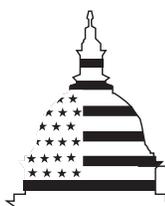


April 2000

MANAGING FOR RESULTS

EPA Faces Challenges in Developing Results-Oriented Performance Goals and Measures



GAO

Accountability * Integrity * Reliability

Contents

Letter		3
Appendixes		
	Appendix I: Objectives, Scope, and Methodology	22
	Appendix II: Strategic Goals in EPA's September 1997 Strategic Plan	24
	Appendix III: Performance Goals and Measures In EPA's Fiscal Year 2000 Performance Plan	25
	Appendix IV: End and Intermediate Outcome Performance Goals and Measures in EPA's Fiscal Year 2000 Performance Plan	26
Tables		
	Table 1: Hierarchy of Indicators	9
Figures		
	Figure 1: Number and Percentage of Performance Goals Contained in EPA's Fiscal Year 2000 Performance Plan	6
	Figure 2: Number and Percentage of Performance Measures Contained in EPA's Fiscal Year 2000 Performance Plan	7
	Figure 3: Numbers and Percentages of Performance Goals for Each Level of EPA's Hierarchy of Indicators	11
	Figure 4: Numbers and Percentages of Performance Measures for Each Level of EPA's Hierarchy of Indicators	12

Abbreviations

EMPACT	Environmental Monitoring for Public Access and Community Tracking
EPA	Environmental Protection Agency
LUST	Leaking Underground Storage Tank
NAAQS	National Ambient Air Quality Standards
OMB	Office of Management and Budget
OPAA	Office of Planning, Analysis, and Accountability
Project XL	Project eXcellence and Leadership
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plan
SPCC	Spill Prevention, Control and Countermeasure



B-284576

April 28, 2000

The Honorable Bud Shuster
Chairman, Committee on Transportation
and Infrastructure
House of Representatives

The Honorable F. James Sensenbrenner
Chairman, Committee on Science
House of Representatives

For over a decade, internal and external studies have called for the Environmental Protection Agency (EPA) to “manage for environmental results” as a way to improve and better account for its performance. The Government Performance and Results Act of 1993 (the Results Act) requires EPA and other federal agencies to prepare performance plans containing annual performance goals and measures to help move them toward managing for results. These performance goals and measures are used to assess an agency’s progress toward achieving the results expected from its major functions. Under the act, a performance goal is a target level of performance expressed as a tangible, measurable objective against which actual achievement can be compared. Performance measures are the yardsticks to assess an agency’s success in meeting its performance goals.

Performance goals and their associated measures are often expressed as end outcomes, intermediate outcomes, or outputs. End outcomes are the results of programs and activities compared to their intended purpose, such as ensuring that drinking water is safe. Intermediate outcomes show progress toward achieving end outcomes. They are often required for programs when end outcomes are not immediately clear, easily delivered, or quickly achieved. For example, convincing local communities to adopt higher water quality standards is an intermediate outcome leading to the end outcome of safe drinking water. Outputs are typically activities or products, such as the number of environmental regulations promulgated, and do not directly measure results.

EPA’s fiscal year 2000 performance plan contains 187 performance goals and 364 performance measures. Concerned about EPA’s progress in developing goals and measures that focus on environmental results rather

than on program activities, you asked us to (1) determine the extent to which EPA's fiscal year 2000 performance goals and measures focus on end outcomes, intermediate outcomes, or outputs; (2) identify any challenges the agency faces in developing additional performance goals and measures that focus on end outcomes; and (3) describe the initiatives the agency is taking to address any identified challenges.

Results in Brief

In EPA's fiscal year 2000 performance plan, 16 percent of the goals and 12 percent of the measures focus on end outcomes, targeting the environmental changes that EPA plans to achieve as a result of its activities. End outcomes generally entail reductions in the amount of pollutants emitted or discharged into or concentrated in the environment. To a lesser extent, these end outcomes relate to reductions in the amount of pollutants absorbed by living organisms and the adverse effects of the pollutants on ecology and human health and welfare.

EPA program managers told us that the limited availability of data on environmental conditions and knowledge of the health effects of pollutants needed to measure EPA's performance was the major challenge to developing outcome goals and measures. Such data is needed to establish a direct cause-and-effect relationship between a program's activities and the resulting changes in the environment. This relationship is often difficult to establish because of factors beyond a program's control, such as changes in weather patterns and economic conditions.

In October 1998, EPA announced plans to establish a central information office to, among other things, lead the agency's efforts toward obtaining the environmental information needed to measure the results of its programs' activities. This office has initiated several efforts to improve the quality of EPA's data, such as developing an action plan to detail the key steps the agency needs to take to help ensure that its environmental data are sufficiently complete, compatible, and accurate to meet its needs. In addition, EPA's Office of Planning, Analysis, and Accountability has initiated an effort to work with the agency's program offices to improve the quality of annual performance goals and measures and the agency's Office of Enforcement and Compliance Assurance is attempting to link its enforcement and compliance activities with environmental results. Other program offices are also taking actions to develop additional outcome goals and measures.

Background

Under the Results Act, federal agencies develop annual performance plans that establish performance goals to define the level of performance to be achieved by a program activity and establish performance measures to indicate or assess the relevant outputs, service levels, and outcomes of each program activity. Performance goals and measures are key elements in determining whether an agency has been effectively accomplishing its strategic goals. Performance measurement reinforces the connection between the long-term strategic goals and strategies outlined in an agency's strategic plan and the day-to-day activities of its program offices. (See app. II for a list of EPA's strategic goals.)

The Office of Management and Budget (OMB) has instructed agencies that, as a general rule, outcome goals should be included in their annual performance plans whenever possible. OMB acknowledges, however, that activity-based output goals can provide important information for agency managers to use in managing their programs. Consequently, OMB recognizes that the performance plans of most agencies will contain output goals and measures and that, in the plans of some agencies, the majority of goals and measures could be outputs.

EPA's Performance Plan Emphasizes Output Goals and Measures

EPA's fiscal year 2000 performance plan emphasizes output goals and measures that provide information on the level or quality of environmental-related products or services, such as activities that result from the agency's efforts. As shown in figures 1 and 2, outputs account for 74 percent of the performance goals and 81 percent of the performance measures contained in EPA's plan. End outcomes and intermediate outcomes total 26 percent of EPA's performance goals and 19 percent of its performance measures. EPA planning, budgeting, and program office officials responsible for performance planning noted that this was only the second such plan that they had developed under the Results Act and said that they were striving to make future plans more outcome oriented.

