> <p><b>Project in Excellence and Leadership: New England Universities' Laboratories</b></p> <p><b>Mid-Term Evaluation: Piloting Superior Environmental Performance in Labs</b></p> <p>Earns lessons learned from the unique approach to laboratory management being tested and highlights opportunities to improve the overall environmental performance of the universities for the remainder of the project period.</p>	<p>It was clear that a heavy investment of time and resources had resulted in progress. At the same time, there was some frustration at the lack of movement in distinct areas of the universities' Environmental Management Plans that would lead to improved environmental performance.</p> <p>The primary lesson learned is that universities' environmental health and safety staff, EPA, and the states need to work within the challenges of an academic culture while also capitalizing on the benefits of an academic culture. It is evident that it is extremely challenging to achieve the stated pollution prevention goals within the culture of research, with its demands for chemical purity and scientifically acceptable protocols.</p>	<p>The Agency is working with the states and universities to address the challenges faced in implementing this innovation pilot.</p> <p>Also, the Agency is reviewing the results of this evaluation to assess how the lessons learned in this pilot should be incorporated into a proposed rulemaking being planned for FY 2003 under the RCRA.</p>	<p>U.S. EPA, Office of Policy, Economics, and Innovation and EPA–New England</p> <p>September 2002</p> <p>Located at:  <a href="http://www.epa.gov/evaluate">http://www.epa.gov/evaluate</a></p>
<p>Goal 8, Objective 7</p> <p><b>Evaluation of the Environmental Justice Collaborative Model</b></p> <p>An evaluation of the Environmental Justice Collaborative Model currently being used in demonstration projects sponsored by the Interagency Working Group on Environmental Justice.</p>	<p>The Model provides an important vehicle for the many institutions that are seeking to provide community assistance but lack effective mechanisms for doing so. Recognizing a community's vision for redevelopment can enable service providers to tailor their programs and services to better suit community needs and save resources. Several of these partnerships have faced and continue to face challenges in using the Model. Cooperation and coordination in support of partnership efforts within and among federal agencies could be enhanced. Much of the success of these efforts can be attributed to community, regional non-governmental organization, or government-level individuals, who pulled together diverse groups.</p>	<p>The Federal Interagency Working Group on Environmental Justice and the Office of Environmental Justice have used the results described in the draft report to make some midcourse changes to the criteria and guidelines, which will be used to review the nomination proposals for the Interagency Working Group's Environmental Justice Revitalization Projects in FY 2003.</p>	<p>Prepared for the Federal Interagency Working Group on Environmental Justice by U.S. EPA, Office of Policy, Economics, and Innovation</p> <p>September 2002</p> <p>(Draft for Public Comment)</p> <p>Located at:  <a href="http://www.epa.gov/evaluate/DRAFT-EJCM-Eval-Rpt090402.pdf">http://www.epa.gov/evaluate/DRAFT-EJCM-Eval-Rpt090402.pdf</a></p>

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<p>Goal 8, Objective 7</p> <p><b>Democracy On-Line: An Evaluation of the National Dialogue on Public Involvement in EPA Decisions</b></p> <p>Resources for the Future evaluates the Dialogue as a case study of electronic public participation. It examines the dynamics of the participation process and how participants felt about it. It describes the quality of communication when public participation moves from the meeting room to the computer screen. Finally, it looks at how participants and EPA benefitted from the process.</p>	<p>The evaluation found that the online public participation, the Dialogue, was highly successful. The Dialogue turned a static commenting process into an interactive and dynamic discussion. It involved vastly more (and different) people than had previously provided input in the Public Involvement Policy. Unlike any other form of public participation, it allowed people to participate as much or as little as they wanted to without any sort of selection process or agency control. Many of the problems that arose during the Dialogue can largely be addressed through future changes in design, software, and norms of participation. Others may be addressed through societal trends in computer ownership, use, and familiarity.</p>	<p>EPA agrees with Resources for the Future that like any new format for participation, online dialogues need to evolve through an iterative process of experimentation and learning. The Agency will seek additional opportunities to use</p>	<p>the approach as appropriate.</p> <p>Resources for the Future</p> <p>January 2002</p> <p>Located at:  <a href="http://www.rff.org/reports/PDF_files/democracyonline.pdf">http://www.rff.org/reports/PDF_files/democracyonline.pdf</a></p>
<p>Goal 8, Objective 7</p> <p><b>Reinventing Environmental Regulation: Lessons from Project XL</b></p> <p>Resources for the Future's publication assesses the difficult negotiations needed to implement Project XL at a 3M tape manufacturing plant.</p>	<p>The book discusses the conflicting goals of participants, the influences of personality and organizational culture, and complications caused by changes in 3M's external business environment. The 3M case is compared with EPA negotiations with Intel, Merck, and Weyerhaeuser. Stressing the need for continued innovation, it suggests more successful outcomes through clearer definitions and expectations, better communication, and a negotiation process that keeps pace with changes in the world beyond.</p>	<p>The Agency continues to assess lessons learned about developing successful innovation projects. The Agency continues to seek opportunities for successful innovations and ways to apply lessons learned to broader system change.</p>	<p>Resources for the Future</p> <p>August 2002</p> <p>Located at:  <a href="http://www.rff.org/">http://www.rff.org/</a></p>

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<p>Goal 8, Objective 7</p> <p><b>Environmental Protection: Overcoming Obstacles to Innovative State Regulatory Programs</b></p> <p>GAO identifies the major avenues that states have used to obtain EPA's approval of innovative approaches to environmental protection and the major obstacles that impede states from pursuing innovative approaches needing EPA's concurrence. The report also discusses EPA's recent efforts to facilitate innovative approaches to environmental protection.</p>	<p>Officials in most of the states contacted stated that they faced significant challenges before they were in a position to submit proposals to EPA, including resistance from within the state environmental agency and a lack of adequate resources to pursue innovative approaches. But although obstacles at the state level played an important role, environmental officials from 12 of the 15 states said that federal obstacles—including the need to comply with detailed EPA regulations, policies, and guidance, as well as a perceived cultural resistance to change among EPA staff—were more significant.</p>	<p>EPA has recognized the need to improve its strategy to encourage innovative environmental approaches by states and other entities. Toward this end, the Agency has (1) issued a broad-based strategy on Innovating for Better Environmental Results and (2) adopted the recommendations of an internal Task Force on Improving EPA Regulations, which, among other things, advocates the consideration of innovative alternatives as new regulations are developed.</p>	<p>General Accounting Office GAO-02-268 January 2002</p> <p>Located at: <a href="http://www.gao.gov">http://www.gao.gov</a></p>
<p>Goal 10, Objective 2</p> <p><b>Managing for Improved Results</b></p> <p>A steering group of EPA senior managers was convened to examine the Agency's current management practices—how EPA sets its priorities; plans and budgets; tracks, measures, and reports on its performance; and uses performance and other information to adjust its strategies—with an eye toward improvement.</p>	<p>The Steering Group recommended that the Agency:</p> <ul style="list-style-type: none"> <li>• Develop simplified strategic goals, focused on end results.</li> <li>• Collaborate with states on developing out-year performance targets and multiyear strategies for achieving them.</li> <li>• Commit to regional and goal-specific strategic plans.</li> <li>• Build regional/state priorities into annual plan and budget before submission to OMB and Congress.</li> <li>• Accelerate improvements to performance measures.</li> <li>• Streamline the process for annual program guidance/Memorandums of Agreement (MOAs).</li> <li>• Shift approach to accountability.</li> <li>• Ramp-up support to national programs, regions, and states to build capacity for results-based management.</li> </ul>	<p>The Agency will begin implementation in FY 2003.</p>	<p>U.S. EPA, Office of the Chief Financial Officer Fall 2002</p> <p>Contact: Wendy Lubbe 202-564-3827</p>



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<p>Goal 10, Objective 2</p> <p><b>EPA Clean Water and Drinking Water State Revolving Funds</b></p> <p>The purpose of this evaluation was to review the processes and controls over State Revolving Fund disbursements and determine whether any erroneous payments had occurred.</p>	<p>The evaluation found controls to be effective and that based on audits and performance evaluation reviews, only isolated instances of erroneous payments have occurred in the two State Revolving Funds. For the Clean Water State Revolving Fund, the erroneous payment rate was 0.13 percent; for the Drinking Water State Revolving Fund, the rate was 0.04 percent. Actions to correct these erroneous payments have been completed or are under way.</p>	<p>Recommendations are aimed toward ensuring that erroneous payments are properly monitored and the erroneous payment rate remains low. Once the report is finalized, the Office of Water and the Office of the Chief Financial Officer will begin implementation.</p>	<p>U.S. EPA, Office of the Chief Financial Officer</p> <p>Fall 2002</p> <p>Contact: Bob Cluck 202-564-4917</p>
<p>Goal 10, Objective 2</p> <p><b>Management Oversight/Validations Reviews</b></p> <p>In FY 2001 EPA designated an Agency weakness entitled "Improved Management of Assistance Agreements," and in response the Office of Grants and Debarment (OGD) conducted validation reviews.</p>	<p>The evaluation reviews showed that headquarters and regional offices had made progress in improving grants management; however, the reviews found that although post-award monitoring is occurring, project officers need to do a better job of documenting monitoring in the project file and proactively identifying potential performance issues. The reviews also found that some offices had not submitted their post-award monitoring plans on time.</p>	<p>The OGD plans to continue and expand the Management Oversight/Validation Reviews in FY 2003. OGD is using the results of the FY 2002 reviews to develop a long-term strategic plan for grants management. The strategic plan will focus on enhancing the skills of the grants workforce; promoting grant competition; participating in e-government initiatives and making effective use of information technology; improving resource management, accountability, and oversight; providing technical assistance and training to nonprofit and tribal recipients; developing grant work plans that address environmental results; and strengthening the Agency's internal evaluation systems for grants management.</p>	<p>U.S. EPA, Office of Administration and Resources Management</p> <p>Contact: Martha Monell 202-564-5387</p>



# Appendix B

*Data Quality for Assessments  
of FY 2002 Performance*

## APPENDIX B: DATA QUALITY FOR ASSESSMENTS OF FY 2002 PERFORMANCE

Appendix B describes the quality of the data used to measure EPA's performance. For each of the 10 EPA Strategic Goals, this appendix describes (1) the performance measures (PMs), (2) the database(s) supporting the PMs, (3) the source of the database(s), (4) the quality of the data, (5) planned improvements to the data or database(s), and (6) any material inadequacies.

### Goal 1: Clean Air

#### **PERFORMANCE MEASURES:** (Refer to Performance Data Chart pages II-9–II-11)

- Total number of people who live in areas designated in attainment of the clean air standards for ozone, PM, CO, SO<sub>2</sub>, NO<sub>2</sub>, and Pb. (APG 1 & 4)
- Additional people living in newly designated areas with demonstrated attainment of the ozone, PM, CO, SO<sub>2</sub>, NO<sub>2</sub>, and Pb standards. (APG 1 & 2)
- Total number of people living in areas with demonstrated attainment of the NO<sub>2</sub> standard. (APG 4)

[Note: PM = particulate matter, PM-10 = particulate matter 10 micrometers or less in diameter, PM-2.5 = particulate matter 2.5 micrometers or less in diameter CO = carbon monoxide, SO<sub>2</sub> = sulfur dioxide, NO<sub>2</sub> = nitrogen dioxide, Pb = lead.]

**Performance Database:** The Air Quality Subsystem (AQS). AQS stores ambient air quality data used to evaluate an area's air quality levels relative to the National Ambient Air Quality Standards (NAAQS). The Findings and Required Elements Data System (FREDS). FREDS is used to track the progress of states and regions in reviewing and approving the required data elements of the State Implementation Plans (SIPs). SIPs are clean air plans and define what actions a state will take to improve the air quality in areas that do not meet NAAQS.<sup>1</sup> FY 2002 performance data are complete.

**Data Source:** AQS - State and local agency data from State and Local Air Monitoring Stations (SLAMS). Population - Data from Census Bureau/Department of Commerce. FREDS - Data are provided by EPA's regional offices.

**Data Quality:** AQS - The quality assurance (QA)/quality control (QC) of the national air monitoring program has several major components: the Data Quality Objective (DQO) process, reference and equivalent methods program, EPA's National Performance Audit Program (NPAP), system audits, and network reviews. To ensure quality data, the SLAMS are required to meet the following: (1) each site must meet network design and siting criteria; (2) each site must provide adequate QA assessment, control, and corrective action functions according to minimum program requirements; (3) all sampling methods and equipment must meet EPA reference or equivalent requirements; (4) acceptable data validation and record-keeping procedures must be followed; and (5) data from SLAMS must be summarized and reported annually to EPA. Finally, there are system audits that regularly review the overall air quality data collection activity for any needed changes or corrections. FREDS - No formal QA/QC procedures. Populations - No additional QA/QC beyond that done by the Census Bureau/Department of Commerce. The data included in AQS are based on EPA performance specifications. EPA has stringent QA/QC procedures in place that minimize data limitations. Populations - No additional QA/QC beyond that done by the Census Bureau/Department of Commerce. FREDS - Potential data limitations include incomplete or missing data from EPA's regional offices.

**Improvements:** AQS - EPA recently completed the process of reengineering the AQS to make it a more user-friendly, Windows-based system. As a result, air quality data will be more easily accessible

## Goal 1: Clean Air (continued)

via the Internet. AQS has been enhanced to include data standards (e.g., latitude/longitude, chemical nomenclature) developed under the Agency's Reinventing Environmental Information (REI) Initiative.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

### **PERFORMANCE MEASURES:** (Refer to Performance Data Chart pages II-9–II-11 )

- Reduction in mobile source PM-10. (APG 2)
- Reduction in mobile source PM-2.5. (APG 2)
- Reduction in mobile source volatile organic compound (VOC) emissions. (APG 1)
- Reduction in mobile source NO<sub>x</sub> emissions. (APG 1)
- CO reduced from mobile sources. (APG 4)

**Performance Database:** The Air Quality Subsystem (AQS). AQS stores ambient air quality data (used to evaluate an area's air quality levels relative to the NAAQS).<sup>2</sup> FY 2002 performance data are complete for FY 2002.

**Data Source:** AQS - State and local agency data from State and Local Air Monitoring Stations (SLAMS). Certain mobile source information is updated annually. Inputs are updated annually only if there is a rationale and a readily available source of annual data. Generally, Vehicle Miles Traveled (VMT), the mix of VMT by type of vehicle (Federal Highway Administration types), temperature, gasoline properties, and the designs of inspection/maintenance programs are updated each year. The age mix of highway vehicles is updated using state registration data, thereby capturing the effect of fleet turnover. Emission factors for all mobile sources and activity estimates for nonroad sources are changed only when the Office of Transportation and Air Quality requests that this be done and is able to provide the new information in a timely manner. This new information includes new models such as MOBILE6 and the latest version of the nonroad model.

**Data Quality:** AQS - The QA/QC of the national air monitoring program has several major components: the Data Quality Objective (DQO) process, the reference and equivalent methods program, EPA's National Performance Audit Program (NPAP), system audits, and network reviews. To ensure quality data, the SLAMS are required to meet the following: (1) each site must meet network design and siting criteria; (2) each site must provide adequate QA assessment, control, and corrective action functions according to minimum program requirements; (3) all sampling methods and equipment must meet EPA reference or equivalent requirements; (4) acceptable data validation and record-keeping procedures must be followed; and (5) data from SLAMS must be summarized and reported annually to EPA. Finally, there are system audits that regularly review the overall air quality data collection activity for any needed changes or corrections.

Any limitations of the inventory estimates for mobile sources come from limitations in the modeled emission factors (based on emission factor testing and models predicting overall fleet emission factors in grams per mile) and also in the estimated vehicle miles traveled for each vehicle class (derived from Department of Transportation data). For nonroad emissions, the estimates come from a model using equipment populations, emission factors per hour or unit of work, and an estimate of usage. This nonroad emissions model accounts for more than 200 types of nonroad equipment. Any limitations in the input data will carry over into limitations in the emission inventory estimates.

It is important to have the current and future year emission reduction estimates generated using consistent methods. The EPA Emission Trends report dated December 1997 has mobile source emission inventories for the 1995 base year as well as for years 2000, 2002, 2005, and 2007. The

## Goal 1: Clean Air (continued)

base year emissions in 1995 for mobile sources are 8,134,000 tons VOC; 70,947 tons CO; 11,998 tons NO<sub>x</sub>; 878,000 tons PM-10; and 659,000 tons PM. These data were used to predict the emission reductions in the year 2000 and later.

**Improvements:** AQS - EPA recently completed the process of reengineering the AQS to make it a more user-friendly, Windows-based system. As a result, air quality data will be more easily accessible via the Internet. AQS has been enhanced to include data standards (e.g., latitude/longitude, chemical nomenclature) developed under the Agency's Reinventing Environmental Information (REI) Initiative.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-11)

Combined stationary and mobile source reduction in air toxics emissions. (APG 5)

**Performance Database:** National Toxics Inventory (NTI).

**Data Source:** The NTI includes emission estimates from large industrial or point sources, smaller stationary area sources, and mobile sources. The baseline NTI (for base years 1990–1993) includes emission estimates for 188 hazardous air pollutants from more than 900 stationary source categories and from mobile sources. It is based on data collected during the development of Maximum Achievable Control Technology (MACT) standards, state and local data, Toxics Release Inventory (TRI) data, and emissions estimates using accepted emission inventory methodologies. Additional information on the development of the baseline NTI is available on the Internet at <http://www.epa.gov/ttn/chief/nti/index.html#nti>. The baseline NTI contains county level emissions data and cannot be used for modeling because it does not contain facility-specific data.

The 1996 and the 1999 NTI contain major point sources, area sources, and mobile source estimates that are used as input to National Air Toxics Assessment (NATA) modeling. The 1996 and 1999 NTI contain estimates of facility-specific hazardous air pollutants (HAP) emissions and their source-specific parameters necessary for modeling such as location and facility characteristics (stack height, exit velocity, temperature, etc.).

The primary source of data in the 1996 and 1999 NTI is state and local air pollution control agencies and tribes. These data vary in completeness, format, and quality. EPA evaluates these data and supplements them with data gathered while developing MACT and residual risk standards, industry data, and Toxics Release Inventory (TRI) data. Then EPA estimates emissions for approximately 30 area source categories such as wildfires and residential heating sources not included in the state, local, and tribal data to produce a complete model-ready national inventory. Mobile source data are developed using data provided by state and local agencies and tribes and onroad and nonroad models developed by EPA's Office of Transportation and Air Quality. The draft 1996 and 1999 NTI undergo extensive review by state and local agencies, tribes, industry, EPA, and the public.<sup>3</sup>

In the intervening years between updates of the NTI, the model EMS-HAP (Emissions Modeling System for Hazardous Air Pollutants) is used to estimate annual emissions of air toxics. EMS-HAP is an emissions processor that performs the steps needed to process an emission inventory for input into the model. These steps include spatial allocation of area and mobile source emissions from the county level to the census tract level, and temporal allocation of annual emission rates to annually averaged (i.e., same rate for every day of the year) 3-hour emission rates. In addition, EMS-HAP, a model processor, can project future emissions by adjusting point, nonpoint, and mobile emission data to account for growth and emission reductions resulting from emission reduction scenarios.<sup>4</sup>

## Goal 1: Clean Air (continued)

**Data Quality:** The NTI is a database designed to house information from other primary sources. EPA performs extensive QA/QC activities to improve the quality of the emission inventory. EPA conducts a variety of internal activities to QC the 1999 NTI data provided by other organizations, including (1) the use of an automated format QC tool to identify potential errors with data integrity, code values, and range checks; (2) use of geographic information system (GIS) tools to verify facility locations; and (3) content analysis by pollutant, source category, and facility to identify potential problems with emission estimates such as outliers, duplicate sites, duplicate emissions, coverage of a source category, etc. The content analysis includes a variety of comparative and statistical analyses. The comparative analyses help reviewers prioritize which source categories and pollutants to review in more detail based on comparisons using current inventory data and prior inventories. The statistical analyses help reviewers identify potential outliers by providing the minimum, maximum, average, standard deviation, and selected percentile values based on current data. EPA is currently developing an automated QC content tool for data providers to use prior to submitting their data to EPA. After investigating errors identified using the automated QC format tool and GIS tools, EPA follows specific guidance, available on the Internet ([http://www.epa.gov/ttn/chief/emch/invent/qaaugmemo\\_final.pdf](http://www.epa.gov/ttn/chief/emch/invent/qaaugmemo_final.pdf)), on augmenting missing data fields. The NTI database contains data fields that indicate if a field has been augmented and identifies the augmentation method.

