

**New England:**  
*Toward 2000*



*New England Regional Office*  
*U.S. Environmental Protection Agency*



# About Us

*The U.S. Environmental Protection Agency's New England Office (Region 1) is headquartered in Boston, Massachusetts. It is one of ten regional offices across the nation charged by Congress to protect America's land, air and water.*

*Congress has instructed EPA, a federal agency based in Washington, D.C., to use national environmental laws to maintain a compatible balance between human activities and the ability of natural systems to support and nurture life.*

*Since the agency's creation in 1970, EPA's New England Office has defended the environment in the six New England states—Connecticut, Rhode Island, Massachusetts, New Hampshire, Maine, and Vermont.*

*For more information about EPA Region 1 and its programs or for additional copies of this annual report, "New England: Toward 2000," contact the Office of Public Affairs, U.S. Environmental Protection Agency, Mail Code: RPA-2203, John F. Kennedy Federal Building, Boston, Massachusetts 02203, Telephone (617) 565-3420.*

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# Dear Friends of the Environment



The memories and images of 1988 will be slow to fade from the nation's environmental conscience: medical debris littering our beaches; searing temperatures, charred forests and drought all underscoring predictions of a warming atmosphere; a weakened ultraviolet light filter above and radon gas from below. Meanwhile acid rain from the Middle West and ozone smog from the Atlantic seaboard continue to inundate New England. These threats have rekindled America's—indeed, the world's—environmental ethic.

We are on the brink of fundamental change. Our mission is evolving from one of simply protecting our local environment from societal abuse to one of managing the global environment for continued societal gain. Our common goal is sustainable development into the next millennium. In the following pages the talented and dedicated public servants of the Environmental Protection Agency's New England Office offer their perspectives on what our environmental future holds and how New England will fit into an increasingly complicated global picture.

With the advent of a new administration in Washington, at least a half-dozen reports, agendas and "blueprints" for the future have been prepared by independent environmental and research organizations. What they share is a universal recognition of the awesome risks posed by global issues, such as the "greenhouse effect" and holes in the stratospheric ozone layer, and an urgent need to shift gears here at home

from conventional pollution control efforts to pollution prevention strategies. We are beginning to head in that direction. Tip O'Neill's common sense observation that "all politics is local" also holds true in the environmental arena. Whether we look at Brazilians who are seeking alternatives to the slashing and burning of their rain-forest home—or an enforcement action by a state agency against an illegal emitter of stratospheric-damaging chemicals on Cape Cod—all environmental protection is ultimately local.

Here in New England we have embarked on a course that recognizes that the region's long-term economic viability is in large measure dependent upon maintaining our environmental quality. If Boston is to become a world-class city, it is essential to have a first-class harbor. If Connecticut's shoreline, Cape Cod, and the rocky coast of Maine are to retain the very features that make them attractive and inviting, open space must be protected and clean water guaranteed. If we are to break the cycle of poverty in our inner cities we must not only overcome the pervasive problem of drugs, but the insidious, brain-damaging chemical of lead.

In the coming year I will be organizing a New England Pollution Prevention Council in partnership with business and industry. The purpose of the council is to identify changes in manufacturing processes that will reduce or eliminate pollution and will improve the "disposability" of consumer products. This is an

important step in breaking a nonsensical and inefficient cycle of waste. Environmental protection will be a never-ending battle against contaminated "hot spots"—harbors, landfills, or air—unless we take steps now to dramatically reduce the amount of pollution we generate and break our habit of simply moving around pollution.

Our future also holds an opportunity to objectively assess how well we are managing environmental risks and how we might redirect our resources to manage them better. We have just completed a thorough examination of 24 environmental problems in New England both in terms of ecological damage and their threat to public health. Comparing the actual risks they pose with our current responses to them challenges our institutional complacency and allows us to redirect resources where they can do the most good, namely, where they can achieve the greatest reduction of risk. This is the type of forward-looking management needed in any government agency, but particularly in the environmental arena where risks are so varied and the stakes are so high.

Finally, as we look to the future, we must not lose sight of our roots. EPA is first and foremost a regulatory agency with the large responsibility of enforcing the nation's environmental laws. It is a job we try to do as fairly as we do firmly. At the same time, the actions we take are not merely to "run up numbers" but to bring meaningful cases that will have a deterrent effect in the regulated community.

As we look together toward the year 2000 and the challenges beyond we must also turn and look from whence we came. I am reminded of a letter written by Chief Seattle in 1852 in response to a request from Washington to buy his people's land. "If we sell you our land, you must remember that it is sacred. Will you teach your children what we have taught our children? That the earth is our mother? What befalls the earth befalls all the sons of the earth. This we know. . . Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself."

As our knowledge of the environment grows, so too does the poignancy of Chief Seattle's words. May we take the Chief's counsel to heart, and, together, strive to leave to our children an environment cleaner and safer than we found it.

**EPA Regional Administrator Michael Deland (left) and U.S. Sen. Edward M. Kennedy presenting awards in EPA's ecology poem and poster contest.**



*Michael R. Deland*

Michael R. Deland  
Regional Administrator



# Future Challenges

*Environmental protection is never static. As technology and development change, so does the pollution. We solve one problem, but another new one soon emerges. Though we have achieved many successes in past years through vigilant programs, we still face environmental hazards that will require our forceful preventive action to protect our "Endangered Earth." What follows is a look at 10 of New England's most pressing challenges as we move toward the year 2000.*



Encouraging more people to use mass transit.

## *Driving Less for Cleaner Air*

### **The Problem**

Forty-three states, including five in New England, continue to experience air quality in violation of the Clean Air Act's standard for ozone. The task of reducing ambient concentrations of ground-level ozone (often called smog) is widely recognized as one of the most intractable environmental problems facing our society. Ozone is not directly emitted into our air. It is photochemically formed in the presence of sunlight at ground level by the interaction of its precursors, primarily volatile organic compounds (VOCs) and nitrogen oxides (NOx).

### **Current Efforts**

Air pollution control strategies have been adopted to reduce VOCs and NOx. The State Implementation Plans (SIPs) of Massachusetts and Connecticut are already among the most stringent in the country. Both of these states regulate nearly all of their existing and new stationary sources, and have mandatory

inspection and maintenance programs for automobiles. Rhode Island, New Hampshire and Maine regulate VOCs from specific categories of large stationary sources.

In May of 1988, EPA issued calls to 43 states for a new round of plans because the existing plans did not attain the ozone standard by the statutory deadline of Dec. 31, 1987. We will need to look beyond current control strategies to further reduce smog.

### **Future Challenges**

As we look to future solutions to the ozone problem, it is clear that some of them will involve lifestyle changes for many of us. At the top of the list will be the need to redefine our relationship with our automobiles. Cars emit 30 to 50 percent of the VOCs and about 40 percent of the NOx precursor emissions that contribute to the ozone problem. We see the dramatic effects in weekend violations of the ozone standard—a time when industrial emissions are cut way back. While EPA and automobile manufacturers may be able to put cleaner cars on the road, given current habits, we will be buying even more of them and driving more miles than ever.