Figure 1: Number and Percentage of Performance Goals Contained in EPA's Fiscal Year 2000 Performance Plan

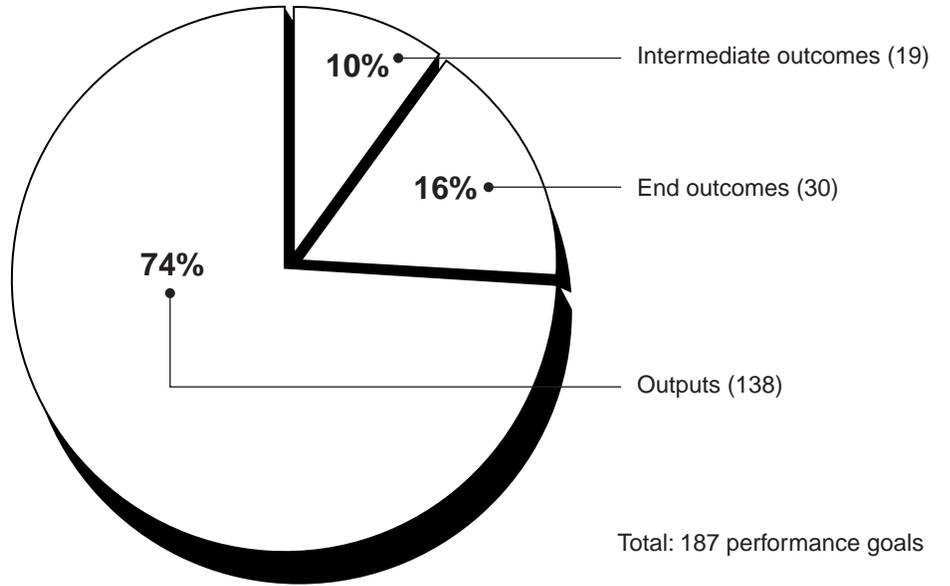
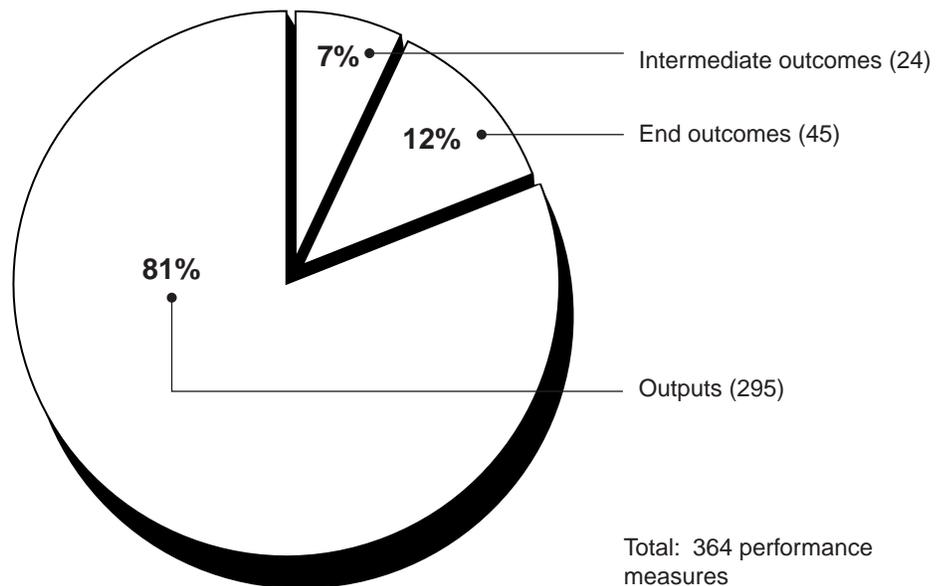


Figure 2: Number and Percentage of Performance Measures Contained in EPA's Fiscal Year 2000 Performance Plan



EPA classifies its programs into two types—media and nonmedia. Media programs include clean air, safe water, and pollution prevention programs that aim to clean up the environment. Nonmedia programs include those that do not directly affect the environment, such as research and development, enforcement, public awareness and general management activities.

Our analysis shows that EPA's media and nonmedia programs differ significantly in the extent to which their performance goals and measures reflect environmental outcomes. Thirty-three percent of EPA's performance goals and 24 percent of its performance measures for environmental media programs focus on end or intermediate outcomes; 10 percent of its performance goals and 7 percent of its performance measures for nonmedia programs focus on such outcomes.

EPA officials told us that it is much more difficult to link nonmedia programs to specific environmental results. They pointed out that the agency's strategic goals cover most, if not all, of the agency's major

activities. Therefore, the annual performance plan includes nonmedia programs whose outputs are inherently difficult to link to specific environmental results. For example, officials of the Office of Research and Development told us that, given the office's role in providing scientific and engineering information, models, methods, and tools, it is impossible to tie its achievements to a specific change in pollutant levels. However, they noted that their models, methods, and tools are inputs to the development of environmental regulations and policies and frequently advance the state of environmental science, thereby better enabling EPA to achieve its environmental outcomes.

EPA has adopted a framework for categorizing its performance goals and measures. EPA calls this framework the "hierarchy of indicators" because it ranks the performance goals and measures according to their direct impacts on improving the environment. The agency uses the framework as a tool to evaluate its progress in moving from activity-based to results-based performance goals and measures. As shown in table 1, at the top of the hierarchy are the reductions of environmental risks or impacts to the ecology or to human health and/or welfare. An example is EPA's performance goal and measure for restoring watersheds to their designated uses. Activities and services that EPA and the states perform, such as producing rules and standards to achieve environmental improvements are at the low end of the hierarchy under level 1. EPA has established a level "R" for research and development efforts to recognize that they are different from other types of environmental activities. According to EPA's performance planning guidance, program offices should develop performance goals and measures at the highest indicator level for which adequate data exist.

Table 1: Hierarchy of Indicators

Level	Description of indicator	Type of performance goal and measure generally associated with the indicator	Example of performance goal	Example of performance measure
6	Environmental risks or impacts to the ecology or human health and/or welfare	End outcome	Restore watersheds to their designated uses.	Number of river miles, lake acres, and estuary square miles that will be restored to their designated uses.
5	Pollutants absorbed by the human body	End outcome	Reduce pesticide poisonings by 5 percent.	Pesticide poisonings will be reduced by 5-percent.
4	Concentrations of pollutants in the environment	End outcome	Maintain healthy air quality for levels of carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead.	All areas currently meeting national ambient air quality standards will continue to maintain healthful standards for carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead.
3	Discharges and emissions of pollutants	End outcome	Reduce discharges of toxic air pollutants by 4 million pounds per year.	Discharges of toxic air pollutants will be reduced by 4 million pounds per year.
2	Actions or responses by regulated parties	Intermediate outcome	At least 100 drinking water systems eligible for Drinking Water State Revolving Funds will have initiated operations that protect human health and welfare.	At least 100 eligible drinking water systems will initiate operations to protect human health and welfare.
1	Actions by EPA, states, tribes, or other governmental bodies	Output	Prepare final rules for disposal of lead-based paint debris and establish standards regarding hazardous levels of lead in paint, dust, and soil.	The lead debris disposal rule and lead hazards standards rule will be completed by September 30, 2000.