After performing the content analysis, EPA contacts data providers to reconcile potential errors. The draft NTI is posted for external review and includes a README file with instructions on review of data and submission of revisions, documentation, state-by-state modeling files with all modeled data fields, and summary files to assist in the review of the data. One of the summary files includes a comparison of point source data submitted by different organizations.

During the external review of the data, state and local agencies, tribes, and industry provide external QA of the inventory. EPA evaluates proposed revisions from external reviewers and prepares memos for individual reviewers documenting incorporation of revisions and explanations if revisions were not incorporated. All revisions are tracked in the database with the source of original data and sources of subsequent revision. The external QA and the internal QC of the inventory result in significant changes to the initial emissions estimates. Additional information on QA/QC of the NTI is documented in a paper titled *QA/QC — An Integral Step in the Development of the 1999 National Emission Inventory for HAPs* (Anne Pope et al.). Presented at the 2002 Emission Inventory Conference in Atlanta; available on the Internet at <http://www.epa.gov/ttn/chief/conference/ei11/qa/pope.pdf>.

EPA's Science Advisory Board (SAB) reviewed the draft 1996 national-scale assessment, NATA, during 2001. It was published in 2002. The review was generally supportive of the assessment purpose, methods, and presentation; the committee considers this an important step toward a better understanding of air toxics. Many of the SAB comments related to possible improvements for future assessments (additional national-scale assessments are being planned for the base year 1999 and for every 3 years thereafter) or raised technical issues that merit further investigation. In response to the technical issues, EPA plans to improve the modeling methodology and conduct additional analyses and studies per SAB recommendation. Also, as a result of the SAB meeting, industry provided revisions to the draft 1996 NTI, which were incorporated in the final inventory used for NATA modeling. EPA will follow up on all the issues raised by SAB and plans to publish a series of technical reports addressing the results of these investigations. Information on the scientific peer review of the national-scale assessment is available on the Internet at <http://www.epa.gov/ttn/atw/nata/peer.html>.

## Goal 1: Clean Air (continued)

**Improvements:** The 1996 and 1999 NTI are a significant improvement over the baseline 1993 NTI because of the added facility-level detail (e.g., stack heights, latitude/longitude locations), making it more useful for dispersion model input. Future inventories (2002 and later years) are expected to improve significantly because of increased interest in the NTI by regulatory agencies, environmental interests, and industry, and the greater potential for modeling and trend analysis. During the development of the 1999 NTI, all primary data submitters and reviewers were required to submit their data and revisions to EPA in a standardized format using the Agency's Central Data Exchange (CDX). Information on CDX is available on the Internet at <http://www.epa.gov/ttn/chief/nif/cdx.html>.

**Material Inadequacy:** There are no material inadequacies for this performance measure.

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### PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-12)

- SO<sub>2</sub> emissions reduction. (APG 6)
- NO<sub>x</sub> emissions reduction. (APG 7)

**Performance Database:** The following are the databases used to support the performance measures in the Acid Rain Program: Emissions Tracking System (ETS), SO<sub>2</sub> and NO<sub>x</sub> emissions collected by Continuous Emission Monitoring Systems (CEMS), CASTNet for dry deposition, and National Atmospheric Deposition Program (NADP) for wet deposition. Data are collected on a calendar year basis. FY 2002 data will be available in mid-2003 and will be reported in the FY 2003 Annual Report.

**Data Source:** On a quarterly basis, ETS receives and processes hourly measurements of SO<sub>2</sub>, NO<sub>x</sub>, volumetric flow, CO<sub>2</sub>, and other emission-related parameters from more than 2,500 fossil fuel-fired utility units affected under the Title IV Acid Rain Program. For the 5-month ozone season (May 1–September 30), ETS receives and processes hourly NO<sub>x</sub> measurements from electric generation units (EGUs) and certain large industrial combustion units affected under the Ozone Transport Commission (OTC) NO<sub>x</sub> Budget Program, the NO<sub>x</sub> SIP Call, and/or the section 126 programs for controlling regional transport of ozone in the eastern United States. In 2004 the initial compliance year for the NO<sub>x</sub> SIP Call, up to 2,000 units in as many as 20 states and the District of Columbia will report seasonal NO<sub>x</sub> data to ETS. More than 900 units have been reporting these data since 1999 under the OTC NO<sub>x</sub> Budget Program.

CASTNet measures particle and gas acidic deposition chemistry. Specifically, CASTNet measures sulfate and nitrate dry deposition and meteorological information at approximately 70 active monitoring sites. CASTNet is primarily an eastern, long-term dry deposition network funded, operated, and maintained by EPA's Office of Air and Radiation (OAR).

The NADP is a national long-term wet deposition network that measures precipitation chemistry and provides long-term geographic and temporal trends in concentration and deposition of major cations and anions. Specifically, NADP provides measurements of sulfate and nitrate wet deposition at approximately 200 active monitoring sites. EPA, along with several other federal agencies, states, and other private organizations, provides funding and support for NADP. The Illinois State Water Survey, University of Illinois, maintains the NADP database.

**Data Quality:** Quality assurance and quality control requirements dictate performing a series of quality assurance tests of CEMS's performance. For these tests, emissions data are collected under highly structured, carefully designed testing conditions, which involve either high-quality standard reference materials or multiple instruments performing simultaneous emission measurements. The resulting data are screened and analyzed using a battery of statistical procedures, including one that tests for systematic bias. If CEMS fails the bias test, indicating a potential for systematic underestimation

## Goal 1: Clean Air (continued)

of emissions, either the problem must be identified and corrected or the data are adjusted to minimize the bias.

In November 2001 CASTNet established a Quality Assurance Project Plan (QAPP).<sup>5</sup> The QAPP contains data quality objectives and quality control procedures for accuracy and precision.

NADP has established data quality objectives and quality control procedures for accuracy, precision, and representativeness. The intended use of these data is to establish spatial and temporal trends in wet deposition and precipitation chemistry. The NADP methods of determining wet deposition values have undergone extensive peer review, handled entirely by the NADP housed at the Illinois State Water Survey, University of Illinois. Assessments of changes in NADP methods are developed primarily through the academic community and reviewed through the technical literature process.

The ETS provides instant feedback to the data sources (e.g., the electrical utilities) to identify data reporting problems, format errors, and inconsistencies. EPA staff then conduct data quality review on each quarterly ETS file. In addition, states or EPA staff conduct random audits on selected sources' data submission. The electronic data file QA checks are described in EPA's *Quarterly Report Review Process*.<sup>6</sup>

**Improvements:** To improve the spatial resolution of the Network (CASTNet), additional monitoring sites are needed. However, at this time EPA has no plans to add sites.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-10)**

Report on the effects of concentrated ambient PM on humans and animals believed most susceptible to adverse effects (e.g., elderly, people with lung disease, or animal models of such diseases). (APG 3)

**Performance Database:** Program output; no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-10)**

Report on animal and clinical toxicology studies using Utah Valley particulate matter (UVPM) to describe biological mechanisms that may underlie the reported epidemiological effects of UVPM. (APG 3)

**Performance Database:** Program output; no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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## Goal 2: Clean and Safe Water

### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-23)**

Provide method(s) for CCL related pathogens in drinking water for use in the Unregulated Contaminant Monitoring Rule. (APG 11)

**Performance Database:** Program output; no internal tracking system.



## Goal 2: Clean and Safe Water (continued)

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-22)

Percent of population served by community drinking water systems with no violations during the year of any federally enforceable health-based standards that were in place by 1994 and population served by community water systems providing drinking water meeting health-based standards promulgated in or after 1998. (APG 8 & 9)

**Performance Database:** Safe Drinking Water Information System–Federal Version (SDWIS or SDWIS-FED).

**Data Source:** Agencies with primacy for the Public Water Supply Supervision (PWSS) Program, including states, EPA regional offices with direct implementation (DI) responsibility for states and Indian tribes, and the Navajo Nation Indian Tribe (the Navajo Nation is expected to begin reporting directly to EPA in FY 2003). Primacy agencies (states) collect the data from the regulated water systems, determine compliance, and report a subset of the data to EPA (primarily inventory and violations). EPA is the secondary user of these data. Water quality data from other collectors of data (third parties) related to drinking water, such as source water or waste water discharge, are not used in PWSS program measures. FY 2002 performance data are complete.

**Data Quality:** The analytical methods for drinking water sample analysis are specified in technical guidance associated with each drinking water regulation. Laboratories must be certified by the primacy agency (state) to analyze drinking water samples and are subject to periodic performance audits by the state. The performance measures are based on data reported by individual systems to states, which supply the information to EPA through SDWIS. EPA then verifies and validates the data for 10 to 12 states per year, according to the PWSS Data Verification Protocol (Version 9.0, 1999).<sup>7</sup> To measure program performance, EPA aggregates the SDWIS data into a national statistic on overall compliance with health-based drinking water standards. This statistic compares the total population served by community water systems meeting all health-based standards to the total population served by all public water systems (which includes non-community water systems).

SDWIS-FED has numerous edit checks built into the software to reject erroneous data. There are quality assurance manuals for states and regions to follow to ensure data quality. The manuals provide standard operating procedures for conducting routine assessments of the quality of the data, communication and follow-up actions to be conducted with the state to achieve timely corrective action(s). EPA offers training to states on reporting requirements, data entry, data retrieval, and error correction. User and system documentation is produced with each software release and is maintained on EPA's Web site. SDWIS-FED documentation includes data entry instructions, data element dictionary application, Entity Relationship Diagrams, a user's manual, and regulation-specific reporting requirements documents. System, user, and reporting requirements documents can be found on the EPA Web site at <http://www.epa.gov/safewater>. System and user documents are accessed via the database link, and specific rule reporting requirements documents are accessed via the regulations, guidance, and policy documents link. In addition, EPA provides specific error correction and reconciliation support through a troubleshooter's guide, a system-generated summary with detailed reports that document the results of each data submission, and an error code database for states to use when they have questions on how to enter or correct data. A user support hotline is available 5 days a week to answer questions and provide technical assistance. At least one EPA staff person in each EPA regional office serves as the SDWIS-FED Regional Data Management Coordinator to provide technical assistance and training to the states

## Goal 2: Clean and Safe Water (continued)

on all aspects of information management and required reporting to EPA. State primacy agencies' information systems are audited on an average schedule of once every 3 years. EPA also completed a data reliability assessment (QA audit) of the 1996–1998 SDWIS-FED data in FY 2000. The Data Reliability Action Plan (DRAP, described below),<sup>8</sup> completed in FY 2000, was developed to address deficiencies identified in the 1999 data reliability assessment. The action plan was implemented in 2001 and continues to be implemented and revised as appropriate. The most recent revision was made in October 2002.

EPA, states, and stakeholders have expanded on the DRAP through the development of a more comprehensive OGWDW Information Strategy that tackles additional data quality problems.<sup>9</sup> Components of the OGWDW Information Strategy include (1) simplifying and/or standardizing regulatory reporting requirements where possible; (2) reevaluating EPA's philosophy of system edits; and (3) continuing to improve tools and processes for creating and transferring data to EPA, such as incorporating newer technologies, and adapting the Agency's Enterprise Architecture Plan, to integrate data and the flow of data from reporting entities to EPA via a central data exchange (CDX) environment. The Information Strategy could be considered Phase II of the DRAP, and it sets the direction for a comprehensive modernization of SDWIS over the next 3 to 5 years.

Finally, individual data quality reviews are conducted by EPA and its contracted auditors on state primacy agencies' information systems. The frequency of these audits are conducted between every 2 to 4 years depending on the resources available and programmatic need in the region. Each state's overall information system is evaluated with special emphasis on its compliance determinations (interpretation and application of regulatory requirements, which includes designation of violations) and data flow (primacy agency's compliance with record-keeping and reporting requirements to EPA). Continuous data quality reviews include data quality estimates based on the results of data verifications, timeliness and completeness of violation reporting, completeness of various required inventory data elements, and completeness of reporting for specific rules.

Currently SDWIS-FED is an "exceptions" database that focuses exclusively on public water systems' noncompliance with drinking water regulations (health-based and program). Primacy states implement drinking water regulations with the support of the Public Water System Supervision (PWSS) grant program and determine whether public water systems have violated maximum contaminant levels (MCLs), treatment technique requirements, consumer notification requirements, or monitoring and reporting requirements. Primacy agencies report those violations through SDWIS.

Recent state data verification and other quality assurance analyses indicate the most significant data quality problem is under-reporting to EPA of monitoring and health-based standards violations and inventory characteristics, such as water sources and/or latitude/longitude for all sources. The most significant under-reporting occurs in monitoring violations. Even though these are not covered in the performance measure, failures to monitor could mask treatment technique and MCL violations. Such under-reporting of violations limits EPA's ability to precisely quantify the population served that are meeting health based standards. Currently, the program office is assessing the percentage of unreported health based violations and calculating adjustments to the performance data that might be required for future annual reports. The population data has been determined to be of high quality.

The DRAP and the Information Strategy Plan address many of the underlying factors contributing to the data limitations. Additional options under consideration include the following:

1. Increase the focus on state compliance determinations and reporting of complete, accurate, and timely violations data.
2. Develop incentives to improve the accuracy, completeness, and timeliness of state reporting.

## Goal 2: Clean and Safe Water (continued)

3. Continue to analyze the quality of the data.
4. Require the reporting of parametric data (analytical results used to evaluate compliance with monitoring regulations and compliance with treatment techniques and maximum contaminant levels), monitoring schedules, and waiver information assigned to water systems by the state primacy agency. This information would allow compliance determinations to be made by EPA for quality assurance or state oversight purposes. Potential violation under reporting could be identified through the availability of this information and appropriate corrective actions implemented.

**Improvements:** With a newly developed information strategy developed by EPA in partnership with the states and major stakeholders, several improvements to SDWIS are under way. The DRAP is an integral part of the OGWDW Strategic Information Plan, currently under development.

First, EPA will continue to work with states to implement the DRAP (previously referenced), a multi-step approach to improve the quality and reliability of data in SDWIS-FED. The DRAP already has improved the completeness, accuracy, timeliness, and consistency of the data in SDWIS-FED through (1) training courses for SDWIS-FED data entry, error correction, and regulation-specific compliance determination and reporting requirements; (2) specific DRAP analyses, follow-up activities, and state-specific technical assistance; (3) increased number of data verifications conducted each year; and (4) creation of various quality assurance reports to assist regions and states in the identification and reconciliation of missing, incomplete, or conflicting data.

Second, more states will use SDWIS-STATE,<sup>10</sup> a software information system jointly designed by states and EPA, to support states as they implement the drinking water program. SDWIS-STATE is the counterpart to EPA's federal drinking water information system, SDWIS-FED, and employs many of the same edit criteria and enforces many of the mandatory data elements. If the SDWIS-STATE system is fully utilized by a state, the information it holds would meet EPA's minimum data requirements. SDWIS-STATE contains a utility that creates the necessary output to report to SDWIS-FED, which aids in easing the states' reporting burden to EPA and in the process minimizes data conversion errors and improves data quality and accuracy. In addition, a Web-enabled version of SDWIS-STATE and a data migration application that can be used by all states to process data for upload to SDWIS-FED are being developed. EPA estimates that 40 states will be using SDWIS-STATE for data collections by FY 2004.

Third, EPA is modifying SDWIS-FED to (1) streamline its table structure, which simplifies updates and retrievals, (2) minimize data entry options that result in complex software and prevent meaningful edit criteria, and (3) enforce compliance with permitted values and Agency data standards through software edits, all of which will improve the accuracy of the data.

Fourth, EPA has developed a data warehouse system that is optimized for analysis, data retrieval, and data integration from other data sources like information from data verifications, sample data, source water quality data (e.g., U.S. Geological Survey [USGS] data), and indicators from inspections conducted at the water systems. It will improve the program's ability to use information to make decisions and effectively manage the program.

Finally, EPA, in partnership with the states, is developing information modules on other drinking water programs: the Source Water Protection Program, the Underground Injection Control Program, and the Drinking Water State Revolving Fund. These modules will be integrated with SDWIS to provide a more comprehensive data set with which to assess the Nation's drinking water supplies, a key component of the goal.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

## Goal 2: Clean and Safe Water (continued)

### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-25)

Clean Water State Revolving Fund (CWSRF) projects that have initiated operations. (APG 17)

**Performance Database:** Clean Water State Revolving Fund National Information Management System (NIMS).<sup>11</sup> FY 2002 performance data are complete.

**Data Source:** Data are reported to EPA headquarters by state regulatory agency personnel and EPA's regional staff. Data are collected and reported once yearly. State data are maintained in NIMS using a standard Excel spreadsheet format.

**Data Quality:** States receive data entry guidance from EPA headquarters in the form of annual memoranda. After the states enter data, EPA headquarters and its contractor compile the data. EPA headquarters and its regional office staff query the states as needed to ensure data quality and conformance with expected trends. Quality control measures verify that data are complete, data collected are consistent with data stored in NIMS, and data in NIMS are unique. The process of validating the data takes several weeks.

After discrepancies have been resolved and the data are determined to be complete, EPA headquarters prepares a detailed analysis, which the regional offices use during their yearly on-site reviews of each state program. In addition, independent auditors or the EPA Inspector General's office conduct their own annual audits, at which time they evaluate each state's financial data quality. Finally, every other year, headquarters staff visit each regional office to examine files and to check data quality procedures.

There are no known limitations in the performance data, which states submit voluntarily. Erroneous data can be introduced into the NIMS database by typographic or definitional error. Typographic errors are controlled or corrected through data testing performed by EPA and its contractor. Definitional errors due to varying interpretations of information requested for specific data fields have been virtually eliminated in the past 2 years through EPA headquarters' clarification of definitions.<sup>12</sup> It takes several weeks to quality-check the data and make them available for public use.

**Improvements:** This system has been operative since 1996. It is updated annually, and data fields are changed or added as needed. The federal budget cycle demands that EPA set program performance targets 2 years in advance. The NIMS has effectively shown the success of the CWSRF program. The NIMS shows that the number of projects being financed and built has exceeded the Agency's targets by an average of 12 percent per year.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-24)

Acres of habitat restored and protected nationwide since 1987 as part of the National Estuary Program (NEP). (APG 14)

**Performance Database:** Aggregate national and regional data for this measurement, as well as data submitted by the individual National Estuary Programs, are displayed numerically, graphically, and by habitat type in the Performance Indicators Visualization and Outreach Tool (PIVOT).<sup>13</sup> PIVOT highlights habitat loss, alteration, protection, and restoration in an educational fashion with graphics and images that reflect specific NEP reports. FY 2002 performance data are complete.

