 EPA — REGION I
NEW ENGLAND

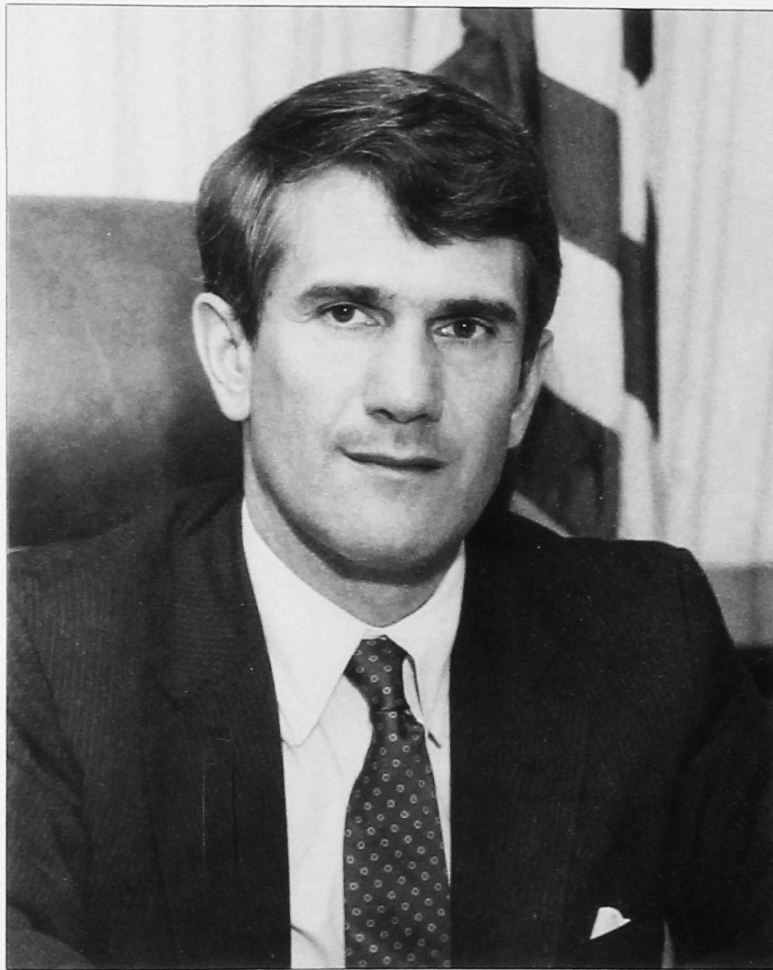
THE YEAR IN REVIEW

JULY 1983 — JULY 1984

**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION I**

THE YEAR IN REVIEW

AUGUST, 1984



"My main mission is to ensure the firm and fair enforcement of our environmental statutes."

*Michael R. Deland
Regional Administrator*

Dear Friends of the New England Environment:

This past year, the Region I Office of the U.S. Environmental Protection Agency made significant strides towards our common cause—protection of New England's precious environment. This "Year in Review" highlights some of our activities in 1983-1984 to help you understand more about our work on behalf of our environment. We recognize full well that our achievements are due in large measure to the interest and support of the New England states and of each of you. You have earned our thanks.

One year ago, at the behest of Administrator William D. Ruckelshaus, I returned to the Environmental Protection Agency as Regional Administrator for New England. In the past year, we strove to help regain EPA's credibility by taking tough enforcement actions, cleaning up hazardous waste sites, responding to a changing environmental and technological landscape, hiring committed staff, communicating our efforts to the community, and encouraging participation in our deliberations.

My main mission is to ensure the firm and fair enforcement of our environmental statutes. In the last year, Region I took more than 250 formal enforcement actions, including notices of violations, administrative orders and penalty assessments, and civil and criminal court cases. Among the results . . .

- 200 tons of sewage sludge are no longer being dumped daily into Salem Harbor.*
- The Canob Park neighborhood of Richmond, Rhode Island, will have clean drinking water instead of water contaminated with service station gasoline.*
- School systems are newly attentive to their responsibility to protect school children from asbestos, after we assessed the nation's first civil penalty for violations of the asbestos-in-schools regulations.*
- Region I prepared the first federal criminal environmental case filed in Massachusetts in the past ten years. The case involved violations of PCB rules and falsification of information reported to the EPA. The company entered a plea of guilty in May and sentencing is scheduled for August.*
- The nation's first Superfund liability trial against seventeen defendants continues in U.S. District Court in Concord, New Hampshire. In the six months since its inception, more than 40 witnesses have been heard and two thousand exhibits have been introduced.*
- Federal judges approved an EPA proposal that part of the large civil penalties assessed against the City of Providence for air and water pollution violations be used to fund an environmental health study which benefits people in Rhode Island. We will continue to press for similar creative uses of the fines we collect.*

This enforcement pace means that by the end of the fiscal year Region I will achieve the highest level of enforcement action in its history. However, this is no time for complacency—enforcement continues to be my highest priority.

As important as enforcement is, in part because it cuts across all program lines, we have many other mandates. The most agonizing environmental issue in Region I is hazardous waste. To date, we have put over \$50 million of Superfund money to work to clean up New England's sites. Almost two-thirds of this money was allocated to the Region since Bill Ruckelshaus returned to EPA. In addition, he delegated to me the authority to spend up to \$1 million to respond to imminent threats to public health or the environment. This authority enables us to react quickly to hazardous waste emergencies throughout New England, such as relocating families living near asbestos disposal sites in two New Hampshire communities.

Unfortunately, the wastes that have been accumulating for over 100 years in disposal sites or wastes that have been indiscriminately or illegally dumped cannot be cleaned up overnight. The studies needed to determine the most sensible long-term environmental solution are necessarily detailed. They take longer than we would like and often seem interminable to those who bear the severe emotional trauma of living near a site. However, I pledge that in every case where an imminent threat to public health is found we will continue to take quick corrective action.

Meanwhile our older, more mature water and air programs also made strides this past year. For example, we spent over \$150 million to help local governments throughout New England improve surface water quality by building wastewater treatment plants—and the new automobile inspection and maintenance programs in Connecticut and Massachusetts, the result of EPA-state cooperation, are making a vital contribution to the control of smog and carbon monoxide pollution. Hopefully, these brief snapshots may prompt you to read the more detailed Division Reports and “case studies.”

Our many allies throughout the Region appreciably augment our environmental protection efforts. New Englanders' strong support for environmental protection is reflected in the leadership role played by our Congressional delegation on environmental issues. We try to build upon this support imaginatively and aggressively. Similarly, the six New England states are often national environmental leaders. For example, they are in the vanguard in ground water protection and were instrumental in the development of the EPA's ground water protection policy. We continue to assist them by providing grants and conducting important research to pioneer emerging national issues, such as the control of leaking underground storage tanks.

I've spent much of my time reestablishing relationships with our various constituencies. I've met with the New England Congressional delegation and Governors. We meet quarterly with state environmental directors as a group and frequently on an individual basis. I've visited with most major environmental and business organizations in New England and inaugurated joint discussions between those two groups. Meeting with the media is obviously important as we try to heighten public awareness of and participation in environmental problem solving. No time has been better spent than the many hours talking with citizens throughout New England who live near hazardous waste sites, hearing first hand their deepseated and understandable concerns. The opportunity to listen to and learn from those who care about New England's environment is invaluable.

We have accomplished much, but there is much more to be done. My priorities for next year include:

- increasing enforcement efforts with particular emphasis on municipal violations, industrial pretreatment and oversight of state activities at hazardous waste management facilities,*
- continuing aggressive clean up of hazardous waste sites,*
- implementing the ground water strategy, with an emphasis on leaking underground storage tanks,*
- accelerating our outreach efforts to our diverse constituency groups,*

- *coordinating to ensure that our actions do not transfer pollutants from one media to another,*
- *reissuing water pollution control permits with an emphasis on controlling toxics, and*
- *continuing to represent New England's views in the national acid precipitation debate.*

My list of priorities could not be complete without special mention of Boston Harbor, the most severe water pollution problem in New England. Sewage and industrial waste from 43 cities and towns as far west as Framingham pollute the Harbor and cause one of the worst violations of the Clean Water Act in the country. This must not continue.

Soon we must make several major decisions which will influence the shape of the Harbor for decades to come. These decisions will not be easy and certainly will be controversial. However, until they are made, there can be no meaningful progress on Harbor clean up.

We do not lack environmental challenges Thanks to several key staff additions, we are now better able to confront them. Last year I had the pleasure of picking Paul Keough as Deputy Regional Administrator. Paul has served EPA in an exemplary fashion for 13 years—most of these as an extremely able, articulate spokesman for the Region. As Deputy, or "Mr. Inside," he has channeled his talents to skillfully guiding the Region day to day. He tempers his directives with common sense and good humor, greatly boosting the morale of all.

I am delighted that we persuaded Pat Parenteau to leave his post as Vice President for Natural Resources at the National Wildlife Federation to join us as Regional Counsel. His litigation and management skill will markedly enhance our enforcement efforts, and he will add a helpful dimension to our policy deliberations.

I am equally pleased that Brooke Cook recently joined us as Director of Public Affairs. She comes to us from the Commonwealth of Massachusetts, where she served most recently as Director of Communications in the Executive Office of Human Services. Whether publicizing our enforcement actions or building community relations, she brings a creative, enthusiastic spark. The addition of these talented people completes our senior staff and adds new strength and experience to our senior management team.

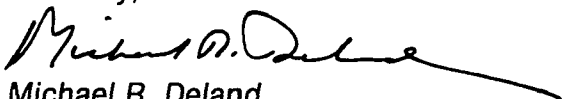
In closing, I extend my deep appreciation to the committed and extremely capable Region I staff. They are dedicated public servants who constantly demonstrate by effort and accomplishment their commitment to the citizens of New England and to the New England environment.

We share the abiding New England ethic first stated over 100 years ago by the Massachusetts Board of Health (the nation's first):

"We believe that all citizens have an inherent right to the enjoyment of pure and uncontaminated air and water and soil, that this right should be regarded as belonging to the whole community, and that no one should be allowed to trespass upon it by his carelessness and his avarice, or even by his ignorance."

Still confronting and challenging us a century later is the realization of that right. With your participation and guidance, we will continue to take significant steps toward a cleaner, safer New England environment.

Sincerely,



*Michael R. Deland
Regional Administrator*

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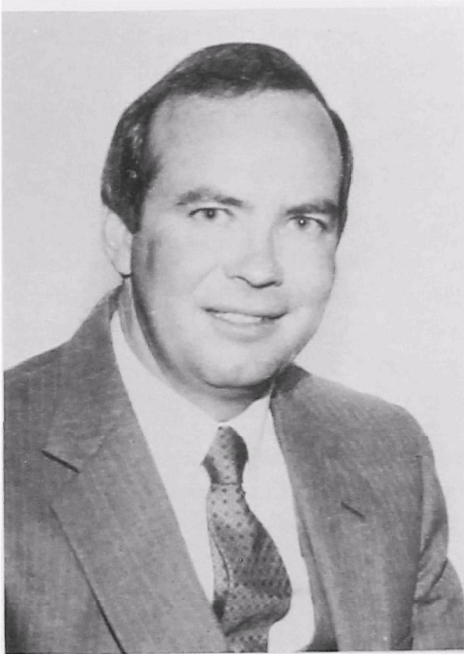
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Deputy Regional Administrator Paul G. Keough

I was honored this year—my 13th year with EPA—to have been selected by Mike Deland to serve as his Deputy Regional Administrator.

The duties of Deputy Regional Administrator are many—and varied. My primary responsibility is to serve as the Regional Administrator's chief lieutenant. In this capacity, I work closely with him in the development and implementation of all major policy and program initiatives.

For example, as Mike made clear in his opening letter, increased enforcement is his highest priority. I was named overall Regional Enforcement Coordinator for the Region. It is my responsibility to work with our legal and technical staff to develop and implement an overall enforcement strategy that meets the Regional Administrator's objective of a more vigorous enforcement presence.

We added new resources to our enforcement program, including seventeen new attorneys and technical specialists. New sections dealing with hazardous waste programs were established within our Waste Management Division. A new enforcement tracking process was established, and once a month the senior program staff meets with me to discuss the progress of enforcement cases. We also hired a criminal investigator, and I anticipate the development of a vigorous criminal enforcement program.

The Region clearly demonstrated that it has the will and the capacity to enforce the laws it administers. As the Regional Administrator pointed out, 1984 was a very good year, a record year—as far as enforcement is concerned. And he noted, we intend to keep the pressure on in 1985.

Another major responsibility of the Deputy is to serve as the day-to-day operations director in the Regional Office. I am extensively involved with all aspects of resource distribution, planning, and budgeting.

In the past year, we gained significant increases in our resources. In fact, by the end of this year, our staffing level will reach an all-time high. And, as we move ahead with the hiring of new personnel, the Regional Administrator gave me the responsibility for overseeing a vigorous equal opportunity hiring program.

To help meet that objective, we transferred George Coblyn, our long-time Equal Employment Officer, to the staff of the Regional Administrator and gave him the responsibility to recruit women and minorities. This paid dividends. During the year, 43 percent of all new professional and administrative hires were women and 13 percent were minority group members. With new positions coming to the Region in 1985, we intend to build a more vigorous affirmative action program.