Continued

Level	Description of indicator	Type of performance goal and measure generally associated with the indicator	Example of performance goal	Example of performance measure
R	Research and development	Output	Develop a conceptual model for developing watershed assessment techniques that would assist local, regional, and national environmental decisionmakers in maintaining the ecological integrity of a watershed.	A model to assess the exposure of wildlife to multimedia environmental contaminants (i.e., in the soil, water, food, and air) will be released.

Continued from Previous Page

Source: GAO's analysis of EPA's data.

Figure 3 shows the numbers and percentages of performance goals for each level of EPA's hierarchy of indicators. Figure 4 provides similar information for performance measures.

Figure 3: Numbers and Percentages of Performance Goals for Each Level of EPA's Hierarchy of Indicators

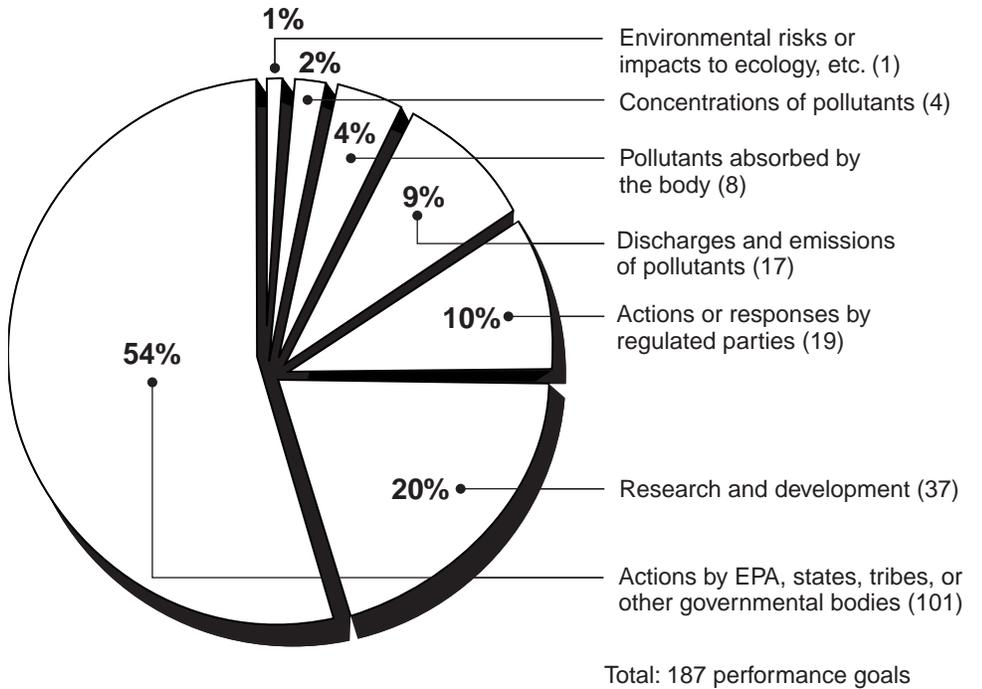
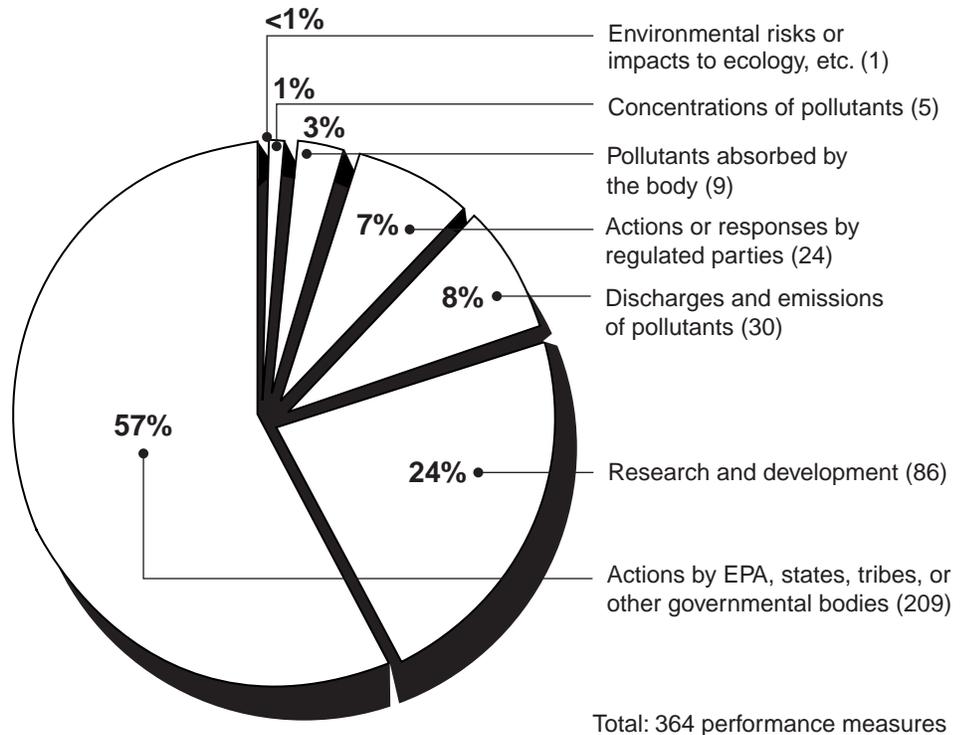


Figure 4: Numbers and Percentages of Performance Measures for Each Level of EPA's Hierarchy of Indicators



EPA Faces Major Challenges in Getting the Data Needed to Develop Outcome Goals and Measures

EPA considers getting the data needed to measure results its biggest challenge in developing outcome-oriented performance goals and measures. Over the years, EPA and the states have collected extensive data on the environment; however, substantial gaps exist in the data on environmental conditions and their effects on human health. For example, EPA lacks toxicity data for more than one-third of the chemicals produced in large volumes as well as for about two-thirds of the known hazardous air pollutants. Such gaps make it difficult to establish a direct cause-and-effect relationship between a program's activities and specific changes in environmental conditions. Furthermore, different data collection and analysis methods among EPA's databases and state databases (which EPA relies upon extensively) make it difficult to aggregate data and use the information to determine environmental outcomes. Substantial costs are involved in improving EPA's and the states' databases to be more

responsive to the need for additional outcome-oriented goals and measures.

Even with better data, linking environmental programs and activities to outcomes is sometimes difficult. Environmental conditions change because of a complex web of factors, including such variables as the weather or economic activity, many of which are beyond the control of EPA and its state partners. For example, the annual use of pesticides in a particular region can vary depending on how insect populations fluctuate from year to year. Therefore, the peaks and valleys in the annual application of pesticides make it difficult to attribute reductions in their use to a specific governmental program. Some EPA officials have raised concerns about being held accountable under the Results Act for environmental outcomes that they think are largely out of their control and have indicated that they would rather be held accountable for program outputs, over which they have more control.

