

Report to the Ranking Minority Member, Committee on Environment and Public Works, U.S. Senate

January 1996

ENVIRONMENTAL MANAGEMENT

An Integrated Approach Could Reduce Pollution and Increase Regulatory Efficiency





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

Resources, Community, and Economic Development Division

B-270370

January 31, 1996

The Honorable Max S. Baucus Ranking Minority Member Committee on Environment and Public Works United States Senate

Dear Senator Baucus:

The nation's environmental programs have traditionally been designed to control the amount of pollution released to a specific medium—air, water, or land. Under the medium-specific approach, permits are issued and inspections are conducted for pollution released to each medium. Although these programs have significantly improved the condition of the environment, concerns have been raised that the medium-specific approach encourages "end-of-the-pipe" pollution controls to treat, store, or dispose of waste, rather than encouraging pollution prevention. In addition, some industry representatives believe that having a different set of requirements for each medium increases the cost and the complexity of compliance with environmental programs.

Environmental agencies in Massachusetts, New York, and New Jersey have experimented with multimedia, or integrated, approaches to environmental management as alternatives to the traditional medium-specific approach. The integrated approaches used in these three states focus to varying degrees on a whole industrial facility and all of its sources of pollution. Proponents believe that integrated approaches will encourage pollution prevention, reduce compliance costs to industry, and make environmental programs more efficient. In its recent review of the Environmental Protection Agency (EPA), the National Academy of Public Administration concluded that EPA should move toward integrating its responsibilities under various statutes to provide the maximum flexibility needed to effectively meet environmental priorities.¹

Because of your interest in environmental management, you asked us to review (1) the approaches used in Massachusetts, New York, and New Jersey; (2) state and industry experience with these approaches; and (3) EPA's role in these efforts.

¹Setting Priorities, Getting Results: A New Direction for the Environmental Protection Agency, National Academy of Public Administration (Apr. 1995).

Results in Brief

Although environmental agencies in Massachusetts, New York, and New Jersey have made significant efforts to integrate their regulatory activities and to incorporate pollution prevention into these activities, each state has approached integration differently. Massachusetts has adopted a single, integrated inspection to assess a facility's compliance with environmental statutes, rather than conducting separate medium-specific inspections. New York is using a facility-management strategy in which a team directed by a state-employed facility manager is assigned to targeted plants to coordinate medium-specific environmental programs. New Jersey is testing the use of a single, integrated permit for industrial facilities, rather than separate permits for releases of pollution to each medium.

Massachusetts and New York believe that their integrated approaches have proven to be successful and are implementing them statewide. Because permits have only recently been issued as part of New Jersey's integrated approach, officials in that state believe that it is too early to evaluate the success of its pilot. According to industry officials in these three states, integrated approaches are beneficial to the environment, achieve regulatory efficiencies, and reduce costs.

EPA has supported the three states' efforts primarily through funding assistance. However, according to officials from each state, obtaining funding from EPA's grants for medium-specific programs has entailed lengthy negotiations that might discourage other states. Massachusetts officials also noted that meeting EPA's requirements for medium-specific reports has been difficult. However, EPA recently proposed a new grant program that the agency believes will provide states with easier access to funding for multimedia programs and will ease the reporting of multimedia activities. If this grant program is successful, it may promote the states' efforts to integrate environmental management.

Background

The Pollution Prevention Act of 1990 established the national policy that pollution prevention, as opposed to pollution control, is the preferred method of addressing the nation's pollution problems. The act also specified that reduction of pollution at its source (source reduction) is the preferred method to prevent pollution and should be used whenever possible. Source reduction includes modifying equipment, technology, processes, or procedures; reformulating or redesigning products; substituting raw materials; and improving operations and maintenance.

EPA generally delegates responsibility for the day-to-day implementation of environmental programs to state agencies that perform a variety of regulatory functions. Examples of regulatory functions include issuing permits to limit facilities' emissions, conducting inspections, and taking enforcement actions against violators. States may also provide nonregulatory technical assistance, public education, and outreach activities to industry. Because many of the nation's environmental statutes are medium-specific, state environmental agencies and EPA have traditionally been organized around separate medium-specific program offices.