I also assumed the responsibility of Director of Civil Rights and worked with Mr. Coblyn to develop a strong external affirmative action program. Working with various specialists in our program offices, we initiated a major effort to see that women-owned and minority-owned businesses, as well as small businesses, are given a fair opportunity to participate in EPA-funded programs.

I helped develop new management procedures and processes during the year and streamlined the way we manage our internal affairs. For example, we implemented a new planning process to direct priorities. Each Division and Office Director prepares an "Accomplishment Plan" outlining the implementation of the announced goals and objectives of the Regional Administrator. This ensures direction, enables mid-course adjustments, provides a simple means of accountability and tracking, and allows us to guide our state counterparts in carrying out their EPA funded activities.

I have also been given the overall responsibility of overseeing regional participation in the Agency's new Strategic Planning and Management System (SPMS). This is a system developed by Alvin Alm, our national Deputy Administrator, that checks our progress towards implementing various programs on a quarterly basis. I meet quarterly with our senior managers to evaluate how we are doing in carrying out various program responsibilities. It enables us to identify problem areas so that we can make resource adjustments early on.

During this year, I was selected as "lead" Deputy Regional Administrator for Drinking Water and Groundwater Programs. In this capacity, I represent all of the regions at Headquarters as budget and policy decisions on groundwater protection and drinking water are made. I am particularly pleased with this assignment since our Regional Administrator has made the protection of groundwater one of his highest program priorities.

As you will see in reports from our Division and Office Directors on the following pages, a good deal of progress was made in 1983-1984. Mike outlined some of his

priorities for this coming year. I would like to list a few areas in which I expect to be heavily involved.

- (1) **Enforcement**—Mike will continue to stress the need to enforce the law to achieve environmental results. Prime areas of activity will be dealing with municipal violators and asbestos in schools. I will continue to serve as overall enforcement coordinator.
- (2) **Toxics**—Region I will be working with our states to develop a strong toxics program in all program areas. I will be heavily involved in working with our Toxics Coordinating Committee to see that all cross-program matters are addressed.
- (3) **Special ocean studies**—I will be working with our Water Division to develop strategies for carrying out special studies of Narragansett Bay, Buzzards Bay, and Long Island Sound. These studies will be patterned after the Chesapeake Bay Study being carried out by our Region III Office in Philadelphia.
- (4) **Continued emphasis on minority hiring.**
- (5) Working with the states on the implementation of our **groundwater protection strategy.**



Mike Deland and Paul Keough



WASTE MANAGEMENT DIVISION

Merrill S. Hohman, Director

Region I's Waste Management Division administers EPA's two federal statutes dealing with the management of hazardous waste.

The first, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, known as Superfund, created a federal response program to clean up hazardous waste sites which have resulted from past improper management activities and which present significant risks to health and the environment.

The second, the Resource Conservation and Recovery Act (RCRA), establishes a regulatory framework for the "cradle-to-grave" management of hazardous wastes.

To achieve the goals of these statutes, our major initiatives this year have been:

- To continue progress in cleaning up hazardous waste sites, placing major emphasis on sites on the Superfund National Priority List
- To ensure private parties meet their responsibilities under Superfund for site clean up and reimbursement to government of expenses incurred in connection with removal and/or remedial actions
- To implement the RCRA waste management program in Region I giving emphasis to state program development, delegations, permitting, enforcement, and monitoring

HAZARDOUS WASTE SITE CLEAN UP— THE SUPERFUND PROGRAM

EPA has developed a Superfund National Priority List that presently consists of 546 waste sites across the country that pose the most serious risks to human health and the environment. In New England, 45 sites are now on the National Priority List.

Superfund provides EPA with the authority to respond quickly to hazardous waste-related emergencies that pose a danger to public health or that threaten the environment. Region I used this rapid response authority in connection with a growing variety of situations, including, as examples, 1) dealing with PCB "hot spots" 2) attending to asbestos wastes improperly disposed of in a residential neighborhood, and 3) removing sunken barrels as a precautionary measure to protect a drinking water supply.

In the 13 month period from March 1983 to April 1984, the Region obligated more than \$30 million of Superfund monies for hazardous waste emergency response and remedial action in New England. By way of comparison, \$20 million was obligated by the Region over the nearly two year period that began in July of 1981. We also provided over \$450,000 in grants to the New England states to help them conduct site investigations and preliminary assessments.

While our emphasis has been on addressing sites that are on the National Priority List, EPA and the states continue to identify and develop response plans for all sites. We often undertake action under our emergency authority to protect public health at sites that may never qualify for the National Priority List.

In Region I, nearly 900 potential hazardous dump sites have been identified, and we will evaluate all of them by 1986. Preliminary assessments were completed at 523 sites across New England, and work is in progress at 64 sites. The Region conducted elaborate on-site investigations at 84 locations, and 23 more are underway.

Each hazardous waste site presents its own set of special problems. As the New Bedford case on page five demonstrates, responding to Superfund sites frequently can involve coordinating the efforts of several state agencies and several departments of local government, and tapping the expertise of other federal agencies. These multi-governmental efforts are designed to determine whether contaminated air, land, surface water or groundwater is posing a health risk to people who live or work near a hazardous waste site.

REGION I NATIONAL PRIORITY LIST SITES

MASSACHUSETTS

- Baird & McGuire
Holbrook
- Cannon Engineering Corp.
(CEC)
Bridgewater
- Charles George Reclamation Trust Landfill
Tyngsborough
- Groveland Wells
Groveland
- Hocomonco Pond
Westborough
- Industri-Plex 128
Woburn
- New Bedford
New Bedford
- Nyanza Chemical Waste
Dump
Ashland
- PSC Resources
Palmer
- Plymouth Harbor Cannon
Engineering Corp.
Plymouth
- Re-Solve, Inc.
Dartmouth
- Silresim Chemical Corp.
Lowell
- W.R. Grace & Co., Inc.
(Acton Plant)
Acton
- Wells G&H
Woburn
- Iron Horse Park
Billerica
- Sullivan's Ledge
New Bedford

VERMONT

- Old Springfield Landfill
Springfield
- Pine Street Canal
Burlington

NEW HAMPSHIRE

- Auburn Road Landfill
Londonderry
- Dover Municipal Landfill
Dover
- Keefe Environmental
Services (KES)
Epping
- Ottati & Goss Kingston
Steel Drum
Kingston
- Somersworth Sanitary
Landfill
Somersworth
- Sylvester
Nashua
- Tinkham Garage
Londonderry
- Kearsage Metallurgical Corp.
Conway
- Savage Municipal Water Supply
Milford
- South Municipal Water Supply Well
Petersborough

RHODE ISLAND

- Davis Liquid Waste
Smithfield
- Landfill & Resource
Recovery, Inc.
North Smithfield
- Peterson-Puritan, Inc.
Lincoln Cumberland
- Picillo Farm
Coventry
- Stamina Mills, Inc.
North Smithfield
- Western Sand & Gravel
Burrillville

MAINE

- F. O'Connor Site
Augusta
- McKin Co.
Gray
- Pinette's Salvage Yard
Washburn
- Saco Tannery Waste Pits
Saco
- Winthrop Landfill
Winthrop

CONNECTICUT

- Beacon Heights Landfill
Beacon Falls
- Laurel Park, Inc.
Naugatuck Borough
- Solvents Recovery Service
of N.E.
Southington
- Yaworski Waste Lagoon
Canterbury
- Kellogg-Deering Well Field
Norwalk
- Old Southington Landfill
Southington



NEW BEDFORD

Indiscriminate use, mismanagement and improper disposal of polychlorinated biphenyls (PCBs) has resulted in serious, widespread multimedia contamination in New Bedford, Massachusetts. PCBs have been found in the water, sediments, fish and shellfish of the Harbor; in the area's air, groundwater and soils; and at upland disposal sites at the New Bedford Municipal Landfill and Sullivan's Ledge.

The difficulties facing EPA in reducing exposure to PCB's in the area are exemplified by the involvement of four other federal agencies, four state agencies and two communities. These various government bodies share a common concern about how to dredge bottom sediments without creating a worse problem, how to protect aquatic life and the local fishing industry, and, most importantly, how to convey an adequate understanding of the health implications to people who live and work in the area.

Because there has been PCB contamination of 18,000 acres of bottom sediments and the water column in the Acushnet River and Buzzard's Bay, because a PCB "hot spot" in the River will necessitate dredging more than a million cubic yards of material, because of the number of government entities dealing with the site, and because of the variety of environmental pathways of exposure involved, it is understandable that the New Bedford site is considered to be one of the most complex environmental problem sites in the country.

To date, preliminary field investigations have identified two important sources of continuing contamination of New Bedford Harbor and nearby Buzzards Bay: a PCB "hot spot" at the head of the Acushnet River which flows into the Harbor, and the New Bedford wastewater treatment facility whose sewer lines were contaminated by industrial users of PCB's. As part of the overall \$3.4 million Remedial Investigation Feasibility Studies, EPA Region I has initiated a feasibility study for the Acushnet River "hot spot" zone. The study, due to be completed in August will identify possible remedial actions and assist the state in finding a suitable disposal site.

EPA has taken a number of other actions to deal with the PCB problem in New Bedford.

Last winter, the federal government filed suit under Superfund on behalf of EPA, the Coast Guard, and the National Oceanic and Atmospheric Administration against six corporations seeking, among other things, to recover damages for the PCB contamination of natural resources, and for past and future clean-up costs.

In June, Region I announced the transfer of nearly \$1 million to the Centers for Disease Control (CDC) in Atlanta. CDC will conduct a health study of New Bedford area residents to determine the extent of human exposure to PCB's, contamination of local food supply and occupational contact. The Massachusetts Department of Health and the CDC will coordinate planning of the investigation. The first phase of the project involves collecting data to determine the extent of PCB contamination in the local population and the various routes of exposure, the second will consist of case studies to test specific hypotheses concerning PCB health effects.

Among other enforcement actions, Region I issued Administrative Orders to the City of New Bedford and to Cornell-Dubilier Electronics. The electronics firm is scheduled to clean out the affected sewer lines in August, and the City will monitor the effluent and sludge for PCB's at the waste water treatment facility.

At Sullivan's Ledge, another National Priority List site in the New Bedford Harbor area, we started preliminary investigations to determine whether a different solution is needed. EPA has also conducted an air monitoring program, with background measurements in areas of particular concern to residents in Fairhaven. The results of this work should also be available this summer.

To keep the residents informed and involved in the many facets of this serious environmental problem, EPA has undertaken a substantial community outreach program. It includes a bilingual (English and Portuguese) monthly newsletter, distribution of more than 26,000 copies of a site-specific PCB pamphlet, and the convening of public meetings at critical decision-making points. The EPA project officer meets regularly with local citizen groups to obtain public input to help EPA find appropriate solutions.

EPA seeks to identify parties whose past practices may have been at least partly responsible for conditions at Superfund National Priority List sites. We have the authority to enter into negotiations with "potentially responsible parties" to arrange for site clean up or for repayment to the Fund for government monies spent in connection with site-related work. If these negotiations fail, EPA can refer cases to the Department of Justice for court actions to recover costs incurred by government in cleaning up sites. Thus far, more than

\$6 million in private funds have been expended at nine sites in New England.

It is common in New England for Superfund sites to have scores of "potentially responsible parties" to contact. This year, the Region mailed more than 1,400 notice letters as the first step in documenting actions for eventual cost recovery or negotiated settlement, hundreds more than any other EPA region.

THE GILSON ROAD SITE IN NASHUA, NEW HAMPSHIRE— GROUNDWATER CONTAMINATION

During several months of activity in 1979, more than 1,300 55-gallon drums of hazardous waste were disposed of at a seven acre sand and gravel pit on Gilson Road in Nashua, New Hampshire. The gravel pit had been in active use for some time, receiving refuse and discarded demolition materials.

The state estimates that at least 900,000 gallons of toxic chemical wastes were discharged into a leach field. The chemical seeped into the soil, entered the groundwater and contaminated more than 100 million gallons of groundwater in the Gilson Road vicinity.

A number of emergency actions were taken to assure the protection of public health and the environment from imminent threats posed by the contamination.

City of Nashua officials erected a security fence funded by EPA around the whole site in May of 1980. The contents of roughly 1,300 discarded drums containing chemical wastes were sampled, analyzed and transported to an approved hazardous waste facility. An emergency interception and recirculating system was installed to temporarily contain the contaminated groundwater, to prevent the waste from migrating into Lyle Reed Brook and the Nashua River.

In August 1981, New Hampshire and EPA officials entered into a first-in-the-nation "cooperative

agreement" to provide federal resources and conduct engineering studies to clean up the site. Federal, state and local government have been directly involved in the planning and execution of the project. As a technical achievement itself, the site work has won state, regional and national awards for engineering excellence.

On May 14, 1984, New Hampshire Governor John H. Sununu and Regional Administrator Deland broke ground at Gilson Road for a \$5.4 million groundwater treatment facility to treat half a million gallons of groundwater per day over a two year period. When completed, the treatment facility will subject the tainted groundwater to physical, chemical and biological purification processes.