The long-term nature of environmental programs also hinders the development of the data needed for annual performance goals and measures. A program implemented today might take many years to show results. The actions by EPA and the states to reduce the amount of polluting nutrients that work their way into lakes, rivers, and bays illustrate the lengthy interval between some environmental activities and their effects. Nutrients from fertilizers and the manure of poultry and other livestock flow through the ground and eventually find their way into the water. These nutrients pollute the water and, among other things, cause the growth of algae that can release toxins, killing fish. However, reducing the amount of polluting nutrients in the ground today may not result in improved water quality for a decade or more. Therefore, a performance goal to reduce these nutrients in the water may not result in an environmental impact in the short-term.

Another challenge in developing better information on program results is that data provided by the states often are incompatible. For example, states do not use identical survey methods and criteria to rate their water quality. EPA officials told us that such inconsistencies from state to state make developing national performance goals and measures difficult. Furthermore, they said that the scientific community generally recognizes that the indicators for measuring performance in improving water quality have not been very good.

Despite such limitations in the states' data systems, EPA is dependent upon them for much of the data it needs to measure its performance. These systems, like EPA's systems, primarily are designed to provide information on the outputs associated with program activities, such as the enforcement of regulations, rather than the environmental results of these activities. Given the expense of collecting environmental data, EPA is concerned about the reporting burden it may place on states and regulated industries as the agency seeks to obtain better data to measure its results. States have expressed concern about additional reporting burdens and have called for any expansion in reporting requirements to be balanced with a reduction in some of EPA's other reporting requirements.

EPA is considering ways to modernize its own data systems, but correcting the problems may require considerable resources. Substantial resources and expertise are required to identify and test potential results-oriented performance measures. Once the measures are established, gathering and analyzing the data can be resource-intensive and can take years to show environmental improvement. Nor is it always cost-effective to collect the data needed to monitor environmental programs. For example, Office of Water officials told us that to establish a complete set of outcome goals and measures for water quality would require creating a costly national monitoring system that would take years to implement. They also noted that, in passing the Clean Water Act, the Congress never envisioned a federal system and left the primary monitoring responsibility with the states.

EPA Has Initiated Actions to Develop Additional Outcome-Oriented Performance Goals and Measures

EPA has recently taken several actions that should strengthen its ability to develop additional outcome-oriented performance goals and measures. The most important initiative is the creation of the Office of Environmental Information, which is charged with ensuring that EPA has the data it needs to manage for results. Other initiatives include developing processes and long-term strategies to improve the quality of performance goals and measures and linking the activities of program offices with environmental results.

Creating a Central Information Office

In October 1998, EPA announced plans to establish a central information office to consolidate its diverse data systems and to improve the quality of data used by EPA and provided to the public. The new Office of Environmental Information is responsible for (1) ensuring that the quality of data collected and used by EPA is known and appropriate for its

intended uses, (2) reducing the data collection and reporting burden of the states and regulated industries, (3) filling significant data gaps, and (4) providing the public with integrated information and statistics on environmental and public health issues.

In a September 1999 report on the status of EPA's efforts to improve its information management,¹ we recommended that the EPA Administrator direct the program manager of the new Office of Environmental Information to develop an action plan detailing the steps the agency needs to take to help ensure that EPA's environmental and regulatory data are sufficiently complete, compatible, and accurate to meet its needs. We said this action plan should include the office's strategy, milestones, and resource needs to (1) fill key gaps that have been identified in the agency's information on environmental conditions; (2) identify and develop all needed data standards and implement them in all major databases; (3) coordinate EPA's data standardization efforts with the states, federal agencies, and other organizations that maintain major environmental databases; (4) improve the collection of accurate data by implementing its quality assurance throughout the agency as well as in the states; and (5) identify the procedures so that the data errors detected in one EPA information system can be corrected agencywide. On December 22, 1999, EPA advised the Chairman, Senate Committee on Governmental Affairs, that it agreed with our recommendation and intended to develop an information plan that would serve as its action plan.

EPA officials responsible for designing EPA's Office of Environmental Information have stated that developing environmental results data will be a major part of the agency's initiative to overhaul how it collects, manages, and disseminates information. EPA has indicated that its information plan will articulate the central role that performance measures will play in helping the agency meet its strategic goals. According to the agency, the plan will describe how it will foster and encourage efforts to develop performance measures.

EPA recognizes that to be successful in filling data gaps it will need a clear understanding of the data required to measure performance for the diverse environmental activities the agency undertakes. As EPA program offices move toward developing outcome goals and measures, it will become more

¹*Environmental Information: EPA Is Taking Steps to Improve Information Management, but Challenges Remain* (GAO/RCED-99-261, Sept. 17, 1999).

apparent what specific environmental information is needed to measure the agency's progress toward improving the environment. In some cases, program offices may need to establish outcome goals before all the environmental data are available to provide the Office of Environmental Information a starting point to determine what data should be collected and analyzed. For example, the Office of Water has adopted a fiscal year 2000 outcome goal to restore watersheds. However, this goal does not show the target level of watersheds to be restored during that fiscal year because EPA does not have the baseline data available to measure the performance for this goal.

Developing Processes and Long-Term Strategies to Improve the Quality of Performance Goals and Measures

In June 1999, the Director of EPA's Office of Planning, Analysis, and Accountability implemented an effort—called the Performance Measurement Improvement Team—to work with program staff to develop more results-oriented goals and measures. The team currently includes members of EPA's Office of the Chief Financial Officer and may be expanded to include members of the program offices and other key staff involved with performance planning. EPA planning officials had hoped that this initiative would lead to improvements in the agency's fiscal year 2001 performance plan. However, they said that the schedule to submit the goals and the measures to OMB for approval in September 1999 did not allow them enough time to significantly participate in the development of the fiscal year 2001 performance goals and measures.

Nevertheless, the team is focusing on a long-term effort to make incremental improvements to EPA's performance goals and measures. The team is developing a process to work with the program managers to develop long-term strategies for addressing the specific problems facing each program office in establishing outcome goals and measures. The director of the team told us that one of the key reasons that many of EPA's performance goals and measures are output-oriented is that they are linked to EPA's strategic objectives, which were established in September 1997 in response to the requirements of the Results Act. About half of the 41 strategic objectives are output-oriented. The director told us that the team plans to work with the program offices to develop more outcome-oriented strategic objectives, which in turn will lead to additional outcome goals and measures of performance.