Therefore, during the next decade the states will develop "transportation control measures" and "trip reduction ordinances." They will all have one purpose—to get us out of our cars. Whether it is van-pooling, mass transit, voluntary no-drive days or parking freezes, the message will be the same—we simply cannot afford to have unlimited growth in vehicle miles traveled. The best part of this approach is that we do not have to wait for some exotic new technology. We can all start to make a difference today by finding other ways to get to our destination.



### **The Problem**

Across this country, we as Americans generate more trash (solid waste) per capita each year than any other nation. At the same time we are running out of places to dispose of it. Our landfill capacity in numerous places is almost filled to the saturation point. Because of public health and environmental concerns, municipalities and private firms face growing public resistance as they attempt to site new landfills and build new incinerators. Even materials recovery facilities and recycling centers are difficult to site because local residents tend to associate all waste management operations with unpleasant odors, noise and truck traffic.

We are seeing an accelerating trend toward disposable products, convenience packaging, and an "out-of-sight, out-of-mind" attitude toward solid waste creation and disposal. We can no longer afford this kind of "business as usual." We must adopt a new solid waste management ethic that minimizes the amount and toxicity of waste created by the products we make and purchase. We must reuse and recycle many of our waste materials so that we minimize our reliance on landfills and incinerators.

### **Current Efforts**

Although solid waste management is primarily a local responsibility, the problem is national in scope and EPA has developed an "Agenda for Action" in consultation with a variety of knowledgeable groups and individuals to improve our management of municipal solid waste. The agenda provides concrete suggestions for actions by government, industry and private citizens.

EPA's New England Office is committed to working with all parties to solve our dilemma and encourage everyone to form the partnership which is vital to developing solutions to these problems. The agency has established working groups representing state and local officials, industry and citizens in each of our New England states. The groups are proceeding with initiatives to minimize volumes and reduce quantities of household and

industrial trash destined for landfills by separating, recovering, recycling and reusing materials at the front end of the waste stream.

### **Future Challenges**

By the year 2000, we in New England will have reduced our volume of solid waste by more than 25 percent through separation, recovery, recycling and reusing. The materials that can't be recovered and reused will be incinerated, then stabilized, treated and properly disposed.

Through a partnership with our states, industries, and citizens groups, we will truly have established a disposal ethic which will benefit and enhance our environment and the public health. Our goal will always be to improve.

## ***Seeking New Ways to Handle Trash***



**Recycling in Wells Beach, ME.**



# Addressing International Issues/Global Warming

## The Problem

In the next 60 years human-made emissions of certain gases will cause the earth to warm to an average temperature that has not occurred for 100,000 years. The rise in temperature is known as "global warming" or the "greenhouse effect".

Carbon dioxide, methane, nitrous oxide, ozone and chlorofluorocarbons (CFCs) are known as the greenhouse gases because they are transparent to sunlight (just as the glass on a greenhouse) and they act like a blanket of insulation in the atmosphere trapping the earth's heat.

## Current Efforts

CFCs, used as refrigerants, will be phased out in the years ahead because they are depleting the stratospheric ozone layer which protects us from harmful ultraviolet radiation from the sun.

## Future Challenges

Reductions in the emission of all greenhouse gases are essential to slow the expected warming. Scientists predict that if we do not greatly reduce the gases the earth will warm 4 degrees Fahrenheit by the year 2050, and 9 degrees by the year 2100. A 4 degree warming would cause a three to five-foot rise in the sea level, resulting in a 600-1000 foot loss of coastline in New England and a 30-80 percent loss of coastal wetlands. It would increase the frequency of the 100-year coastal flood and triple the number of days with temperatures in the 90s. Other effects would include devastating forest losses, disruptions in agriculture, increased insect infestation, deteriorated air quality (i.e. more smog), and salt water intrusion into estuaries and groundwater.

We cannot stop global warming, but we can slow it down. The following alternatives could slow the warming:

Banning methanol production from oil and coal.

Instituting mandatory efficiency standards for all cars, appliances and machinery.

Reducing the emissions that cause smog.

Banning all new coal and oil-fired power plants and instead using natural gas or a non-carbon dioxide source of electricity.

Switching to low sulfur fuels instead of relying on "scrubber technology" to reduce sulfur dioxide emissions because scrubbers are not energy efficient.

Slowing or stopping the destruction of tropical rain forests which act as huge sponges for carbon dioxide.

Instituting strict coastal development laws.



Global warming may cause sea levels to rise.

All fossil fuels emit carbon dioxide when burned. Natural gas emits less than oil or coal. Synthetic fuels, such as methanol derived from coal, emit three times more than natural gas. Methane is produced by cows and rice paddies. Nitrous oxide is emitted during the processing of fertilizers. Ground-level ozone or smog is photochemically formed in the presence of sunlight with the interaction of nitrogen oxides and volatile organic compounds.



### **The Problem**

New England's dependency on groundwater for drinking water will increase as the population and construction in the region grows. As a result, efforts to protect groundwater from contamination will become more urgent. Already, many groundwater supplies in the region have been contaminated. Unlike the large industrial sources of pollution that received attention in the 1970s, the groundwater pollutants today are less obvious, such as those coming from septic tanks, road salt, landfills, lawn chemicals and gas stations. The consequences of the contamination are costly: using long-term cleanup technologies or developing new groundwater supply wells. Groundwater contamination is a difficult problem because of the multitude of potential land-based pollutants and the nature of groundwater itself. Surface water bodies are easily seen and their water quality readily sampled. However, groundwater is everywhere below us. The properties of the materials it flows through control the movement of pollutants, and it is not always readily apparent where to drill a well to sample it.

### **Current Efforts**

EPA is providing technical assistance, consultation and grants to the New England states to help them develop a resource-based approach to protecting their groundwater. The approach enables the states to identify the groundwater resources that require the most protection (not all groundwater is capable of supplying drinking water). Once the states and local communities have identified them, they can coordinate their efforts to better protect the water before it becomes contaminated by regulating uses of the land above the groundwater. Currently, all six New England states have developed, or are developing, groundwater protection strategies using a resource-based approach. Meanwhile, EPA is continuing to establish additional human health-based water quality standards for drinking water that will result in safer water for the public.

### **Future Challenges**

The undertaking we face now and into the year 2000 will be to protect groundwater with limited financial resources and without stifling economic growth and development. The Wellhead Protection Program established under the 1986 amendments to the Safe Drinking Water Act will be instrumental in protecting groundwater. The program was developed to help the states study the flow of groundwater around current and future water supply wells, and to identify the land area around a well through which the rainwater passes into a well's aquifer. EPA is encouraging local communities to prevent contamination of the areas by directing growth and development outside the wellhead area through efforts such as local enforcement of zoning restrictions, building and health inspections and development of sewer services.