**Data Source:** NEP program documents such as annual work plans (which contain achievements made in the previous year) and annual progress reports are used, along with other implementation tracking materials, to document the number of acres of habitat restored and protected. EPA then aggregates

## Goal 2: Clean and Safe Water (continued)

the data for each NEP to arrive at a national total for the entire program. EPA conducts regular reviews of NEP implementation to help ensure that information provided in these documents is as accurate as possible and that progress reported is in fact being achieved.

**Data Quality:** Primary data are prepared by the staff of the NEP based on their own reports and from data supplied by other partnering agencies/organizations (that are responsible for implementing the action resulting in habitat protection and restoration). The NEP staff are required to follow guidance provided by EPA to prepare their reports and to verify the numbers they provided. EPA then confirms that the national total accurately reflects the information submitted by each program. The Office of Wetlands, Oceans and Watersheds has developed a standardized format for data reporting and compilation and guidance with definitions for habitat protection, restoration activities, and habitat categories.<sup>14</sup>

Current data limitations include information that may be reported inconsistently (based on different interpretations of the protection and restoration definitions), acreage that may be miscalculated or misreported, and acreage that may be double-counted (same parcel may also be counted by partnering/implementing agency or need to be replanted multiple years). In addition, although measuring the (quantitative) number of acres of habitat protected or restored provides an indicator of on-the-ground progress made by NEPs, it does not necessarily correlate to an indication of the overall health of that habitat (e.g., changes in ecological function).

**Improvements:** EPA is continuing to work with the NEPs and their partners to improve consistency and accuracy of reporting.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-23)

Cumulative number of beaches for which monitoring and closure data are available. (APG 10)

**Performance Database:** National Health Protection Survey of Beaches Information Management System.<sup>15</sup> FY 2002 performance data are complete.

**Data Source:** Data are obtained from National Health Protection Survey of Beaches, which is a voluntary collection of beach data along the coastal and Great Lake states and territories. State and local governments voluntarily provide the information. The survey began in 1997 with information on 1,021 beaches and now includes records on 2,445 beaches. The database includes fields identifying the beaches for which monitoring and notification information is available. The database also identifies those states that have received a BEACH (Beaches Environmental Assessment and Coastal Health) Act grant. Information is updated annually.

**Data Quality:** A standard survey form, approved by OMB, is distributed to coastal and Great Lake state and county environmental and public health beach program officials by mail in hard copy and is available on the Internet for electronic submission. In 2001 survey respondents comprised 42% county, 31% city, 12% state, 6% district, 4% region, 2% National park, 2% state park, 1% other. When data are entered over the Internet by a state or local official, a password is issued to ensure the appropriate party is completing the survey. EPA reviews the survey responses to ensure the information is complete, then follows up with the state or local government to obtain additional information where needed. However, because the data are submitted voluntarily by state and local officials, the Agency cannot verify the accuracy of the information provided.

## Goal 2: Clean and Safe Water (continued)

Participation in this survey and collection of data is voluntary, and information has not been collected on the universe of beaches. The voluntary response rate was 88% in 2001 (237 out of 269 contacted agencies responded). The number of beaches for which information was collected increased from 1,021 in 1997 to 2,445 in 2001. Participation in the survey will become a mandatory condition for grants awarded under the BEACH Act program (described below); however, state and local governments are not required to apply for a grant.

**Improvements:** With the passage of the BEACH Act of 2000, P.L. 106-284, the Agency is authorized to award grants to states to develop and implement monitoring and notification programs consistent with federal requirements. As the Agency awards these implementation grants, it will require standard program procedures, sampling and assessment methods, and data elements for reporting. To the extent that state governments apply for and receive these implementation grants, the amount, quality, and consistency of available data will improve. In addition, the BEACH Act requires the Agency to maintain a database of national coastal recreation water pollution occurrences. The Agency will fulfill this requirement by revising the current database to include this new information. In revising the database, the Agency has been investigating modes for electronic exchange of information and reducing the number of reporting requirements.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-25)

- Major point sources are covered by current permits. (APG 16)
- Minor point sources are covered by current permits. (APG 16)

**Performance Database:** Permit Compliance System (PCS).<sup>16</sup> FY 2002 performance data are complete.

**Data Source:** EPA's regional offices and states enter data into PCS.

**Data Quality:** PCS is the official repository of NPDES program data. The Office of Water (OW) uses PCS to determine the extent of the NPDES universe and the percentage of permits that have exceeded their expiration date (i.e., the percentage of permits that are backlogged). States that have been delegated the NPDES program are required to maintain PCS. In cases where EPA remains the permitting authority, the region is responsible for maintenance of PCS. However, many states have developed their own systems to manage NPDES data. While these states are still required to input data into PCS, either through direct entry or batch upload, their own systems often contain more complete and accurate programmatic data.

OW has been working with states and regions on a PCS Clean-Up Project to ensure that the data in PCS provide an accurate representation of the NPDES universe and are reconciled with state system data. As part of the QA/QC process, OW generates monthly national and state-by-state reports listing key facility and outfall data elements appearing in PCS for all active permits. The data elements include permittee and facility name, facility address, issuance date, expiration date, application received date, effective date, Standard Industrial Classification (SIC) code, facility and outfall latitude/longitude, flow, etc. These reports are available on a password-protected Web site<sup>17</sup> maintained by an OW contractor. In addition to the actual data elements listed above, the site includes summary reports of missing and available data nationally and for every state.

OW has been working with states and regions to identify and correct discrepancies between state and PCS data and to populate fields in PCS that are currently blank with existing state-level data provided by states. A contractor is available to provide states with support in the review, comparison, upload and entry of data. OW anticipates completion of the project during FY 2003.

## Goal 2: Clean and Safe Water (continued)

**Improvements:** The PCS Clean-Up project has resulted in significant changes to the PCS database. OW has inactivated over 25% of the individual permits in PCS when states indicated that, according to their own updated records, those permits were no longer or had never been active. Many of the permits that were inactivated had been included as part of the NPDES permit backlog. OW has also worked with states to populate many facility-level data fields that had been blank. While EPA has progressed with the PCS Clean-Up, significant data gaps remain. Many minor permit records still do not contain basic facility-level data such as address or latitude/longitude.

**Material Inadequacy:** Minor permit data elements remain poorly populated in PCS; however, there is sufficient information upon which to base management decisions.

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### PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-24)

- Loading reductions of toxics by facilities subject to effluent guidelines promulgated between 1992 and 2000, as predicted by model projection. (APG 15)
- Loading reductions of conventional pollutants by facilities subject to effluent guidelines promulgated between 1992 and 2000, as predicted by model projection. (APG 15)
- Loading reductions of non-conventional pollutants by facilities subject to effluent guidelines promulgated between 1992 and 2000, as predicted by model projection. (APG 15)

**Performance Database:** This measure is calculated using a spreadsheet<sup>18</sup> that draws from several data sources. An average “per facility” value is assigned to each permittee according to the industrial type of the facility. Each region reports the actual number of permits issued in the past year for each sector, typically drawn from PCS.<sup>19</sup> Using both the average per facility value and the number of permits issued, the spreadsheet then generates the value for the total pollutants reduced.

**Data Sources:** For direct dischargers subject to effluent guidelines, the average per facility value for pollutant reduction is derived from the Technical Development Documents produced at the time of the effluent guideline (ELG) rulemaking.<sup>20</sup> TDDs are available for Pulp & Paper, Pharmaceuticals, Landfills, Industrial Waste Combustors, Centralized Waste Treatment, Transportation Equipment Cleaning, Pesticide Manufacturing, Offshore Oil & Gas, Coastal Oil & Gas, Synthetic Based Drilling Fluid, and Concentrated Animal Feeding Operations.

**Data Quality:** (For a discussion of the PCS data that provide the number of permittees in each sector, please see the discussion in the previous measure on backlog.) The Technical Development Documents that provide pollutant data for each industrial sector are based on extensive research and undergo public review and comment.

**Improvements:** (For a discussion of activities to improve PCS data, please see the discussion in the previous measure on backlog.)

For other sources, such as POTWs, CSOs, and storm water, that were not included as of 2002, other sector-specific modeling is being developed in order to more fully characterize the pollutant loading reductions resulting from the entire NPDES program. For 2003 EPA added an estimation for CSOs using a model<sup>21</sup> that draws information from the Clean Water Needs Survey.<sup>22</sup> EPA is also developing a model,<sup>23</sup> to estimate pollutant reductions from POTWs, both with and without pretreatment programs. EPA expects that model to draw information from Discharge Monitoring Reports (DMRs) contained in PCS, as well as other annual reports by POTWs to EPA and states, including information about permitted Significant Industrial Users where there are pretreatment programs. In the future, EPA also expects to develop a model to estimate pollutant reductions from storm water.

## Goal 2: Clean and Safe Water (continued)

**Material Inadequacy:** There are no material inadequacies for these performance measures. There is sufficient information upon which to base management decisions.

### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-23)

Watersheds that have greater than 80% of assessed waters meeting all water quality standards. (APG 12)

**Performance Database:** The Watershed Assessment Tracking Environmental Results System (WATERS)<sup>24</sup> is used to summarize water quality information at the watershed level. For purposes of this national summary, “watersheds” are equivalent to 8-digit hydrologic unit codes (HUCs), of which there are 2,262 nationwide.<sup>25</sup> State CWA 305(b) data<sup>26</sup> are submitted every 2 years and many states provide annual updates.<sup>27</sup> Data to be used for the FY 2003 Annual Performance Report will include state submissions expected in the spring of 2002.<sup>28</sup> 510 eight-digit HUCs were reported with greater than 80% of assessed waters meeting all water quality standards in the 2000 305(b) report. FY 2001 performance data are used to assess FY 2002 performance; this is a biennial measure, and no new data were planned this year.

**Data Source:** State CWA 305(b) reporting. The data used by the states to assess water quality and prepare their 305(b) reports include ambient monitoring results from multiple sources (state, USGS, volunteer, academic) as well as predictive tools like water quality models.<sup>29</sup> States compile diverse data to support water quality assessments; EPA uses these data to present a snapshot of water quality as reported by the states, but does not use them to report trends in water quality. EPA’s Office of Water and Office of Research and Development have established a monitoring and design team that is working with states on a 3- to 5-year project to recommend a design for a national probability-based monitoring network that could be used to provide both status and trends in water quality at a state and national level. Future data will be accompanied by quality assurance plans as part of the State’s Assessment Methodology,<sup>30</sup> and data coming into the OW database, Storage and Retrieval system (STORET), will have the necessary accompanying metadata.

**Data Quality: QA/QC Procedures:** QA/QC of data provided by states pursuant to individual state assessments (under 305(b)) is dependent on individual state procedures. Numerous system-level checks are built into WATERS based upon the business rules associated with assessment information.<sup>31</sup> States are then given the opportunity to review the information in WATERS to ensure it accurately reflects the data that they submitted. Detailed data exchange guidance and training are also provided to the states. Sufficiency threshold for inclusion in this measure requires that 20% of stream miles in an 8-digit HUC be assessed. The OW Quality Management Plan (QMP) was approved in July 2001.<sup>32</sup> (QMPs need to be renewed every 5 years.)

*Data Quality Review:* Numerous independent reports have cited that weaknesses in monitoring programs and the reporting of monitoring data undermine EPA’s ability to depict the condition of the Nation’s waters and to support scientifically sound water program decisions. The most recent reports include the 1998 *Report of the Federal Advisory Committee on the Total Maximum Daily Load (TMDL) Program*,<sup>33</sup> the March 15, 2000, General Accounting Office report,<sup>34</sup> and the 2001 National Academy of Sciences Report.<sup>35</sup>

In response to these evaluations, EPA has been working with states and other stakeholders to improve (1) data coverage, so that state reports reflect the condition of all waters of the state; (2) data consistency to facilitate comparison and aggregation of state data to the national level; and (3) documentation so that data limitations and discrepancies are fully understood by data users. First, EPA enhanced two existing data management tools (STORET and the Assessment Database) that include documentation of data quality information.<sup>36</sup> Second, EPA has developed a GIS tool called



## Goal 2: Clean and Safe Water (continued)

WATERS that integrates many databases including STORET, the Assessment database, and a new water quality standards database. These integrated databases facilitate comparison and understanding of differences among state standards, monitoring activities, and assessment results. Third, EPA and states have developed a guidance document intended to facilitate increased consistency in monitoring program design and the data and decision criteria used to support water quality assessments.<sup>37</sup> And fourth, OW and the regions have developed the *Elements of a State Water Monitoring and Assessment Program*,<sup>38</sup> which is currently under review by EPA's state partners. This guidance describes 10 elements that each state water quality monitoring program should contain and proposes time-frames for implementing all 10 elements.

**Data Limitations:** Data are not representative of comprehensive national assessments because states do not yet employ a monitoring design that characterizes all waters in each reporting cycle. States do not use a consistent suite of water quality indicators to assess attainment with water quality standards. For example, indicators of aquatic life use support range from biological community assessments to levels of dissolved oxygen to concentrations of toxic pollutants. Several factors relating to variations in state practices limit how the assessment reports provided by states can be used to describe water quality at the national level. States, territories, and tribes collect data and information on only a portion of their water bodies. There are differences among their programs, sampling techniques, and standards.

State assessments of water quality may include uncertainties associated with derived or modeled data. Differences in monitoring designs among and within states prevent the Agency from aggregating water quality assessments at the national level with known statistical confidence. States, territories, and authorized tribes monitor to identify problems and typically place a higher priority on problem solving than on characterization of all water resources. Lag times between data collection and reporting can vary by state.

**Improvements:** OW is currently working with states, tribes, and other federal agencies to improve the database that supports this management measure by addressing the underlying methods of monitoring water quality and assessing the data. Also, OW is working with partners to enhance monitoring networks to achieve comprehensive coverage of all waters, use a consistent suite of core water quality indicators (supplemented with additional indicators for specific water quality questions), and document key data elements and decision criteria in electronic data systems and assessment methodologies. OW is using a variety of mechanisms to implement these improvements including data management systems, guidance, stakeholder meetings, training and technical assistance, program reviews, and negotiations.

EPA is working with states to enhance their monitoring and assessment programs, with a particular emphasis on the probabilistic approach. These enhancements, along with improving the quality and timeliness of data for making watershed-based decisions, will also greatly improve the Agency's ability to use state assessments in consistently portraying national conditions and trends. Specific state refinements include developing rigorous biological criteria to measure the health of aquatic communities (and attainment with the aquatic life use) and designing probability-based monitoring designs to support statistically valid inferences about water quality. The EPA Environmental Monitoring and Assessment Program (EMAP) design team has been instrumental in helping states design the monitoring networks and analyze the data. Initial efforts have focused on streams, lakes, and coastal waters though wetlands and large rivers are next in line. States are implementing these changes incrementally and in conjunction with traditional targeted monitoring. At last count 16 states have adopted probability-based monitoring designs, several more are evaluating them, and all but 10 are collaborating in an EMAP study.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

## Goal 3: Safe Food

### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-36)

Register safer chemicals and biopesticides. (APG 18)

**Performance Database:** PRATS. OPP maintains PRATS. The system is designed to track regulatory data and studies submitted by the registrant (pesticide manufacturer/producer) in support of the registration application for a pesticide. OPP staff update the data regularly. Output counts are available in October of the next fiscal year.

**Data Source:** OPP staff update the status of the submissions and studies as they are received and as work is completed by the reviewers. The status indicates whether the application is ready for review, the application is in the process of review, or the review has been completed.

**Data Quality:** These are program outputs. OPP staff and management review the program outputs in accordance with established policy for the registration of reduced-risk pesticides as set forth in Pesticide Regulation Notice 97-3, September 4, 1997.

**Improvements:** OPPIN, which is in the initial stages of implementation, will consolidate various OPP program databases. EPA is working internally and with stakeholders from environmental organizations and industry to develop outcome data and measures that more accurately depict risk from pesticides. Quantitative assessment of human risks from pesticide exposure is challenging in part because pesticides are pervasive in the environment and there are many routes of exposure. Furthermore, in many cases, a means of distinguishing whether an effect is the result of pesticide use or of some other condition is difficult to verify. Therefore, the risk assessors must make assumptions to estimate results that are attributable to pesticide use.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-37)

- Product reregistration. (APG 22)
- Reregistration Eligibility Decisions (REDs). (APG 22)

**Performance Database:** PRATS. OPP maintains PRATS. The system is designed to track regulatory data and studies submitted by the registrant (pesticide manufacturer/producer) in support of a pesticide's registration application. OPP staff update the data regularly. Output counts are available in October of the next fiscal year.

**Data Source:** OPP staff update the status of each action as it is completed by the reviewer.

**Data Quality:** These are program outputs. OPP staff and management review the program outputs in accordance with established policies in place for the reregistration program.

**Improvements:** OPPIN is being implemented in late 2002 and will consolidate various OPP program databases. EPA is working internally, as well as with stakeholders from environmental organizations and industry, to develop outcome data and measures that more accurately depict risk from pesticides.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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### PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-37)

- Tolerance reassessments for top 20 foods eaten by children. (APG 21)
- Tolerance reassessments. (APG 21)

### Goal 3: Safe Food (continued)

**Performance Database:** Tolerance Reassessment Tracking System (TORTS). TORTS is an OPP in-house system that contains records on all 9,721 tolerances subject to reassessment. It includes the total number of tolerances reassessed by fiscal year, the outcomes of reassessments (number of tolerances raised, lowered, revoked, or unchanged), and the appropriate priority group for the tolerance. Additionally, it breaks out the tolerances for specific chemical groups such as organophosphates, carbamates, organochlorines, carcinogens, high-hazard inerts, children's foods, and minor uses. OPP staff update the data regularly. Output counts are available in October of the next fiscal year.

**Data Source:** OPP staff update the status of each tolerance reassessment action as it is completed by the reviewer.

**Data Quality:** These are program outputs. OPP staff and management review the program outputs in accordance with established policies in place for reregistration/tolerance reassessment activities.

**Improvements:** EPA is working internally, as well as with stakeholders from environmental organizations and industry, to develop outcome data and measures that more accurately depict risk from pesticides.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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#### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-37)**

Number of acre-treatments using reduced risk pesticides. (APG 20)

**Performance Database:** Two non-EPA databases are used for this measure. One is the Doane Marketing Research data; the other is the U.S. Department of Agriculture's (USDA) National Agricultural Statistical Survey (NASS) database. FY 2002 performance data are expected to be complete in November 2002.

**Data Source:** Doane Marketing Research (a private-sector research database) and USDA surveys (e.g., NASS data).

**Data Quality:** A reduced-risk pesticide must meet the criteria set forth in Pesticide Registration Notice 97-3, September 4, 1997. Reduced-risk pesticides include those which reduce the risks to human health; reduce the risks to nontarget organisms; reduce the potential for contamination of groundwater, surface water, or other valued environmental resources; and/or broaden the adoption of integrated pest management strategies or make such strategies more available or more effective. In addition, biopesticides are generally considered safer (and thus reduced-risk). All registration actions must employ sound science and meet the new safety standard of the Food Quality Protection Act (FQPA). All risk assessments are subject to public and scientific peer review. Doane data and USDA's NASS data are subject to extensive QA/QC procedures, documented at their Web sites. Additionally, Doane and NASS information are compared as a cross-reference.