State program offices receive federal grants under environmental laws, such as the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act. Each state program office has traditionally conducted its own regulatory activities and reported them to EPA. Program offices within a state may have had little contact with each other. For example, an air inspector may not know whether a facility is complying with hazardous waste or water regulations or what impact a required remedial action is likely to have on releases to other media. Most of EPA's funding for state environmental programs has also traditionally been medium-specific, although in recent years EPA has provided some funding for the states' multimedia activities.

Managing the states' regulatory functions to cut across medium-specific program lines is a recent phenomenon. In 1991, the New Jersey legislature directed that state's Department of Environmental Protection to conduct a pilot project. In 1992, the New York Department of Environmental Conservation began integrating its environmental programs by using a facility-management approach, under which the agency assigned a team and a "facility manager" employed by the state to coordinate environmental programs at targeted facilities. The Massachusetts Department of Environmental Protection began testing multimedia pollution prevention inspections in 1989 and in 1993 adopted the approach statewide. Other states, such as Oregon, Washington, and Wisconsin, have taken steps to integrate their regulatory activities, but their efforts have been either very recent or limited in scope.

Massachusetts, New York, and New Jersey have moved toward integrating their regulatory activities to promote the use of pollution prevention strategies, particularly source reduction, rather than strategies that rely on pollution control. Pollution control methods include installing devices that treat waste after it has been produced. The three states have also sought to

address problems arising from fragmented, medium-specific approaches to environmental management, such as pollution shifting, whereby equipment intended to control pollution in one medium merely transfers pollutants to another medium rather than reducing or eliminating them at the source.

Each State Has Chosen a Different Approach to Integration

Each of the three states has taken a different approach to integrating its regulatory activities (see table 1). Massachusetts conducts multimedia, facilitywide inspections instead of numerous medium-specific inspections. The state also coordinates its enforcement activities to address violations in all media. New York coordinates the activities of its separate medium-specific environmental programs and targets its efforts at the firms generating most of the state's toxic discharges. New Jersey is testing the use of facilitywide permits, which would replace a facility's medium-specific permits with a single permit governing the facility's releases to all media. Although the three states have taken different approaches to integrating regulatory activities, each state looks at whole facilities and their production processes to identify opportunities to prevent pollution.

Table 1: Integrated Environmental Management in Three States

State	Approach	Start date	Targeted facilities
Massachusetts	Facilitywide inspection and enforcement	Statewide implementation in 1993	All but the largest facilities
New York	Facility management	Statewide implementation in 1992	400 facilities that produced 95 percent of the hazardous waste
New Jersey	Facilitywide permits	Pilot in 1991	18 facilities that volunteered

All three states plan to evaluate the environmental outcomes of integrating environmental management. Although they have just begun to develop evaluation plans, the data needed to fully evaluate their initiatives will not be available for some time. On the basis of their experiences thus far, officials in Massachusetts and New York generally consider the integrated approaches in their states to be successful, while New Jersey officials believe that it is too early to predict the success of that state's permitting test.

Massachusetts Uses Facilitywide Inspection and Enforcement

In contrast to the medium-specific inspections most states use to assess whether a facility's releases to a specific medium comply with state and EPA regulations, Massachusetts has developed a multimedia approach that incorporates inspections for all media into a single, facilitywide inspection that focuses on a facility's production processes. Inspectors follow the flow of materials used in the production processes and the inputs and outputs of each process. At each step of a process, an inspector identifies areas of regulatory concern and opportunities to prevent pollution. EPA Region I helped Massachusetts develop the single, unified inspection procedure used by that state's inspectors.

Massachusetts began testing its facilitywide approach to inspection and enforcement in 1989 and then implemented it statewide in 1993. The Massachusetts Department of Environmental Protection annually conducts about 1,000 inspections at the approximately 20,000 facilities in the state that are subject to facilitywide inspections. To support this approach, the Department reorganized its Bureau of Waste Prevention, which had been organized with separate air, waste, and water sections, each of which had performed its own compliance, enforcement, and permitting activities. In field offices, these sections were replaced by a combined section for compliance and enforcement and a separate section for permits. The Bureau did not eliminate medium-specific units in the central office because the medium-specific nature of federal environmental statutes necessitated some corresponding organization. Instead, the Department established an Office of Program Integration to coordinate these medium-specific units and foster pollution prevention.