## *Controlling Land Use to Protect Groundwater*





## *Reducing and Recycling Chemical Waste*

### **The Problem**

Every year about 300 million metric tons of hazardous, chemical waste are generated in the United States. Faced with limited capacity to treat and dispose of the waste, we must implement "waste minimization" for a safe and clean environment. EPA's waste management policy calls for the following: first, source reduction; then recycling; next, treatment; and finally, disposal. The term "waste minimization" refers to the first two of these options: source reduction and recycling. Practicing waste minimization makes good sense. It saves companies money, conserves valuable natural resources, and protects the environment from accidental releases of hazardous chemicals.



### **Current Efforts**

EPA's New England Office is actively working to promote the waste minimization ethic through seminars and workshops for New England companies, and we are getting the "pollution prevention" message out through speeches at technical conferences. The Agency's management has met with state and local government, industry, and private groups to promote source reduction in New England. We have distributed waste-minimization brochures and audit manuals. Within EPA, we have participated in national policy development.

### **Future Challenges**

We will continue to play an important role in the next decade to convey the waste minimization ethic to industry and the public. EPA will also actively support the development of state and local programs through grants and technical assistance. We also see our role as that of a facilitator, bringing the states together to share information and experiences in promoting waste minimization. Some activities we plan for the future include:

- Sponsoring waste minimization workshops for various industrial groups (ie., electroplating, paper manufacturing, etc.).

- Training EPA employees and assisting in training states about waste minimization concepts.

- Encouraging universities to include waste minimization courses in their curricula.

- Presenting the waste-minimization message at conferences and to private groups, trade associations, etc.

- Providing an easily accessible database of educational and technical information on source reduction and recycling.

- Distributing brochures, updates, technical information, and articles.

### **The Problem**

Accelerated development and land speculation threaten New England's prized lakes, coastal estuaries, wetlands, streams and aquifers. Development hot spots are especially threatened areas. For example, robust development is expected in coastal New Hampshire and southern Maine where population will likely double by the year 2000. Paradoxically, the quality waters and landscapes that attract development are endangered by potential pollutants from the development itself, such as leaking underground oil and gasoline tanks, lawn fertilizer, improperly-located septic tanks, road salting, town landfills, soil that erodes during construction, and urban runoff from parking lots and roads.

### **Current Efforts**

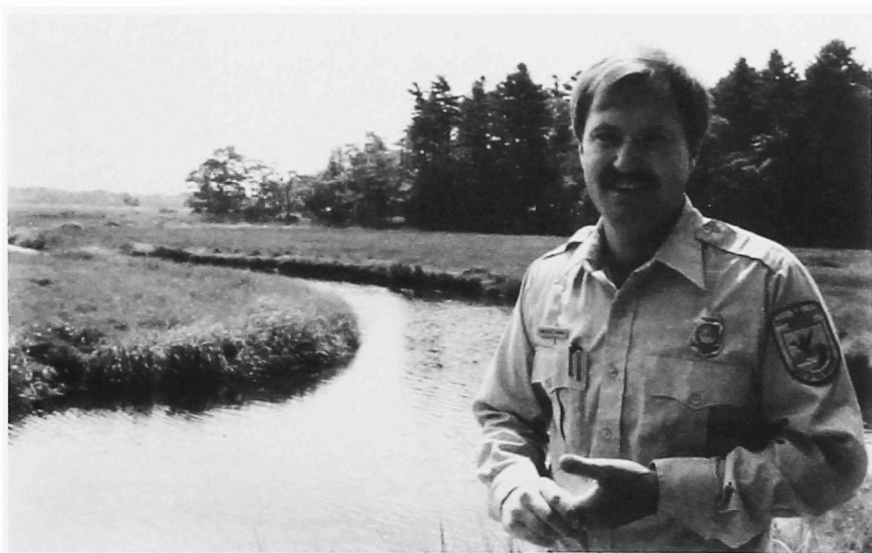
Initiatives in the Clean Water Act enable EPA and the states to encourage local officials and citizens responsible for land-use planning and regulation to implement programs to protect water quality in their towns. States are beginning to identify water bodies threatened by development pressures. Once identified, they can implement preventive measures, such as conserving open space, regulating underground tanks and landfills, retaining undeveloped buffers around water bodies and streams, or tightening zoning regulations. Maine and Vermont are using water-quality management grants to assist regional agencies and localities in incorporating water-resources constraints in land-use planning and regulation. In Maine, an EPA Clean Lakes grant is assisting the citizen-based Lakes Environmental Association to develop a pilot 50-year protection plan and town ordinances for the 131-square mile, five-town, Long Lake Watershed. On Cape Cod, voters last fall overwhelmingly supported a referendum to urge

the Legislature to establish a Cape Cod Protection Commission and to adopt a moratorium on multi-unit residential and commercial development to protect the Cape's Sole Source Aquifer, marine waters and open space.

### **Future Challenges**

EPA hopes to help the states on several pilot projects that apply computer mapping known as "geographic information systems." The computer mapping will assist communities in making decisions about planning, zoning and permitting. These systems would present in simple form pollution limits for lakes and estuaries potentially threatened with development. They would help communities determine the type and density of construction that would be required to prevent water pollution. Also, EPA will continue to protect wetlands through "advance identification programs" such as the one in 18 York County communities in southern Maine.

## ***Protecting Lakes, Wetlands, Estuaries and Streams from Development***



**Refuge Manager Andrew C. French at Rachel Carson National Wildlife Refuge in southern coastal Maine.**



## *Seeking Criminal Prosecutions Against the Worst Polluters*

### **The Problem**

One of the main goals of EPA's enforcement program is to deter companies, individuals, and municipalities from violating federal pollution laws. Congress has responded to this need for deterrence by enacting statutes with large civil penalties and criminal fines as well as jail sentences. EPA's Office of Regional Counsel works together with investigators from the Office of Criminal Investigations to identify the worst polluters, present cases to the U.S. Attorneys' offices, and prepare cases for proceedings before federal grand juries and federal trial courts.



**Cleanup is expensive.  
Prosecutions will deter  
polluters.**

### **Current Efforts**

The criminal enforcement program of EPA's New England Office is achieving record levels of activity. During 1988, we prepared ten new cases for criminal prosecution, which equals the number of new criminal cases prepared during the preceding three years combined. Highlights of the program included:

Ocean Spray Cranberries, Inc., Middleborough, MA was the first case nationwide in which the federal government charged a company with a felony under the Clean Water Act.

Marathon Development Corp. of Providence, RI and one of its officers pleaded guilty in the first criminal prosecution of wetlands violations under the Clean Water Act. The company was sentenced to a \$100,000 fine; and the officer received a \$10,000 fine, a one-year suspended prison term, and one-year probation.