OPP statistical and economics staff review data from Doane and NASS. Information is also compared to prior years for variations and trends as well as to determine the reasons for the variability.

Doane data are proprietary; thus, to release any detailed information, the Agency must obtain approval. The NASS data include only major crops for annual surveys. Other crops are surveyed biannually. Not all states are included; however, states included are deemed representative of a national estimate.

**Improvements:** These are not EPA databases; thus improvements are not known in any detail.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

### Goal 3: Safe Food (continued)

#### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-36)

Occurrence of residues on core set of 19 foods eaten by children. (APG 19)

**Performance Database:** U.S. Department of Agriculture's (USDA) Pesticide Data Program (PDP). FY 2002 performance data expected to be complete in FY 2003.

**Data Source:** Data collection is conducted by states.

**Data Quality:** The information is collected by the states and includes statistical information on pesticide use, food consumption, and residue detections, which provides the basis for realistic dietary risk assessments and evaluation of pesticide tolerance. Information is coordinated within USDA agencies and cooperating state agencies. Pesticide residue sampling and testing procedures are managed by USDA's Agricultural Marketing Service (AMS). AMS also maintains an automated information system for pesticide residue data and publishes annual summaries of residue detections.

Participation in PDP sites is voluntary. Sampling is limited to 10 states but designed in a manner to represent the food supply nationwide. The number of sampling sites and volume vary by state. Uncertainties and other sources of error are minor and not expected to have any significant effect on performance assessment.

**Improvements:** PDP is not an EPA database; thus improvements are not known in any detail.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

### Goal 4: Preventing Pollution and Reducing Risks in Communities, Homes, Workplaces, and Ecosystems

#### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-46)

Model agricultural partnership pilot projects. (Through voluntary cooperation among EPA, states, and private grower groups, implement model agricultural partnership pilot projects that demonstrate and facilitate the adoption of farm management decisions and practices that provide growers with a "reasonable transition" away from the highest risk pesticides.) (APG 23)

**Performance Database:** EPA's regional offices report new model agricultural partnership pilot projects implemented during the year, and the information is compiled by the Office of Pesticide Programs. FY 2002 performance data are complete.

**Data Source:** Reports from EPA's regional offices.

**Data Quality:** FY 2002 performance data are simple counts of projects implemented and are considered accurate.

**Improvements, Material Inadequacy:** Not applicable.

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#### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-47)

Number of certified individuals nationally (federal-administered and state-administered programs). (APG 24)

**Performance Database:** EPA's regional office records. FY 2002 performance data are complete.

## Goal 4: Preventing Pollution and Reducing Risks in Communities, Homes, Workplaces, and Ecosystems (continued)

**Data Source:** Currently, all information is received through informal reporting from regional offices and originates from information submitted through certification applications. In the future, EPA will track certifications centrally.

**Data Quality:** The Office of Prevention, Pesticides and Toxic Substances' Quality Management Plan (QMP) is under review; approval is scheduled by December 31, 2002. Data quality reviews of records maintained at the test centers are conducted during routine compliance monitoring of the centers using Office of Enforcement and Compliance Assurance procedures. The reviews have found occasional discrepancies, but no regional or national trends requiring modifications to any record-keeping or QA/QC procedures have come to light.

**Improvements:** EPA hopes to have a centralized, contractor-run tracking system in place by 2003.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-47)

TSCA Premanufacture Notice reviews. (APG 25)

**Performance Database:** New Chemicals Management Information Tracking System (MITS), which tracks information from beginning of Premanufacture Notice (PMN) program (1979) to present. Information includes number of PMNs submitted and final disposition (whether regulated or not) and number of low-volume and test market exemptions. The performance data for FY 2002 are complete and final.

**Data Source:** As industry develops new chemicals, it submits data related to the new chemicals for review to the Agency, including information on chemicals to be manufactured and imported, chemical identity, manufacturing process, use, worker exposure, environmental releases, and disposal.

**Data Quality:** The Office of Prevention, Pesticides and Toxic Substances' Quality Management Plan (QMP) is under review; approval is scheduled by December 31, 2002. EPA reviews industry data; Agency staff scientists and contractors perform risk screening and assessments, which could lead to regulation. This is an output measure tracked directly through OPPT record-keeping systems. No models or assumptions or statistical methods are employed. Data are aggregated nationally and suitable for cross-year comparisons.

**Improvements, Material Inadequacy:** Not applicable.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-47)

After reviewing submissions from companies, make screening quality health and environmental effects data publicly available for 2,800 HPV chemicals. (APG 26)

**Performance Database:** EPA is developing an electronic chemical right-to-know database system, called the U.S. High Production Volume (US HPV) database, which will allow organized storage and retrieval of all available information on high-production-volume chemicals in commerce in the United States. The US HPV database will be designed to store, in a systematic fashion, physical chemistry, fate, exposure, and toxicity data on listed chemicals for Agency and public use. The performance data for FY 2002 are complete and final.

## Goal 4: Preventing Pollution and Reducing Risks in Communities, Homes, Workplaces, and Ecosystems (continued)

**Data Source:** Industry submits test plans and robust summaries of risk screening data in response to the voluntary HPV Challenge program or EPA promulgated test rules.

**Data Quality:** The Office of Prevention, Pesticides and Toxic Substances' Quality Management Plan (QMP) is under review; approval is scheduled by December 31, 2002. Data undergo quality assurance/quality control by EPA before being uploaded to the database. EPA reviews industry submissions of robust summaries of hazard data on individual chemicals and chemical categories, and test plans based on those summaries. EPA determines whether industry data adequately support the summaries and test plans. Data review does not include new information received as a result of new testing. Data are primarily hazard data, not exposure data. Data are suitable to support screening-level assessments only.

**Improvements:** Data will be integrated with other Toxic Substances Control Act (TSCA) databases in an Oracle environment.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-48)

People living in healthier indoor air. (Note: The following three supporting performance measures below are used for tracking progress toward this overarching Congressional performance measure.) (APG 27)

- People living in radon resistant homes.

**Performance Database:** Survey. The results are published by the National Association of Home Builders (NAHB) Research Center in annual reports of radon-resistant home building practices.<sup>39</sup> FY 2002 performance data are currently unavailable. Data are expected in 2003.

**Data Source:** The survey is an annual sample of home builders in the United States, most of whom are members of NAHB. NAHB members construct 80 percent of the homes built in the United States each year. Using a survey methodology reviewed by EPA, NAHB Research Center estimates the percentage of these homes that are built radon-resistant. The percentage built radon-resistant from the sample is then used to estimate what percent of all homes built nationwide are radon-resistant. To calculate the number of people living in radon-resistant homes, EPA assumes an average of 2.67 people per household. NAHB Research Center has been conducting this annual builder practices survey for nearly a decade and has developed substantial expertise in the survey's design, implementation, and analysis. The statistical estimates are typically reported with a 95 percent confidence interval.

NAHB Research Center conducts an annual survey of home builders in the United States, to assess a wide range of builder practices. NAHB Research Center voluntarily conducts this survey to maintain an awareness of industry trends in order to improve American housing and to be responsive to the needs of the home building industry. The annual survey gathers information such as types of houses built, lot sizes, foundation designs, types of lumber used, types of doors and windows used, and so forth. The NAHB Research Center Builder Survey also gathers information on the use of radon-resistant design features in new houses; these questions constituted about 2 percent of the overall survey.

In January of each year, the survey of building practices for the preceding calendar year is typically mailed out to home builders. For the most recently completed survey, on building practices during calendar year 2000, NAHB Research Center reported mailing the survey to about 39,000 active

## Goal 4: Preventing Pollution and Reducing Risks in Communities, Homes, Workplaces, and Ecosystems (continued)

United States home building companies and receiving about 2,200 responses, which translates to a response rate of about 5.6 percent. This is the response rate for the entire survey. The survey responses are analyzed with respect to state market areas and Census Divisions in the United States and are analyzed to assess the percentage and number of homes built each year that incorporate radon-reducing features. The data are also used to assess the percentage and number of homes built with radon-reducing features in high-radon-potential areas in the United States (high-risk areas). Other analyses include radon-reducing features as a function of housing type, foundation type, and different techniques for radon-resistant new home construction. The data are suitable for year-to-year comparisons.

**Data Quality:** Because data are obtained from an external organization, data quality review procedures are not entirely known. According to NAHB Research Center, QA/QC procedures have been established, which includes QA/QC by the vendor that is used for key entry of data.

NAHB Research Center indicates that each survey is manually reviewed, a process that requires several months to complete. The review includes data quality checks to ensure that the respondents understood the survey questions and answered the questions appropriately. NAHB Research Center also applies checks for open-ended questions to verify the appropriateness of the answers. In some cases where open-ended questions request numerical information, the data are capped between the upper and lower 3 percent of the values provided in the survey responses. Also, a quality review of each year's draft report from NAHB Research Center is conducted by the EPA project officer.

The majority of home builders surveyed are NAHB members. The NAHB Research Center survey also attempts to capture the activities of builders that are not members of NAHB. Home builders that are not members of NAHB are typically smaller, sporadic builders that in some cases build homes as a secondary profession. To augment the list of NAHB members in the survey sample, NAHB Research Center sends the survey to home builders identified from mailing lists of builder trade publications, such as *Professional Builder* magazine. There is some uncertainty as to whether the survey adequately characterizes the practices of builders that are not members of NAHB. The effects on the findings are not known.

Although an overall response rate of 5.6 percent could be considered low, it is the response rate for the entire survey, of which the radon-resistant new construction questions are only a very small portion. Builders responding to the survey would not be doing so principally due to their radon activities. Thus, a low response rate does not necessarily indicate a strong potential for a positive bias under the speculation that builders using radon-resistant construction would be more likely to respond to the survey. NAHB Research Center also makes an effort to reduce the potential for positive bias in the way the radon-related survey questions are presented. EPA recognizes that there are limitations to these data; however, the data are the best available at this time.

**Improvements:** None.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

- People living in radon mitigated homes.

**Performance Database:** External. See <http://www.epa.gov/iaq/radon/pubs/index.html> for national performance/progress reporting (National Radon Results: 1985–1999) on radon, measurement, mitigation, and radon-resistant new construction.<sup>40</sup> FY 2002 performance data are currently unavailable. Data are expected in 2003.

## Goal 4: Preventing Pollution and Reducing Risks in Communities, Homes, Workplaces, and Ecosystems (continued)

**Data Source:** Radon fan manufacturers report fan sales to the Agency. EPA assumes one fan per radon-mitigated home and then multiplies it by the assumed average of 2.67 people per household.

**Data Quality:** Because data are obtained from an external organization, QA/QC procedures are not known. Reporting by radon fan manufacturers is voluntary and might underestimate the number of radon fans sold. Nevertheless, these are the best available data to determine the number of homes mitigated. There are other methods to mitigate radon, including passive mitigation techniques of sealing holes and cracks in floors and foundation walls, installing sealed covers over sump pits, installing one-way drain valves in untrapped drains, and installing static venting and ground covers in areas like crawl spaces. Because there are no data on the occurrence of these methods, there is again the possibility that the number of radon-mitigated homes has been underestimated. When EPA produces an updated version of its Radon Results (1985–1999) report, it will use more/most recent census data, as appropriate. No radon vent fan manufacturer, vent fan motor maker, or distributor is required to report to EPA; they provide data/information voluntarily to EPA. There are only four radon vent fan manufacturers of any significance; one of these accounts for an estimated 70 percent of the market.

**Improvements, Material Inadequacy:** Not applicable.

- Children under 6 not exposed to ETS in the home.

**Performance Database:** The National Cancer Institute's (NCI) Tobacco Use Supplement to the Census Bureau's Current Population Survey (CPS) data for 1992–2000 will be made available to EPA by the end of the calendar year. There is no Web site specifically related to the survey; however, ETS information can be obtained at <http://www.epa.gov/iaq/ets>. FY 2002 performance data are currently unavailable. Data are expected in 2003.

**Data Source:** NCI and the Census Bureau.

**Data Quality:** Data are from external organizations.

**Improvements:** EPA has developed an asthma survey that includes questions about the presence of environmental tobacco smoke in homes with small children. The information is obtained during the screening phase of the larger asthma survey. This survey has received Office of Management and Budget clearance. The survey will be conducted by a contractor in late fall 2002, and results will be available in early 2003.

EPA has designed the asthma survey questionnaire, in which the respondents are asked to provide primarily yes/no responses. By using yes/no and multiple-choice questions, the Agency has substantially reduced the amount of time necessary for the respondent to complete the survey and has ensured consistency in data response and interpretation.

The survey instrument was developed in consultation with EPA staff and the National Center for Health Statistics (NCHS) to ensure that respondents will understand the questions asked and will provide the types of data necessary to measure the Agency's objectives.

The survey will be designed, conducted, and analyzed in accordance with approved Agency procedures. Random-digit dialing methodology is used to ensure that a representative sample of households has been contacted; however, the survey is subject to the inherent limitations of voluntary telephone surveys of representative samples. Limitations of phone surveys include (1) inconsistency of interviewers following survey directions (for example, an interviewer might ask the questions



## Goal 4: Preventing Pollution and Reducing Risks in Communities, Homes, Workplaces, and Ecosystems (continued)

incorrectly or inadvertently lead the interviewee to a response) and (2) calling at an inconvenient time (for example, the respondent might not want to be interrupted at the time of the call and may resent the intrusion of the phone call; the answers will reflect this attitude).

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-48)

Students/staff experiencing improved indoor air quality (IAQ) in schools. (APG 28)

**Performance Database:** Survey of representative sample of schools using a comprehensive database of private and public schools. The survey will help determine the number of schools adopting and implementing good indoor air quality (IAQ) practices consistent with EPA's Tools for Schools (TfS) guidance.<sup>41</sup> FY 2002 performance data are currently unavailable. Data are expected in early 2003.

**Data Source:** EPA-developed questionnaire. Other supporting data from the U.S. Department of Education National Center for Education Statistics. The design of the IAQ Practices in Schools Survey is a random sample with stratification by geography and school type. Such stratification is expected to decrease the variances of sample estimates, and, because of interest in these specific strata, add strength to the survey design. Additional data from other sources, such as the U.S. Department of Education's National Center for Education Statistics, will facilitate analysis and interpretation of survey results.

**Data Quality:** The survey is designed, conducted, and analyzed in accordance with approved Agency procedures. EPA will review the data for completeness and quality of responses. The data are subject to inherent limitations of voluntary surveys of representative samples.

**Improvements:** Prior to the survey, EPA tracked the number of schools receiving the kit and estimated the population of the school to determine the number of students/staff experiencing improved IAQ. With this survey, EPA is querying a statistically representative sample of schools to estimate the number of schools that have actually adopted and implemented good IAQ management practices consistent with the TfS guidance.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-49)

Reduction of TRI non-recycled wastes. (APG 29)

**Performance Database:** Toxics Release Inventory Modernization (TRIM), formerly TRIS (Toxics Release Inventory System)—Contains aggregate data on toxic chemical releases by individual reporting facilities.<sup>42</sup> The aggregate data are used to provide a measure of national performance. Performance data are not available currently; data will be available in spring 2003.

**Data Source:** Data reported to EPA from facilities meeting criteria specified in section 313 of the Emergency Preparedness and Community Right-to-Know Act. Following thorough quality control review and data processing, data are made publicly available through an annual Public Data Release report and associated publicly accessible databases.

**Data Quality:** The quality of TRI data depends on the quality of the data submitted by the reporting facilities. Although EPA has no direct control over the quality of the submitted data, the Agency does

## Goal 4: Preventing Pollution and Reducing Risks in Communities, Homes, Workplaces, and Ecosystems (continued)

assist reporting facilities in improving their estimates. EPA also verifies that the facilities' information is correctly entered in TRIM. The Office of Environmental Information's (OEI) Quality Management Plan (QMP) was approved on February 14, 2001.

**Improvements:** EPA is developing regulations for improving reporting of source reduction activities by TRI releasers.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-49)

- Millions of tons of municipal solid waste diverted. (APG 30)
- Daily per capita generation of municipal solid waste. (APG 30)

**Performance Database:** In the nonhazardous waste program, no national databases are in place or planned. Data currently unavailable; expected September 30, 2003.

**Data Source:** The baseline numbers for municipal solid waste source reduction and recycling are developed using a materials flow methodology employing data largely from the Department of Commerce, which can be found in an EPA report titled *Characterization of Municipal Solid Waste in the United States*.<sup>43</sup>

**Data Quality:** Quality assurance and quality control are provided by the Department of Commerce's internal procedures and systems. The report prepared by the Agency is then reviewed by a number of experts for accuracy and soundness. The report, including the baseline numbers and annual rates of recycling and per capita municipal solid waste generation, is widely accepted among experts. There are various assumptions factored into the analysis to develop progress on each measure.

The quality of TRI data is dependent on the quality of the data submitted by the reporting facilities. Although EPA has no direct control over the quality of the submitted data, the Agency does assist reporting facilities in improving their estimates. EPA also verifies that the facilities' information is correctly entered into the TRI database.

**Improvements:** Because these numbers are widely reported and accepted by experts, no new efforts to improve the data or the methodology have been identified or are necessary. EPA is developing regulations for improving reporting of source reduction activities by TRI releasers.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-49)

Number of environmental assessments for tribes. (APG 31)

**Performance Database:** The American Indian Environmental Office (AIEO) has made tremendous progress in developing an electronic baseline assessment system used to access tribal environmental information. The Tribal Information Management System (TIMS) is a Web-based application that allows access to these data. This information system will draw together environmental information on tribes from the existing EPA databases, such as those from the Office of Water and EPA regions, as well as databases from other federal agencies. All the data will be accessed on a per-tribe basis, so environmental information can be queried by tribe, by state, by EPA region, or nationally. Information that is geo-referenced will be displayed graphically on an electronic map of tribal reservation

## Goal 4: Preventing Pollution and Reducing Risks in Communities, Homes, Workplaces, and Ecosystems (continued)

boundaries. The information system will also have a narrative profile description by tribe of environmental information and management activities. The structure of this system is complete and is expected to be fully populated with profiles for all federally recognized tribes by FY 2005. Public access to this information via the Web cannot be given until EPA completes consultation with the tribes, but is expected within the next year. FY 2002 performance data are complete.

**Data Source:** The data sources will be existing federal databases that are available from EPA headquarters and its regional offices, as well as from other agencies. The data sources will be identified and referenced in EPA's information system application.

**Data Quality:** Quality of the external databases will be described but not ranked. Tribes will have the opportunity to review and comment on their tribal profiles. Mechanisms for adjusting data will be supplied. Errors in the tribal profiles are subject to errors in the underlying data.

**Improvements:** Statistical assessments are planned on a national level using the data collected and reported on a per-tribe basis. EPA will report on whether tribes are underserved or overserved compared to the nation as a whole in a number of categories, such as wastewater treatment service, drinking water facilities, and solid waste facilities.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

## Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response

### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-58)

Superfund construction completions. (APG 32)

**Performance Database:** The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) is the database used by the Agency to track, store, and report Superfund site information. FY 2002 performance data are complete.