Massachusetts's enforcement actions encompass violations in all media and encourage violators to use source reduction techniques to achieve compliance. When notifying a facility of any violation, the state encourages the facility to implement any specific opportunities for source reduction that the state inspector has identified and informs the facility that the state's Office of Technical Assistance can assist in identifying and pursuing additional opportunities for source reduction. The state also forwards a copy of all enforcement documents to the Office of Technical Assistance, which in turn contacts the facility to offer free, confidential assistance. When serious violations and large penalties are involved, the state may negotiate agreements requiring facilities to undertake pollution prevention measures in exchange for reduced penalties.

In addition to its multimedia inspections, Massachusetts recently tested facilitywide permits that incorporate pollution prevention by combining the various permits issued to a facility for each medium into a single permit. According to a state official, Massachusetts ended this test because of a lack of participation by the business community, which apparently believed that a permit process with a pollution prevention component would be more complicated than the existing permit process, which was focused exclusively on pollution control.

Although Program Is Not Yet Fully Evaluated, Massachusetts Believes It Is a Success

Under a fiscal year 1995 multimedia demonstration grant from EPA, Massachusetts is required to evaluate the results of its integrated management efforts. After fiscal year 1995, Massachusetts plans to develop and test a number of "environmental-yield" indicators, such as the number of unregistered waste streams discovered and waste streams eliminated as well as the amount of emissions reduced. During the next few years, the state plans to assess the effectiveness of its integrated program by measuring the extent to which pollution has been reduced at its source.

Massachusetts officials believe that the implementation of the state's facilitywide inspection approach has improved the state's enforcement program. They reported that facilitywide inspections have successfully found sources of pollution that had not been registered or permitted, promoted pollution prevention, and encouraged companies to seek technical assistance from the state. According to state officials, facilitywide inspections have streamlined the regulatory process by replacing numerous single-medium inspections with one multimedia inspection at most facilities.

However, the transition from medium-specific to facilitywide inspections has been challenging. It has required inspectors, previously knowledgeable about a single environmental statute, to become familiar with multiple statutes, techniques to prevent pollution, and industry's manufacturing processes. According to state officials, inspectors have found it difficult to keep abreast of regulations in numerous environmental programs, as well as the latest strategies to prevent pollution. As a result, some inspectors are concerned that they may overlook compliance problems outside their area of expertise. In a 1994 report on the state's enforcement program, EPA praised the program's emphasis on pollution prevention but questioned whether inspectors were focusing on pollution prevention to the detriment of taking enforcement actions.² The report noted, however, that the state

 $^{^2\}mathrm{Final}$ Multimedia Overview Report on Massachusetts Department of Environmental Protection Enforcement, EPA Region I (Jan. 14, 1994).

had begun an enforcement training course that stressed the importance of stronger enforcement actions.

In addition, Massachusetts has found that facilitywide inspections are unworkable at the state's largest, most complex facilities, which constitute five percent of the firms it inspects. According to a state official, the state uses a single-medium approach at these facilities because facilitywide inspections at these facilities take too long, require too many inspectors, and demand too much expertise.

New York Uses a Facility-Management Approach

New York is pursuing integrated environmental management by coordinating its medium-specific activities. In 1992, New York started to target its regulatory activities at the approximately 400 facilities that produced about 95 percent of the state's toxic discharges. The state still performs single-medium program activities, such as inspections and permitting, but state officials coordinate these activities to provide an integrated approach at targeted plants. To coordinate activities at each of these plants, New York has assigned employees of its Department of Environmental Conservation as facility managers at 94 plants. According to a state official, however, it will likely take more than the originally planned 10 years before New York will be able to assign a facility manager to each of its 400 targeted facilities.

The facility manager serves as the primary point of contact between the state and a plant. Working with a team of inspectors and other technical staff, the facility manager plans and oversees inspections, enforcement, and other regulatory activities at the facility. For example, the facility manager guides team members in developing a profile of the facility that includes permit data, compliance history, and other information chronicling the plant's emission and waste-handling practices. In doing so, the facility manager can assess what is needed to enhance the facility's efforts to prevent pollution.