W. R. Grace & Company pleaded guilty to making a false statement to the government regarding past hazardous waste disposal activities in Woburn, MA and was sentenced to a \$10,000 fine.

### **Future Challenges**

We will actively scrutinize all cases to determine if they involve willful or negligent violations of the law and thus should be prosecuted criminally. We will aggressively investigate facilities suspected of knowingly violating pollution laws. Some of the violators EPA expects to be the focus of criminal enforcement activity through the next decade include:

Companies which improperly remove and dispose of asbestos from buildings.

Companies which improperly store and dispose of hazardous waste.

Individuals and companies who fill wetlands without obtaining proper permits.

Companies which fail to properly remove toxic chemicals from their process wastewater before discharging the contaminated wastewater into rivers, the ocean, or the sewer system.

Companies which submit falsified data to EPA in required reports to the agency.

### **The Problem**

EPA's New England Office received more than 1,400 calls about chemical accidents in 1988. Some of the calls resulted in evacuations and some of the chemical releases had the potential for serious safety and environmental consequences. The releases were caused by human error, equipment malfunction, highway accidents, natural disasters, and other factors. Communities in New England are especially vulnerable to accidental releases because, in many cases, they are located in close proximity to the facilities that use or transport hazardous chemicals. Depending on the chemical released, the amount and other factors such as weather and terrain, several New England communities could be affected by a single release. Health effects from chemical exposure may be short term, such as skin irritation, or a major release could cause more long-term effects such as cancer or respiratory disorders. Accidental releases may also cause property damage and environmental harm.

### **Current Efforts**

Awareness of the dangers from accidental chemical releases was heightened by the tragedy in Bhopal, India where 2,800 people died and, closer to home, Institute, West Virginia where hundreds of people needed medical attention. In 1980, Title III of SARA, or the Emergency Planning and Community Right-To-Know Act, was enacted to deal with the problem of accidental chemical releases. It requires states and communities to evaluate risks associated with chemicals and to develop comprehensive, hazardous materials emergency plans. More than half of the districts in New England completed a plan last year. The law requires facilities to notify the states and communities of the presence, the location and quantity of hazardous chemicals at the facility, as well as the amount of toxic chemicals that are routinely released to air, land and water. Oral and written reports must be submitted immediately upon accidental release of a listed chemical.

To implement the law, EPA has coordinated technical assistance training, participated in more than 20 workshops, conducted accident investigations, and held six simulated chemical accidents to test emergency response capabilities and to provide a model training program for communities to follow. Also, the first Title III enforcement action in the nation was issued against a Massachusetts firm.

### **Future Challenges**

In the years ahead, communities must gather additional information about thousands of chemicals and their associated risks, identify chemical hot spots and develop workable emergency plans. Hazardous materials equipment and training will have to be distributed to thousands of responders, managers and employees. Facility safety audits and enforcement of the regulations will be ongoing. Also, EPA plans to provide increased support to local government, which will assume a leadership role in preventing and responding to chemical accidents.

## ***Preventing Chemical Accidents***

**A firefighter is hosed down after investigating a leak of hydrogen chloride gas at Harvard University.**





## *Solving Problems That Pose the Greatest Risk*

### **The Problem**

Pesticide residues, groundwater contamination, smog, acid rain, wetlands destruction, global warming, hazardous waste, radon—the list seems to get longer every year. It is EPA's job to find solutions to all these problems. At the same time, the federal budget deficit is a reality that EPA must face for years to come. Environmental managers have more and more important issues with which to deal and fewer resources with which to work.

### **Current Efforts**

EPA's New England Office is developing a new tool called Comparative Risk Evaluation to help managers identify which problems are most important and which ones they should tackle first. Using a methodology to compare different types of environmental problems, we can determine which problems present the greatest risks to human health and the environment. Once we have identified them, we can focus our time and money on the ones with the greatest potential for risk reduction.

Comparative Risk Evaluation borrows from the methodologies developed for risk assessment to compare different environmental problems. Risk assessment asks a deceptively simple question—How much and what types of risk does a particular environmental problem present? For example, in order to assess the actual increased risk of cancer at a Superfund site, risk assessment considers the toxicity of the pollutants, the possible exposure routes to humans and the number of people that might be exposed.

This year we completed a Comparative Risk Evaluation of 24 serious environmental problems in New England and determined the residual human health and ecological risks associated with each one. (Residual risk is the risk that remains after taking into account all current environmental programs.) In addition to the risk evaluations, the final rankings reflect the best professional judgement of a 35-person, multi-disciplinary team representing most EPA programs.

The three environmental problems posing the most serious residual human health risks in the New England Region are ozone, radon and lead. The problems posing the most serious ecological risks are air pollution, acid rain, loss of wetlands and habitat, all discharges to surface waters and accidental releases.

### **Future Challenges**

Comparative Risk Evaluation will help identify which current efforts are successful in reducing risk and which areas will need attention in the future. It will help direct resources where they will do the most good. In the coming decade, it will be an important planning tool for EPA, state and local officials as they work together to improve environmental quality and protect public health.



**An EPA helicopter crew samples northeastern lakes to determine the effects of acid rain.**

### **The Problem**

Twenty years ago, the National Environmental Policy Act of 1969 (NEPA) was a flagship law. It not only directed the federal government to follow a new ethic of the natural order, but it also found an innovative way to make government accountable. NEPA says that government shall use all practicable means to protect the environment from degradation, and to "fulfill the responsibilities of each generation as trustee of the environment for succeeding generations." NEPA also says that before any federal agency decides to take any action or issue any grant or permit which significantly affects the environment, it must prepare and show the people an environmental impact statement (EIS) and must respond to citizens' concerns.

### **Current Efforts**

NEPA and EISs touch two beliefs that run deep in a free and feisty people: "The truth shall make us free" and "show me." A good EIS lays out information on impacts and alternatives, allays citizen fears, checks the agency's judgement, and can prevent pollution. The EIS process doesn't oppose development as such but advocates disclosure and protection. EIS comments often favor simpler alternatives, which are often cheaper and less harmful. With the help of the courts, NEPA has improved many projects and has been present at the deservedly early retirement of a few.

Though NEPA is ending its second decade, the EIS process still struggles to succeed. NEPA's experiment of stating environmental ideals in a statute, and then policing the decision process by requiring that the truth be told, is still bold. In fact, NEPA has become even more controversial as sponsors of poor projects have learned to resent NEPA's scrutiny. Ideally, the effectiveness of NEPA should depend more upon the clarity of the voices that speak for the environment than upon their volume, but these voices must be strong enough to be heard.