**Data Source:** Automated EPA system; headquarters and regional offices enter data into CERCLIS on a rolling basis.

**Data Quality:** To ensure data accuracy and control, the following administrative controls are in place: (1) Superfund/Oil Implementation Manual (SPIM), the program management manual that details what data must be reported; (2) Report Specifications, which are published for each report detailing how reported data are calculated; (3) Coding Guide, which contains technical instructions to such data users as regional Information Management Coordinators (IMCs), program personnel, report owners, and data input personnel; (4) Quality Assurance (QA) Unit Testing, an extensive QA check against report specifications; (5) QA Third Party Testing, an extensive test made by an independent QA tester to ensure that the report produces data in conformance with the report specifications; (6) Regional CERCLIS Data Entry Internal Control Plan, which includes (a) regional policies and procedures for entering data into CERCLIS, (b) a review process to ensure that all Superfund accomplishments are supported by source documentation, (c) delegation of authorities for approval of data input into CERCLIS, and (d) procedures to ensure that reported accomplishments meet accomplishment definitions; and (7) a historical lockout feature that has been added to CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a change-log report.

## Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response (continued)

Two audits, one by the Office of the Inspector General (OIG) and the other by the Government Accounting Office (GAO), were done to assess the validity of the data in CERCLIS. The OIG audit report, *Superfund Construction Completion Reporting* (No. E1SGF7-05-0102- 8100030), was performed to verify the accuracy of the information that the Agency was providing to Congress and the public. The OIG report concluded that the Agency “has good management controls to ensure accuracy of the information that is reported,” and “Congress and the public can rely upon the information EPA provides regarding construction completions.” The GAO’s report, *Superfund Information on the Status of Sites* (GAO/RECD-98-241), estimates that the cleanup status of National Priorities List sites reported by CERCLIS is accurate for 95 percent of the sites.

The IG reviews annually the end-of-year Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) data, in an informal process, to verify the data supporting the performance measures. Typically, there are no published results.

The Quality Management Plan (QMP) for the Office of Solid Waste and Emergency Response (OSWER) is currently under review by the Office of Environmental Information.

**Improvements:** In 2004 the Agency will continue its efforts begun in 1999 to improve the Superfund program’s technical information by incorporating more site remedy selection, risk, removal response, and community involvement information into CERCLIS. Efforts to share information among the federal, state, and tribal programs to further enhance the Agency’s efforts to efficiently identify, evaluate, and remediate Superfund hazardous waste sites will continue. In 2005 the Agency will also establish data quality objectives for program planning purposes and to ascertain the organization’s information needs for the next 5 years. Adjustments will be made to EPA’s current architecture and business processes to better meet those needs.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-59)

Refer to DOJ, settle, or writeoff 100% of Statute of Limitations (SOLs) cases for Superfund sites with total unaddressed past costs equal to or greater than \$200,000 and report value of costs recovered. (APG 34)

**Performance Database:** Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). Data are complete for assessment of FY 2002 performance.

**Data Source:** Automated EPA system; headquarters and EPA regional offices enter data into CERCLIS.

**Data Quality:** The data used to support this measure are collected on a fiscal year basis only. Enforcement reports are run at the end of the fiscal year, and the data that support this measure are extracted from the reports.

The Quality Management Plan for the Office of Site Remediation and Enforcement was approved on April 11, 2001. To ensure data accuracy and control, the following administrative controls are in place: (1) Superfund/Oil Implementation Manual (SPIM), the program management manual that details what data must be reported; (2) Report Specifications, which are published for each report detailing how reported data are calculated; (3) Coding Guide, which contains technical instructions to such data users as regional Information Management Coordinators (IMCs), program personnel, report owners, and data input personnel; (4) Quality Assurance (QA) Unit Testing, an extensive QA check against report specifications; (5) QA Third Party Testing, an extensive test made by an independent QA

## Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response (continued)

tester to ensure that the report produces data in conformance with the report specifications; (6) Regional CERCLIS Data Entry Internal Control Plan, which includes (a) regional policies and procedures for entering data into CERCLIS, (b) a review process to ensure that all Superfund accomplishments are supported by source documentation, (c) delegation of authorities for approval of data input into CERCLIS, and (d) procedures to ensure that reported accomplishments meet accomplishment definitions; and (7) a historical lockout feature that has been added to CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a change-log report.

The IG annually reviews the end-of-year CERCLA data, in an informal process, to verify the data supporting the performance measure. Typically, there are no published results.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURES:** (Refer to Performance Data Chart pages II-58, II-60)

- PRPs conduct 70 percent of the work at new construction starts. (APG 33)
- Percentage of Federal facility NPL sites for which final offers have been made that meet Agency policy and guidance. (APG 38)
- Percentage of Federal facilities with final offers made within 18 months. (APG 38)

**Performance Database:** Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS).

**Data Source:** Automated EPA system; headquarters and EPA's regional offices enter data into CERCLIS. The data used to support these measures are collected on a fiscal year basis. Enforcement reports are run at the end of the fiscal year, and the data that support the measures are extracted from the report. Data are complete for assessment of FY 2002 performance.

**Data Quality:** The Quality Management Plan for the Office of Site Remediation and Enforcement was approved on April 11, 2001. To ensure data accuracy and control, the following administrative controls are in place: (1) Superfund/Oil Implementation Manual (SPIM), the program management manual that details what data must be reported; (2) Report Specifications, which are published for each report detailing how reported data are calculated; (3) Coding Guide, which contains technical instructions to such data users as regional Information Management Coordinators (IMCs), program personnel, report owners, and data input personnel; (4) Quality Assurance (QA) Unit Testing, an extensive QA check against report specifications; (5) QA Third Party Testing, an extensive test made by an independent QA tester to ensure that the report produces data in conformance with the report specifications; (6) Regional CERCLIS Data Entry Internal Control Plan, which includes (a) regional policies and procedures for entering data into CERCLIS, (b) a review process to ensure that all Superfund accomplishments are supported by source documentation, (c) delegation of authorities for approval of data input into CERCLIS, and (d) procedures to ensure that reported accomplishments meet accomplishment definitions; and (7) a historical lockout feature that has been added to CERCLIS so that changes in past fiscal year data can be changed only by approved and designated personnel and are logged to a change-log report.

The IG annually reviews the end-of-year CERCLA data, in an informal process, to verify the data supporting the performance measures. Typically, there are no published results.

**Improvements, Material Inadequacy:** Not applicable.

## Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response (continued)

### PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-59)

- High priority RCRA facilities with human exposure to toxins controlled. (APG 35)
- High priority RCRA facilities with toxic releases to groundwater controlled. (APG 35)

**Performance Database:** The Resource Conservation and Recovery Act Information System (RCRAInfo) is the national database that supports EPA's RCRA program. RCRAInfo contains information on entities (generically referred to as "handlers") engaged in hazardous waste (HW) generation and management activities regulated under the portion of RCRA that provides for regulation of hazardous waste. RCRAInfo has several different modules, including a Corrective Action Module that tracks the status of facilities that require, or may require, corrective actions. A "yes" or "no" entry is made in the database with respect to meeting corrective action indicators. Supporting documentation and reference materials are maintained in regional and state files.

Human exposures controlled and toxic releases to groundwater controlled are used to summarize and report on the facility-wide environmental conditions at the RCRA Corrective Action Program's highest-priority facilities. The environmental indicators are used to track the RCRA program's progress on getting highest-priority contaminated sites under control. Known and suspected site (-wide) conditions are evaluated using a series of simple questions and flow-chart logic to arrive at a reasonable, defensible determination. These questions were issued as Interim Final Guidance on February 5, 1999. Lead regulators for the site (authorized state or EPA) make the environmental indicator determination; however, facilities or their consultants may assist EPA in the evaluation by providing information on the current environmental conditions. FY 2002 performance data are complete.<sup>44</sup>

**Data Source:** EPA regions and authorized states enter data on a rolling basis.

**Data Quality:** States and regions, which create the data, manage data quality control related to timeliness and accuracy (i.e., the environmental conditions and determinations are correctly reflected by the data). Within RCRAInfo the application software enforces structural controls that ensure that high-priority national components of the data are properly entered. RCRAInfo documentation, which is available to all users online, provides guidance to facilitate the creation and interpretation of data. Training on use of RCRAInfo is provided on a regular basis, usually annually, depending on the nature of systems changes and user needs.

GAO's 1995 report on EPA's Hazardous Waste Information System reviewed whether national RCRA information systems support meeting the primary objective of helping EPA and states manage the HW program. Recommendations coincide with ongoing internal efforts (WIN/Informed) to improve the definitions of data collected, ensure that data collected provide critical information, and minimize the burden on states.

No data limitations have been identified. As discussed above, environmental indicator determinations are made by the authorized states and EPA regions based on a series of standard questions and entered directly into RCRAInfo. EPA has provided guidance and training to states and regions to help ensure consistency in those determinations. High-priority facilities are monitored on a facility-by-facility basis, and the QA/QC procedures identified above are in place to help ensure data validity.

The Quality Management Plan for the Office of Solid Waste and Emergency Response (OSWER) is currently under review by the Office of Environmental Information.

**Improvements:** EPA has successfully implemented new tools for managing environmental information to support federal and state programs, replacing the old data systems (the Resource

## Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response (continued)

Conservation and Recovery Information System and the Biennial Reporting System) with RCRAInfo. RCRAInfo allows for tracking of information on the regulated universe of RCRA hazardous waste handlers and for characterization of facility status, regulated activities, and compliance histories. The system also captures detailed data on the generation of hazardous waste from large quantity generators and on waste management practices from treatment, storage, and disposal facilities. RCRAInfo is Web-accessible, providing a convenient user interface for federal, state, and local managers and encouraging development of in-house expertise for controlled cost. RCRAInfo uses commercial off-the-shelf software to report directly from database tables.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-61)

Percent of RCRA hazardous waste management facilities with permits or other approved controls in place. (APG 40)

**Performance Database:** The Resource Conservation Recovery Act Information System (RCRAInfo) is the national database that supports EPA's RCRA program. RCRAInfo contains information on entities (generically referred to as "handlers") engaged in hazardous waste (HW) generation and management activities regulated under the portion of RCRA that provides for regulation of hazardous waste. RCRAInfo has several different modules, including status of RCRA facilities in the RCRA permitting universe. FY 2002 performance data are complete.<sup>45</sup>

**Data Source:** EPA regions and authorized states enter data on a rolling basis.

**Data Quality:** States and regions, which create the data, manage data quality control related to timeliness and accuracy (i.e., the environmental conditions and determinations are correctly reflected by the data). Within RCRAInfo the application software enforces structural controls that ensure that high-priority national components of the data are properly entered. RCRAInfo documentation, which is available to all users on-line, provides guidance to facilitate the creation and interpretation of data. Training on use of RCRAInfo is provided on a regular basis, usually annually, depending on the nature of system changes and user needs.

GAO's 1995 report on EPA's Hazardous Waste Information System reviewed whether national RCRA information systems support meeting the primary objective of helping EPA and states manage the HW program.<sup>46</sup> Recommendations coincide with ongoing internal efforts (WIN/Informed) to improve the definitions of data collected, ensure that data collected provide critical information, and minimize the burden on states.

The Quality Management Plan for the Office of Solid Waste and Emergency Response (OSWER) is currently under review by the Office of Environmental Information.

**Improvements:** EPA has successfully implemented new tools for managing environmental information to support federal and state programs, replacing the old data systems (the Resource Conservation and Recovery Information System and the Biennial Reporting System) with RCRAInfo. RCRAInfo allows for tracking of information on the regulated universe of RCRA hazardous waste handlers and for characterization of facility status, regulated activities, and compliance histories. The system also captures detailed data on the generation of hazardous waste from large quantity generators and on waste management practices from treatment, storage, and disposal facilities. RCRAInfo is Web-accessible, providing a convenient user interface for federal,

## Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response (continued)

state, and local managers, encouraging development of in-house expertise for controlled cost. RCRAInfo uses commercial off-the-shelf software to report directly from database tables.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-59)

LUST cleanups completed. (APG 36)

**Performance Database:** EPA does not maintain a database for this information. FY 2002 performance data are complete.

**Data Source:** Designated state agencies submit semiannual progress reports to the EPA regional offices.

**Data Quality:** EPA regional offices verify and then forward the data to EPA headquarters, where staff examine the data and resolve any discrepancies with regional offices. The data are displayed in a document on a region-by-region basis, which allows regional staff to again verify their data. The process relies on the accuracy and completeness of state records.

The Quality Management Plan (QMP) for the Office of Solid Waste and Emergency Response (OSWER) is currently under review by the Office of Environmental Information.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURES:** (Refer to Performance Data Chart page II-60)

- Cumulative site assessments. (APG 37)
- Cumulative jobs generated. (APG 37)
- Cumulative leveraging of cleanup and redevelopment funds. (APG 37)

**Performance Database:** The Brownfields Management System (BMS) records the results, both environmental and economic, achieved by the Brownfields Pilots. BMS data are gathered from the Brownfields Pilots' quarterly reports. EPA Regional Pilot Managers review the data for consistency and accuracy. The BMS database contains information such as the number of properties with Pilot-funded assessment, the number of properties cleaned up, the number of properties not requiring cleanup, and jobs generated.

The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) records regional accomplishments on Brownfields assessments in the Brownfields module. This module tracks Targeted Brownfields Assessments (TBAs) on a property-specific basis. FY 2002 performance data are complete.

**Data Source:** Data are reported by Brownfields Pilots in their quarterly reports as submitted under cooperative assistance agreements. Data are entered into BMS by EPA contractor support and forwarded to EPA Regional Pilot Managers for review and approval. Edits are made as appropriate. EPA regional staff enter the results achieved through Targeted Brownfields Assessments (TBAs) into CERCLIS.

**Data Quality:** Verification relies on reviews by regional staff responsible for Brownfields pilot cooperative agreements.

Several data quality reviews have been conducted by the program and external organizations. In its report, GAO recommended that EPA continue to review data reported by recipients in anticipation of



## Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response (continued)

EPA's guidelines for results and make any corrections needed to ensure that the data are consistent with the current guidelines.<sup>47</sup> They also recommended that EPA regions monitor and work to improve recipients' reporting of data on key results measures.

The reporting of results of the Brownfields Pilots is subject to the Paperwork Reduction Act and attendant OMB regulations governing information collection requests (ICRs), as well as the Agency's assistance regulations. Consequently, the Agency is limited to obtaining information from Pilot recipients on specific accomplishments attained with grant funds, such as properties assessed (40 CFR 35.6650(b)(1)). In addition, EPA cannot require private sector entities, which do not receive EPA financial assistance, to provide information related to such accomplishment measures as redevelopment dollars invested or numbers of jobs created. These constraints may lead to an underreporting of accomplishments.

The Quality Management Plan (QMP) for the Office of Solid Waste and Emergency Response (OSWER) is currently under review by the Office of Environmental Information.

**Improvements:** In February 2000 EPA headquarters issued guidance to the regions to standardize quarterly reporting of accomplishment measures. This guidance was developed to ensure that the standardized information collected fell within the scope of regulations and applicable OMB controls for quarterly reporting by assessment Pilot recipients. EPA is also working with recipients to encourage the use of this standardized reporting through workshops and training. To improve recipients' reporting of data on key results measures, EPA has implemented GAO's recommendation that the Agency make it clear to recipients that follow-on awards depend on reported results.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-61)

Number of 55-gallon drums of radioactive waste disposed of according to EPA standards. (APG 41)

**Performance Database:** The Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP) database contains the number of drums shipped by DOE waste generator facilities and placed in the DOE WIPP. The DOE National TRU Waste Management Plan Quarterly Supplement contains information on the monthly volumes of waste that are received at the DOE WIPP.<sup>48</sup> FY 2002 performance data from both databases are complete.

**Data Source:** Department of Energy.

**Data Quality:** The performance data used by EPA are collected and maintained by DOE. Under EPA's WIPP regulations, all DOE WIPP-related data must be collected and maintained under a comprehensive quality assurance program meeting consensus standards developed by the American Society of Mechanical Engineers. EPA conducts regular inspections to ensure that these quality assurance systems are in place and functioning properly; no additional QA/QC of the DOE data is conducted by EPA.

The DOE WIPP database contains the number of drums shipped by DOE waste generator facilities and placed in the DOE WIPP.

Before DOE waste generator facilities can ship waste to the WIPP, EPA must approve the waste characterization controls and quality assurance procedures for waste identification at these sites. EPA conducts frequent independent inspections and audits at these sites to verify continued compliance

## Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response (continued)

with radioactive waste disposal standards and to determine whether DOE is properly tracking the waste and adhering to specific waste component limits. Once EPA gives its approval, the number of drums shipped to the WIPP facility per year is dependent on DOE priorities and funding. EPA volume estimates are based on projecting the average shipment volumes over 40 years with an initial start-up.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-60)

Annual Site Report to Congress detailing 4–6 innovative approaches, their cost savings and future direction; reports summarizing pilot scale evaluation of in-situ remedies for solvents. (APG 39)

**Performance Database:** Program output, no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

## Goal 6: Reduction of Global and Cross-Border Environmental Risks

### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-70)

People in the Mexico border area protected from health risks because of adequate water and wastewater sanitation systems funded through border environmental infrastructure funding (cumulative). (APG 42)

**Performance Database:** There is no formal EPA database. Performance is tracked and reported quarterly by the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADBank.) The unit of measure is “population served.” FY 2002 performance data are complete.

**Data Source:** (1) Population figures from the 1990 U.S. Census,<sup>49</sup> (2) data for both U.S. and Mexican populations served by “certified” water/wastewater treatment improvements from the BECC, (3) data on projects funded from the NADBank.

**Data Quality:** Headquarters is responsible for evaluation of reports from BECC and NADBank on drinking water and wastewater sanitation projects.<sup>50</sup> Regional representatives attend meetings of the certifying and financing entities for border projects (BECC and NADBank) and conduct site visits of projects under way to ensure the accuracy of information reported.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-73)

Assist in the development or implementation of improved environmental laws or regulations in developing countries. (APG 48)

**Performance Database:** None. Manual collection. FY 2002 performance data are complete.

**Data Source:** Project-specific.

**Data Quality:** Verification does not involve any pollutant database analysis, but will require objective assessment of tasks completed, of compliance with new regulations, and of progress toward project goals and objectives.

## Goal 6 - Reduction of Global and Cross-Border Environmental Risks (continued)

EPA works with developing countries to improve environmental laws and regulations. Tracking development and implementation of legislation presents few challenges because EPA project staff maintain close contact with their counterparts and because any changes become part of a public record. Assessing the quality of the new or revised laws/regulations, the level of public participation and support for stronger regulations, and the long-term social impacts of legislation is more subjective. Aside from feedback from Agency project staff, EPA relies in part on feedback from its counterparts in the target countries and regions and from non-governmental organizations (NGOs) and other third parties in gauging the efficacy of its work on international legal and regulatory capacity-building. Because EPA works to establish long-term relationships with priority countries, the Agency is often able to assess environmental improvement in these countries and regions for a number of years following legal assistance efforts.

**Improvements:** Under its cooperative programs with USAID in Central America, EPA is developing a set of indicators to measure progress for each activity undertaken.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-73)**

Increase the transfer of environmental best practices among the U.S. and its partner countries and build the capacity of developing countries to collect, analyze, or disseminate environmental data. (APG 48)

**Performance Database:** None. Manual collection. FY 2002 performance data are complete.

**Data Source:** Project-specific.

**Data Quality:** Verification does not involve any pollutant database analysis but will require objective assessment of tasks completed, of compliance with new regulations, and of progress toward project goals and objectives. Data and information related to the outputs and goals of EPA's international urban projects are forwarded to the EPA project officer by the grantee after bimonthly consultation with local, regional, and national urban environmental practitioners.