Costs have exceeded \$10 million at Gilson Road, of which the EPA Superfund share has been in excess of \$9.5 million. Gilson Road is the Region's most ambitious, technologically innovative and costly hazardous waste site clean up effort to date.

The combined efforts of EPA, the City of Nashua and the New Hampshire Water Supply and Pollution Control Commission dramatically demonstrate how the job of hazardous waste site cleanup can be accomplished when various levels of government join forces in a truly cooperative spirit.

Recently, a Region I staff member experimented with an innovative groundwater sensing technique at the Western Sand and Gravel Superfund hazardous waste site in Rhode Island. In certain circumstances the new technique obviates the need for sinking expensive monitoring wells since it can detect contaminated underground plumes by means of remote sensing. This Region I innovation is now in regular use nationwide.

This year, Administrator Ruckelshaus transferred to Regional Administrators the authority to obligate \$1 million for immediate action in emergency situations. Region I used this authority frequently, e.g. in Barrington and Hudson, New Hampshire; Derby, Connecticut; and Plymouth, Massachusetts. As additional authority is transferred later this year, Region I will be able to move still more quickly to initiate and accomplish the long-term remedial action cleanup work necessary at so many sites across New England.

HAZARDOUS WASTE MANAGEMENT— THE RCRA PROGRAM

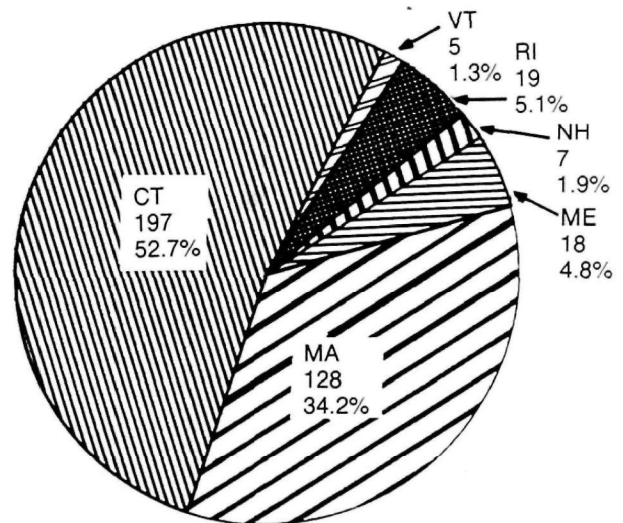
Region I provided state hazardous waste programs with \$3,840,729 of federal grant assistance in FY 84 and worked closely with state personnel on a broad range of hazardous waste management activities. They include:

- providing technical engineering, hydrological and laboratory assistance
- conducting facility permit application reviews
- inspecting waste facilities to determine compliance with waste management requirements
- developing special expertise in the area of storage and treatment of hazardous waste in tanks
- taking enforcement actions when necessary, and
- assessing the continuing readiness of state programs to administer components of the federal hazardous waste program.

The RCRA program is designed to prevent future Superfund sites from developing. Through a comprehensive "cradle-to-grave" management process, EPA and the states track hazardous wastes from original generation through transportation, treatment and storage to final disposal. All RCRA treatment, storage and disposal facilities must have a permit detailing how they will meet Agency standards for safe operation and

maintenance. There are 374 of these facilities in New England. The pie chart shows their distribution.

**TREATMENT, STORAGE AND DISPOSAL
FACILITIES REQUIRING PERMITS IN
REGION I AS OF 6/30/84**



During the past year, Region I and the New England states formally requested 29 facilities to submit permit applications, and in addition, seven applications were voluntarily submitted for review. Since 1982, EPA and the states requested a total of 126 applications, including applications from all RCRA facilities in the states of Vermont, New Hampshire and Rhode Island. Following these requests, many existing waste management facilities and handlers decided not to conduct activities subject to RCRA regulations and closed their operations.

In enacting RCRA, Congress wanted the states to operate their own hazardous waste programs in place of the federal RCRA program by 1985. To accomplish this, a state must develop a program that is as strict or more strict than the federal program. All six of the New England states now are operating the enforcement and permitting elements of the RCRA program. All six states will seek and expect to be granted approval from EPA to run the full RCRA program sometime this winter.

Ensuring that waste handlers meet applicable standards is a key component of the RCRA program. To identify any deficiencies or violations, 140 RCRA inspections were conducted by Region I. Over the last nine months the states have conducted an additional 912 inspections. There were 43 enforcement referrals to the states. Region I issued nineteen complaints, with \$116,000 of penalties assessed.

During the year, Region I RCRA staff developed a regional enforcement policy defining EPA and state roles so that it would be clear when it was appropriate for EPA to take enforcement action in states that had

been delegated the federal RCRA management program. We are proud of our pioneering work in this area. The Agency recently adopted our policy for use nationwide.

CANOB PARK

Residents of Canob Park, a section of Richmond, Rhode Island, had been experiencing gasoline contamination in their water supply. A number of homeowners stopped drinking the water from their wells on the advice of the Rhode Island Department of Health and were using bottled water at their own expense.

EPA conducted extensive studies to determine the nature and possible sources of the problem. These studies, concluded in the fall in 1982, determined that there were two independent sources of contamination: an Exxon service station and a neighboring Mobil service station. As is the case at most filling stations, both of these gas stations stored their product in underground tanks. Leaks of gasoline from these tanks had entered the groundwater, moved with the groundwater toward Canob Park and resulted in contamination of many of the private wells in the area.

When the study results were known, EPA met with Exxon and Mobil representatives in an attempt to deal with the problem. After extensive negotiations failed to produce an agreement, EPA, in September, 1983, exercised its administrative authorities under RCRA and issued Orders to Exxon and Mobil requiring the companies to:

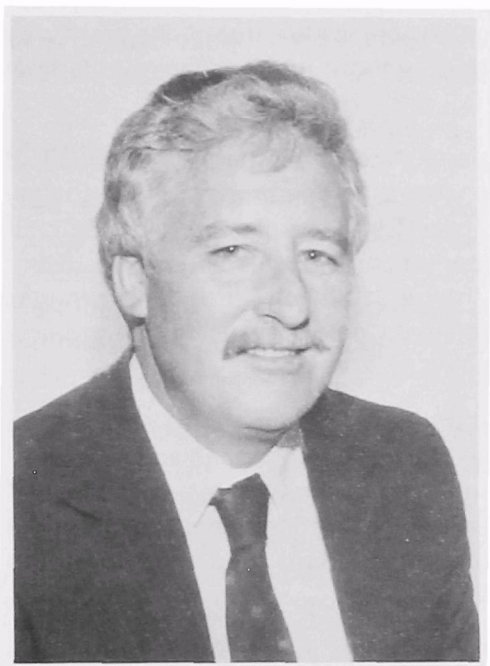
- 1) supply bottled or filtrated water to residents

- with contaminated water, 2) remove all contaminated soil from company property and 3) withdraw and treat all contaminated groundwater. This was the first case in the nation to make use of a RCRA hazardous waste provision in connection with a leaking underground storage tank problem.

Issuance of the Administrative Orders spurred renewed negotiations with the oil companies. Finally, in February 1984, a series of agreements among EPA, Exxon and Mobil, and the State of Rhode Island were signed. Together, these agreements provided a comprehensive solution to the Canob Park problem.

Under the agreements, Exxon and Mobil, with a contribution by the State, will fund the construction of a new municipal water system for Canob Park. Until the new system is in place and operational, the oil companies will supply bottled water to all homes with contaminated water and conduct an ongoing monitoring program to determine whether the contamination has spread to other areas.

The municipal water system to serve the affected area is expected to be operational in September of 1985.



WATER MANAGEMENT DIVISION

David A. Fierra, Director

The Water Management Division administers the federal Clean Water Act (CWA) for water pollution control and the Safe Drinking Water Act (SDWA) for drinking water protection. This report highlights progress during this past year in restoring and protecting the valuable water resources of New England, including accomplishments in the following priority areas:

- increased compliance with environmental laws;
- development and implementation of strong groundwater protection programs;
- restoration of water quality in lakes and streams;
- increased emphasis on the clean up of Boston Harbor and Salem Harbor;
- management of the federal financial investment in water pollution control improvement;
- improving the cooperative State/EPA efforts in preserving and protecting New England's water.

In general, New England's water is very clean. Approximately 66% of New England's major stream areas meet the CWA standards for fishing and swimming, but remaining water quality problems are complex and costly to solve. Our population enjoys drinking water that is of high quality, but violations of national standards do occur.

PERMITTING AND COMPLIANCE

Clean Water Act Permit Program

The Clean Water Act permit program limits the amounts and kinds of pollutants that can be discharged into navigable waters. In Region I, there are 2,650 such permits issued to both municipal and industrial sources.

The Region made substantial progress this year toward its goal of reissuing all expired major permits in the states where EPA has primary permit issuance authority (Maine, Massachusetts, New Hampshire and Rhode Island). Two-thirds of all outstanding major permits will be issued by October 1984; by October 1985 the backlog of expired major permits will be eliminated.

These new permits will result in significant environmental improvement since they require reductions in toxic pollutant levels to assure protection of the receiving waters. The Region is using two powerful new tools which more accurately assess the water quality impact of toxic discharges: (1) EPA's new criteria for toxic pollutants and (2) new toxicity testing (bioassay) procedures. In addition, many of the municipal permits incorporate pretreatment program requirements which will begin to regulate toxic discharges to municipal sewer systems.

Clean Water Act Permit Compliance

This year the principal permit program emphasis was on improving the compliance rate of major municipal wastewater treatment plants, but industrial dischargers were not neglected. Ninety percent of all major municipal and industrial dischargers were in compliance with permit limitations.

To ensure the high compliance rate was maintained, the Region completed 238 inspections of permitted facilities and took a series of enforcement actions, issuing 34 Administrative Orders and referring 6 cases for judicial action. (The Region has 651 major facilities: 339 are municipals, 312 are industrials.) Inspections completed during this period are as follows:

	Municipals	Industrials
Compliance Sampling	19	22
Compliance Evaluation	133	25
Performance Audit	32	7
	184	54

National Municipal Policy

The National Municipal Policy requires all municipalities to construct waste water treatment plants by July 1, 1988 with or without the assistance of federal funds.

All six New England states submitted State Municipal Policies which ensure that their municipalities comply with this rule. These State Policies address the construction grant/permit compliance relationship, distinguish between the fundable and unfundable projects and require Municipal Compliance Plans for projects that will not receive federal funds.

The Region and the New England states are working closely to insure: 1) all operating facilities are in compliance, 2) all fundable facilities are on a schedule and 3) all communities which need treatment facilities but will not be eligible for federal funding prepare the required compliance plans.

In addition, the Region has initiated several enforcement actions to ensure community compliance. The

SOUTH ESSEX SEWERAGE DISTRICT (Salem Harbor)

For the first time in over four years sewage sludge is not being discharged to Salem Harbor because the South Essex Sewerage District (SESD) has complied with an EPA order upheld in May by the U.S District Court. The chemically treated sludge is now being trucked to the Peabody landfill.

The District facility serves five communities (Salem, Peabody, Beverly, Marblehead and Danvers) and a number of industries, including 18 tanneries. Approximately 200 tons of sludge per day had been discharged to Salem Harbor since early 1980 when SESD shut down its sludge incinerator. The shut-down was due in part to the presence of hazardous levels of chromium that are present in the ash as a result of the incineration process. However, the SESD sludge is not a hazardous waste.

EPA filed suit against the District on September 22, 1983 to permanently end the discharge. The Conservation Law Foundation joined the suit.

Major obstacles to resolving the violations were: 1) locating a suitable sludge disposal site and 2) raising an adequate level of funding for plant changes and sludge treatment.

In efforts to bring about resolution of the problems, the Region stopped all construction grant payments to the District and to its member communities, met with city and town officials and citizens at their respective town meetings to encourage local override of "Proposition 2-1/2" and issued Administrative Orders directing SESD to evaluate alternative sludge management and to repair and modify its treatment plant in Salem.

As a result of these coordinated activities, the five municipalities of SESD did vote to override the "Proposition 2-1/2" limit on the District's budget in order to provide funds for equipment to prepare the sludge for landfilling. The Region provided technical assistance to establish that the landfilling solution was feasible. EPA won a summary judgment motion establishing that the District was violating the law and obtained a court-ordered date of July 2, 1984 for the District to cease sludge discharges to the ocean.

The District now has a safe, environmentally acceptable way to dispose of its sludge. As a result, residents of the North Shore of Massachusetts will be able to use the Harbor more fully for recreational purposes.

states and the Region are establishing a priority order for all communities not scheduled to receive federal funds. We will initiate enforcement actions where appropriate to require these communities to construct needed wastewater treatment facilities.

Pretreatment

The Region is requiring 77 communities in New England to develop and implement pretreatment programs to limit industrial discharges of specific chemicals into municipal sewer systems. Compliance with pretreatment standards is a priority because it will significantly reduce the discharge of toxic pollutants.

In addition, federal enforcement actions are being initiated against industrial dischargers who do not comply with the federal standards, including several enforcement actions against metal platers. The Region will also overview state and locally developed programs to ensure they are strictly enforced.