### **Future Challenges**

If NEPA in the 1990s is to do its job of making government more accountable to the people and through them more protective of the environment, NEPA must get renewed support from those of you who believe in its ideals and the EIS process. During the next decade, with your help, we want to see all federal agencies become committed to a strong NEPA based on truthful disclosure of impacts and alternatives, public participation, and an ethic that impels the selection of the alternative that is best for the environment.

## ***Reviewing Projects to Protect the Environment***



**Youngsters take a boat on Boston Harbor to Georges Island for a picnic. The environmental review process has helped to clean up the harbor, thereby creating more recreational opportunities.**



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# Ask the Managers

*The senior managers in EPA's New England Office make daily decisions about how to effectively utilize their employees and budgets to best protect the environment. They also plan for the future. What are the most provocative problems they anticipate as they approach the year 2000? Their responses follow.*

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**W**e need to reduce the growing quantities of municipal and industrial solid and hazardous wastes, and to assure that those which cannot be eliminated are managed with minimal risk to health and the environment. To achieve this goal will require full use of the hierarchy of waste management—source reduction, recycling, treatment and disposal. We must also continue our efforts to restore the environment where past improper disposal resulted in unacceptable risks.

Reducing our waste stream will require each of us to understand and accept changes in our daily lives—from the packaging we demand to the inconvenience of recycling. But we must do so without lowering our quality of life. Reduction alone will not be enough—we must also develop and gain acceptance of new treatment and disposal technologies for our residual wastes.

Solving these problems will demand the talents and dedication of our very best people. As managers, we must excite our young people to select government service as a fulfilling career, for without them these goals can never be realized.



**Merrill S. Hohman**  
*Director of  
Waste Management*



**Stephen F. Ells**  
*Director of  
Government Relations  
and Environmental Review*

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**H**ere are some environmental wishes for the 1990s.

I wish for us to have the credibility to match our responsibilities; for risk information that relieves people's fears; for a way to have change that doesn't burden its environs; and for an economy that doesn't thrive on waste.

I wish for a land-use ethic that doesn't smear the land; and for the Vermonts, coasts of Maine, Nantucket, Whitton Ponds and all the small places we love—I wish that they may yet escape the tragedy of the commons.

I wish for an end to disease from urban lead, ozone-smog, and radon gas; and for the courage to change our dismaying new world of acid rain, global climate shifts, ozone holes, greenhouse gasses, and rising sea levels.

I wish for a government that doesn't pollute; for a society averse to the allure of pork barrel projects; for an end to decisions that shrug off the environment; and for a stop to incremental losses and perpetual rear guard actions.

More than ever, I wish for a nation that agrees on its environmental future, not one bitterly divided and partisan, but hopeful.

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**A**gent Orange Found In Holbrook," "Massachusetts Bay Fish: Unsafe to Eat?" "Is Your Home Hazardous to Your Health?" "As Earth Heats Up, Sea Levels Rise." The headlines scream danger. Nothing seems safe to eat, drink or breathe. Radon on the inside, smog on the outside. PCB's in the fish, asbestos in the schools.

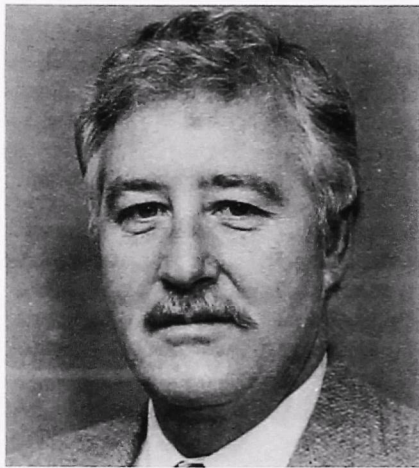
The public's reaction? Sometimes panic. Sometimes indifference. Sometimes resignation.

How can our society sort out the confusion and put the facts in perspective? Communicating risk by comparing it to something the public understands and doing so in a way that inspires trust is the toughest challenge facing risk communicators. The key is to communicate health risks to citizens and the media in a way that neither panics nor numbs.

We face complex risks to our health and environment. As we move toward the next century, risk communicators will need to work hard to inform, not overwhelm, our society about them.



**Brooke Chamberlain-Cook**  
*Director of  
Public Affairs*



**David A. Fierra**  
*Director of  
Water Management*

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**F**or the past 15 years, federal and state governments have spent billions of dollars and made significant progress in restoring degraded water bodies by controlling discharges of toxic pollutants from industries and sewage from municipal treatment plants. However, ponds, lakes and coastal waters are still being polluted from less obvious sources, such as inappropriately-sited septic tanks, boat discharges, animal wastes and fertilizer from farms and residential lawns. Also, underground drinking water supplies are being contaminated or threatened by subtle activities, like residential septic tanks, gasoline stations, auto dealerships, road salting and the town landfill.

Many of the less obvious contaminants are not controlled by federal or state government. In the years ahead, local governments must recognize that they have the broadest authority to control most of the remaining sources of contamination to the water resources by properly managing growth and development around their water supplies and water bodies. I hope that all towns make the right choice to prevent pollution before it causes the loss of water resources because restoring water resources is far more expensive and in many cases impossible.





***Patricia L. Meaney***  
***Director of Planning***  
***and Management***

**T**he environmental information system of the future will require changes in computer technology and a new focus on staff training within EPA to make this change possible. We must search for new ways to get the right information to answer environmental questions. Future environmental analyses will require multi-media integration, geographic referencing, geographic information systems, trend monitoring, and ecosystem impact review.

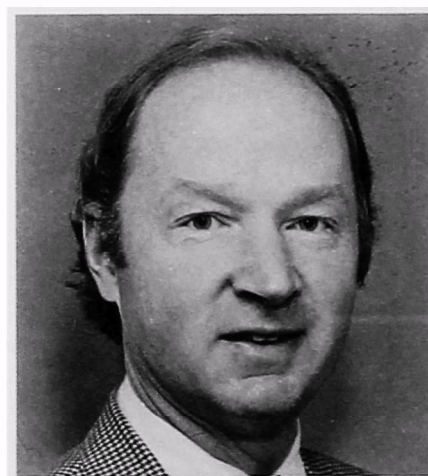
These new computer technologies will allow us to gather and assess volumes of diverse information never before available for environmental groups and state and local environmental agencies. We need to simplify and standardize the systems to allow both scientists and managers to obtain environmental data. We need to develop staff who know the possible uses of the environmental data and information resources.

It will be difficult to develop the expertise to make these systems work. The content of jobs will change. However, it is only by developing individual and group expertise that we will be able to get full value out of our very significant information investments.