Linking Program Activities With Environmental Results

Several of EPA's program offices have initiatives aimed at developing more outcome-oriented goals and measures. After consulting with stakeholders, the Office of Enforcement and Compliance Assurance established its National Performance Measures Strategy in 1997, which included a strategy to develop more and better outcome and output performance goals and measures. In reporting on this strategy in December 1997, the office identified outcome and output goals and measures that it intended to adopt, along with an implementation schedule. For fiscal year 2001, the office established five additional outcome goals and four additional output goals. For example, the office has a fiscal year 2001 goal to increase or maintain environmental compliance rates or other indicators of compliance for selected regulated industries using baseline data developed during fiscal year 2000. The office also has cooperative agreements with 11 states to develop and implement outcome-based performance measures for enforcement and compliance assurance programs.

In addition, EPA's Office of Prevention, Pesticides, and Toxic Substances has set up a working group to explore ways to develop more outcome goals and measures. For example, the group is examining the possibility of measuring the results of reductions in the use of harmful pesticides based upon wildlife mortality rates. The office also has a cooperative agreement with Florida State University to identify environmental indicators for pesticides, toxics, and pollution prevention. Thirteen representatives from the private sector, states, academia, and environmental groups will serve as advisers to the university. Although the indicators are being developed for the states, officials from the Office of Prevention, Pesticides, and Toxic Substances told us that they also plan to use the data to modify their portion of EPA's revised strategic plan, which is scheduled to be completed in September 2000, to make future performance goals and measures more outcome-oriented.

The Office of International Activities also led a working group to develop "best practices" for the agency's international capacity building programs to assist other nations to reduce environmental risks. According to program officials, they have used this guidance to develop more outcome-oriented goals and measures for fiscal year 2001. For example, the office has a goal to increase access to safe drinking water in certain communities in Central America and Africa. EPA will establish baselines and measure the progress of these programs in strengthening the analytical capabilities of laboratories, improving the effectiveness of treatment plants for drinking water, and implementing source water protection programs in

targeted communities. This intermediate outcome goal will show progress in achieving the end outcome of safer drinking water in the communities.

While officials of EPA's program offices recognize that they need additional outcome goals and measures, they told us that, for the most part, they would continue to need outputs to manage their programs. They said that statutory requirements drive many of EPA's output goals and measures and others are necessary to manage the programs. For example, EPA's fiscal year 2000 output goal to reassess 20 percent of the pesticide tolerances (legal amounts of pesticide residue permissible on food) is mandated by the Food Quality and Protection Act of 1996. The act requires EPA to reassess within 10 years the 9,721 pesticide tolerances existing in 1996. Progress in this area is of interest to the Congress and other stakeholders, including farmers, food processors, and public interest groups.

We noted that some goals that have been established in response to legislative mandates are outcomes. In enacting the Acid Rain Program, the Congress included an outcome goal for a specific reduction of nitrogen oxide. Consequently, EPA has an outcome goal for this program to reduce annual emissions of nitrogen oxide by 2 million tons by the end of fiscal year 2000. Superfund officials told us that recent congressional direction has increased the awareness of the need to develop outcome goals and measures. In its report accompanying the VA, HUD, and Independent Agencies fiscal year 2000 appropriations act,² the Senate Committee on Appropriations expressed concern that EPA had gauged the performance of the Superfund Program solely on outputs, such as the number of contaminated sites cleaned up, and had no outcome-oriented measures that "directly address reduction of risk to human health and welfare and the environment." The Superfund program plans to establish an outcome goal to specify the percentage of sites where human exposure and ground water releases have been controlled.

Conclusions

While EPA has developed outcome goals and measures for its various strategic goals and objectives, its progress has been limited because of gaps in the environmental data needed to determine the impact of its programs. EPA has recently established an Office of Environmental Information to fill such gaps, but it is too early to tell what contributions

²S. Rep. No. 106-161, at 89 (1999).

the new office will make in providing the data needed by EPA to establish outcome goals and measures. The success of the new office will largely depend upon the extent to which the program offices are able to identify their specific data requirements. Current actions by several program offices to develop more outcome-oriented performance goals and measures are a step in the right direction toward identifying such requirements.

Agency Comments

We provided a draft of this report to EPA for its review and comment. EPA commented that the report presents a balanced picture of the challenges the agency faces in developing more outcome-oriented performance goals and measures and the progress that it has made. EPA generally agreed with the report's classifications of the agency's performance goals and measures as outputs, intermediate outcomes, and end outcomes; although, in a few cases, EPA believed that the goals and the measures classified as outputs reasonably could be considered intermediate outcomes. However, EPA recognized that such classifications are subject to the application of the best professional judgment and that reclassifying them would not materially affect the report's conclusions. We believe that our classifications of EPA's performance goals and measures are appropriate and consistent with the definitions of outputs, intermediate outcomes, and end outcomes that we used in performing our work. (See app. I.) EPA also provided specific technical comments and clarifications that we have included in the report.

The scope and methodology for our work are discussed in appendix I. We performed our work from August 1999 through March 2000 in accordance with generally accepted auditing standards.

As arranged with your offices, unless you publicly announce its contents earlier, we will make no further distribution of this report until 7 days after the date of this letter. At that time, we will send copies of this report to the Honorable Carol Browner, EPA Administrator, and to other interested parties. We will also make copies available to others on request. If you or your staff have any questions, please call me at (202) 512-6111. Major contributors to this report were Edward Kratzer, Ralph Running, Donald Pless, and Bernice Dawson.

David G. Wood

David G. Wood
Associate Director, Environmental
Protection Issues

Objectives, Scope, and Methodology

We were asked by the Chairman, Committee on Transportation and Infrastructure, House of Representatives, and the Chairman, Committee on Science, House of Representatives, to (1) determine the extent to which the Environmental Protection Agency's (EPA) fiscal year 2000 performance goals and measures focus on end outcomes, intermediate outcomes, or outputs; (2) identify any challenges the agency faces in developing additional performance goals and measures that focus on end outcomes; and (3) describe the initiatives the agency is taking to address any identified challenges.

To determine the extent to which EPA's fiscal year 2000 performance goals and measures are outcomes, we obtained and reviewed EPA's Fiscal Year 2000 Annual Performance Plan and Congressional Justification, the Government Performance and Results Act of 1993, and the Office of Management and Budget (OMB) Circular A-11 part 2. We classified the performance goals and measures in the agency's annual performance plan either as outcome or output using the definitions provided by OMB's Circular A-11. We further classified performance goals and measures as intermediate outcomes. The Government Performance and Results Act and OMB's guidance do not define intermediate outcomes. Therefore, consistent with previous GAO work, for review purposes, we defined intermediate outcomes as goals and measures that provide information on the results, the effects, or the consequences of programs and activities that are expected to lead to end outcomes but are not themselves "ends."¹ We compared our evaluation with classifications prepared by EPA's Office of Planning, Analysis, and Accountability (OPAA) and found them to be generally consistent. However, EPA did not break outcomes into end outcomes and intermediate outcomes.