CONSTRUCTION OF MUNICIPAL WASTEWATER TREATMENT PLANTS

Between July 1983 and June 1984 the Region processed approximately 325 construction grants actions to-

talling \$153 million to help local governments build waste water treatment plants and other facilities designed to improve water quality. These transactions reflect our efforts to manage a sound construction grants program through the commitment of funds to new projects that will result in significant water quality benefits.

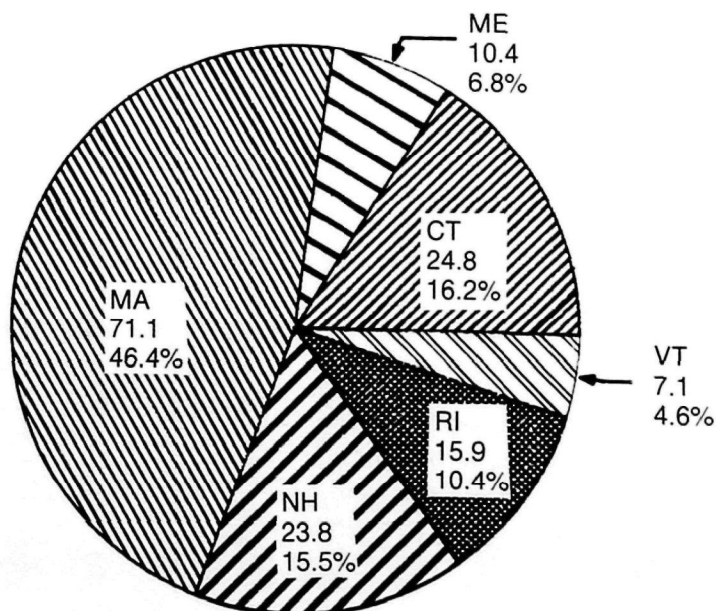
The Region and our states are also committed to those initiatives which ensure that minority and women owned business enterprises (MBE/WBE) are awarded a fair share of EPA grant dollars. Emphasis on the program this year resulted in a ten percent increase in the MBE/WBE participation rate.

Providing assistance to communities experiencing financial and management problems with the operation of wastewater treatment facilities was a major initiative in the water program. Contractors for EPA produced two manuals to aid in this effort: "The New England Wastewater Management Guide" and "Energy Management in New England Wastewater Treatment Plants—A Practical Guide". In cases where problems are perceived, municipal wastewater treatment plant compliance inspections now include a financial and management component.

CONSTRUCTION GRANTS NET OBLIGATIONS JULY 1983 – JUNE 1984

Region I Total—\$153 Million

MILLIONS OF DOLLARS



LAKE MEMPHREMAGOG— A CASE OF INTERNATIONAL COOPERATION

An extensive algae growth over a large portion of Lake Memphremagog on the Vermont/Canadian border stirred citizen and governmental concern about the Lake's future. Studies undertaken to determine the causes of the problem indicated that the nutrient input to the Lake was too great.

In 1973, the governments of Canada, the United States, Vermont and Quebec formed the Lake Memphremagog Committee to discuss programs for a coordinated approach to water quality management in the Lake. The Committee outlined actions for both countries which were aimed at improving water quality and protecting the Lake.

During the last ten years the communities of North Troy, Brighton, Newport Town, Derby Center, Orleans, Derby Line, Barton, Glover, and

Newport City have invested \$22 million to clean the waters of this area: \$3 million came directly from the communities, \$4 million was provided by grant assistance from the State of Vermont, and \$15 million was from the federal construction grants program.

With the completion of the City of Newport's wastewater treatment facility this past year, all municipal pollution abatement projects in the US portion of the Memphremagog Basin and nearby communities are complete. The municipalities jointly have made a significant water quality accomplishment, and now the residents of the Vermont and Canadian communities which participated in this major task will be able to reap the recreational and water supply benefits.

WATER QUALITY PLANNING AND STANDARDS

During the past year the New England states improved their water quality management processes. All states updated their Continuing Planning Process documents, developed priority waterbody lists and are focusing resources on developing solutions to problems in priority waterbodies.

The Region developed a toxic pollutant control plan to use for establishing appropriate permit limits to achieve water quality standards. The states, with the assistance of EPA, are now developing toxic pollutant studies for the Naugatuck River in Connecticut, the Pawtuxet River in Rhode Island and the Ten Mile River in Massachusetts. The studies will serve as the basis for establishing permit limits for the multiple discharges to these waterways and the ultimate achievement of water quality standards and uses.

EPA awarded four Clean Lakes grants which provide for pollution abatement activities designed to improve the quality of each lake and increase their recreational potential. The four lakes are: Kezar Lake, New Hampshire; Webber Lake, Maine; and Spy Pond and Whitman Pond in Massachusetts.

WETLANDS PROTECTION

The discharge of dredged or fill material into the nation's waters is regulated by a permit program administered by EPA and the U.S. Army Corps of Engineers. Region I attempts to ensure there are no avoidable or significant impacts to water quality or wetlands from dredge and fill activities. When adverse effects cannot be avoided, we seek full mitigation of water quality impacts and habitat losses.

The Region reviewed approximately 500 proposed projects this year ranging from small boat docks to major wetland fills for highway or industrial development. We recommended specific permit conditions or modifications to reduce environmental impacts in nearly half the cases. These conditions include reducing the amount of wetland filled or compensating for lost habitat through creation of new wetlands. Fifteen permit applications were denied outright. In addition, the Region initiated an inspection program to determine applicant compliance with permit conditions.

NATIONAL ENVIRONMENTAL POLICY ACT COMPLIANCE

The National Environmental Policy Act Compliance Team reviews environmental assessments and prepares environmental impact statements (EIS) for EPA's actions. It also conducts special environmental studies such as a major computerized data management system for Boston Harbor. The most significant activity of the Team, described in the case study which follows,

has been to prepare a supplemental EIS on cleaning up Boston Harbor. Two other examples of the Team's efforts this year include: 1) Plymouth, Massachusetts EIS Project—The EIS evaluated alternatives on land and in the ocean for the disposal of wastewater treatment plant effluent, and 2) Getty Mining Project—The Company proposes the first major underground mining operation in Region I, an 80 acre lead and copper mine and mill complex at Mt. Chase, 15 miles northeast of Baxter State Park in Maine.

BOSTON HARBOR

Forty-three cities and towns discharge sewage into Boston Harbor through two obsolete Metropolitan District Commission (MDC) treatment plants and more than 100 combined sewer overflows (CSO). These discharges create the most serious water pollution problem in New England and they make the Commonwealth of Massachusetts one of the worst violators of the federal Clean Water Act in the country. They regularly cause beach closings, diseases in fish and other organisms, and threaten public health. These discharges cannot be allowed to continue.

To date, \$168 million in EPA grants have been made to projects related to Boston Harbor, mainly to repair and rehabilitate portions of the MDC and member community sewer systems and to correct some CSO problems. In addition, in order to avoid treatment plant breakdown, more than \$30 million for immediate interim improvements at Nut Island and Deer Island will be spent.

Clearly the time has come to make the difficult decisions which will actually lead to the two billion dollar Harbor clean-up. Progress has indeed been made in the last year. For example, EPA has taken a number of enforcement actions designed to address the more serious operational and management problems. As a result of these actions, the MDC corrected its monitoring and reporting violations and initiated the design and construction of alterations at its two treatment plants to improve persistent operational problems. A recent EPA Administrative Order will establish a schedule under which the Commonwealth must decide how it proposes to dispose of 600 tons of sludge which is now discharged daily to the Harbor. Since June, 1983, EPA has been acting as a

"friend of the court" in a suit filed in State court by the City of Quincy, Massachusetts, against the MDC. In that capacity regional staff has been contributing legal and technical expertise on Boston Harbor issues to the court-appointed master.

During the last year, EPA has also been preparing a supplemental draft environmental impact statement on the extremely controversial topic of where the new treatment plants are to be located. There have been many contacts between EPA, the Massachusetts Executive Office of Environmental Affairs, the MDC, the Department of Environmental Quality Engineering and the Coastal Zone Management Office to address the many complex problems. To insure public input into the process, meetings have been held regularly during the year with several technical advisory groups and citizens' advisory committees. Public hearings on EPA's draft recommendations will be scheduled for this fall.

In June, 1984, Regional Administrator Deland testified in support of a proposed Metropolitan Water Resources Authority. This legislation would combine the MDC's Water and Sewerage Divisions into an independent authority with the ability to generate its own capital and operating revenue. Deland stated, "Cleaning up Boston Harbor requires the *will* to make tough decisions, the *ability* to finance and manage billions of dollars of complex construction, and a *commitment* to the proper operation and maintenance of this investment. Today's MDC is simply unequipped to do the job. It is barely able to stay ahead of system collapse, much less to manage many 100 million dollar projects concurrently."

During the coming year, at least four of these tough decisions will be ripe for action by government. First, the Massachusetts legislature will decide whether to create a new and adequately financed and staffed sewerage authority. Second, under the EPA Administrative Order, the Commonwealth will commit to a schedule which will lead to getting the sludge out of the Harbor. Third, the EPA will decide whether to permit the MDC to discharge primary effluent at a point seven miles east of Winthrop, rather than requiring the MDC to provide secondary treatment and discharge into the Harbor. Fourth, as a result of the environmental impact statement and planning process, EPA and other governments must decide what treatment facilities are to be built and where they are to be located. A tall order for all of us.

Any further delay in making these decisions could actually cost the Commonwealth significant amounts of money. EPA currently has a sewage treatment grants program, which has already provided almost \$1¼ billion to Massachusetts projects and which is available to help fund the clean up of Boston Harbor. But this grants program will not continue forever. Should the Commonwealth delay in creating the administrative structure and funding mechanism needed, the Commonwealth could end up building its new treatment facilities after the federal program expires, making Boston one of the few major metropolitan areas in the country required to build the treatment facilities without federal assistance. No one wants this to occur. The time has long since come to clean up Boston Harbor.

DRINKING WATER QUALITY

Public Water Supply Supervision Program

To maintain safe and pure drinking water supplies, The Safe Drinking Water Act was enacted to augment state water supply and groundwater programs. This year, Region I provided technical assistance and \$1.8 million in grants so that states can comply with water supply regulations and improve drinking water quality. In particular, Region I emphasized improved compliance with national drinking water standards. A chart identifying compliance rates in New England follows:

COMPLIANCE WITH THE NATIONAL INTERIM PRIMARY DRINKING WATER REGULATIONS

	Microbiological		Turbidity	
	MCL	M/R	MCL	M/R
Connecticut	95%	96%	94%	92%
Massachusetts	88%	98%	97%	100%
Maine	94%	94%	97%	97%
New Hampshire	85%	41%	96%	86%
Rhode Island	96%	100%	100%	100%
Vermont	78%	69%	96%	85%
Regional	89%	83%	96%	94%
FY84 National Goals	93%	79%	97%	92%

Key: MCL = Maximum Contaminant Level; M/R = Monitoring and Reporting

In addition, water supply staff provided extensive technical assistance to state and local governments in such areas as sanitary surveys and water system improve-

ments. We also provided information to the states and the general public on health risk from contaminants found in drinking water (e.g. volatile organic chemicals, gasoline, dioxin and ethylene dibromide) and assisted the Federal Emergency Management Agency in assessing flood damage to public utility facilities in Connecticut.

Underground Injection Control Program

To protect valuable underground water supplies, EPA requires the states to implement underground injection control programs. During the past year, Region I water staff worked with the states of Maine, Connecticut, Vermont, and Rhode Island to help them develop underground injection well programs compatible with the Safe Drinking Water Act. All six New England states have achieved primary enforcement responsibility for the program and in the past year, focused their effort on groundwater protection activities.

GROUNDWATER PROTECTION

New Englanders are heavily dependent upon groundwater for drinking water—77% of our public water supplies and over 95% of our rural population rely upon this source. However, these resources are extremely vulnerable to a variety of man-made and natural sources of contamination. Potential sources of contamination include: underground storage tanks and

pipng systems, landfills, septic systems, surface impoundments, pesticides and herbicide applications, road salt storage and application. These sources are widely dispersed throughout the countryside.

Region I has long emphasized the need for groundwater protection in New England and has enthusiastically supported state initiatives to develop groundwater strategies. In fact, prior to the groundwater program receiving the national attention it now enjoys, this Region encouraged the New England States to use portions of state grants for groundwater planning and management functions. These early "seed" efforts have allowed Region I to go beyond the program development stage and become a leader in the national groundwater protection effort.

During the past year, Region I demonstrated its commitment to groundwater protection by designating the aquifers underlying Nantucket Island, Massachusetts and Block Island, Rhode Island as sole source aquifers. A designated aquifer is the sole or principal drinking water source for an area which, if contaminated, would create a significant hazard to public health. After designation, EPA has authority to review federally financed projects to insure that no significant groundwater damage will occur.

Region I has taken several actions designed to elevate groundwater issues to the upper management level and to better coordinate the Agency's groundwater programs. We formed a Groundwater Steering Committee composed of senior managers from all programs which effect groundwater. Regional Administrator Mike Deland is one of seven members on the National Groundwater Task Force. Paul Keough is the lead Deputy Regional Administrator in the country for groundwater budget issues.