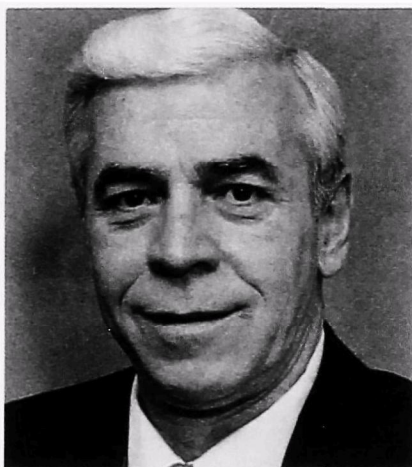
**I** want EPA's New England Office to improve its ability in systematically planning, setting priorities, and targeting our enforcement actions. I want to make sure that the fines, other penalties, injunctions or jail sentences are significant deterrents. Also, as we approach the year 2000, I want to have in place a cooperative state/federal environmental enforcement system with these goals.

We must develop innovative enforcement approaches designed for specific problems. At present, although we do some advance planning and setting priorities in our enforcement program, the enforcement actions we take more often result from tips, random inspections and reports, and referrals from the states. In some EPA areas, noncompliance levels indicate that our enforcement system is not serving as a sufficient deterrent.

EPA is getting better at assessing the comparative environmental and public health risks of the problems we face. Our challenge is to set enforcement priorities and develop plans that reflect our risk assessments, and to evaluate or explain our enforcement victories in terms of environmental improvement.



***Harley F. Laing***  
***Regional Counsel***



***Edward J. Conley***  
***Director of Environmental***  
***Services***

**T**oday's high technology has revolutionized environmental science. Incredibly sensitive, and in many cases portable, instrumentation is changing both the way we measure and the way we perceive the environment around us. These instruments can quickly and accurately measure substances in the part per billion and even parts per trillion range. More and more, data will be collected on-site and in "real time" to allow quick decisions. This will be especially useful to local officials who must respond to environmental emergencies.

With their extreme sensitivity, these instruments will be used to truly protect our environment. For instance, they can measure substances at levels well below any known risk, allowing us to note any change to these essentially background levels and to quickly investigate and take appropriate measures before a problem develops, such as a problem with a municipal groundwater supply.

Nevertheless, base labs such as EPA's in Lexington, MA will always be necessary. Its facilities and personnel will serve as a repository of expertise for the interpretation of data, quality assurance, training for state and local agencies, and state-of-the-art instrumentation.

**E**nd-of-the-pipe" pollution controls and "mid-pipe" corrections to separate waste streams for treatment and reuse will continue to be important environmental tools to protect our nation's air, water and land. Yet, more "before-pipe" actions will need to be implemented as the magnitude of the problems we face is known and the cost of controls is calculated. We discuss "preventive" actions when addressing stratospheric ozone depletion and greenhouse effects, yet the concept will have to apply much more broadly to solve many of our environmental problems. We need to simply stop the proliferation of products that are commonly used and then carelessly discarded to befoul our environment. We cannot expect individuals to substantially change their behavior through individual marketplace decisions without substantial government-supported data on the harm from the products and an explanation of what individuals can and should do to help solve the problem. At the same time, polls indicate that individuals will support a government that does impose controls to stop waste that is harmful and non-essential from ever entering the marketplace or industrial setting.



***Louis F. Gitto***  
***Director of***  
***Air Management***



# Building Toward a Pollution-Free Environment by 2000

## EPA Highlights: 1988

### Water Management Division



Richard Kotelly, (left) deputy director of the Water Division, and Kathleen Hull, EPA environmental engineer, check the sludge composting project at the Deer Island Sewage Treatment Plant on Boston Harbor.

#### Wetlands Enforcement

EPA referred four wetlands cases to the Department of Justice for civil prosecution, began two criminal investigations, and issued four Administrative Orders requiring the removal of unpermitted fill and the restoration of the damaged wetland resources.

#### Toxic Pollutants

EPA and the states collected and analyzed data to identify all water bodies known or suspected to be affected by the discharge of toxic pollutants. All known point sources of toxicants which haven't already been controlled will have new or modified permits by early 1989.

#### Boston Harbor

EPA completed assessments of the on-island and on-shore pier facilities that will be used to transport construction material and equipment to the new secondary treatment plant on Deer Island in Winthrop, MA. The Agency also recommended the types and locations of the plant's sewage tunnels, and a new outfall site, approximately 6 to 10 miles east of Deer Island in Massachusetts Bay.

#### Lead in Drinking Water

All 2,600 community water systems in New England had to notify their customers of the potential for lead in water caused by the corrosion of lead piping materials. The use of lead solder and pipe has been prohibited in five of the six states. EPA has proposed new regulations for lead that set a maximum contaminant level of 0.005 mg/l in source water and a requirement for water systems to initiate corrosion control.

#### Nonpoint Sources

All New England states developed draft Nonpoint Source (NPS) Assessments and Management Programs. Region I has been providing technical assistance to the states. Each state has also organized a NPS task force of officials and interested groups. An example of a nonpoint source is pollution carried off the land by stormwater runoff.

#### Municipal Enforcement Initiative

Under the National Municipal Policy, all municipal sewage treatment plants in New England either returned to compliance with their permits or were placed on an enforceable schedule.

#### National Estuaries

The Long Island Sound study conducted samplings to design a water quality model to determine controls needed for the widespread, low-dissolved oxygen problem in the western sound. The Narragansett Bay project completed dry-weather sampling and sediment contamination analysis. The Buzzards Bay

Project has been implementing a pilot coliform contamination reduction project in Buttermilk Bay. The Mass Bay program, funded by a \$2 million Boston Harbor pollution settlement, completed a workshop to guide the first year's effort.

#### Wastewater Treatment Grants

EPA allocated \$239 million in grants in 1988 for wastewater treatment plants in New England and made \$192 million in payments to grant recipients who had been awarded grants in previous years. The Water Division and the Regional Counsel's Office developed the first Capitalization Grant in the Region for Connecticut through a \$28 million State Revolving Fund (SRF) which will provide low interest loans instead of grants for wastewater treatment.

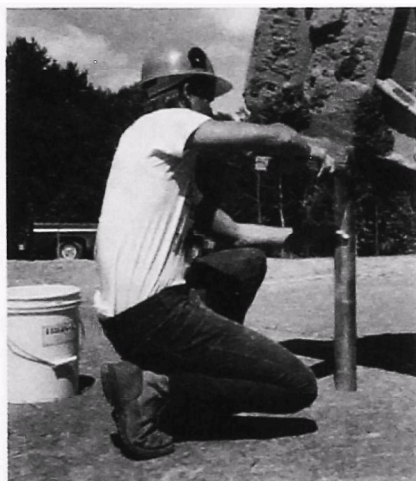
State	Obligation (millions)	Outlay (millions)
CT	\$ 39	\$ 34
ME	\$ 29	\$ 14
MA	\$110	\$ 88
NH	\$ 27	\$ 26
RI	\$ 23	\$ 20
VT	\$ 11	\$ 10
<b>Total</b>	<b>\$239</b>	<b>\$192</b>



Pi-Yun Tsai, Sc.D., EPA toxicologist.