Because developing the expertise needed to perform multimedia inspections is difficult, New York requires its inspectors to perform only medium-specific inspections. However, the facility managers coordinate these inspections to provide an integrated inspection approach. As the liaison between the state and the facility, each facility manager must work closely with company officials. One facility manager pointed out that an advantage of this relationship is that the facility manager can sometimes

convince the company to implement pollution prevention strategies without enforcement actions.

New York uses enforcement actions as an opportunity to require a company to undertake projects to prevent multimedia pollution. For example, after identifying environmental violations by a chemical manufacturer, the state negotiated a multimedia consent order requiring the manufacturer to adopt air, water, and other compliance measures and to fund an employee from the Department of Environmental Conservation to assist the facility manager by serving as a full-time monitor at that facility. A consent order at another facility required the company to fund a monitor and develop a chemical-specific pollution prevention program with specified reduction goals. New York also allows companies to reduce their penalties for violating environmental laws by performing actions that provide environmental benefits, such as contributing to emergency preparedness programs for toxic spills.

In addition to coordinating inspection and enforcement activities, New York plans to test the use of integrated permits at 3 or 4 of the 400 targeted facilities. Initial testing has begun at one facility.

Although Challenges Remain, New York Believes Program Is a Success According to New York officials, the state's facility-management approach has improved the efficiency of its regulatory activities while simplifying the facilities' compliance activities. New York's approach operates more efficiently because each facility manager coordinates all of the state's regulatory activities and the various inspectors approach each facility as a team.³ One facility manager said New York's approach has been effective in bringing problem facilities into compliance more rapidly because the facility manager is able to focus on problems in all media at one time. State officials report that industry has benefited from having a single point of contact with the state to coordinate the state's inspection visits. Although the facility-management approach is labor-intensive and challenging for the facility managers—who must develop expertise in a wide range of federal and state laws, industry processes, and techniques to prevent pollution—the difficulty in obtaining detailed knowledge about each environmental program is mitigated by the presence of single-medium inspectors on each facility's inspection team.

 $^{^3}$ 1993-1994 Annual Report Multimedia Pollution Prevention in New York State, New York State Department of Environmental Conservation (Jan. 1995).

As part of a departmentwide review, New York plans to develop performance measures to evaluate its program. These measures will assess the amount of pollution prevented and the impact of environmental programs on the state's natural resources. New York officials have not yet established milestones for performing this evaluation.

New Jersey Is Testing Facilitywide Permits

New Jersey is testing the use of a single, integrated permit for industrial facilities, an approach that departs from the existing practice of issuing permits to industrial facilities on a medium-specific basis. Under the existing practice, a facility may have dozens of medium-specific permits that regulate environmental releases through "end-of-the-pipe" treatment. Depending on the medium-specific program, permits may state what pollutants may be discharged, prescribe technology-based discharge limits, or contain other requirements.

In 1991, the New Jersey legislature passed a Pollution Prevention Act that directed the state's Department of Environmental Protection to test the use of facilitywide permits at industrial facilities. The test is intended to identify ways to streamline and integrate medium-specific requirements, incorporate pollution prevention into the permitting process, and improve the overall administrative efficiency of permitting by consolidating all of a facility's environmental permits for air, water, and solid and hazardous waste into a single, facilitywide permit. This permit incorporates a pollution prevention plan that examines all of a facility's production processes and identifies those that use or generate hazardous substances regulated under New Jersey's Pollution Prevention Act. Thus, the permit encourages the facility to consider those substances for elimination or reduction.

In the past, industry has criticized permits to approve a facility's production processes and equipment, particularly air permits, because they hampered the facility's efforts to respond quickly to changing market conditions. Facilities that wish to make even minor changes to a process often had to go through lengthy preapproval procedures. As an incentive to participate in its permitting pilot, New Jersey allows facilities with facilitywide permits to change processes without preapproval, as long as the changes will not increase releases of hazardous substances or increase

⁴New Jersey firms must develop plans to reduce their use and generation of the chemicals listed in EPA's Toxic Release Inventory, a major database through which companies annually report to EPA and the states on their facilities' estimated releases of hundreds of chemicals. Firms must perform "materials accounting" to track their inputs, byproducts, and outputs throughout their production processes.

the generation of waste. Companies that take advantage of this operating flexibility are required to expand the number of pollutants that come under their plans to prevent pollution.