To gain a better understanding of the relationship of EPA's annual performance goals and measures to the agency's strategic goals, we obtained and reviewed the agency's strategic plan and discussed the strategic goals and objectives with program officials responsible for its development. We also obtained and reviewed guidance that the Office of the Chief Financial Officer issued to the program offices to prepare the annual performance plan and discussed with EPA officials their

¹*Results Act: Information on Performance Goals and Measures Contained in the Department of Transportation's Fiscal Year 2000 Performance Plan* (GAO/RCED-00-13R, Nov. 15, 1999) and *Managing for Results: Measuring Program Results That Are Under Limited Federal Control* (GAO/GGD-99-16, Dec. 11, 1998).

interpretation and understanding of the guidance related to the development of the programs' outcome goals and measures.

To better understand the challenges EPA faces in developing additional outcome goals and measures as well as the actions the agency is taking to address these challenges, we interviewed EPA budget and program officials responsible for their development. Our review included interviews with officials in the program offices responsible for achieving the performance goals in the annual plan, including the Office of Air and Radiation; the Office of Water; the Office of Solid Waste and Emergency Response; the Office of Prevention, Pesticides, and Toxic Substances; the Office of Enforcement and Compliance Assurance; the Office of Research and Development; and the Office of International Activities. At each office, we discussed the process and the criteria used to develop performance goals and measures, the need to develop additional outcome goals and measures, and the constraints and the challenges to developing outcome goals and measures. Each program office was also requested to provide information on any activities or initiatives it was taking or planned to take to develop outcome goals or measures and the time frames for when more outcome goals or measures might be included in its annual performance plan.

We conducted our review from August 1999 through March 2000 in accordance with generally accepted government auditing standards.

Strategic Goals in EPA's September 1997 Strategic Plan

Number	Strategic goal	Description
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 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.
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.
3	Safe food	The foods Americans eat will be free from unsafe pesticide residues. Children especially will be protected from the health threats posed by pesticide residues, because they are among the most vulnerable groups in our society.
4	Preventing pollution and reducing risk in communities, homes, workplaces and ecosystems	Pollution prevention and risk management strategies aimed at cost-effectively 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.
5	Better waste management, 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, restoring them to uses appropriate for surrounding communities, and respond to and prevent waste-related or industrial accidents.
6	Reduction of global and cross-border environmental risks	The United States will lead other Nation's in successful, multilateral efforts to reduce significant risks to human health and ecosystems from climate change, stratospheric ozone depletion, and other hazards of environmental concern.
7	Expansion of American's right to know about their environment	Easy access to a wealth of information about the state of their local environment will expand citizen involvement and give people tools to protect their families and their communities as they see fit. Increased information exchange between scientists, public health officials, businesses, citizens, and all levels of government will foster greater knowledge about the environment and what can be done to protect it.
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.
9	A credible deterrent to pollution and greater compliance with the law	EPA will ensure full compliance with the laws intended to protect human health and the environment.
10	Effective management	EPA will establish a management infrastructure that will set and implement the highest quality standards for effective internal management and fiscal responsibility.

Source: EPA.

Performance Goals and Measures In EPA's Fiscal Year 2000 Performance Plan

Strategic goal	Performance goals					Performance measures				
	Out-puts	Intermediate outcomes	End out-comes	Percentage outputs	Percent-age outcomes	Out-puts	Intermediate outcomes	End out-comes	Percent-age outputs	Percent-age outcomes
Clean Air	9	0	5	64	36	19	0	14	58	42
Clean Water	30	4	9	70	30	65	7	10	79	21
Safe Food	4	0	1	80	20	16	0	1	94	6
Pollution Prevention	19	3	7	66	34	28	4	10	67	33
Waste Management	14	8	1	61	39	34	6	2	81	19
Global and Cross Border	15	0	6	71	29	27	1	6	79	21
Right to Know	11	2	0	85	15	28	3	0	90	10
Sound Science	19	1	0	95	5	34	1	1	94	6
Enforcement/ Compliance	5	1	1	71	29	15 ^a	2	1	83	17
Effective Management	12	0	0	100	0	29	0	0	100	0
Total	138	19	30	74	26	295	24	45	81	19

^aThree of the fiscal year 2000 performance measures for EPA's Strategic goal for Enforcement/ Compliance are necessary to establish statistically valid noncompliance rates and other baselines for three intermediate outcome measures included in EPA's Fiscal Year 2001 Annual Performance Plan and Congressional Justification.

Source: GAO's analysis of EPA data.

End and Intermediate Outcome Performance Goals and Measures in EPA's Fiscal Year 2000 Performance Plan

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators	
Strategic Goal 1 – Clean Air						
Certify that 5 of the estimated 30 remaining non-attainment areas have achieved the 1-hour National Ambient Air Quality Standards (NAAQS) for ozone. (Non-attainment areas do not meet one or more of the NAAQS for certain types of air pollutants designated in the Clean Air Act.)		4	1,406,000-ton reduction in national highway vehicle volatile organic compounds emissions		3	
			936,000-ton reduction in national highway vehicle nitrogen oxide emissions		3	
			343,000-ton reduction in national non-road mobile source volatile organic compounds emissions		3	
			133,000-ton reduction in national non-road mobile source nitrogen oxide emissions		3	
			Number of non-attainment areas to have the 1-hour ozone standard revoked		4	
	None (The goal is an output. Maintain progress and continue to implement measures to reduce particulate emissions, and transition to and implement the particulate matter 2.5 NAAQS.)		1	55,000-ton reduction in national highway vehicle particulate matter 10 emissions		3
				52,000-ton reduction in national highway vehicle particulate matter 2.5 emissions		3

Continued

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
Nationwide, reduce air toxics emissions from stationary and mobile sources combined by 5 percent from 1999 (for a cumulative reduction of 30 percent from the 1993 level of 1.3 million tons.)		3	5-percent reduction in combined stationary and mobile source air toxics emissions		3
			21,871-ton reduction in national highway vehicle benzene emissions		3
			3,498-ton reduction in national highway vehicle 1.3 butadiene emissions		3
			14,400-ton reduction in national highway vehicle formaldehyde emissions		3
Maintain healthful and improve substandard ambient air quality with respect to carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead.		4	100 percent of areas that have been designated as meeting national air quality standards will continue to maintain healthful standards for carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead.		4
Reduce the level of nitrogen oxide from coal-fired utility sources by 2 million tons from levels before implementation of Title IV of the Clean Air Act Amendments. Reflects total reduction that will be maintained annually.		3	2-million-ton nitrogen oxide reduction		3
Reduce emissions of sulfur dioxide from utility sources by 5 million tons from the 1980 baseline. Reflects total reduction that will be maintained annually.		3	5-million-ton reduction in sulfur dioxide emissions		3