## **Waste Management Division**



**An engineer takes a clay sample for testing.**

### **Innovative Technology**

The Superfund Innovative Technology Evaluation (SITE) program is a legislatively mandated national effort to evaluate the effectiveness of new and promising technologies at Superfund sites. In Region 1, SITE demonstrations were successfully conducted at the New Bedford Harbor, MA site using the solvent extraction process for removal of PCBs from sediments, and at the Groveland, MA site using the Terra Vac process for treatment of groundwater.

### **Waterline**

A waterline serving a 96-unit condominium complex adjacent to the Charles George Superfund site in Tyngsborough, MA was activated in October 1988. The condominium's original deep bedrock wells had been contaminated with landfill organics. Water had been supplied in the interim by an emergency overland waterline. The new \$3.5 million waterline is approximately four miles long and includes a pump station, a 550,000 gallon storage tank and a rechlorination building.

### **Corrective Action**

EPA issued a Hazardous and Solid Waste Amendments permit to IBM in Essex Junction, VT to require the company to set groundwater protection standards and to assess possible contamination at the site for further remediation. Later, an agreement was reached for IBM to develop a modeling approach to support a revision of the corrective action plan and assist in establishing groundwater quality standards. An on-site water supply well was shut down during July 1988 to evaluate the degree of connection between the bedrock aquifer and upper aquifers. Subsequently, the model has been calibrated and may be used to evaluate the effectiveness of corrective measures options.

### **Underground Tanks**

Five state legislatures passed Underground Storage Tank statutory enhancements and work began on preparing states to assume the federal regulatory program in FY89. Also the new Leaking Underground Storage Tank cleanup program, funded by a federal tax on gasoline sales, provided almost \$4 million directly to states to fund priority corrective actions at gasoline leak sites which affected off-site third parties. The states have added more than 45 staff members to overview responsible-party cleanups, and have initiated fund-financed cleanups at more than 21 sites.

### **Superfund Remedies**

EPA selected remedies at the following ten Superfund sites totaling approximately \$71.5 million:

Laurel Park in Naugatuck, CT—\$23 million for a cap and groundwater remediation.

Yaworski in Canterbury, CT—\$3 million for a cap and groundwater monitoring.

CEC in Bridgewater, MA—\$3.4 million for on-site treatment of source materials and groundwater monitoring.

Groveland in Groveland, MA—\$4 million for on-site treatment of source materials and groundwater remediation.

Iron Horse Park in Billerica, MA—\$2 million for on-site treatment of source materials.

Rose Disposal in Lanesboro, MA—\$6.5 million for on-site incineration and groundwater remediation.

Old Springfield in Springfield, VT—\$5.4 million for groundwater remediation.

Keefe in Epping, NH—\$6.1 million for upgrading the existing landfill closure and groundwater monitoring.

Charles George in Tyngsborough, MA—\$11.3 million for groundwater remediation.

L&RR in N. Smithfield, RI—\$6.8 million for upgrading the existing landfill closure and groundwater monitoring.



**Workers at the McKin Superfund site in Gray, ME stabilize decontaminated soil with cement and then rebury it.**



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## Air Management Division

### Indoor Air

Region 1 worked closely with state radon programs in conducting monitoring surveys, training programs, and radon reduction projects. Indoor radon accounts for up to 20,000 lung cancer cases nationally per year. In another indoor air area, the phase-in of the Asbestos Hazard Emergency Response Act of 1986 (AHERA) enhanced protection from airborne asbestos fibers in school buildings. Under AHERA, a comprehensive asbestos inspection and long-term management program by schools is mandated. EPA provided technical assistance to school districts, state officials, and interest groups on implementing the new legislation.

### Community Right-to-Know

Manufacturing industries that use toxic chemicals were required for the first time to submit to EPA and the states a "Toxic Release Inventory" showing the quantity of the chemicals released into the environment. Region 1 held 15 workshops on the requirements and information was mailed to thousands of facilities. More than 4,200 forms have been received, and all of this data is being put into a computer and will be directly available to the public.

### Air Toxics

Region 1 worked with the New England states to develop approved, multi-year plans for evaluating and reducing public exposure to air toxics. Special projects to evaluate potential high-risk point sources were also funded by EPA in Maine, Rhode Island, and Vermont. Also, the Region took the lead in a national effort to develop guidance for evaluating air-toxic impacts from hazardous waste sites.

### Pesticides

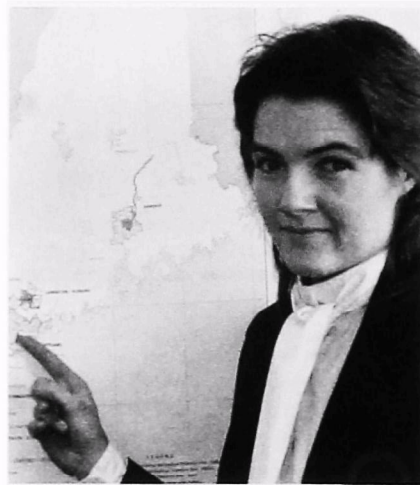
The Air Division and the Regional Counsel's Office refocused attention on federal pesticide enforcement efforts as evidence of noncompliance mounted. Careful investigation and case review resulted in civil actions taken against four New England firms, mostly for violations of the federal pesticide registration and labeling requirements.

### PCBs

Inspections by EPA and the states resulted in the collection of more than \$500,000 in administrative penalties for the improper use, storage and disposal of polychlorinated biphenyls (PCBs), a probable carcinogen that is widely used as a dielectric fluid in electrical equipment. The Region, with help from EPA in Washington, D.C., also provided technical assistance to states to deal with PCB-contaminated "auto fluff," the non-ferrous residue generated from auto and appliance shredding operations.

### Air Pollution

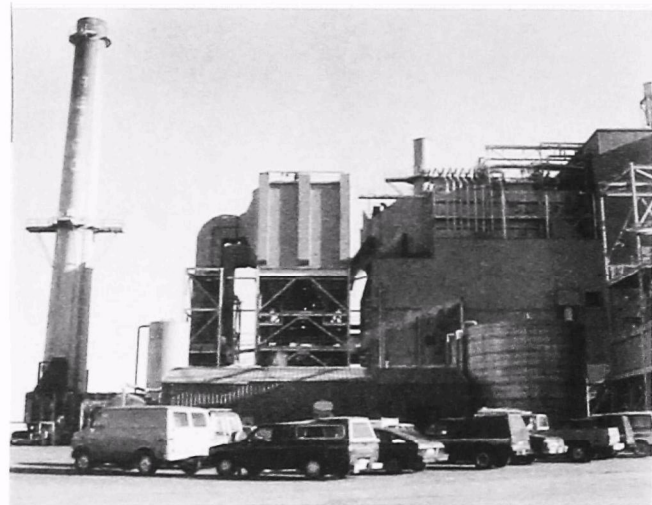
Region 1 reviewed and provided comments on 17 new or modified major stationary sources proposed in New England. The states are the primary authorities for the issuance of federally-mandated permits to construct and operate new and modified stationary sources of air pollution. Because national audits of state permits revealed significant problems, EPA initiated a "real-time" 30-day comment to provide written comments and, where necessary, testimony at public hearings. The program insures that the permits meet federal requirements, and prevents "late hits" on permitted projects under construction or in operation.