New Jersey's facilitywide permit requires facilities to at least meet existing emission standards. State officials believe that requiring facilities to achieve the lower emission levels identified in their source reduction plans would deter them from identifying opportunities to reduce emissions. State officials expect that facilities will voluntarily undertake additional source reduction projects and reduce their emissions to obtain such benefits as reduced costs for raw materials and waste disposal.

New Jersey officials selected 18 facilities from those that volunteered to participate in the test of facilitywide permits. According to state officials, issuing the first permit took 3 years because major changes were made in the state's permitting process and some participants did not calculate the information on waste generation needed to identify opportunities to prevent pollution. New Jersey issued the first facilitywide permit in December 1994 to a pharmaceutical manufacturer that makes tablets, ointments, creams, and inhalation products for asthmatics. As of December 1995, two additional permits had been issued.

New Jersey Believes It Is Too Early to Evaluate the Program's Success

Because New Jersey has issued only a few facilitywide permits, state officials believe that it is too early to evaluate the program's success or predict whether this permitting approach should be used more extensively. Nonetheless, New Jersey officials have already found that some facilities lack key technical data about the amount of waste generated, such as accurate data on baseline emissions for a whole facility. New Jersey's legislature has directed the state's Department of Environmental Protection to report by March 1, 1996, on the results of the test and include recommendations as to whether the state should expand the use of facilitywide permits.

Industry's Views

To obtain industry's views on integrated approaches, we interviewed officials representing six firms that had participated in the integrated initiatives in the three states. These officials generally believed that their state's integrated approach was beneficial to the environment while increasing regulatory efficiencies and reducing costs to industry.

Company representatives at two small facilities in Massachusetts reported that the facilitywide inspections, coupled with the state's technical assistance, contributed to source reduction at their facilities. For example, according to an official from a Massachusetts electroplating company, the awareness of preventing pollution that was gained from the state's facilitywide inspections and technical assistance has convinced the company of the value of reducing pollution at its source. The company anticipates that replacing a hazardous chemical with a nonhazardous one will allow it to pay lower annual compliance fees as a small-rather than large-quantity generator of hazardous waste.

According to a representative of a New York manufacturer, its facility manager has been able to expedite changes in the company's production processes. For example, in less than a month the facility received approval to substitute ethanol for methanol, a change that eliminated the need for at least 30 air permits. According to this representative, the approval process ordinarily would have taken 8 or more months.

Representatives of a New Jersey pharmaceutical manufacturer, the first company in that state to obtain a facilitywide permit, stated that this facility has eliminated one hazardous substance and substantially reduced the use of two others. The company eliminated 1-1-1 trichloroethane, an ozone-depleting substance, in its label-making process by changing to an aqueous-based process that uses no hazardous substances. The facility also developed a recycling program to recover Freon, an ozone-depleting substance, from its production of inhalers.

Representatives of this firm also thought that the facilitywide permit had simplified their company's compliance activities. For example, a new 5-year permit combines 70 air and water permits, as well as approvals of hazardous waste storage, into a single permit that eliminates the need for the company to frequently renew multiple permits. The company's facilitywide permit consolidates a 3-drawer horizontal file cabinet filled with permits into one 4-inch binder (see fig. 1). The company also enjoys greater operating flexibility under New Jersey's air regulations, which allow holders of facilitywide permits to change production processes without a lengthy preapproval process if the change does not increase hazardous emissions to air or discharges to water.

Figure 1: Paperwork Reduction Resulting From Facilitywide Permit



A representative of a New Jersey pharmaceutical manufacturer holds the binder containing the single facilitywide permit that replaces voluminous medium-specific permits.

Source: Schering-Plough Corporation.

According to representatives of the pharmaceutical manufacturer, the company spent \$1.5 million in capital and labor resources to develop the permit but anticipates annual cost savings of \$300,000 from reduced costs for waste disposal and raw materials. The company also anticipates substantial reductions in administrative costs because it will no longer have to frequently replace numerous individual permits.

Officials at other facilities, however, were less positive about their state's integrated approach. For example, while supportive of New York's integrated approach, an official of a company in that state thought that the competitive marketplace, rather than the government, prompted industrial involvement in preventing pollution. Similarly, an official from a Massachusetts company stated that an interest in economic efficiency drove the company's interest in reducing waste.