The Region also funded a groundwater protection initiative of the New England Interstate Water Pollution Control Commission. The basic objective is to provide a forum for the New England states to exchange information on groundwater management activities in areas of common interest. The Commission created a work group specifically concerned with ensuring consistent mapping of interstate aquifers.

Region I encouraged the development of state groundwater work plans. These will be consolidated plans incorporating all state programs which contain groundwater components. This effort will set the stage for the New England states to be in the vanguard if and

when federal grant funds become available for state groundwater protection programs. The Regional Office has also devoted considerable time to training state officials in various aspects of groundwater protection, groundwater modeling and management of hydrogeologic investigations, and techniques for detecting and measuring groundwater contamination.

Leaking Underground Storage Tanks

During this past year, we have worked with the New England states, the Office of Toxics Substances and the Office of Solid Waste and Emergency Response in Washington to address one of the most immediate threats to our groundwater supplies—leaking underground storage tanks. We estimate that there are over 2 million underground petroleum and hazardous waste storage tanks which contain many billions of gallons of fuel and other potentially harmful products buried across the country.

Region I is the national coordinator for the Agency's leaking underground storage tank initiatives. One of our first responsibilities is to organize regional participation in a national survey which is designed to provide important information on the nature and extent of the problem across the country. The survey will examine over 1000 retail gas stations, farms, marinas, airports, fleet service facilities, and publicly owned facilities with fuel tanks. The survey methodology will be tested at nine facilities in the Northeast, Middle Atlantic and Midwest, including five facilities in New England.

Region I helped develop the proposed regulations governing the storage of hazardous waste in tanks. These regulations, developed under the authority of the Resource Recovery and Conservation Act (RCRA), should be released for comment at the end of this year.

Last February, we issued RCRA 7003 consent orders to the Mobil Oil Corporation and the Exxon Oil Company, owners of retail gasoline stations in the Canob Park section of Richmond, Rhode Island. This is the first time this authority has been used in a case where leaking underground storage tanks contaminated groundwater.

In cooperation with the New England Interstate Water Pollution Control Commission, we sponsored two important meetings for representatives from the northeastern states in the past four months. These day-long

meetings provide a rare opportunity for EPA and the states to exchange information, discuss problems and provide experienced direction and guidance on national groundwater protection efforts.

We awarded a grant to the New England Interstate Water Pollution Control Commission to develop a public awareness package on the value of groundwater and the potential costs of contamination. This information should complement the chemical advisory warning that EPA will distribute to 2-3 million facilities and concerned members of the environmental and business communities in the fall.

FUTURE DIRECTIONS

In the past year, the Region has accomplished or made significant progress in many of the highest priority water issues in New England. In FY85 the Water Management Division will focus attention and resources on the following:

- Strengthening the Clean Water Act permit program and assuring that all point source discharges have appropriate enforceable permits;
- Implementing the overall compliance strategy for the permit program (including the National Municipal Policy, pretreatment compliance, and compliance inspection policy);
- Managing the federal funds available to maximize the benefits of the municipal construction grants program;
- Developing and implementing a strong groundwater protection program in all New England states;
- Continuing emphasis on special high priority projects (e.g. Boston Harbor and Narragansett Bay); and
- Increasing compliance with national drinking water standards.



AIR MANAGEMENT DIVISION

Harley F. Laing, Director

The Air Management Division is responsible for the air pollution control program in New England, the regional toxics and pesticides programs, and guidance to states on environmental radiation matters.

AIR

Five-year trends from 1978 through 1982 show significant improvement in air quality in most urban areas of New England. During 1982, for the first time, no violations of ambient sulfur dioxide standards were recorded anywhere in the region. Moreover, there are no areas for which the nitrogen dioxide and lead standards have not been achieved. Particulate levels have been declining steadily, leaving problems in only a few isolated locations. The Region's major non-attainment problems continue to be carbon monoxide and ozone in southern New England, due principally to motor vehicle emissions.

The Clean Air Act gives EPA its statutory authority to control air pollution. Its main objective is the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) set by EPA to protect the public health and welfare. Currently NAAQS have been specified for six pollutants: sulfur dioxide (SO₂), total suspended particulate matter (TSP), carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂) and lead. EPA has established requirements for state agencies for the

ambient monitoring of these pollutants, the development of State Implementation Plans (SIP's) which set emission limits for existing pollution sources, permitting programs for the review of new sources of pollution, and the enforcement of emission limits.

The states have primary responsibility for implementing these programs, while EPA provides guidance, assistance and oversight. In the past year the Air Management Division (AMD) worked closely with the state air agencies to set priorities and provide technical and financial assistance. Air grants to the New England states totalled \$6.5 million.

EPA worked with the states to establish the National Air Audit System. This is the first system to provide national guidelines for the comprehensive audit of state programs. This past spring AMD conducted the Region I audits. While specific recommendations for program improvements were made, we concluded that the New England states are generally doing a good job in carrying out their air program responsibilities.

The Clean Air Act requires the states to design SIP's to reduce O₃ and CO levels to attain NAAQS standards by 1987. In the past year the required state submissions and EPA reviews were completed. Region I was the only EPA Region to have all of its required O₃ and CO SIP's fully approved.

Another important initiative was the monitoring of progress by the states in implementing the control requirements committed to in these SIP's. This includes the control of volatile organic compounds (VOC) from stationary sources, and VOC, NO₂ and CO from mobile sources. VOC and NO₂ react to form ozone in the presence of sunlight. For this reason the successful implementation of vehicle inspection and maintenance programs in Connecticut and Massachusetts was particularly noteworthy.

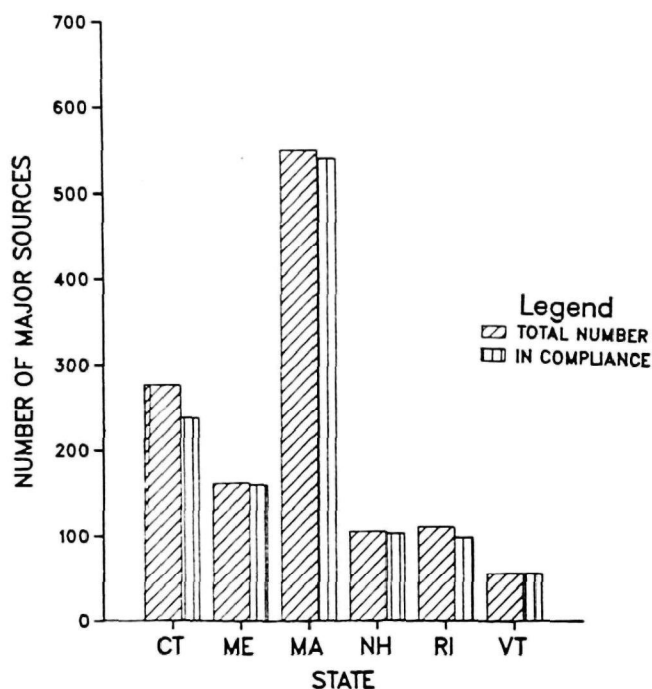
A continuing success story is the conversion of New England utilities and industrial sources to coal and higher sulfur oil in response to economic conditions, without SO₂ and TSP levels exceeding NAAQS limits. In the past year, AMD closely monitored the conversions of the Mt. Tom, Salem Harbor and Somerset electric stations to coal.

In addition, by processing 29 SIP revision requests, we eliminated our backlog. This included approval of a statewide sulfur-in-oil revision in New Hampshire, the processing of a number of temporary sulfur-in-oil revisions for small facilities through special energy conservation/conversion permitting programs in Rhode Island, Connecticut and Massachusetts, and the approval of lead SIP's in all six states.

The past year has also seen renewed emphasis on stationary source enforcement. EPA's compliance engineers worked diligently with their state counterparts to coordinate on-site inspections for compliance with applicable regulations. The number of inspections nearly doubled, increasing to 110 from 57 the preceding year. In addition, Region I satisfactorily resolved 8 out of 9 cases involving significant violations of air pollution regulations. Ten Notices of Violation were issued, and four cases were referred to the Justice Department. This combined state-EPA enforcement effort has resulted in a high level of compliance, as shown in the following chart.

Several complex environmental issues also confronted the air program, including toxic pollutants and acid rain. In both areas the states have looked to EPA for technical assistance, guidance and information. During the year AMD sponsored two workshops on air toxics for state agencies and, working through Region I's Toxics Coordinating Committee, furnished technical assistance on specific intermedia toxics problems.

MAJOR SOURCES: TOTAL NUMBER AND NUMBER IN COMPLIANCE



In the area of acid deposition, we have tried to provide a focal point for the exchange of information among concerned parties on research efforts and regulatory developments. Staff members served on a national EPA task force addressing the state-of-the-science of acid rain and possible control scenarios and are continuing to participate on another task force addressing implementation issues associated with acid rain control strategies. In a recent briefing for the states, EPA and Forest Service experts presented the latest information on forest damage. Meanwhile, Region I's Environmental Services Division conducted a pilot study of acid-sensitive lakes in New England.

In addition to our activities in acid rain and air toxics, major initiatives for the coming year will include the establishment of a mobile source enforcement program targeted at the problem of automobile fuel-switching and emission controls tampering. We will also provide guidance and technical assistance to state agencies in developing SIP's for the new PM₁₀ particulate standards and in meeting the visibility requirements of the Clean Air Act. Heavy program emphasis will continue to be placed on stationary source compliance and the monitoring of O₃/CO SIP commitments.

TOXIC SUBSTANCES

Under the Toxic Substances Control Act (TSCA), EPA regulates the manufacturing, processing, distribution, storage, and disposal of chemicals that pose an unreasonable risk to public health. In the past year the principal regional program emphasis has been on the enforcement of asbestos and polychlorinated biphenyl (PCB) rules. In July, 1983 Region I began an innovative and aggressive program of monitoring and enforcing the Asbestos-in-Schools Rule (See inset below). This has resulted in inspections in 240 school districts throughout New England, of which 95 were cited for violations.

PCB's are in wide use as an insulating fluid in electrical equipment. Unfortunately they are hazardous at even extremely low levels and are characterized by persistence in the environment and accumulation in the tis-

sues of living organisms. In the past year, 131 PCB inspections were conducted in the Region, an increase of 9% over the previous year. These resulted in 12 civil and one criminal complaints. In addition, 24 Notices of Non-compliance were issued for lesser violations. This effort has been greatly enhanced by a cooperative grant agreement with the Connecticut Department of Environmental Protection, through which EPA provided the funds (\$100,000) and technical assistance to develop the Connecticut PCB program.

Frequently specific toxic or hazardous substances, such as dioxins or PCB's, pose intermedia problems affecting air, water and soil. Under our organizational structure, these media are the responsibility of different components of the regional office. To deal with this situation, the Toxics Coordinating Committee was formed, chaired by the Air Management Division, with representatives from all Region I divisions.

ASBESTOS IN SCHOOLS

Because it has excellent heat and fire resistance and other useful properties, asbestos has been widely used as an insulating material in buildings. However, if it is not completely sealed in, it can pose a danger to health. Asbestos can break into tiny fibers smaller than dust particles, which are easily inhaled or swallowed. The presence of asbestos particles in the body can cause asbestosis, lung cancer, and other types of cancer. Fibers may remain in the body, causing cancers that do not appear for 15 to 40 years after exposure.

To safeguard children and school workers, the 1982 Asbestos-In-Schools Rule was established under the Toxic Substances Control Act, requiring school districts to check each of their schools for the presence of friable (easily crumbled) asbestos, and if found to notify parents, teachers, and school employees. School districts should then seal, encase or remove the asbestos. School inspections and notifications were to be completed by June 28, 1983.

With a very limited toxics program staff, Region I was faced with a nearly impossible task of monitoring compliance and enforcing the Asbestos-In-Schools Rule. The Air Management Division developed an innovative plan to tackle this problem. Through an amendment to a national grant

to the American Association of Retired Persons, four inspectors were hired to augment the AMD staff and were trained to conduct school inspections throughout New England. Early findings indicated that over 50% of the school districts were in violation of the Rule's requirements. This unacceptable rate of non-compliance was addressed through a vigorous enforcement program and the use of news media to inform school officials and the public that EPA regards the asbestos problem as a serious matter.

In the past twelve months, Region I has conducted inspections at 657 schools in 240 school districts throughout New England. Ninety-five districts were cited for violations, and in three cases where school districts failed to take action after being cited, Administrative Civil Complaints totaling \$174,000 in penalties were issued. Region I's action against a New Hampshire school district was the first time that an Administrative Civil Complaint had been used as a means of obtaining compliance with the Asbestos-In-Schools Rule.

Region I's successful program led the way in establishing an expanded enforcement effort nationally.

The Committee serves as a communication channel and forum for exchanging information on intermedia toxic matters and provides a structure for coordinating responses to intermedia toxics problems. Since its formation in September, the Committee has, among other activities, reviewed and commented on the proposed National Dioxin Strategy, responded to state requests for technical assistance, and developed a "resource bank" of individuals with varied expertise who can be called upon to assist on toxics problems.