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
Strategic Goal 2 – Clean Water					
Reduce the consumption of contaminated fish and exposure to contaminated recreational waters by increasing the information available to the public and decisionmakers.		5	None	None	
91 percent of the population served by community drinking water systems will receive drinking water meeting all health-based standards that were in effect as of 1994.		5	91 percent of the population served by community drinking water systems will receive water for which there have been no violations during the year of any federally enforceable health-based standards that were in effect as of 1994.		5
	States and community water systems will increase efforts and programs to protect their source water resources including ground water.	2		7,000 community water systems implementing efforts to protect their source water resources, such as wellheads, sole source aquifers, and watersheds	2
				Estimated number of community water systems (and estimated percentage of population served) implementing a multiple barrier approach to prevent drinking water contamination (No target)	2

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
				A population of 28 million will be served by community water systems that are implementing efforts to protect their source water resources, such as wellheads, sole source aquifers, and watersheds.	2
	At least 100 eligible drinking water systems will have initiated operations that will protect human health and ensure compliance with health-based drinking water standards through use of the Drinking Water State Revolving Fund.	2		100 community and nonprofit, noncommunity water systems that have initiated operations as a result of receiving funds from the Drinking Water State Revolving Fund	2
Restore and protect watersheds through implementation of Clean Water Act Strategies.		6	Assessed river miles, lake acres, and estuary square miles that are covered under Watershed Restoration Action Strategies and were restored to their designated uses during the reporting period		6
	Reduce the number of nonpoint sources contributing to the total load of fecal contamination and nutrients in two targeted Gulf watersheds.	2	None	None	
Improve habitat in the Chesapeake Bay.		4	71,500 acres of submerged aquatic vegetation will be present in the Chesapeake Bay.		4

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
			877 stream miles of migratory fish habitat will be reopened through provision of fish passages.		4
				70 percent of agricultural, recreational and public lands have voluntarily integrated pest management practices in the Chesapeake Bay watershed.	2
				40 percent of wastewater flow into the Chesapeake is treated by biological nutrient removal.	2
Another two million people will receive the benefits of the secondary treatment of wastewater, for a total of 181 million people.		5	Two million additional people will receive the benefits of the secondary treatment of wastewater.		5
54 percent of biosolids are beneficially reused.		3	Publicly owned treatment works beneficially reusing all or a part of their biosolids, and where data exists, the percentage of biosolids generated that are beneficially reused are 54 percent		3
Reduce the number of homes in Indian country with inadequate wastewater sanitation systems by 6 percent through funding from the Clean Water State Revolving Fund Tribal Set Aside Program.		5	6-percent reduction in the number of homes in Indian country with inadequate wastewater sanitation systems		5

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
Industrial discharges of nonconventional pollutants will be reduced by 1.5 billion pounds per year (a 7 percent reduction) as compared to 1992 discharges when considerations for growth are considered.		3	1.5-billion-pound reduction in loadings in permit compliance system database for facilities subject to effluent guidelines promulgated prior to 1998, as compared to 1992 levels		3
Industrial discharges of toxic pollutants will be reduced by 4 million pounds per year (a 14 percent reduction) and conventional pollutants will be reduced by 388 million pounds per year (a 9 percent reduction) as compared to 1992 discharges when consideration for growth are considered.		3	388-million-pound reduction in loadings in permits compliance system for conventional pollutants for facilities subject to effluent guidelines promulgated prior to 1998, as compared to 1992 levels		3
			4-million-pound reduction in loadings in permits compliance system of toxic pollutants for facilities subject to effluent guidelines promulgated prior to 1998, as compared to 1992 levels		3
	Through assistance under the Clean Water Act Section 104(g), 699 wastewater treatment facilities will be prevented from going into Clean Water Act noncompliance or assisted in moving toward compliance.	2		699 wastewater facilities are prevented from going into Clean Water Act non-compliance or assisted in moving toward compliance.	2

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
Strategic Goal 3 - Safe Food					
Use of pesticides classified as having the highest potential to cause cancer, or neurotoxic effects, will be reduced by 5 percent (from the fiscal year 1995 baseline).		3	5-percent reduction of pesticide use that has the highest potential to cause cancer or neurotoxic effects		
Strategic Goal 4 - Pollution Prevention					
	10 to 15 model agricultural partnership projects will be implemented 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.	2		Implementation of 10-15 model agricultural partnership pilot projects	2
Protect homes, communities, and workplaces from harmful exposure to pesticides and related pollutants through improved cultural practices and enhanced public education, resulting in a reduction of 5 percent, or 20 percent cumulative, (from 1994 levels) in the incidences of pesticide poisonings reported nationwide.		5	20-percent reduction in pesticide poisonings		5
				15 percent of pesticides with high probability to leach/persist in groundwater will be managed.	2

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
Reduce exposure to toxic fibers by identifying fibers of concern and addressing risks through outreach, voluntary initiatives, and regulatory actions.		5	None		None
890,000 additional people will live in healthier residential indoor environments.		5	315,000 additional people will live in radon-resistant homes.		5
			64,000 additional people will live in radon-mitigated homes.		5
			360,000 fewer children will be exposed to environmental tobacco smoke.		5
			890,000 additional people will live in healthier indoor air.		5
2,580,000 students, faculty, and staff will experience improved indoor air quality in their schools.		5	2,580,000 students, faculty, and staff will experience improved indoor air quality in their schools.		5
The quantity of Toxic Release Inventory pollutants released, treated, or combusted for energy recovery will be reduced by 200 million pounds, or 2 percent, from 1999 reporting levels.		3	200-million-pound reduction of Toxic Release Inventory pollutants		3
None (The goal is an output: Continue to assure broad implementation and reporting of pollution prevention measures by facilities required to submit Toxic Release Inventory data.)		1		145,000 facilities submit form Rs with source reduction activity.	2

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
	Achieve a 5-percent increase in the use of cleaner flexographic ink technologies and cleaner (water-or-non-solvent-based) adhesives or bonding techniques in foam furniture products.	2	None	None	
	From the 1998 baseline, expand pollution prevention practices in the garment and textile industries by achieving a 35-percent increase in the use of safer alternative cleaning technologies.	2		35-percent increase in the use of alternative cleaning technologies	2
Reduce persistent, bioaccumulative, and toxic chemicals in hazardous waste streams by 10 percent as compared to the 1991 baseline.		3	10-percent reduction in persistent, bioaccumulative, and toxic chemicals in hazardous waste streams		3
Divert an additional 1 percent (for a cumulative total of 29 percent or 64 million tons) of municipal solid waste from landfilling and combustion, and maintain per-capita generation of Resource Conservation and Recovery Act (RCRA) municipal solid waste at 4.3 million pounds per day.		3	64 million tons of municipal solid waste will be diverted.		3
			4.3 million pounds of daily municipal solid waste generation will be maintained.		3