EPA's Funding and Reporting Systems Present Problems for States With Multimedia Initiatives

According to officials from Massachusetts, New York, and New Jersey, while EPA has provided funding for their multimedia pollution prevention activities, reaching agreements with EPA to fund such activities has required extensive negotiations. Obtaining funds for Massachusetts also required EPA's approval as well as congressional authorization to reprogram funds from other activities. New Jersey and EPA officials have discussed ways to incorporate that state's multimedia activities into EPA's medium-specific grant system, but they have not fully resolved the issue. Officials in all three states concurred that even though EPA's grant system has some flexibility, having to petition the agency to obtain funds may discourage some states from considering multimedia initiatives.

Medium-Specific Program Grants Do Not Readily Fit Multimedia Activities

EPA has provided grants to each of the three states to support their multimedia pollution prevention activities. Massachusetts received a \$288,000 grant in fiscal year 1990 for its facilitywide inspection pilot; New York received a \$222,276 grant in fiscal year 1993 to conduct outreach and technical assistance projects; and New Jersey received a \$207,000 grant in fiscal year 1993 to assist the state with its permitting pilot. However, all three states subsequently found that continued funding for multimedia activities was not easily obtained under the current federal medium-specific grant programs.

For each medium-specific grant program, the states use EPA's guidance to prepare annual plans detailing the activities they intend to perform in the coming fiscal year. Once EPA approves a state's plan, it allocates funding

on the basis of the planned activities. In fiscal years 1993 and 1994, Massachusetts and New Jersey requested that EPA provide additional credit for work performed under these medium-specific programs for their facilitywide inspection and permit programs. The two states asked that EPA, in calculating their allocation, give them extra credit for multimedia activities because these activities encompass all media programs, require additional staff training and guidance, and contain an additional component to prevent pollution.

After extensive negotiations, Massachusetts and EPA signed agreements attached to medium-specific grants for fiscal years 1993 and 1994. These agreements allowed the state to conduct facilitywide inspections and to support its multimedia activities by using the funds allocated for compliance and enforcement activities under its existing medium-specific grants. ⁵

Because of the potential benefits from multimedia activities and the difficulty of funding them through medium-specific grants, EPA awarded Massachusetts a \$1 million grant in fiscal year 1995 to demonstrate multimedia activities. This grant was made with funds that would have otherwise been awarded through medium-specific grants, and no new funds were granted. According to EPA and state officials, although the grant was intended to alleviate their concerns about using medium-specific funding for multimedia activities, it does not permanently resolve the problem of funding for multimedia activities because it can be renewed for only 2 years.

EPA and New Jersey officials have extensively discussed ways to fund that state's facilitywide permit activities through medium-specific grants. As of September 1995, New Jersey and EPA have not fully resolved this issue.

New York asked EPA for a special allocation from its medium-specific grants to support the state's pollution prevention unit because if the unit's duties were part of a medium-specific program they would be eligible for EPA's support. New York also noted that its multimedia program represents a new way of doing business because its focus is on preventing pollution at the state's largest dischargers. After extensive negotiations, EPA agreed to allow New York to fund the multimedia activities of the pollution prevention unit with funding for medium-specific activities. New York's pollution prevention unit incurred costs of \$838,000 in fiscal year 1994 and operated under a comparable agreement in fiscal year 1995.

 $^{^5}$ These funds amounted to \$1.5 million in fiscal year 1993 and \$1.4 million in fiscal year 1994.

Officials in all three states noted that having to extensively negotiate with EPA to obtain funds for an integrated approach may discourage other states from adopting multimedia initiatives.

Reporting Results From Multimedia Inspections to EPA's Medium-Specific Reporting Systems Is Difficult

In addition to the problems with obtaining funds for multimedia activities, Massachusetts has encountered problems in reporting its multimedia activities to EPA, as required under various federal environmental statutes. For example, while Massachusetts conducts facilitywide inspections and prepares comprehensive reports detailing the results from multimedia inspections, EPA requires the state to report the results to multiple medium-specific reporting systems, each of which has different formats, definitions, and reporting cycles. According to a Massachusetts official, preparing these duplicative reports is both wasteful and demoralizing to staff.