In the coming year toxics program emphasis will remain on the aggressive enforcement of asbestos and PCB rules. Establishment of a Regional compliance program to deal with asbestos during the renovation and demolition of buildings will be a major goal. The Toxics Coordinating Committee will continue its work on the National Dioxin Strategy and will coordinate a multimedia study planned for Rhode Island. It also plans to address the use of automated data bases for retrieving toxicological information as well as the need for developing a procedure for responding to toxic problems where established procedures do not exist.

PESTICIDES

The Office of Pesticides and Toxic Substances is responsible for carrying out the mandates of the federal Insecticide, Fungicide and Rodenticide Act (FIFRA). FIFRA is EPA's principal regulatory authority governing the production and use of pesticides. Primary enforcement responsibility under FIFRA has been delegated to state agencies. EPA provides technical support, guidance and oversight to the states, as well as financial assistance, which totalled about \$600,000 for New England in fiscal year 1984.

In the past year the New England states conducted approximately 1,250 inspections and initiated 125 enforcement actions against violators of pesticide regulations. In addition to compliance activities, the states, with EPA assistance, operate a program of training and certification of pesticide applicators.

In the spring of 1984 EPA worked closely with the State of Maine to monitor the annual aerial spraying of forest areas infested with the spruce budworm. This is the largest aerial spraying operation carried out in the

United States and this year (including adjacent Canadian acreage) covered 8 million acres. EPA provided training to new inspectors for the State of Maine in connection with this project.

Under a new federal program, Region I, assisted by EPA headquarters personnel, conducted an inspection of MIT's Animal Pathology Laboratory to determine whether the laboratory was meeting recently promulgated regulations for good laboratory practices. At the same time, two studies which had been carried out by the laboratory for a major chemical manufacturer to support pesticide registrations were audited by the inspection team. During the coming year further inspections of New England laboratories will be performed under this program.

An emerging environmental problem is the possible impact of pesticides (for example, EDB) on groundwater and its potential threat to water supplies. EPA has worked closely with Massachusetts, Connecticut and Maine on this issue, and Rhode Island is looking into the problem. It is expected that this effort will continue to be an important one during the coming year.

RADIATION

During the past year the Air Management Division worked with federal, state and local agencies on the review of 11 state Radiological Emergency Response Plans for 7 nuclear power plants in New England. AMD also provided guidance and technical assistance on such issues as non-ionizing radiation (e.g. radio frequency and microwave) and the disposal of both high-level (nuclear plants) and low-level (medical, industrial, academic facilities) radioactive waste. Low-level waste disposal will continue to be an important issue, since New England generates about 15% of the U.S. total of such waste. Under the provisions of the Low-Level Radioactive Waste Policy Act, by January 1, 1986 all states, either acting alone or in concert with other states, must have established or arranged for the establishment of disposal sites to meet the needs of waste producers within their borders.

In the coming year we will continue to work with the states on the low-level waste disposal problem, and will provide guidance and technical assistance on other radiation issues.



OFFICE OF REGIONAL COUNSEL Robert A. DiBiccaro, Acting Regional Counsel

The Office of Regional Counsel provides legal support to all of Region I's program offices. The majority of the attorneys' time is spent pursuing the Region's vigorous enforcement efforts. The attorneys concentrate on both administrative and judicial enforcement work. Other responsibilities include defending the Region in suits filed against the Agency, handling bid protests and grant appeals under the Agency's grant programs, reviewing state requests for delegations of specific program authority and providing legal counsel to the program offices on request.

The Office of Regional Counsel is comprised of four attorney/secretary teams: the Waste Team, the Water Team, the Air Team and the Grants, Contracts, and General Law Team.

THE WASTE TEAM

During the last year, the Waste Team provided legal support for the Waste Management Division's implementation of the Superfund program and its revitalization of the Resource Conservation and Recovery Act (RCRA) regulatory enforcement program.

Superfund litigation in Region I in the last year has been highlighted by three major cases:

Ottati and Goss—The first Superfund multiple generator trial in the country began concerning the Ottati and Goss site in Kingston, NH. This complex case with 17 defendants, 2000 exhibits and 42 witnesses has been in trial for six months and the conclusion is probably months away. One major defendant has already agreed to spend approximately a million dollars to excavate several hundred buried drums from the site.

New Bedford Harbor—EPA filed suit against six corporations to address PCB contamination in New Bedford Harbor. This case presents complex legal and environmental issues which will be unravelled in the course of the litigation. (See inset, page 5)

Johns-Mansville—In a case concerning asbestos contamination of sites in Hudson, New Hampshire, EPA prevailed on a motion for preliminary injunction to gain site access from landowners to cover the asbestos. The District Court ruling was upheld on appeal to the First Circuit Court, thus providing an important decision nationally in support of EPA's right to site access for clean-up purposes.

In Superfund site clean-up work, negotiations with potentially responsible parties to accomplish private party clean-up at Superfund sites also account for a

significant amount of attorney time. In addition to major on-going multiple party negotiations, Region I attorneys have provided legal support for negotiations on a number of sites, yielding significant environmental results and conserving the Superfund. Some examples:

Industri-plex, Woburn, Mass.—Negotiations with Stauffer Chemical company resulted in a consent order under which Stauffer will soon complete Remedial Investigation and Feasibility Studies at this major National Priority List site. Stauffer's studies will assess environmental harm and provide clean-up alternatives.

Winthrop, Maine—Negotiations with Inmont Corporation have resulted in a consent order concerning the Winthrop Landfill National Priority List site. Inmont has agreed to provide an alternative water supply to residents living near the landfill whose wells have been affected by groundwater contamination.

Plymouth, Mass.—Negotiations with Saltwater Trust, owner of the Cannons Engineering National Priority List site, resulted in agreement by the trust to remove a leaking tank which posed a fire and explosion threat as well as a threat of soil and groundwater contamination.

In the RCRA area, Waste Team attorneys furthered the RCRA enforcement effort by negotiating a number of settlements of administrative actions against violators of the RCRA hazardous waste regulations. They continued the review of state hazardous waste programs to assist the New England states in receiving final RCRA authorization.

Region I's Waste Team lawyers are among the most experienced within EPA, and in addition to their regional work, have played a major role in the develop-

ment of national hazardous waste policy, particularly in the areas of Superfund and RCRA enforcement and RCRA state program authorizations.

The entire regulated community benefitted from a digest of all the RCRA regulatory amendments prepared by a Region I Waste Team attorney and published in "Environment Reporter."

THE WATER TEAM

Over the last year, the Water Team continued to run an active and expanding enforcement program under the Clean Water Act. In FY 83, the Team prepared cases against seven major industrial and municipal violators of water pollution laws. These cases were referred to the Department of Justice for the filing of federal lawsuits. In FY 84, the Team has developed another five cases to date, and expects to prepare three more cases by the end of the year. These enforcement actions represent a significant increase over the two water cases Region I referred to Justice in FY 82.

The Water Team has recently initiated a strong program to enforce in court the federal pretreatment standards that apply under the Clean Water Act to industries that discharge to municipal treatment plants. The two pretreatment cases recently referred to Headquarters are the first federal pretreatment cases in Region I. The Team has also initiated a new effort to enforce drinking water standards under the Safe Drinking Water Act and is currently planning Region I's first federal drinking water enforcement case for the fall.

Enforcement against municipalities was our first priority this year. Two major examples, South Essex Sewerage District in Massachusetts and Boston Harbor are discussed in detail on pages 10 and 13; a third example, Providence, Rhode Island, appears below.

CITY OF PROVIDENCE SETTLEMENTS

EPA and the Department of Justice successfully negotiated settlements in related Clean Water Act and Clean Air Act cases against the City of Providence. The settlements are noteworthy for two reasons. First, the City will be paying \$250,000 to Rhode Island in settlement of the water case to fund a creative, environmentally beneficial project. Second, the City must pay a substantial cash penalty of \$180,000 to the U.S. Treasury for its egregious violations of the Clean Air Act.

The settlements were approved and entered by the U.S. District Court of Rhode Island on June 8, 1984. The claims against Providence relate to the City's violations in 1979, 1980, and 1981 of consent decrees signed by the City and the United States in 1978, involving the City's wastewater treatment plant and incinerator.

The City had faced a total potential liability of approximately \$1.4 million dollars in penalties for

operating its incinerator for 249 days while bypassing the pollution control equipment, and for delays in repairing its wastewater treatment plant. The settlements send a strong message that consent decree violations will not be tolerated by the United States, and at the same time allow a substantial portion of the total penalty to be used in a way that will benefit the citizens and environment in Rhode Island.

The Clean Water Act settlement will provide funding support for the Rhode Island Toxic Pollutant Transfer and Risk Assessment Project. The project will be an in-depth study of intermedia transfers of toxic pollutants in the environment and corresponding health risks of these transfers. It will be conducted by the Rhode Island Department of Environmental Management, with assistance from EPA, the state Department of Health, Brown University, and the University of Rhode Island.

Initially the study will focus on surface water contamination in the Upper Narragansett Bay and air pollution from toxics at sewage treatment plants. A citizen's advisory committee, made up of environmental organizations, medical professionals, and state and local officials, will be established to help give the program direction.

The State hopes that this project will enable it better to identify multimedia toxic pollutant problems and to determine the relative health and ecological risks associated with such problems.

The funding of the credit project is an unusual and creative settlement. The project itself was devised after a great deal of effort and cooperation by the Rhode Island Department of Environmental Management, the State Department of Health, EPA Regional and Headquarters staff, the Department of Justice, and "Save the Bay," a citizen's environmental group.

Water team attorneys also concluded all legal reviews for delegation of the underground injection control program to the New England states, and Rhode Island's application for delegation of the federal water pollution control permit program. Moreover, they provided continuing legal assistance to the Water Management Division's water permitting operation, and assisted in the review of local pretreatment programs and Clean Water Act 301(h) discharge waiver determinations.

THE AIR TEAM

The Air Team works with the Region's Air Management Division in implementing programs under the Clean Air Act and the Toxic Substances Control Act (TSCA). During the past year, the Air Team attorneys helped initiate the Region's enforcement of the asbestos-in-schools regulations and contributed to a strong EPA enforcement effort under the Clean Air Act. Synopses of some significant cases follow:

Goffstown, New Hampshire—An asbestos complaint was issued to the Goffstown, New Hampshire School District. Nationally, this action was the first issued under a program designed to identify the asbestos in schools and to warn parents and school employees of the hazard posed by this dangerous material.

Electro Sales, Somerville, Massachusetts—Attorneys on the Air Team worked on a criminal enforcement action involving violations of PCB rules by this firm. In May, the company entered a plea of guilty. Sentencing is scheduled for August.

Borden, Inc., Leominster, Massachusetts—In addressing the problems to human health posed by air toxics, the Air Team pursued court action against the Borden, Inc. facility in Leominster, Massachusetts. This case involves numerous violations of the Agency's regulations for vinyl chloride, a hazardous air pollutant.

During FY 84, the Air Team has already helped prepare four new cases for judicial litigation, with two more expected before the end of the year. This effort represents a substantial increase over the two cases referred for litigation in FY 83. Beyond its enforcement work this year, Air Team lawyers provided counsel to the Air Management Division on program matters and conducted reviews of proposed revisions to each New England state's implementation plan (SIP) air pollution control regulations. This past year, significant SIP revisions included VOC regulations for New Hampshire and regulations of the State of Connecticut developed in satisfaction of the Clean Air Act requirements.

GRANTS, CONTRACTS AND GENERAL LAW TEAM

The Grants, Contracts and General Law Team attorneys provide legal advice to all of the Region's program offices. Most of the work is done in the construction grants program, a \$2.4 billion per year program under which the Agency provides grant funding to municipalities to build sewage treatment facilities.

Over the past year, Team attorneys provided advice to Regional personnel on new regulations involving all grants programs, debarments of EPA grant recipients for misconduct and ethical standards for EPA employees. More bid protests were processed and grant appeals handled than in any previous year. Team members were also involved in the first bid protest under the Superfund program.

Attorneys for the Team were involved in the Region's first two debarments from an EPA grant funding. One action resulted in a three year debarment of a company and its officers due to prior criminal convictions. The other concluded in a three year voluntary exclusion of a company and its officers for falsifying information in a grant document. The Team attorneys also helped to develop the Region's new grant appeal procedures issued in June, 1984.

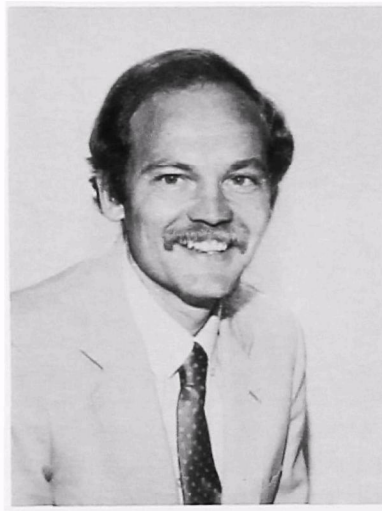
CRIMINAL ENFORCEMENT INITIATIVE

In April, 1984, an attorney in the Office of Regional Counsel was appointed criminal enforcement coordinator for the Region. A number of criminal cases are now under active development, either in the investiga-

tive or grand jury phase. In the next several months, a criminal investigator will be assigned full-time in the Region. Another investigator is expected to be added to the Region during the next fiscal year.