**Improvements:** Activities in support of this project may result in new or improved data collection systems in developing countries.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-73)**

Increase the capacity of programs in Latin America or Africa to address safe drinking water quality issues. (APG 48)

**Performance Database:** None. Manual collection. FY 2002 performance data are complete.

**Data Source:** Project-specific.

**Data Quality:** Verification does not involve any pollutant database analysis but will require objective assessment of tasks completed, of compliance with new regulations, and of progress toward project goals and objectives. EPA is currently tracking output data for the International Safe Drinking Water Program (ISDWP) in Central America and has plans to begin looking at measuring the longer-term outcomes. On a quarterly basis, EPA collects data through EPA teams, in-country partners, and cooperators on outputs such as number of people trained, number of pilot projects completed, and

## Goal 6: Reduction of Global and Cross-Border Environmental Risks (continued)

number of workshops held. This information is validated through constant contact with the aforementioned groups and through on-site visits by EPA program managers. The information is also shared with donors, specifically USAID, through quarterly reports. The outcome measures of improved capacity of in-country partners and stakeholders to ensure safe drinking water for the communities are under development and will provide indicators of the long-term sustainability potential of the program.

**Improvements:** EPA's ISDWP in Africa is currently in the start-up phase, and the data collection process is under development.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-70)

Concentration trends of toxics (PCBs) in Great Lakes top predator fish. (APG 43)

**Performance Database:** Great Lakes National Program Office (GLNPO) base monitoring program.<sup>51</sup> FY 2002 performance data are complete.

**Data Source:** Data are collected as part of GLNPO's ongoing base monitoring program, which has included work with cooperating organizations such as the Great Lakes states, U.S. Geological Survey, and U.S. Food and Drug Administration (no longer participating).

**Data Quality:** This indicator provides concentration of selected organic contaminants in sport fish from the Great Lakes to determine time trends in contaminant concentrations, assess impacts of contaminants on the fishery, and assess potential wildlife exposures from consuming contaminated fish.

This indicator includes data from 600- to 700-mm lake trout (*Salvelinus namaycush*) whole fish composites (five fish) from each of the lakes (walleye, *Stizostedion vitreum vitreum*, in Lake Erie). These data are used to assess time trends in organic contaminants in the open waters of the Great Lakes, using fish as biomonitors. These data can also be used to assess the risks of such contaminants on the health of this important fishery and on wildlife that consume them.

GLNPO's quality management system has been given "outstanding" ratings in previous peer and management reviews. GLNPO has implemented all recommendations from these external audits and complies with Agency quality standards. GLNPO's quality management system conforms to the EPA quality management order and is audited every 3 years in accordance with federal policy for quality management. The current Quality Management Plan that describes this program is undergoing revision and should be approved by December 2002. The quality assurance (QA) plan that supports the fish contaminant analysis program is approved and available on request.<sup>52</sup> The plan that describes the field sampling program is in draft form and should be completed by April 2003.

The top predator fish (lake trout) program was designed specifically for lakewide trends. It is not well suited to portray localized changes. One of the objectives of the fish contaminant program is to be able to detect a 20 percent change in contaminant concentrations in a particular species of fish between consecutive sampling periods and to compare relative changes in contaminant concentrations between Great Lakes. Achieving this can be difficult when taking into account the rather large variance occurring in contaminant concentrations between individual fish. Variance is reduced by compositing five fish for each sample.

## Goal 6: Reduction of Global and Cross-Border Environmental Risks (continued)

**Improvements:** During FY 2002 EPA documented and developed a draft field sampling QA plan that documents field collection procedures. During FY 2003 EPA plans to implement a peer review of the overall program and hopes to conduct on-site review of various aspects of the field and laboratory operations. Additionally the Agency plans to upload the analytical data into its GLENDA database for easy access of analytical results and corresponding quality-assured/quality-controlled data.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-70)

Concentration trends of toxic chemicals in the air. (APG 43)

**Performance Database:** Great Lakes National Program Office (GLNPO) integrated atmospheric deposition network (IADN) operated jointly with Canada.<sup>53</sup> FY 2002 performance data are complete. (Preliminary, awaiting 1999 and 2000 loadings calculations before finalizing.)

**Data Source:** GLNPO and Canada are the principal data sources. The database includes data from 1990 to present (with some earlier available data). Concentrations of persistent toxic substances (polychlorinated biphenyls [PCBs], organochlorine pesticides, and polycyclic aromatic hydrocarbons [PAHs]) are measured at 15 stations around the Great Lakes. Environment Canada (Meteorological Service of Canada and Ecosystem Health Division) operates 10 IADN stations. EPA (through a grantee at Indiana University) operates five U.S. stations. These U.S. stations are in Eagle Harbor, Michigan; Sleeping Bear Dunes, Michigan; Sturgeon Point, New York; IIT-Chicago, Illinois; and Brule River, Wisconsin. Because data from the Brule River site have been very similar to those from Eagle Harbor, EPA is in the process of moving equipment from Brule River to Cleveland, Ohio, to further examine impacts of urban areas on atmospheric deposition.

**Data Quality:** There are five master IADN stations, one for each lake, which are supplemented by satellite stations. The master stations are in remote areas and are meant to represent regional background levels. Concentrations from the master stations are used for the performance measure. Data from the satellite station in Chicago are used to demonstrate the importance of urban areas to atmospheric deposition to the Lakes.

Air samples are collected for 24 hours using high-volume samplers containing an adsorbent. Precipitation samples are collected as 28-day composites. Laboratory analysis protocols generally call for solvent extraction of the organic sampling media with addition of surrogate recovery standards. Extracts are then concentrated followed by column chromatographic cleanup, fractionation, nitrogen blow-down to small volume (about 1 mL), and injection (typically 1 µL) into gas chromatograph (GC)-ECD or GC-MS instruments. A regular set of laboratory and field blanks are taken and recorded for comparison to the IADN field samples. In addition, a suite of chemical surrogates and internal standards are used extensively in most analyses. Details of these analyses can be found in the laboratory protocol manuals or the Agency project plans.<sup>54</sup>

Overall results of the project can be found in *Technical Summary of Progress under the Integrated Atmospheric Deposition Program 1990–1996* and the Draft *Technical Summary of Progress under the Integrated Atmospheric Deposition Network 1997–2002*. The former can also be found on the IADN resource page.

A centralized database was established in 1995. All IADN data are loaded and quality-controlled using the Research Database Management System (RDMS), an SAS program. RDMS provides a unified set of quality-assured data, and additional information for each data point that can be used to evaluate the

## Goal 6: Reduction of Global and Cross-Border Environmental Risks (continued)

usability of the data. Statistical summaries of annual concentrations are generated by the program and used as input into an atmospheric loadings calculation. The loadings calculation is described in detail in the Technical Summary mentioned above. However, the averaged concentrations rather than the loadings are used in the performance measure.

Multiple quality assurance personnel and a scientific peer review panel have judged the IADN data to be of good quality for the purposes for which they are used. IADN data have been collected for the same purposes throughout the program—to calculate atmospheric loadings and to examine spatial and temporal trends in concentrations and loadings to the Great Lakes. GLNPO has in place a quality management system that conforms to the EPA quality management order and is audited every 3 years in accordance with federal policy for quality management, currently being revised. Approved Quality Assurance Project Plans are in place for the laboratory grantee, as well as for the network as a whole. A jointly funded QA contractor conducts laboratory audits and intercomparisons and tracks QA statistics.

The sampling design is dominated by rural sites that underemphasize urban contributions to deposition; thus, although the data are very useful for trends information, there is less assurance of the representativeness of deposition to the whole lake. The performance measure examines the long-term trend. There are gaps in open lake water column organics data, thus limiting EPA's ability to calculate atmospheric loadings.

Error estimate: Concentrations have an error of +/- 40 percent, usually less. Differences between laboratories have been found to be 40 percent or less. This is outstanding given the very low levels of these pollutants in the air and the difficulty in analysis.

**Improvements:** A quality assurance work group was formed during FY 2002 to develop a systematic plan for reporting on quality assurance statistics and information. The group is also investigating differences in protocols, trying to pinpoint stages in sampling and analytical processes where interlaboratory data comparability is reduced. The IADN Steering Committee is also looking into ways to reduce time frames for release of information.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-70)

Trophic status and phosphorus concentrations in the Great Lakes. (APG 43)

**Performance Database:** Great Lakes National Program Office (GLNPO) base monitoring program. FY 2002 performance data are complete.<sup>55</sup>

**Data Source:** Data are part of GLNPO's ongoing base monitoring program for the open waters of the five Great Lakes. GLNPO is the principal source of those data.

**Data Quality:** GLNPO has in place a quality management system that conforms to the new EPA quality management order and is audited every 3 years in accordance with federal policy for quality management. GLNPO has implemented all recommendations from these external audits and complies with Agency QA standards.

Data are gathered from the open-water, central areas of the Great Lakes. Although representative of the main volume of each lake, the data provide little information on the shallower, nearshore areas of the lakes. The open-water environment is an area of relatively low nutrient concentrations, and in some lakes, particularly Lakes Superior and Huron, total phosphorus and total dissolved phosphorus measurements are sometimes at or below the limits of detection.

## Goal 6: Reduction of Global and Cross-Border Environmental Risks (continued)

**Improvements:** EPA tries for continuous improvement through implementation of a survey Quality Assurance Project Plan (QAPP), which includes an annual update to standard operating procedures (SOPs). To complement this, there is a training session for those involved with field work and laboratory work. EPA has made efforts to implement data entry aboard ship, with preloading of sample information in the database to ease data entry. The Agency is developing procedures for internal review of the data and a process for uploading and merging the various components of the data (field and laboratory results).

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-71)

- Reductions from EPA's buildings sector programs (ENERGY STAR). (APG 44)
- Greenhouse gas reductions from EPA's industrial efficiency/waste management programs. (APG 44)
- Greenhouse gas reductions from EPA's industrial methane outreach programs. (APG 44)
- Greenhouse gas reductions from EPA's industrial HFC/PFC programs. (APG 44)
- Greenhouse gas reductions from EPA's transportation programs. (APG 44)
- Greenhouse gas reductions from EPA's state and local programs. (APG 44)

**Performance Database:** Baseline data on greenhouse gas emissions are from the Climate Protection Partnerships Division Tracking System. Performance data lag by approximately 9 months and are not currently available. Data will be reported in the FY 2003 Annual Report.

**Data Source:** Baseline data for carbon emissions related to energy use come from the Energy Information Agency (EIA). Baseline data for non-carbon dioxide emissions, including nitrous oxide and other global warming potential gases, are maintained by EPA. EPA develops the methane emissions baselines and projections using information from industrial partners, which include the natural gas, coal, and landfill gas development industries. EPA continues to develop annual inventories as well as update methodologies as new information becomes available.

EPA's voluntary programs collect partner reports on facility-specific improvements (e.g., space upgraded, kilowatt-hours reduced.) A carbon-conversion factor is used to convert this information to estimated greenhouse gas (GHG) reductions. EPA maintains a "tracking system" for emissions reductions based on the reports submitted by partners.

**Data Quality:** EPA devotes considerable effort to obtaining the best possible information on which to evaluate emissions reductions from voluntary programs. For example, EPA has a quality assurance process in place to check the validity of partner reports.

Peer-reviewed carbon-conversion factors are used to ensure consistency with generally accepted measures of GHG emissions. The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. The first such interagency evaluation, chaired by the White House Council on Environmental Quality, examined the status of the Climate Change Action Plan. The review included participants from EPA, the Department of Energy (DOE), the Department of Commerce (DOC), the Department of Transportation (DOT), and the U.S. Department of Agriculture (USDA). The results were published in *U.S. Climate Action Report—1997* as part of the United States' submission to the Framework Convention on Climate Change (FCCC). A 1997 audit by EPA's Office of the Inspector General concluded that the climate programs examined "used good management practices" and "effectively estimated the impact their activities had on reducing risks to health and the environment . . . ."

## Goal 6: Reduction of Global and Cross-Border Environmental Risks (continued)

These are indirect measures of GHG emissions (carbon-conversion factors and methods to convert material-specific reductions to GHG emissions reductions). The voluntary nature of the programs might affect reporting. Further research will be necessary to fully understand the links between GHG concentrations and specific environmental impacts, such as impacts on health, ecosystems, crops, weather events, and so forth.

**Improvements:** The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. EPA continues to update inventories and methodologies as new information becomes available.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-72)

Annual energy savings. (APG 45)

**Performance Database:** Climate Protection Partnerships Division Tracking System.

**Data Source:** Data collected by EPA's voluntary programs include partner reports on facility-specific improvements (e.g., space upgraded, kilowatt-hours reduced), national market data on shipments of efficient products, and engineering measurements of equipment power levels and usage patterns. Performance data lag by approximately 9 months and are not currently available. Data will be reported in the FY 2003 Annual Report.

**Data Quality:** EPA devotes considerable effort to obtaining the best possible information on which to evaluate energy savings from its voluntary programs. For example, EPA has a quality assurance process in place to check the validity of partner reports and peer-reviewed methodologies are used to calculate energy savings from these programs.

The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. The second such interagency evaluation, led by the White House Council on Environmental Quality, examined the status of U.S. climate change programs. The review included participants from EPA and the Departments of State, Energy, Commerce, Transportation, and Agriculture. The results were published in *U.S. Climate Action Report—2002* as part of the United States' submission to the Framework Convention on Climate Change (FCCC).<sup>56</sup> The previous evaluation had been published in *U.S. Climate Action Report—1997*. A 1997 audit by EPA's Office of the Inspector General concluded that the climate programs examined "used good management practices" and effectively estimated the impact their activities had on reducing risks to health and the environment.

**Improvements:** The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. EPA continues to update inventories and methodologies as new information becomes available.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-72)

Assistance to countries working under Montreal Protocol. (APG 46)

**Performance Database:** Database is maintained by the Global Programs Division (GPD). FY 2002 performance data are complete and final.



## Goal 6: Reduction of Global and Cross-Border Environmental Risks (continued)

**Data Source:** The progress of international implementation goals is measured by tracking the number of countries receiving assistance, dollars allocated to each, and the expected reduction in ozone-depleting substances in assisted countries. The United Nations Environment Program (UNEP) and the GPD maintain the data.

**Data Quality:** The GPD receives periodic reports on the financial status of participating countries from UNEP. This information is then cross-checked with GPD records to ensure the accuracy of the performance data.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-73)**

Domestic consumption of Class II hydrochlorofluorocarbons (HCFCs). (APG 47)

**Performance Database:** The Allowance Tracking System (ATS) database is maintained by GPD. Performance data lag by approximately 6 months and are not currently available. FY 2002 performance data will be reported in the FY 2003 Annual Report.

**Data Source:** Progress on restricting domestic consumption of Class II HCFCs is tracked by monitoring industry reports of compliance with EPA's phaseout regulations. Monthly information on domestic production, imports, and exports from the International Trade Commission is maintained in the ATS.

**Data Quality:** Reporting and record-keeping requirements are published in 40 CFR part 82, subpart A, sections 92.9 through 82.13. These sections of the Stratospheric Ozone Protection Rule specify the required data and accompanying documentation that companies must submit or maintain onsite to demonstrate their compliance with the regulation.

The ATS data are subject to a Quality Assurance Plan. In addition, the data are subject to an annual quality assurance review, coordinated by Office of Air and Radiation (OAR) staff separate from those on the team normally responsible for data collection and maintenance. The ATS is programmed to ensure consistency of the data elements reported by companies. The tracking system flags inconsistent data for review and resolution by the tracking system manager. This information is then cross-checked with compliance data submitted by reporting companies. The GPD maintains a user's manual for the ATS that specifies the standard operating procedures for data entry and data analysis. Regional inspectors perform inspections and audits onsite at the facilities of producers, importers, and exporters. These audits verify the accuracy of compliance data submitted to EPA through examination of company records.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-73)**

Domestic exempted production and import of newly produced Class I chlorofluorocarbons (CFCs) and halons. (APG 47)

**Performance Database:** ATS database is maintained by GPD. Performance data lag by approximately 6 months and are not currently available. Data will be reported in the FY 2003 Annual Report.

**Data Source:** Progress on restricting domestic exempted consumption of Class I CFCs and halons is tracked by monitoring industry reports of compliance with EPA's phaseout regulations. Monthly

## Goal 6: Reduction of Global and Cross-Border Environmental Risks (continued)

information on domestic production, imports, and exports from the International Trade Commission is maintained in the ATS.

**Data Quality:** Reporting and record-keeping requirements are published in 40 CFR part 82, subpart A, sections 82.9 through 82.13. These sections of the Stratospheric Ozone Protection Rule specify the required data and accompanying documentation that companies must submit or maintain onsite to demonstrate their compliance with the regulation.

The ATS data are subject to a Quality Assurance Plan. In addition, the data are subject to an annual quality assurance review, coordinated by OAR staff separate from those on the team normally responsible for data collection and maintenance. The ATS is programmed to ensure consistency of the data elements reported by companies. The tracking system flags inconsistent data for review and resolution by the tracking system manager. This information is then cross-checked with compliance data submitted by reporting companies. The GPD maintains a user's manual for the ATS that specifies the standard operating procedures for data entry and data analysis. Regional inspectors perform inspections and audits on-site at the facilities of producers, importers, and exporters. These audits verify the accuracy of compliance data submitted to EPA through examination of company records.

**Improvements, Material Inadequacy:** Not applicable.

## Goal 7: Quality Environmental Information

### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-82)

Make 90 percent of enforcement and compliance policies and guidance issued this fiscal year available on the Internet within 30 days of issuance. (APG 49)

**Performance Database:** Output measure; internal tracking system. FY 2002 performance data are complete.

**Data Source:** Manual system. Headquarters tracks date document was issued and uploaded to the Internet.

**Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-82)

Total electronic reporting of all chemical submissions processed. (Includes diskette submissions created by ATRS, TRI-ME, and other reporting software programs, as Web-based submissions.) (APG 50)

**Performance Database:** Toxic Release Inventory System.

**Data Source:** TRI chemical reports provided by reporting facilities.

**Data Quality:** Data are simple frequencies, checked informally for accuracy.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-83)

States using the Central Data Exchange to send data to EPA. (APG 51)

**Performance Database:** Output measure; no database.

## Goal 7: Quality Environmental Information (continued)

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-83)

Award 90 grants to organizations which address environmental problems in communities disproportionately impacted by environmental hazards. (APG 52)

**Performance Database:** Each region awards the grants from funds transferred from the Office of Environmental Justice (OEJ). Upon completion of each year's cycle, the regions submit their award selections to OEJ, from which a master list is compiled. OEJ maintains the annual lists.