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
Strategic Goal 5 - Waste Management					
170 (for a cumulative total of 408 or 24 percent) of high priority RCRA facilities will have human exposures controlled and 170 (for a cumulative total of 289 or 17 percent) of high priority RCRA facilities will have groundwater releases controlled.		3	170 high-priority RCRA facilities with human exposures to toxins controlled		3
			170 high-priority RCRA facilities with human exposures to groundwater controlled		3
	Maximize all aspects of Potentially Responsible Party participation, including 70 percent of the work conducted on new construction starts at nonfederal facility sites on the National Priorities List, and emphasize fairness in the settlement process. Result is timely and protective cleanup of the nation's worst contaminated sites and other significant threats to public health.	2	None	None	
	Complete 21,000 leaking underground storage tank (LUST) cleanups.	2		21,000 LUST cleanups completed	2

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
	90 percent of underground storage tanks will be in compliance with the December 22, 1998, requirement, which improves upon the estimated 65 percent as of December 22, 1998 deadline.	2		90 percent of underground storage tanks in compliance with the 1998 deadline	2
	74 percent (141 for a cumulative total of 2,600 out of 3,536) of existing RCRA municipal solid waste facilities in states will have approved controls in place to prevent dangerous releases to air, soil, groundwater, and surface water.	2		74 percent of existing RCRA municipal solid waste facilities in states will have approved controls in place to prevent dangerous releases to air, soil, groundwater, and surface water.	2
	146 more hazardous waste management facilities will have approved controls in place to prevent dangerous releases to air, soil, and groundwater, for 65 percent of 3,380 facilities.	2		146 hazardous waste management facilities with permits or other controls in place	2
	75 percent of facilities will be in compliance with the Risk Management Plan (RMP) submission requirements, 6 states (for a cumulative total of 13) will be implementing the RMP program, and 300 audits will be completed on RMP plans to determine completeness and accuracy.	2		75 percent of facilities in compliance with the RMP requirements	2

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
	400 additional facilities will be in compliance with the Spill Prevention, Control and Countermeasure (SPCC) provisions of the oil pollution prevention regulations (for a cumulative total of 890 facilities.)	2		400 facilities in compliance with the SPCC provisions	2
	Facilities will be managed so as to prevent releases into the environment.	2	None	None	
Strategic Goal 6 – Cross Border and Global					
	Aquatic, wetland, riverine, and terrestrial habitat protection and restoration projects funded by the Great Lakes National Program Office will impact an additional 6,000 acres.	4	6,000 aquatic, wetland, riverine, and terrestrial habitat acres affected by the Great Lakes National Program Office		4
	Documented reductions or progress which fulfills challenges under the Binational Toxics Strategy.	3		10 actions catalogued and publicized (partnerships or virtual elimination demonstration projects) initiated toward reduction challenges under the Binational Toxics Strategy	2
	Greenhouse gas emissions will be reduced from projected levels by more than 50 million metric ton carbon equivalent per year through EPA partnerships with businesses, schools, state and local governments, and other organizations. Reduction level will increase 10 million metric tons over 1999.	3	50-million-metric-ton carbon equivalent reduction in annual greenhouse gas emissions		3

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
Reduce energy consumption from projected levels by more than 60 billion kilowatt hours, resulting in over \$ 8 billion in energy savings to consumers and businesses that participate in EPA's climate change programs. Increase of 15 billion-kilowatt hours and \$ 5 million in annual energy savings over 1999.		3	60-billion-kilowatt-hour annual energy savings		3
Restrict domestic consumption of class II hydrochlorofluorocarbons below 208,400 metric tons and restrict domestic exempted production and import of newly produced class I chlorofluorocarbons and halons below 130,000 metric tons.		3	Less than 208,400-metric-ton domestic consumption of class II hydrochlorofluorocarbons		3
			Less than 130,000 metric tons of domestic exempted production and import of newly produced class I chlorofluorocarbons and halons		3
Restrict domestic consumption of methylbromide by 25 percent of baseline levels.		3	Less than 19,200-metric-ton domestic consumption of methylbromide		3

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
Strategic Goal 7 - Right to Know					
	All community water systems will issue annual consumer confidence reports according to the rule promulgated in August 1998.	2		55,000 community water systems will comply with the regulations to publish consumer confidence reports.	2
				249 million people will be served by community water systems that will comply with the regulation to publish consumer confidence reports.	2
	By FY 2000, 75 percent of environmental monitoring for public access and community tracking (EMPACT) communities will have in place, or will have initiated, community based strategies for time relevant environmental monitoring, information management and communication that will result in sustained community capacity to deliver timely environmental information.	2		Number of community-based strategies in place (i.e., number of pilots)	2

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
Strategic Goal 8 - Sound Science					
None (Goal is an output: Implement sectorwide environmental strategies that will lead to reduced priority emissions, Toxic Release Inventory emissions, water use, energy use and volatile organic compounds emissions as well as non-point source pollution and nitrogen fertilizer use among participating firms.)		1	30-percent reduction in emissions		3
	All 50 Project XL (eXcellence and Leadership) projects will be implemented.	2		50 Project XL projects in implementation	2
Strategic Goal 9 - Credible Deterrent					
Deter and reduce noncompliance and achieve environmental and human improvements by maintaining a strong, timely, and active enforcement presence. EPA will direct enforcement actions to maximize compliance and address environmental and human health problems; 75 percent of concluded enforcement actions will require environmental or human health improvements, such as pollutant reductions and/or physical or management process changes.		3	300-million-pound reduction in pollution		3
				35 percent of actions require pollutant reductions	2

Continued from Previous Page

**Appendix IV
End and Intermediate Outcome Performance
Goals and Measures in EPA's Fiscal Year 2000
Performance Plan**

End outcome goals	Intermediate outcome performance goals	Level in hierarchy of indicators	End outcome performance measures	Intermediate outcome performance measures	Level in hierarchy of indicators
	increase entities self-policing and self-correction of environmental problems through use of EPA incentive policies: small business, small community and audit policies over fiscal year 1998 levels.	2		1150 facilities self-disclose potential violations.	2

Continued from Previous Page

Ordering Information

The first copy of each GAO report is free. Additional copies of reports are \$2 each. A check or money order should be made out to the Superintendent of Documents. VISA and MasterCard credit cards are accepted, also.

Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office
P.O. Box 37050
Washington, DC 20013

Orders by visiting:

Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders by phone:

(202) 512-6000
fax: (202) 512-6061
TDD (202) 512-2537

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

Orders by Internet:

For information on how to access GAO reports on the Internet, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web home page at:

<http://www.gao.gov>

To Report Fraud, Waste, or Abuse in Federal Programs

Contact one:

- Web site: <http://www.gao.gov/fraudnet/fraudnet.htm>
- e-mail: fraudnet@gao.gov
- 1-800-424-5454 (automated answering system)

**United States
General Accounting Office
Washington, D.C. 20548-0001**

**Official Business
Penalty for Private Use \$300**

Address Correction Requested

<p>Bulk Rate Postage & Fees Paid GAO Permit No. GI00</p>