APPOINTMENT OF A NEW REGIONAL COUNSEL

Regional Administrator Deland selected Patrick Parenteau to serve as the new Regional Counsel.



For the past 3 years, Mr. Parenteau has served as the second-ranking official of the National Wildlife Federation, the nation's largest environmental public interest group. As Vice President of the Federation, Mr. Parenteau headed a staff of fifty people including lawyers, technical experts, and lobbyists, as part of the Federation's efforts to shape national environmental policy.



**ENVIRONMENTAL SERVICES
DIVISION**
Edward V. Fitzpatrick, Director

The Environmental Services Division (ESD) located in Lexington, Massachusetts is the laboratory and field support arm of EPA in Region I. The Division collects and analyzes samples and environmental data to support the Air, Water, Hazardous Waste and Superfund programs managed by the other Divisions of the Regional Office. The Lexington facility includes one of the most up-to-date environmental laboratories—chemical and biological—in the Northeast.

Environmental Services Division personnel work closely with the state environmental agencies to coordinate the operation of networks of air and water quality monitoring stations throughout New England. Data from these networks provide a continuous measure of air and water quality trends in the region.

ESD is responsible for the collection and laboratory analysis of samples to support enforcement actions against violators of our environmental laws. It has a staff which is on call 24 hours a day to respond to spills of hazardous chemicals. This staff also oversees a program to prevent and minimize the dangers from leaks and spills of chemicals at industrial locations in New England. Lastly, ESD runs a quality assurance program, working closely with state laboratories to ensure that the accuracy and adequacy of sample analyses is maintained in this field of rapidly-changing technology and regulatory requirements.

With the start-up of the federal Superfund program in 1981, the Environmental Services Division became heavily involved in this priority effort to clean up hazardous waste sites. In addition to the collection and chemical analysis of samples from hazardous sites, ESD has the responsibility for "removal actions" to eliminate the immediate danger to public health.

During the past year, removal actions were undertaken at 14 sites in Maine, New Hampshire, Massachusetts, and Connecticut. Twelve of these have been completed at a cost of approximately \$4,000,000 from the federal Superfund for the clean-up work. Corrective measures ranged from removing contaminated material, sealing and covering several asbestos dumps in the Hudson/Nashua, New Hampshire area to prevent particles from getting into the air, to retrieving and disposing of chemical drums which had been dumped into Sunapee harbor.

In a stepped-up Agency-wide enforcement campaign ESD personnel conducted approximately 150 compliance inspections to ensure that waste water discharge permit conditions were being adhered to. Where serious violations were found, ESD furnished technical data and expert testimony to support legal cases.

Providing technical assistance to state agencies in terms of both direct support and training is an important function of the Environmental Services Division. Direct support refers to the dispatching of ESD personnel upon request to assist states in investigating or resolving environmental problems or in performing specific tasks, such as sample collection or chemical analyses. Recent examples include organic contamination of groundwater in Williamstown, Vermont, lead contamination of soil in several Massachusetts locations, widespread mercury contamination in Poultney, Vermont, and numerous requests for assistance in the developing field of air toxics monitoring.

During the past year, the ESD staff provided both formal courses and on-the-job training for state personnel in field work and in laboratory procedures. The goal of this training program is to aid state personnel in keeping abreast of current technology as well as the requirements of programs for which the states have accepted delegation.

There was a strong effort to develop state capabilities in bio-monitoring and bio-assays. Over twenty training courses were held by ESD at its Lexington facility and other New England locations. These included a continuous emissions monitoring workshop, a volatile organics stack testing workshop, a course in writing permits for waste incinerators, a workshop on the use

of Photovac equipment, a permit compliance course, safety courses, and bio-assay training, among others.

In the past year the Environmental Services Division undertook several special initiatives to gain new knowledge of the environment and advance our technology and management of laboratory capabilities. A new analytical technique was developed which allows rapid and accurate field assessment of the extent of PCB contamination at a suspected site (see inset below). A Sample Control Center was established at the Lexington facility to improve management of laboratory support for the Superfund program, particularly where contract laboratories are used. The limited capacity for this type of chemical analysis requires careful planning, technical assistance, sampling study design, and quality assurance programs to ensure that the available capacity is utilized effectively with consistently good output data. A pilot project for a national Acid Rain Study was initiated (see inset, page 27). In addition, the groundwork was laid for Region I's participation in a national study of the extent of dioxin contamination in the United States.

During the coming year, the Environmental Services Division will continue to provide field and laboratory support for the Regional office, as well as technical assistance and coordination with our counterparts in the state agencies. The acid rain pilot study will lead

PCB DETECTION—A NEW TECHNIQUE

One of the most difficult problems in chemical analysis is identifying and measuring organic chemicals in an unknown sample. The difficulty is multiplied when dealing with concentrations of a few parts per million, in the field, and with a need for quick answers. This is the situation faced by an environmental engineer trying to determine the extent (if any) of PCB (polychlorinated biphenyl) contamination at a suspected site. PCB's are dangerous to human health and may be found almost anywhere, because they have been used so widely as insulating material in electrical equipment such as transformers.

The problem of field testing soil for PCB content was tackled and solved during the past year at EPA's Region I laboratory. The technique, which

utilizes a portable gas chromatograph, was used by Environmental Services Division personnel at several sites. In Norwood, Massachusetts and Washburn, Maine clean-up teams were able to collect, analyze, and report on 500 samples in a few days. This would have been inconceivable using previous procedures. Cost savings alone at those two sites were over \$50,000. The technique has also been used at five other sites in Massachusetts, Connecticut, and Rhode Island. Since papers on the new methodology were presented at and published in the proceedings of two national meetings, dozens of inquiries have been received at the Region I laboratory.

This contribution to the advancement of environmental science was recognized by the awarding of the Agency's bronze medal.

into participation in the national study. We will continue with our part in the national dioxin study, establishing what we expect to be background data, since there are no known manufacturing facilities nor appreciable areas in the Region where herbicides or pesticides with dioxin contaminants were used.

We expect the Regional Sample Control Center to be in full operation. Finally, we anticipate new developments in the areas of quality assurance and quality control as new federal regulations go into effect.

ACID RAIN PILOT STUDY

One of the major environmental issues today, particularly in the Northeast, is the effect of acid rain on the environment. A specific concern is the impact of acid precipitation on acid-sensitive lakes—lakes with low natural alkalinity, which are presumed to be most susceptible to changes from acidic deposition. Unfortunately, quantitative data about the present chemical and biological status of aquatic resources in the United States is limited. For this reason EPA, in conjunction with the National Acid Precitation Program, has proposed a 3-phase National Surface Water Survey, the first phase of which would include a survey of nearly 2500 lakes nationally.

Randomly-selected lakes in the four northern New England states were designated for a pilot study to test out sampling and laboratory methods to be used in the full survey. EPA personnel from Regions I and II conducted the study

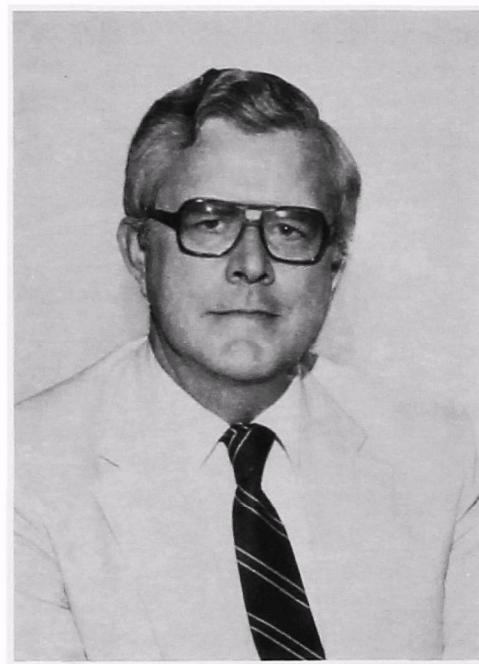
assisted by personnel from the state environmental agencies of Maine, New Hampshire, Vermont, and Massachusetts, who determined which of the smaller lakes were privately-owned and obtained permission for the samples to be taken, as well as aiding in other ways.

The design of the study called for the sampling to be done by two field crews operating from helicopters, with the samples to be processed in a special mobile laboratory. Despite several setbacks, the sampling and analyses were completed in early June, 1984.

The pilot study was a success due to the joint efforts of EPA and state personnel. More than 120 lakes were visited and 111 were sampled. Both field and laboratory equipment and methods were tested, changed and retested. The knowledge gained will provide a sound base for the full national survey.

OFFICE OF GOVERNMENT RELATIONS & ENVIRONMENTAL REVIEW

Stephen F. Ells, Director



This small Office has four big jobs. It enlists the support of senior public officials to help EPA carry out its mission. It reviews the major actions and permits issued by other federal agencies to minimize environmental damage. It ensures that federal agencies comply with all environmental laws. And, lastly, the office director is senior policy advisor to Regional Administrator Mike Deland. Here are some examples of what we do.

GOVERNMENT RELATIONS

Almost every member of New England's Congressional Delegation is on a committee with environmental jurisdiction or in a Congressional leadership position, such as House Speaker O'Neill. This includes membership on every committee with environmental jurisdiction in the House of Representatives and the United States Senate. Most importantly, this representation frequently results in federal laws that reflect New England's strong and abiding concern for protection of the environment and natural resources.

The Office of Government Relations and Environmental Review is responsible for responding to inquiries from Members of Congress, governors and other

senior officials. These may range from pending legislation and the impact in New England of EPA regulations and policies, to problem situations of a particular community or citizen.

We respond to more than 150 official letters a year; telephone calls from government officials face us with about 20 new issues every week. Hazardous waste management and water pollution control issues are most frequently raised. Recognizing the strong bipartisan support for environmental protection programs, Regional Administrator Mike Deland has met at least once with 28 members of the New England Congressional delegation and most of the governors in his first year as Regional Administrator.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REVIEWS

We review and comment on all actions proposed by the federal government in New England that could have a significant impact on the environment. The objective is to insure that the federal establishment protects the environment as much as possible in its construction, grant awarding, permitting and other activities. We do this by reviewing other agencies' environmental im-

pact statement (EIS) assessments, requesting that an EIS be prepared for major projects that have not had adequate environmental review and encouraging selection of environmentally preferable alternatives. This year, we were involved in some of the largest, most controversial projects in recent history:

Offshore Oil Drilling on Georges Bank—After reviewing the Department of Interior's EIS for Lease Sale 82, which proposed oil and gas leasing on 25 million acres of the North Atlantic, Region I opposed leases in near-shore waters, the sensitive Georges Bank fishing grounds and in submarine canyons, and urged delay of the entire sale. Soon after EPA and many others voiced these objections, Congress required the Department of Interior to delete sensitive tracts. Lease Sale 82, now 14 million acres instead of 24, is scheduled for September 1984.

Boston Third Harbor Tunnel/Central Artery—After identifying problems in the draft EIS, Region I worked extensively with consultants, Massport and state and federal highway agencies to ensure that the air quality analysis, one of the most complex in our experience, would accurately assess the impacts of this major project.

I-84/Route 6—We continued to express opposition to the construction of new expressways and major road expansion in Rhode Island across the Scituate Reservoir, the sole source of drinking water for half of Rhode Island, and on corridors in Connecticut that aim at the Reservoir and its watershed. Region I worked closely with consultants and project proponents to prepare a state-of-the-art impact assessment to protect the Reservoir.

Northern Peat Energy Project—For the first time, Region I is helping the Corps of Engineers write an EIS. Due to be released around the end of 1984, this EIS will consider the impacts of Signal Company's proposed peat-to-energy project. Our job, while reserving the right to review the project under NEPA and the Clean Water Act, will be to write the water quality, air quality and noise sections of the Corps EIS.

Sugar River Watershed Flood Control Dams—We objected to a ten dam project proposed by the Soil Conservation Service (SCS) to be built on the Sugar River and tributaries in western New Hampshire. The basis for our objections was significant adverse impacts to high quality streams and wetlands, inadequate demonstration of need for the project, and a seriously out-

dated EIS. The Corps of Engineers and SCS now agree that the project will not proceed further until an EIS re-examines need, impacts, and alternatives.

In addition to these projects, we reviewed another 28 EIS's and assessments, 101 hydroelectric projects, and 13 other environmental documents.

FEDERAL FACILITY COMPLIANCE

The Executive Branch of the federal government owns 1,344 installations in New England on 1,294,727 acres of land. It owns hundreds of motor vehicles, major ships and large aircraft. It operates hospitals, laboratories, manufacturing plants and technical facilities. With operations on such a large scale, it should come as no surprise that many of the facilities have been sources of pollution in the past and remain potential sources of pollution in the future.

This year, we re-established the function of Federal Facility Compliance Coordinator to provide technical advice and assistance to other federal agencies and to ensure cost-effective and timely compliance with state and federal environmental laws. We now conduct reviews and inspections to ensure compliance by federal facilities.

We assist federal agencies and the Office of Management and Budget in developing budgetary plans for controlling pollution from federal facilities. During FY84, over \$46 million has been budgeted for pollution abatement at federal facilities in this Region.