**Data Source:** The OEJ compiles lists of annual grant awards, based on information submitted by the regions.

**Data Quality:** Prior to award, each grant application is reviewed in accordance with EPA quality management protocols in each region. Each grant is for a maximum of \$20,000, and most do not involve data collection or manipulation. The few that do are required to have a Quality Management Plan.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-83)

Hold meetings with the NEJAC, all stakeholders involved in the environmental justice dialogue, and communities disproportionately impacted by environmental hazards. (APG 52)

**Performance Database:** Output measure; internal manual tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-84)

Publicly available facility data from EPA's national systems, accessible on the EPA Web site, will be part of the Integrated Error Correction Process. (APG 53)

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-84)

Critical financial systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document. (APG 54)

**Performance Database:** Output measure; no database.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-84)

Critical infrastructure systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document. (APG 54)

**Performance Database:** Output measure; no database.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

## Goal 7: Quality Environmental Information (continued)

### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-84)

Mission critical environmental systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document. (APG 54)

**Performance Database:** Output measure; no database.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

## Goal 8: Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems

### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-93)

Trends in acidity in lakes and streams in the Northeast and Mid Atlantic Regions of the United States. (APG 55)

**Performance Database:** Program output; no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-94)

Enhance the Waste Reduction Algorithm environmental impact assessment tool used to design or retrofit chemical processes with (1) a better assessment methodology and (2) new features (costing). (APG 56)

**Performance Database:** Program output; no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-94)

Prepare a pest resistance management framework to prolong the effectiveness of genetically-modified corn pesticide characteristics for the Office of Pesticide Programs during product registration. (APG 56)

**Performance Database:** Program output; no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-94)

Provide a PC-based tool for use by EPA and the metal finishing sector in evaluating exposure and inhalation health risks to workers and residents living near metal finishing facilities. (APG 56)

**Performance Database:** Program output; no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-94)

Complete 20 stakeholder approved and peer-reviewed test protocols in all environmental technology categories under ETV, and provide them to testing organizations world-wide. (APG 57)

## Goal 8: Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems (continued)

**Performance Database:** Program output; no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

## Goal 9: A Credible Deterrent to Pollution and Greater Compliance with the Law

### **PERFORMANCE MEASURES:** (Refer to Performance Data Chart pages II-105, II-108)

- 75 percent of concluded enforcement actions identify pollutant reductions and/or changes in facility management or information practices. (APG 58)
- Millions of pounds of pollutants required to be reduced through enforcement actions settled this fiscal year. (APG 58)
- Facilities voluntarily self-disclose and correct violations with reduced or no penalty as a result of EPA self-disclosure policies. (APG 64)

**Performance Database:** ICIS, which tracks EPA civil, judicial, and enforcement actions. FY 2002 performance data are complete.<sup>57</sup>

**Data Source:** Most of the essential data on environmental results in ICIS are collected through the use of the Case Conclusion Data Sheet (CCDS), which Agency staff prepare after the conclusion of each civil (judicial and administrative) enforcement action. EPA implemented the CCDS in 1996 to capture relevant information on the results and environmental benefits of concluded enforcement cases.<sup>58</sup> The information generated through the CCDS is used to track progress for several of the performance measures. The CCDS form consists of 27 specific questions which, when completed, describe specifics of the case; the facility involved; information on how the case was concluded; the compliance actions required to be taken by the defendant(s); the costs involved; information on any Supplemental Environmental Project to be undertaken as part of the settlement; the amounts and types of any penalties assessed; and any costs recovered through the action, if applicable. The CCDS requires that the staff identify whether the facility/defendant, through injunctive relief, must (1) reduce pollutants and (2) improve management practices to curtail, eliminate, or better monitor and handle pollutants in the future. For actions that result in pollution reductions, the staff estimate the amounts of pollution reduced over the lifetime of the enforcement action. There are established procedures for the staff to calculate, by statute (e.g., Clean Water Act), the pollutant reductions or eliminations. The procedure first entails the determination of the difference between the current “out of compliance” concentration of the pollutant(s) and the post enforcement action “in compliance” concentration. This difference is then converted to mass per time using the flow or quantity information derived during the case.

**Data Quality:** Quality assurance/quality control procedures are in place for both the CCDS and ICIS entry. A Case Conclusion Data Sheet Training Booklet and a Case Conclusion Data Sheet Quick Guide have been distributed throughout regional and headquarters offices. Separate CCDS Calculation and Completion Checklists are required to be filled out at the time the CCDS is completed. A Quality Management Plan for ICIS is under development.

Information contained in the CCDS and ICIS is reviewed by regional and headquarters staff for completeness and accuracy. The pollutant reductions or eliminations reported in the CCDS are estimates of what will be achieved if the defendant carries out the requirements of the settlement. The estimates are based on information available at the time a case is settled or an order is issued. In some instances, this information will be developed and entered after the settlement in continued discussions over specific plans for compliance. There may be delay. Because of unknowns at the

## Goal 9: A Credible Deterrent to Pollution and Greater Compliance with the Law (continued)

time of settlement, level of technical proficiency, or the nature of a case, the enforcement office's expectation is that based on information on the CCDS, the amount of pollutant reduction/elimination will be underestimated. Information on expected outcomes of state enforcement is not available.

**Improvements:** In November 2000 EPA completed a comprehensive guidance package on the preparation of the CCDS. This guidance, issued to headquarters and regional managers and staff, was made available in print and CD-ROM, and was supplemented in FY 2002. The guidance contains work examples to ensure better calculation of the amounts of pollutants reduced or eliminated through concluded enforcement actions. EPA trained each of its 10 regional offices during FY 2002. Additionally, OECA began implementing an Information Quality Strategy in FY 2002.<sup>59</sup> The Office of Compliance's (OC) Information Quality Strategy is a plan, developed with participation across OC, the Office of Environmental Information (OEI), EPA's regional offices, and states, to ensure that information used and produced from national data systems and associated information are reviewed for quality, that preventive processes are adhered to, and that problems are identified and corrective steps followed. It includes an implementation plan that describes a series of projects OC is undertaking to carry the strategy forward. These projects will be updated annually. Additionally, the IQS provides the basis for OC's Quality Management Plans produced in accordance with the Agency's data quality requirements.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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### PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-105)

Develop and use valid compliance rates or other indicators of compliance for selected populations. (APG 58)

**Performance Databases:** The Permit Compliance System (PCS) tracks National Pollutant Discharge Elimination System (NPDES) permit and enforcement actions, as well as reporting and scheduling requirements. The Airs Facility Subsystem (AFS) captures emission, compliance, and permit data for major stationary sources of air pollution. The Resource Conservation and Recovery Act Information System (RCRAInfo) supports permit, compliance, and corrective action activities carried out by hazardous waste handlers. Performance data are preliminary and should be finalized late first quarter or early second quarter of FY 2003.

**Data Source:** EPA regional offices and delegated states.

**Data Quality:** All of the systems have been developed in accordance with the Office of Information Management's Lifecycle Management Guidance,<sup>60</sup> which includes data validation processes, internal screen audit checks and verification, system and user documents, data quality audit reports, third-party testing reports, and detailed report specifications for showing how data are calculated.

Regarding AFS, EPA Inspector General (IG) reports in 1997 and 1998 highlighted states' problems with identifying and reporting significant violators of the Clean Air Act, impairing EPA's ability to assess noncompliance.<sup>61</sup> EPA issued High Priority Violator Guidance to improve tracking of sources of violations.<sup>62</sup> As a result of the reports, EPA has enhanced oversight and headquarters' outreach to regions, states, and local governments.

**Improvements:** PCS modernization is under way and will near completion in FY 2004. EPA is preparing Quality Management Plans (data quality objectives, quality assurance project plans, baseline assessments) for all major systems. A new Integrated Compliance Information System

## Goal 9: A Credible Deterrent to Pollution and Greater Compliance with the Law (continued)

(ICIS) supports core program needs and consolidates and streamlines existing systems. A pilot project to develop statistically valid compliance rates for selected universes of regulated facilities will be completed in 2003. A National Congressional Performance Measure Strategy project on the impact of EPA strategies on recidivism focuses attention on better compliance assurance targeting (i.e., monitoring, compliance assistance, incentives, and enforcement).

For all systems, there are concerns about quality and completeness of data and the ability of existing systems to meet data needs. Incompatible database structures/designs and differences in data definitions impede integrated analyses. Additionally, there are incomplete data available on the universe of regulated facilities because not all such facilities are inspected/permitted. System modernization will resolve many of these problems. There are also issues of programmatic scheduling that influence when statistically valid compliance measures can be calculated. For example, rates based on self-reported Discharge Monitoring Reports in the NPDES program cannot be calculated until more than a fiscal quarter after the reports are received because of programmatic and associated system rules for determining significant noncompliance.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-105)

- Reduce by 2 percentage points overall the level of significant noncompliance recidivism among the Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act programs from FY 2000 levels. (APG 58)
- Increase by 2 percentage points over FY 2000 levels the proportion of significant noncomplier facilities under the Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act which returned to full physical compliance in less than two years. (APG 58)

**Performance Databases:** PCS tracks NPDES permit and enforcement actions, as well as reporting and scheduling requirements. AFS captures emission, compliance, and permit data for major stationary sources of air pollution. RCRAInfo supports permit, compliance, and corrective action activities carried out by hazardous waste handlers. FY 2002 performance data will be available in FY 2003.

**Data Source:** EPA regional offices and delegated states.

**Data Quality:** All the systems have been developed in accordance with the Office of Information Management's life cycle management<sup>63</sup> guidance, which includes data validation processes, internal screen audit checks and verification, system and user documents, data quality audit reports, third-party testing reports, and detailed report specifications for showing how data are calculated.

Regarding AFS, EPA's OIG reports in 1997 and 1998 highlighted states' problems with identifying and reporting significant violators of the Clean Air Act, impairing EPA's ability to assess noncompliance.<sup>64</sup> EPA issued High Priority Violator Guidance to improve tracking of sources of violations.<sup>65</sup> As a result of the reports, EPA has enhanced oversight and headquarters' outreach to regions, states, and local areas.

**Improvements:** PCS modernization is under way. EPA is preparing QMPs (data quality objectives, quality assurance project plans, baseline assessments) for all major systems. A new system, ICIS, will support core program needs and consolidate and streamline existing systems. A pilot project to develop statistically valid compliance rates for selected universes of regulated facilities will be completed in 2003. A National Congressional Performance Measure Strategy project on the impact of EPA strategies on recidivism focuses attention on better compliance assurance targeting (i.e., monitoring, compliance assistance, incentives, and enforcement).

## Goal 9: A Credible Deterrent to Pollution and Greater Compliance with the Law (continued)

**Material Inadequacy:** There are no material inadequacies for any of these performance measures.

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### **PERFORMANCE MEASURES:** (Refer to Performance Data Chart pages II-105, 107)

- Produce a report on the number of civil and criminal enforcement actions initiated and concluded. (APG 58)
- Have Phase I of the Integrated Compliance Information System fully operational in March 2002. (APG 61)
- Operate 14 information systems housing national enforcement and compliance assurance data with a minimum of 95 percent operational efficiency. (APG 61)

**Performance Database:** Output measures; internal tracking.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-106)

Number of criminal investigations. (APG 59)

**Performance Databases:** The Criminal Docket System (CRIMDOC) is a criminal case management, tracking, and reporting system. Information about criminal cases investigated by EPA's Criminal Investigation Division (CID) is entered into CRIMDOC at case initiation, and investigation and prosecution information is tracked until case conclusion. Performance data are preliminary and should be finalized late first quarter or early second quarter of FY 2003.

**Data Source:** EPA-CID offices.

**Data Quality:** The system administrator performs regularly scheduled quality assurance/quality control checks of the CRIMDOC database to validate data and to evaluate and recommend enhancements to the system.

**Improvements:** A new case management, tracking, and reporting system (Case Reporting System) that will replace CRIMDOC is being developed. This new system will be a more user-friendly database with greater tracking, management, and reporting capabilities.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### **PERFORMANCE MEASURES:** (Refer to Performance Data Chart page II-106)

- Number of EPA inspections conducted. (APG 59)
- Number of civil investigations. (APG 59)

**Performance Databases:** Integrated Data for Enforcement Analysis (IDEA). IDEA integrates data from major enforcement and compliance systems, such as PCS, AFS, RCRAInfo, and the Emergency Response Notification System (ERNS). FY 2002 performance data are complete.

**Data Source:** EPA regional offices.

**Data Quality:** All the systems have been developed in accordance with the Office of Information Management's life cycle management guidance,<sup>66</sup> which includes data validation processes, internal screen audit checks and verification, system and user documents, data quality audit reports, third-party testing reports, and detailed report specifications for showing how data are calculated.



## Goal 9: A Credible Deterrent to Pollution and Greater Compliance with the Law (continued)

Regarding AFS, EPA's OIG reports in 1997 and 1998 highlighted states' problems with identifying and reporting significant violators of the Clean Air Act, impairing EPA's ability to assess noncompliance.<sup>67</sup> EPA issued High Priority Violator Guidance to improve tracking of sources of violations.<sup>68</sup> As a result of the reports, EPA has enhanced oversight and headquarters' outreach to regions, states, and local areas.

**Improvements:** PCS modernization is under way. EPA is preparing QMPs (data quality objectives, quality assurance project plans, baseline assessments) for all major systems. A new system, ICIS, will support core program needs and consolidate and streamline existing systems. A pilot project on developing statistically valid compliance rates will be completed in 2003.

**Material Inadequacy:** There are no material inadequacies for these performance measures.

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### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-107)**

Conduct EPA-assisted inspections to help build state program capacity. (APG 60)

**Performance Database:** Output measure; internal regional tracking system.

**Data Source:** Internal regional tracking system and ICIS.

**Data Quality:** EPA regional and headquarters' managers check information to confirm accuracy.

**Improvements:** ICIS has ability to assist regions in tracking inspections.

A new measurement tool, the Inspection Conclusion Data Sheet (ICDS), will be used to analyze the results from inspections conducted under some of EPA's major statutes. Data on communication of problems to industry, compliance assistance delivered by inspectors, and immediate corrections made by industry will be analyzed by region, nationally, and by industry sector.

**Material Inadequacy:** There is no material inadequacy for this performance measure.

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### **PERFORMANCE MEASURES: (Refer to Performance Data Chart page II-107)**

- Number of EPA training classes/seminars delivered to states, localities, and tribes to build capacity. (APG 60)
- Total number of state and local students trained. (APG 60)

**Performance Database:** National Enforcement Training Institute's (NETI's) course information management systems, the Automated Blue Form, and the registrar. Performance data are complete.

**Data Source:** Manual reports.

**Data Quality:** Managers ensure the quality assurance/quality control of information in the system.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE: (Refer to Performance Data Chart page II-108)**

Evaluate 100 percent of the notices for transboundary movement of hazardous wastes, ensuring their proper management in accordance with international agreements. (APG 62)

**Performance Database:** Waste Import Tracking System (WITS), Hazardous Waste Export System (HWES). Performance data are complete.

## Goal 9: A Credible Deterrent to Pollution and Greater Compliance with the Law (continued)

**Data Source:** Manual reports (notifications) submitted by U.S. exporters and by foreign governments for imports.

**Data Quality:** EPA reviews the notifications, manifests, and annual reports to ensure they are timely and accurate before they are entered into the database.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURES:** (Refer to Performance Data Chart page II-107)

- Train tribal personnel. (APG 60)
- Provide tribal governments with 50 computer-based training (CBT) modules. (APG 60)

**Performance Database:** National Enforcement Training Institute Registration System. FY 2002 performance data are complete.

**Data Source:** Data come from registration forms.

**Data Quality:** Managers ensure quality assurance/quality control of information in system.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-109)

Increase Environmental Management Systems (EMS) use by developing tools, such as training and best practice manuals that encourage improved environmental performance. (APG 65)

**Performance Database:** Internal tracking system is currently being developed.

**Data Source:** Headquarters will report on progress.

**Data Quality, Improvements, Material Inadequacy:** Not applicable.

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## Goal 10 - Effective Management

### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-117)

Agency's audited financial statements and Annual Report are submitted on time. (APG 66)

**Performance Database:** There is no formal database.

**Data Source:** OMB acknowledgment of receipt of financial statements and reference in OMB government-wide reports.

**Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-117)

Agency's audited financial statements receive an unqualified opinion and provide information that is useful and relevant to the Agency and external parties. (APG 66)

**Performance Database:** There is no formal database.

**Data Source:** OMB acknowledgment of receipt of financial statements and reference in OMB government-wide reports.

**Data Quality, Improvements, Material Inadequacy:** Not applicable.

## Goal 10 - Effective Management (continued)

### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-118)

Percentage of increase in outcome-oriented annual performance goals and performance measures (APGs/PMs) in the Agency's FY 2003 Annual Performance Plan and Congressional Justification submission. (APG 67)

**Performance Database:** Performance and Environmental Results System (PERS) and Budget Automation System (BAS) are used for internal tracking. The performance data are complete for assessment of FY 2002 performance.

**Data Source:** PERS, BAS, and OCFO staff evaluation.

**Data Quality:** Because PERS and BAS are databases that primarily house information from Agency program databases, most of the quality assurance and control efforts focus on ensuring effective data entry. However, internal staff evaluation allows the Agency to develop trend data and analyze information submitted to these centralized databases.

**Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-118)

Percentage of EPA personnel consolidated into headquarters complex. (APG 68)

**Performance Database:** Program output measure; no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-118)

Percentage of complete build out of Customs and Connecting Wing buildings. (APG 69)

**Performance Database:** Program output measure; no internal tracking system.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-119)

Percentage of fuel cell components in place. (APG 70)

**Performance Database:** No relevant database used to track this performance measure.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-119)

Percentage of structure completed. (APG 70)

**Performance Database:** No relevant database used to track this performance measure.

**Data Source, Data Quality, Improvements, Material Inadequacy:** Not applicable.

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### **PERFORMANCE MEASURE:** (Refer to Performance Data Chart page II-119)

Number of environmental improvements made, reductions in environmental risks, and best environmental practices identified. (APG 71)

## Goal 10 - Effective Management (continued)

**Performance Database:** The OIG Performance Results and Measurement System is used to capture and aggregate information on an array of measures in logic model format, linking immediate outputs with longer-term intermediate outcomes and results. Database<sup>69</sup> measures include numbers of (1) recommendations for environmental improvement; (2) legislative and regulatory changes; (3) policy, directive, or process changes; (4) environmental risks identified, reduced, or eliminated; (5) best practices identified and transferred; and (6) examples of environmental improvement.

**Data Source:** Designated OIG staff are responsible for entering data into the system. Data are from OIG independent follow-up, performance evaluations, audits, and research and from EPA data systems and reports to determine the extent of environmental improvements, risks reduced or avoided, and best practices transferred, as well as from certifications of actions taken by EPA officials. OIG also collects independent data from EPA's partners.

**Data Quality:** All performance data submitted to the database require at least one verifiable source assuring data accuracy and reliability. OIG products and services are subject to rigorous compliance with the Government Auditing Standards of the Comptroller General<sup>70</sup> and are regularly reviewed by OIG management, an independent OIG Management Assessment Review Team, and external independent peer reviewers. The statutory mission of the OIG is to conduct independent audits, evaluations, and investigations to promote, among other things, integrity in Agency operations and reporting systems.

All OIG staff are responsible for data accuracy in their products and services. However, there is the possibility of incomplete, miscoded, or missing data in the system due to human error. Data supporting achievement of results are often from indirect or external sources, with their own methods or standards for data verification/validation.

**Improvements:** The OIG developed the Performance Results and Accountability System as a prototype in FY 2001 and continued enhancing it in FY 2002 by refining measures, refining targets, and expanding OIG-wide understanding of the system. The system was enhanced to sort results by OIG Strategic Areas and improve the linkages of measures. The use of the system and the quality of the data were improved by refining the definitions of measures, developing a comprehensive system handbook, publishing the results of the data collected in the system, and providing tutorials to all OIG staff. EPA expects the quality of the data to improve with greater familiarity with the new system and definitions of measures.