Recent EPA Initiatives Address State Multimedia Activities

A grant program EPA recently proposed may provide states with easier access to multimedia funding and promote the reporting of their integrated facilities management activities. As part of EPA's fiscal year 1996 budget request, the President proposed that the Congress give EPA's Administrator the authority to allow states to consolidate numerous medium-specific grants into a new "Performance Partnership" grant program. These grants would allow states to allocate funds to reflect local priorities while continuing to pursue national policy objectives and fulfilling all federal statutory requirements. The grant program would include new performance measures to simplify reporting requirements while ensuring continued environmental protection. EPA plans to work with state officials to develop performance measures that assess the programs' environmental impact, instead of using measures that focus only on the number of medium-specific program activities performed. According to officials in Massachusetts, New York, and New Jersey, each state plans to participate in this grants program.

EPA is also studying the effectiveness of initiatives to prevent pollution in eight northeastern states, including the multimedia efforts in Massachusetts, New York, and New Jersey. The study, which EPA planned to complete by December 1995, will compile data on the experiences of industrial facilities with government activities on how to prevent pollution. In addition, EPA plans to conduct a national study of pollution prevention effectiveness in 1996.

Conclusions

Although the three states have not yet fully assessed the effectiveness of integrating environmental management, this approach shows potential for reducing pollution and increasing regulatory efficiency. Officials representing Massachusetts and New York, the states having the most experience with integrated approaches, generally report improvements in promoting pollution prevention and achieving regulatory efficiencies. Industry representatives also reported positive results from using this approach. Nonetheless, drawbacks exist. For example, performing integrated inspections and promoting pollution prevention requires inspectors to have additional expertise.

Each of the three states has found it difficult to fund its multimedia activities through EPA's grants for medium-specific programs. While EPA has worked with these states to resolve the funding problems, the extensive negotiations that were required could discourage other states from adopting multimedia initiatives. In addition, Massachusetts had problems reporting multimedia activities under medium-specific reporting systems. A new grant program recently proposed by EPA has the potential to facilitate the multimedia funding and reporting process for the three states. If successful, this grant program may resolve funding and reporting issues for those other states that are interested in using an integrated environmental management approach in their regulatory activities.

Agency Comments

We provided copies of a draft of this report for review and comment to EPA, the Massachusetts Department of Environmental Protection, the New York Department of Environmental Conservation, and the New Jersey Department of Environmental Protection. On December 8, 1995, we met with EPA officials, including the Director of the Pollution Prevention Policy Staff, who generally agreed with the report's findings. The officials stated that the funding and reporting problems noted in the report are, at least in part, the result of (1) medium-specific statutes and appropriations and (2) the medium-specific accountability processes associated with them.

On December 5, 1995, we met with Massachusetts and New York state officials, including the Director of the Office of Program Integration of the Massachusetts Department of Environmental Protection and the Chief of the Bureau of Pollution Prevention of the New York State Department of Environmental Conservation. On December 8, 1995, we met with New Jersey officials, including the Director of the Office of Pollution Prevention of the New Jersey Department of Environmental Protection. These state officials agreed with the report's facts and findings and

suggested some technical corrections, which we have incorporated into the report as appropriate.

Scope and Methodology

We performed our work at the Massachusetts Department of Environmental Protection, the New York Department of Environmental Conservation, and the New Jersey Department of Environmental Protection. According to EPA, these states are among the leaders in adopting integrated approaches to regulatory activities. We contacted six companies that had significant experience with their state's integrated efforts—three in Massachusetts, two in New York, and one in New Jersey. We also performed work at EPA's headquarters in Washington, D.C., and at the agency's regional offices in Boston and New York City, the EPA offices that cover the states we visited. We performed our work in accordance with generally accepted government auditing standards from May 1995 through December 1995.

As arranged with your office, unless you publicly announce this report's contents earlier, we plan no further distribution until 10 days after the date of this letter. At that time, we will send copies of the report to other appropriate congressional committees and the Administrator of EPA. We will also make copies available to others upon request.

Please call me at (202) 512-6112 if you or your staff have any questions. Major contributors to this report are listed in appendix I.

Sincerely yours,

Peter F. Guerrero Director, Environmental Protection Issues

Major Contributors to This Report

Resources, Community, and Economic Development Division, Washington, D.C. Lawrence J. Dyckman, Associate Director Ed Kratzer James S. Jorritsma Bruce Skud Janet G. Boswell

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