STATE/EPA AGREEMENTS

This Office developed the Management Agreements that were signed this year with each major state environmental agency in Region I. These multi-purpose documents focus top management attention at the State and EPA on the evaluation and accomplishment of major environmental and programmatic issues. The agreements serve as a vehicle to identify new or emerging items of interest, as a composite of the related environmental management grants awarded to the states (\$25 million annually) and as a mechanism to develop special strategies.

An issue in this year's Rhode Island agreement is a good example of how the process works. Environmental risk assessment was identified as an emerging issue of concern to state environmental officials and the citizens of Rhode Island. Because the issue was high-

lighted, officials at EPA, the Justice Department and the State were able to have the U.S. District Court agree to apply \$250,000 in penalty funds (recovered from an air and water suit filed against the City of

Providence) to an environmental monitoring study. Without the agreement, the connection between this monitoring project and its supporting funding would not have been made (See inset, page 22).

UNITED STATES—CANADIAN RELATIONS

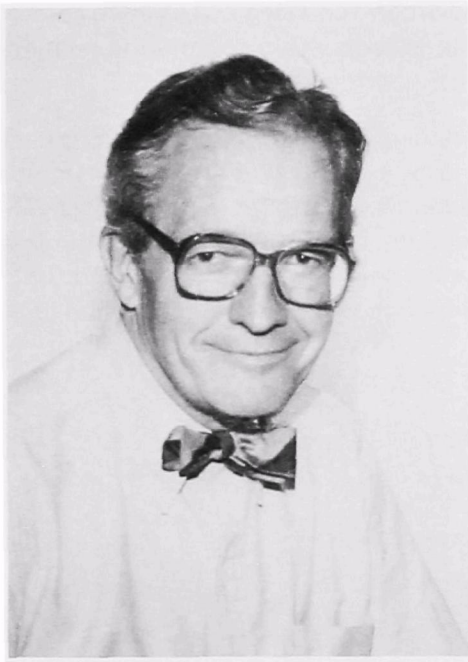
Since the middle of 1983, much progress has been made in improving relations with our Canadian neighbors. Frequent meetings were held with environmental officials from the Province of New Brunswick and Environment Canada. We have had discussions on a variety of issues of concern to all levels of government.

This Region not only actively participates in two international boundary river committees but also deals with specific environmental issues that transcend our mutual borders. As an example of the latter, all nine United States treatment facilities are now in place and able to control wastewater discharges into Lake Memphremagog which lies on the boundary between Canada and Vermont.

This Regional Office co-chairs with Canadian officials two committees that oversee water quality requirements on international sections of the St. John and St. Croix River systems. On February 22, 1984, a new diplomatic note was signed re-

newing the charter of the St. John River Water Quality Committee for an indefinite period of time. Like the St. John committee, the St. Croix River Water Quality Advisory Board (which reports to the International Joint Commission in Washington, DC) continues to list progress being made in water quality improvements, and both committees are beginning to deal with the issue of restoring the anadromous fisheries.

On May 23, 1984, Regional Administrator Mike Deland met with the Regional Director General of Environment Canada's Atlantic Region. Hosting and participating in discussions with EPA's sister regional agency in Canada has been very productive. The exchange of ideas, technical data, and a better understanding of the overall direction of the environmental movement in Canada have been a favorable product of these meetings. Though the acid rain debate continues between the two countries, it is gratifying to note that officials of both countries continue to cooperate in pollution abatement efforts.



OFFICE OF PUBLIC AFFAIRS

David Pickman, Acting Director

One of the greatest challenges facing Mike Deland when he returned to the Agency as Regional Administrator last summer was to reestablish strong links between EPA and the environmental and business communities. The Region needed to regain the confidence of the communities and encourage our citizens to participate in our deliberations so that we could develop more appropriate policy and make better decisions.

Region I made every effort in the past 12 months to convey the message that EPA can be trusted, that EPA is operating in a fish bowl, that EPA is focusing a multi-pronged offensive against such environmental harms as groundwater contamination and that enforcement is the name of the game.

Regional Administrator Mike Deland explained our priorities and goals to the media via personal interviews with newspapers, radio and television stations on breaking stories. Typical were removal actions at Superfund sites, enforcement moves under the Clean Water Act, Clean Air Act, Toxic Substances Control Act, Resource Conservation and Recovery Act and Superfund. He also carried the message to the editorial boards of more than a dozen major newspapers around New England.

This spring, the Region published a revision of its "Directory of New England Environmental Organizations" and distributed it to about 500 state environmental agencies and voluntary environmental organizations.

In December 1983 Region I celebrated the 13th birthday of EPA with a well attended "Citizens' Briefing" held at a suburban convention center. Awards were given for outstanding contributions in the fields of education, journalism, public service, public education, and business. Guest speakers were William Weld, the United States Attorney for Massachusetts, Benjamin Dysart, president of the National Wildlife Federation, and New Hampshire Governor John Sununu, chairman of the National Governors' Association Acid Rain Task Force.

The Office of Public Affairs maintained close working relations with the operating divisions. The stepped up enforcement program and accelerated Superfund activity called for careful planning to make certain that the news was clear, accurate and relevant to the Agency's central mission—to protect the environment and public health. Information policy during this period can be summed up in a few words: to help the news media get the whole story quickly, easily and accurately.

Two innovations were conceived at the Senior Staff Retreat in April and hatched in June: an internal news letter and a report to environmental and business organizations, state and regional environmental officials. The internal newsletter, titled WE'RE NUMBER ONE, was first published on June 4 and now appears weekly. WNO prints news from all divisions of the Agency: major projects and who is working on them, grants, enforcement actions, marriages and degrees. The weekly is also a vehicle for special messages from the Regional Administrator and Division and Office Directors.

The external newsletter, NEW ENGLAND ENVIRONMENT REPORT, is issued monthly. It first appeared in June and has been enthusiastically received. The publication reviews EPA actions, many of them distinctly local in their impact, which nevertheless reflect Agency and Regional policy. EPA's friends and associates in the world of environmental protection have welcomed this information on Regional and national policy, enforcement actions, research programs, policy development and outreach meetings. It reaches about 500 organizations and agencies.

Both publications are produced by photocopy process from typescript originals and entail no external cost of composition. NEW ENGLAND ENVIRONMENT REPORT is a self-mailer.

Since August 1983 the Office of Public Affairs has furnished full-time community relations services to Superfund project officers and on-scene coordinators and to the states conducting Superfund projects under cooperative agreements. The Community Relations Coordinator has provided plans for each site, prepared news releases, fact sheets and summaries for public meetings and general information. These services were previously offered on a more limited basis by an information specialist working about half time on Superfund.

The Community Relations Coordinator hosted a national quarterly meeting of co-workers from all ten EPA Regions and organized a Region I training session for EPA and state personnel on community relations skills required at Superfund sites.

This year's Elementary Education Ecology Poem and Poster Program drew a record 10,000 entries from New England grade schools. Awards were presented by the Regional Administrator and Deputy Regional Administrator in ceremonies held in each New England State, usually assisted by one of the State's U.S. Senators.

APPOINTMENT OF A NEW DIRECTOR

In July, we welcomed Brooke C. Cook as the new Director of the Office of Public Affairs.



Ms. Cook, Director of Communications for the Massachusetts Executive Office of Human Services, brings broad experience in communicating complex and sensitive subjects in the human services field to an equally challenging environmental protection arena.



ADMINISTRATIVE SERVICES DIVISION

Louis F. Gitto, Director

The work of the Administrative Services Division is principally to manage the internal operations of the Region. We operate traditional planning and evaluation, personnel, finance (collection/disbursement), procurement and internal support (computer assistance and operations, space, equipment, supplies, etc.) functions to maintain our environmental programs.

The dedicated staff of this Division worked hard to keep the Regional operations running smoothly. Some of our major achievements are highlighted below:

Integrated Regional Planning

We wanted our employees, our state counterparts and the public to have a clearer idea of how Region I would achieve specific environmental results. It is important that all our constituencies understand how we believe our objectives and activities will result in a cleaner, safer environment. To map out this direction, we integrated our regional planning process with our identification of environmental problems and regional goals.

Beginning with the Environmental Management Report in the spring, we first identified Region I's key

environmental issues and laid out action steps for addressing them. Regional Administrator Mike Deland stated his goals for the Region. Regional managers established priorities and prepared "Accomplishment Plans" to explain how their programs would work to achieve both the Regional Administrator's goals and environmental improvement.

Our accountability systems track program accomplishments against the program commitments so that senior managers (and the public) can understand how well the Region is progressing throughout the year in reaching its stated objectives.

Regulation Development

Regulation development is one of EPA's major responsibilities. To improve Region I's role in the Agency's rulemaking process, we initiated a new system to identify and follow those developing regulations in which the health, environment, or economic effects of a rule could have a major impact on the New England states. Regional Administrator Deland can now concentrate regional technical expertise in areas producing the most benefits for the Region and take the lead in negotiating for our positions and priorities.

STAFF INCREASES

As a regulatory agency dealing with highly technical issues, Region I employs engineers and scientists, attorneys and various administrative support employees. In the last year, the Region has hired 84 permanent employees for a net increase of 56, from 345 to 401 (a 16.2% increase). Consistent with the Agency's priorities, the largest increase was associated with Waste Management, while enforcement positions were added to the Water, Waste, and Air programs.

The increases have significantly enhanced the Region's technical and enforcement capabilities. The increases by occupational category are:

Engineers	+ 33
Clerical	+ 10
Attorneys	+ 7
Scientists	+ 4
Administrative	+ 2

Also, consistent with the Agency's Equal Employment Policy, 43% of the professional and administrative hires were women and 13% of the professional and administrative hires were minority group members.

Managing for Environmental Results

At the urging of the Regional Administrator, we arranged a meeting between Rhode Island environmental officials and the staff who developed a successful Environmental Management Mapping Program in Maryland. This interchange of ideas helped Rhode Island begin a project of their own to map environmental, geographic and demographic information. Although the effort will require a substantial long-term commitment of resources by Rhode Island if it is to be successfully completed, we feel it could provide significant background information for setting environmental priorities.

Making Resource Management Work

Again this year we worked with several of our states to help resolve fiscal and administrative problems associated with managing environmental program grants. These grants totaled almost twenty-five million dollars

in Fiscal Year 1984; states have purchased and must account for millions of dollars of equipment. While most systems are operating well, we helped implement better cost accounting, procurement processes, and property management systems. We are one of the few regions providing this support to our states and we intend to keep improving this service.

Intergovernmental Personnel Act (IPA)

Under the Intergovernmental Personnel Act (IPA) we have put twelve of our highly experienced people into state offices to work on environmental and policy issues. These are important assignments for both the state and for us (In prior years, these assignments have filled a State Commissioner position and another a Deputy Commissioner position). This year one of our twelve is working directly in the office of a New England governor. This assignment includes close working relations with state officials nationwide, national environmental leaders and high ranking federal officials in the United States and Canada. While this is not a "typical" assignment, each position is important to the mission of EPA and the state.

Helping To Share Information

The environmental effort relies on a sharing of data between the states and ourselves; our Automated Data Processing systems (ADP) are established with that sharing in mind. However, we have gone one step beyond that traditional role with the Maine Department of Environmental Protection. With funding and data support provided by Region I, Maine DEP designed, developed, and is in the final stages of loading data into a New England Hazardous Waste Manifest System (a system to track the load by load trucking of hazardous wastes from the point of pick-up to the point of delivery).

This system is unique in a number of respects. It addresses the consensus of waste tracking needs identified by all six New England states. Additionally Maine provides the host computer facility and operations support to allow all interested New England states to directly use this system. To date, New Hampshire, Rhode Island, and Vermont have made commitments to be active system users. A breakthrough aspect of this system is its ability to provide a common, sharable source of data on manifested New England wastes.

EPA REGION I BUDGET—FISCAL YEAR 1984

The budget we manage for Fiscal Year 1984 (Oct. 1983 to Sep. 1984) is comprised of 404 staff years and \$17 million to support our operations including \$3 million for Superfund operations, \$184 million for construction grants for wastewater treatment plant construction, \$25 million for grants to support State environmental program operations and in May we were given additional responsibility to manage \$1.8 million for Superfund Removal actions for the remainder of the year.

The Region's resources increased across all operating programs from Fiscal Year 1983 to 1984. Highlights of the increases are:

- Financial resources increased by 2.7 million or 9 percent.
- Superfund operating financial resources have increased by \$427,000 or 19 percent over FY 83
- In addition to Superfund, other EPA programs dealing with protection of the environment

from hazardous waste and toxic pollutants (Hazardous Waste, Pesticides Radiation and Toxic Substances) have increased in operating dollars by \$643,000 or 38 percent over FY 83.

Stability of funding levels is the highlight of Region I's financial assistance to states. These grants support Air, Water, Construction Grants Management, Water Quality, Public Water Supply, Underground Injection Control, Hazardous Waste and Pesticides Enforcement and Certification programs. For Fiscal Year 1984, the New England states received EPA funds as follows:

Connecticut	\$ 5,360,000
Maine	2,694,000
Massachusetts	9,553,000
New Hampshire	2,712,000
Rhode Island	2,672,000
Vermont	1,962,000
Total	\$ 24,953,000

REGIONAL PROGRAMS FINANCIAL RESOURCES