**Material Inadequacy:** There are no material inadequacies for this performance measure.

## Notes:

1. For additional information about criteria pollutant data, nonattainment areas, and other related information, see U.S. EPA, Air Trends, at <http://www.epa.gov/airtrends>.
2. For additional information about mobile source programs and NOx and VOC emissions in particular, see U.S. EPA, Transportation and Air Quality, Office of Transportation and Air Quality, at <http://www.epa.gov/otaq>.
3. Information on the development of the 1996 and 1999 NTI is available, respectively, on the Internet: <http://www.epa.gov/ttn/chief/nti/index.html#nti> and [www.epa.gov/ttn/chief/net/index.html#1999](http://www.epa.gov/ttn/chief/net/index.html#1999).
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- U.S. EPA, Office of Water. December 1998. *Development Document for Proposed Effluent Limitations Guidelines and Standards for the Centralized Waste Treatment Industry*. EPA 821-R-98-020. Washington, DC: U.S. EPA. Available at <http://www.epa.gov/waterscience/guide/>.
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- U.S. EPA, Office of Water. January 2000. *Development Document for Final Effluent Limitations Guidelines and Standards for the Landfills Point Source Category*. EPA-821-R-99-019. Washington, DC: U.S. EPA. Available at <http://www.epa.gov/waterscience/guide/>.
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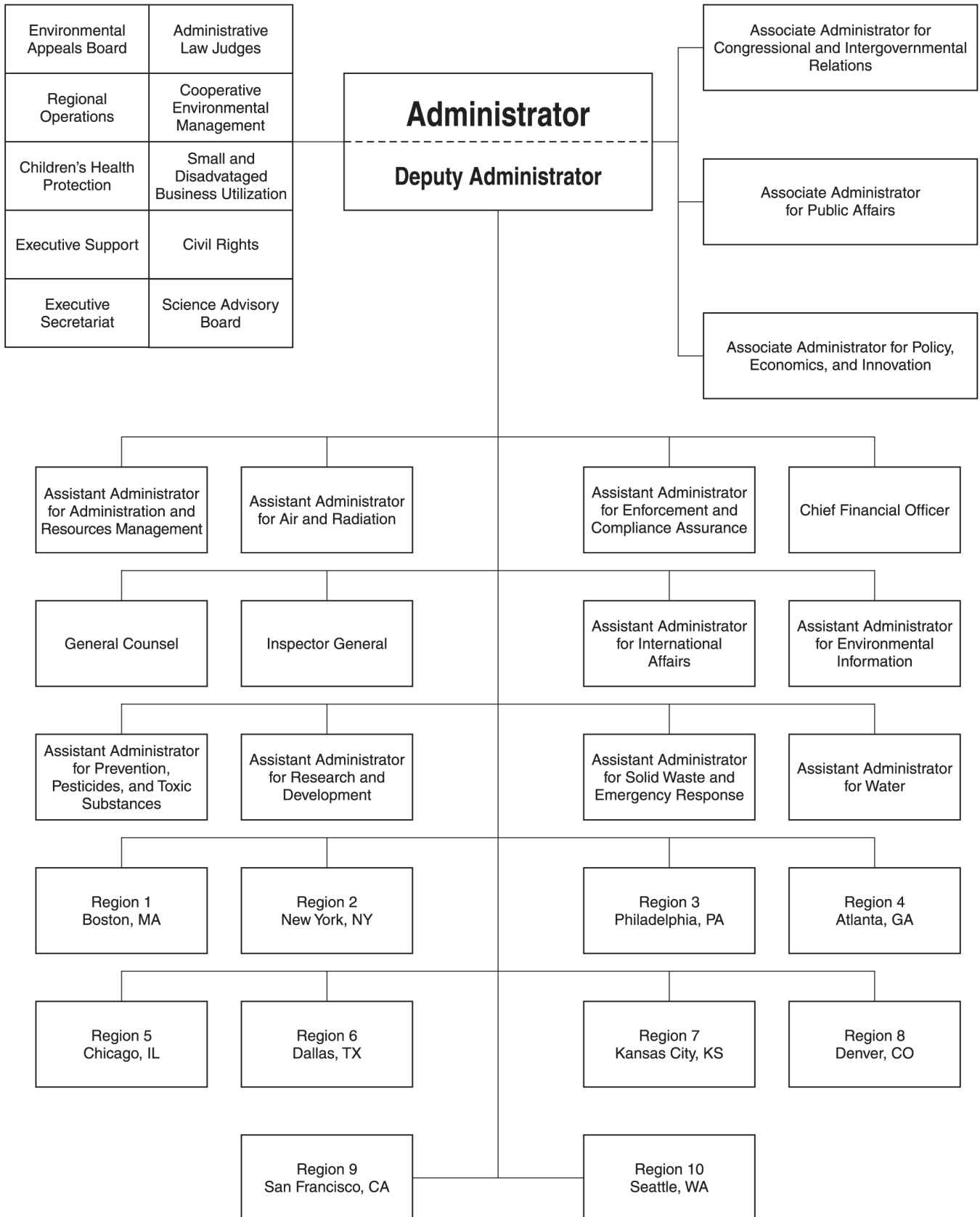
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# Appendix C

## *EPA Organization Chart*

# APPENDIX C: U.S. ENVIRONMENTAL PROTECTION AGENCY





# Appendix D

## *Acronyms and Abbreviations*

## APPENDIX D: ACRONYMS AND ABBREVIATIONS

<b>AA</b>	Assistant Administrator	<b>CASAC</b>	Clean Air Scientific Advisory Committee
<b>AEGL</b>	Acute Exposure Guideline Level	<b>CBT</b>	computer-based training
<b>AFS</b>	AIRS Facility Subsystem	<b>CCDS</b>	Case Conclusion Data Sheet
<b>AIEO</b>	American Indian Environmental Office	<b>CCL</b>	Contaminant Candidate List
<b>AMS</b>	Agricultural Marketing Service	<b>CCMP</b>	Comprehensive Conservation and Management Plan
<b>APG</b>	annual performance goal	<b>CDX</b>	Central Data Exchange
<b>AQCD</b>	Air Quality Criteria Document	<b>CEMS</b>	Continuous Emission Monitoring System
<b>AQI</b>	air quality index	<b>CEP</b>	Cumulative Exposure Project
<b>AQS</b>	Air Quality Subsystem	<b>CERCLA</b>	Comprehensive Environmental Response, Compensation, and Liability Act
<b>ASME</b>	American Society of Mechanical Engineers	<b>CERCLIS</b>	Comprehensive Environmental Response, Compensation, and Liability Information System
<b>ASPEN</b>	Assessment System for Population Exposure Nationwide	<b>CFC</b>	chlorofluorocarbon
<b>ASTHO</b>	Association of State and Territorial Health Officials	<b>CID</b>	Criminal Investigation Division
<b>ATS</b>	Allowance Tracking System	<b>CO</b>	carbon monoxide
<b>BDMS</b>	Biosolids Data Management System	<b>CO<sub>2</sub></b>	carbon dioxide
<b>BEACH</b>	Beaches Environmental Assessment and Coastal Health	<b>CPM</b>	core performance measure
<b>BECC</b>	Border Environment Cooperative Commission	<b>CPS</b>	Current Population Survey
<b>BMP</b>	best management practice	<b>CRIMDOC</b>	Criminal Docket System
<b>BMS</b>	Brownfields Management System	<b>CSO</b>	combined sewer overflow
<b>BPP</b>	Bakery Partnership Program	<b>CWA</b>	Clean Water Act
<b>CAA</b>	Clean Air Act	<b>CWS</b>	community water system
<b>CAFO</b>	Concentrated Animal Feeding Operation	<b>CWSRF</b>	Clean Water State Revolving Fund
<b>CAS</b>	Center of Applied Science	<b>DfE</b>	Design for the Environment
		<b>DI</b>	direct implementation
		<b>DNAPL</b>	dense non-aqueous phase liquid

<b>DOC</b>	Department of Commerce	<b>FAIR</b>	Federal Activities Inventory Reform
<b>DOD</b>	Department of Defense	<b>FCCC</b>	Framework Convention on Climate Change
<b>DOE</b>	Department of Energy	<b>FedBizOpps</b>	Federal Business Opportunities
<b>DOI</b>	Department of the Interior	<b>FHWA</b>	Federal Highway Administration
<b>DOJ</b>	Department of Justice	<b>FIFRA</b>	Federal Insecticide, Fungicide, and Rodenticide Act
<b>DOT</b>	Department of Transportation	<b>FMFIA</b>	Federal Managers Financial Integrity Act
<b>DQO</b>	data quality objective	<b>FQPA</b>	Food Quality Protection Act
<b>DRAP</b>	Data Reliability Action Plan	<b>FREDS</b>	Findings and Required Elements Data System
<b>DWSRF</b>	Drinking Water State Revolving Loan Fund	<b>FY</b>	fiscal year
<b>ECOS</b>	Environmental Council of the States	<b>GAO</b>	General Accounting Office
<b>EDC</b>	endocrine disruptor chemical	<b>GAP</b>	General Assistance Program
<b>EFAB</b>	Environmental Financial Advisory Board	<b>GC</b>	gas chromatography
<b>EFC</b>	Environmental Finance Center	<b>GHG</b>	greenhouse gas
<b>EGU</b>	electric generation unit	<b>GIS</b>	geographic information system
<b>EI</b>	environmental indicator	<b>GISRA</b>	Government Information Security Reform Act
<b>EIA</b>	Energy Information Agency	<b>GLNPO</b>	Great Lakes National Program Office
<b>EJ</b>	environmental justice	<b>GLWQA</b>	Great Lakes Water Quality Agreement
<b>EMAP</b>	Environmental Monitoring and Assessment Program	<b>GPD</b>	Global Programs Division
<b>EMS</b>	Environmental Management System	<b>GPRA</b>	Government Performance and Results Act
<b>EMS-HAP</b>	Emissions Modeling System for Hazardous Air Pollutants	<b>GWR</b>	groundwater exposure
<b>ERNS</b>	Emergency Response Notification System	<b>H2E</b>	Hospitals for a Healthy Environment
<b>ERP</b>	Environmental Results Program	<b>HCFC</b>	hydrochlorofluorocarbon
<b>ETS</b>	environmental tobacco smoke	<b>HE</b>	human exposure
<b>ETS</b>	Emissions Tracking System		
<b>EIV</b>	Environmental Technology Verification		

<b>HPV</b>	High Production Volume	<b>MACT</b>	Maximum Achievable Control Technology
<b>HUC</b>	hydrologic unit code	<b>MCL</b>	maximum contaminant level
<b>HW</b>	hazardous waste	<b>MIRA</b>	Multi-criteria Integration Resource Assessment
<b>HWES</b>	Hazardous Waste Export System	<b>MITIS</b>	Management Information Tracking System
<b>I/M</b>	inspection/maintenance	<b>MMTCE</b>	million metric tons carbon equivalent
<b>IADN</b>	Integrated Atmospheric Deposition Network	<b>MOA</b>	Memorandum of Agreement
<b>IAG</b>	interagency agreement	<b>MSR</b>	Management System Review
<b>IAQ</b>	indoor air quality	<b>MSW</b>	municipal solid waste
<b>ICC</b>	Interstate Commerce Commission	<b>MTBE</b>	methyl tertiary butyl ether
<b>ICDS</b>	Inspection Conclusion Data Sheet	<b>MVP2</b>	Most Valuable Pollution Prevention
<b>ICIS</b>	Integrated Compliance Information System	<b>NAAG</b>	National Association of Attorneys General
<b>ICR</b>	Information Collection Request	<b>NAAQS</b>	National Ambient Air Quality Standards
<b>IDEA</b>	Integrated Data for Enforcement Analysis	<b>NACEPT</b>	National Advisory Council for Environmental Policy and Technology
<b>IECP</b>	Integrated Error Correction Process	<b>NADBank</b>	North American Development Bank
<b>IG</b>	Inspector General	<b>NADP</b>	National Atmospheric Deposition Program
<b>IJC</b>	International Joint Commission	<b>NAHB</b>	National Association of Home Builders
<b>IMC</b>	Information Management Coordinator	<b>NAPAP</b>	National Acid Precipitation Assessment Program
<b>IPM</b>	integrated pest management	<b>NAS</b>	National Academy of Sciences
<b>IRIS</b>	Integrated Risk Information System	<b>NASS</b>	National Agricultural Statistical Survey
<b>ISDWP</b>	International Safe Drinking Water Program	<b>NATA</b>	National-Scale Air Toxics Assessment
<b>ISO</b>	Information Security Officer	<b>NCA</b>	National Coastal Assessment
<b>LaMP</b>	Lakewide Management Plan		
<b>LDEQ</b>	Louisiana Department of Environmental Quality		
<b>LUST</b>	leaking underground storage tank		



**NCHS** National Center for Health Statistics

**NCI** National Cancer Institute

**NEIEN** National Environmental Information Exchange Network

**NEJAC** National Environmental Justice Advisory Council

**NELAC** National Environmental Laboratory Accreditation Conference

**NEP** National Estuary Program

**NEPPS** National Environmental Performance Partnership System

**NGO** nongovernmental organizations

**NO<sub>2</sub>** nitrogen dioxide

**NOAA** National Oceanic and Atmospheric Administration

**NOI** Notice of Intent

**NO<sub>x</sub>** nitrogen oxide

**NPAP** National Performance Audit Program

**NPDES** National Pollutant Discharge Elimination System

**NPL** National Priorities List

**NRC** National Research Council

**NRDC** Natural Resources Defense Council

**NRT** National Response Team

**NTI** National Toxic Inventory

**O<sub>3</sub>** ozone

**OAR** Office of Air and Radiation

**OATS** On-line Allowance Tracking System

**OC** Office of Compliance

**OCFO** Office of the Chief Financial Officer

**OCIR** Office of Congressional and Intergovernmental Relations

**ODP-MT** ozone depletion potential-weighted metric tonnes

**ODS** ozone-depleting substance

**OECA** Office of Enforcement and Compliance Assurance

**OEI** Office of Environmental Information

**OGD** Office of Grants and Debarment

**OHS** Office of Homeland Security

**OIG** Office of the Inspector General

**OMB** Office of Management and Budget

**OP** organophosphate

**OPPIN** Office of Pesticide Programs Information Network

**OSWER** Office of Solid Waste and Emergency Response

**OTC** Ozone Transport Commission

**OW** Office of Water

**P2** pollution prevention

**PAH** polycyclic aromatic hydrocarbon

**PART** Program Assessment Ratings Tool

**Pb** lead

**PBDE** polybrominated diphenyl ether

**PBT** persistent, bioaccumulative toxic

**PC** personal computer

**PCB** polychlorinated biphenyl

**PCS** Permit Compliance System

**PDD** Presidential Decision Directive

**PDP** Pesticide Data Program

**PERS** Performance and Environmental Results System

**PFOS** perfluorooctanyl sulfonate

**PIVOT** Performance Indicators Visualization and Outreach Tool

<b>PM</b>	particulate matter	<b>RIA</b>	Regional Transit Authority [Cleveland, Ohio]
<b>PM<sub>10</sub></b>	particulate matter 10 micrometers or less in diameter	<b>RTP</b>	Research Triangle Park
<b>PM<sub>2.5</sub></b>	particulate matter 2.5 micrometers or less in diameter	<b>SAB</b>	Science Advisory Board
<b>PMA</b>	President's Management Agenda	<b>SARA</b>	Superfund Amendments and Reauthorization Act
<b>PMN</b>	Premanufacture Notice	<b>SBREFA</b>	Small Business Regulatory Enforcement Flexibility Act
<b>POA&amp;M</b>	plan of action and milestones	<b>SDWA</b>	Safe Drinking Water Act
<b>POP</b>	persistent organic pollutant	<b>SDWIS</b>	Safe Drinking Water Information System
<b>PPG</b>	performance partnership grants	<b>SDWIS-FED</b>	Safe Drinking Water Information System—federal version
<b>PRATS</b>	Pesticide Regulatory Action Tracking System	<b>SDWIS-STATE</b>	Safe Drinking Water Information System—state version
<b>PRP</b>	Potentially Responsible Party	<b>SECG</b>	small entity compliance guide
<b>PWSS</b>	Public Water System Supervision	<b>SEP</b>	supplemental environmental project
<b>QA/QC</b>	quality assurance/quality control	<b>SES</b>	Senior Executive Service
<b>QAPP</b>	Quality Assurance Project Plan	<b>SIC</b>	Standard Industrial Classification
<b>QMP</b>	Quality Management Plan	<b>SIP</b>	State Implementation Plan
<b>RAP</b>	Remedial Action Plan	<b>SITE</b>	Superfund Innovative Technology Evaluation
<b>RCC</b>	Resource Conservation Challenge	<b>SLAMS</b>	State and Local Air Monitoring Stations
<b>RCRA</b>	Resource Conservation and Recovery Act	<b>SNUR</b>	Significant New Use Rules
<b>RCRAInfo</b>	Resource Conservation and Recovery Act Information System	<b>SO<sub>2</sub></b>	sulfur dioxide
<b>RDMS</b>	Research Database Management System	<b>SOL</b>	statute of limitations
<b>RED</b>	Reregistration Eligibility Decision	<b>SOP</b>	standard operating procedure
<b>REI</b>	Reinventing Environmental Information	<b>SO<sub>x</sub></b>	sulfur oxides
<b>REA</b>	Regulatory Flexibility Act	<b>SRF</b>	State Revolving Fund
<b>RGI</b>	Regional Geographic Initiative	<b>TBA</b>	Targeted Brownfields Assessment
<b>RGM</b>	reactive gaseous mercury	<b>TERA</b>	Toxicology for Excellence in Risk Assessment
<b>RS&amp;T</b>	Regional Science & Technology		

<b>TFS</b>	Tools for School
<b>TIMS</b>	Tribal Information Management System
<b>TIP</b>	Tribal Implementation Plan
<b>TMDL</b>	Total Maximum Daily Load
<b>TORTS</b>	Tolerance Reassessment Tracking System
<b>TPPC</b>	Tribal Pesticide Program Council
<b>TRI</b>	Toxics Release Inventory
<b>TRI-ME</b>	TRI Made Easy
<b>TRIM</b>	Toxics Release Inventory Modernization
<b>TSCA</b>	Toxic Substance Control Act
<b>UNEP</b>	United Nations Environment Programme
<b>US HPV</b>	U.S. High Production Volume [database]
<b>USAID</b>	United States Agency for International Development
<b>USDA</b>	United States Department of Agriculture

<b>USGS</b>	United States Geological Survey
<b>UST</b>	underground storage tank
<b>UV</b>	ultraviolet
<b>UVPM</b>	Utah Valley particulate matter
<b>VMT</b>	vehicle miles traveled
<b>VOC</b>	volatile organic compound
<b>WAR</b>	Waste Reduction [Algorithm]
<b>WATERS</b>	Watershed Assessment, Tracking & Environmental Results
<b>WIPP</b>	Waste Isolation Pilot Plant
<b>WITS</b>	Waste Import Tracking System
<b>WQS</b>	water quality standard
<b>WSSD</b>	World Summit on Sustainable Development
<b>WTC</b>	World Trade Center
<b>XL</b>	eXcellence and Leadership

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John H. McShane, Office of Water