**Cynthia Greene,**  
EPA environmental scientist.

### Fine Particle Matter

With EPA funding and technical support, the Northeast States for Coordinated Air Use Management (NESCAUM) began operation of a regional fine particle monitoring network at seven rural sites around New England, New York, and New Jersey. This is the only extensive monitoring of its kind east of the Mississippi and is expected to improve the understanding of transported air pollutants which contribute to acid deposition and regional haze.



**Resco Refuse Energy  
Systems Co., Saugus, MA.**



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## ***Environmental Services Division***

### **Air Activities**

The Air Section approved monitoring networks for particulate matter in the six New England states; processed more than 1.5 million data points in a new Aerometric Information Retrieval System; and reviewed ozone data for state plans to meet air pollution standards. The section observed 26 tests at a variety of sources; reviewed 36 excessive emission reports; reviewed 40 Superfund documents; and conducted 14 toxics monitoring studies. For Chemical Emergency Planning and Community Right-To-Know, the program developed strong preparedness programs within the states and filed the first Title III enforcement action in the nation.

### **Biological Activities**

The Biology Section performed approximately 70 toxicity tests for compliance, monitoring, and enforcement of sewage discharge permits. Chlorine toxicity evaluations were conducted at three wastewater treatment plants. Also, reviews of toxicity reduction evaluation plans were completed for several plants. In addition to toxicity testing, approximately 350 bulk insulation and dust samples were analyzed for asbestos, and 24 wetlands compliance inspections were completed. Numerous microbiological tests were run on drinking water samples and sewage plant discharges.

### **Chemical Activities**

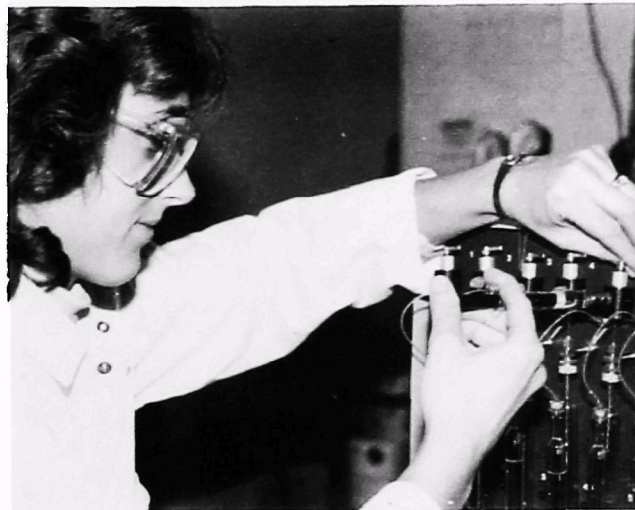
The Chemistry Section analyzed more than 2,300 samples for volatile and semi-volatile organics, polychlorinated biphenyls (PCBs) and metals. Air toxics monitoring was developed and used at key sites. Field work for volatiles, PCB and metal screening continues to be a valuable tool for on-site investigations. Training in air toxic analysis and gas chromatography/mass spectrometry operations has been given to the states.

### **Oil and Hazardous Response**

The Emergency Response Program received an unprecedented number of reports of accidental releases of oil and hazardous substances—more than 1,400 reports in 1988. One of the most dangerous situations occurred in Putnam, CT where a large number of toxic substances were involved in a fire and explosion that forced a widespread evacuation and contaminated the municipal drinking water supply. Another occurred in Springfield, MA where chlorine gas was released and caused the largest evacuation in New England history. The Response Program also removed hazardous waste at 26 sites and cleaned up 23 oil spills.



**EPA's laboratory in Lexington, MA.**



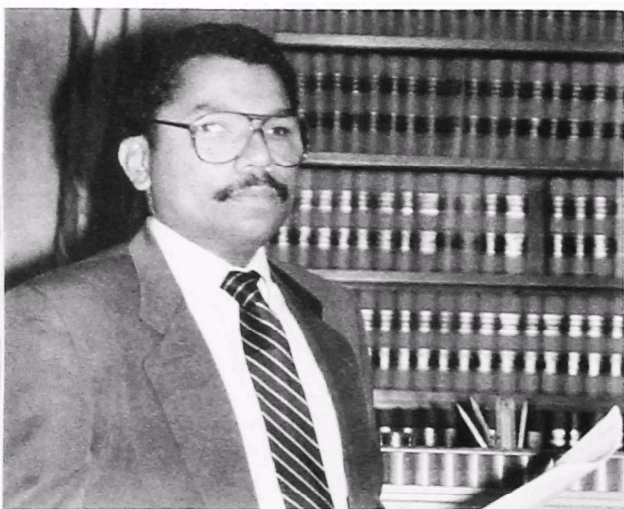
**Mary Jane Cuzzupe, EPA chemist.**

### **Water Activities**

The Water Section inspected sewage discharges during 50 compliance inspections, 16 pretreatment inspections, and 13 audit inspections. Several facilities were sampled to support the Agency's multi-media inspection initiative and the Title III program. To confirm a wasteload model for the Rutland, VT wastewater treatment plant, the section conducted an intensive water quality survey of Otter Creek. Also, the section participated in numerous environmental studies in support of other EPA programs.



## Office of Regional Counsel



**James Owens, EPA attorney.**

### **Air Enforcement**

EPA's ability to enforce existing regulations more than four months after the state submitted a revision to EPA was tested this past year. In *United States v. Arkwright and OCE*, the Rhode Island District Court became the only court so far to uphold the Agency's ability to enforce an existing regulation where there has been a long-pending revision of a State Implementation Plan (SIP). A SIP is an EPA-approved state plan for setting, regulating and enforcing air pollution standards. In *United States v. General Motors Corp.* on the other hand, the Massachusetts District Court dismissed EPA's action seeking to enforce the existing SIP because the Agency had not acted on a pending revision for well over four months. EPA has appealed the decision.

### **Cannons Engineering Settlement**

The Regional Counsel's Office and the Waste Division achieved a precedent-setting \$33.1 million settlement with 48 major parties involved in the Cannons Engineering Superfund case. This "mega-settlement" concludes a series of settlements, including three previous settlements with parties who sent smaller quantities of waste to the sites. The settlements with both "major" and "minor" parties total \$49.2 million to date, which accounts for 84 percent of the total cleanup costs at the four Cannons sites in Bridgewater and Plymouth, MA, and Londonderry and Nashua, NH. The mega-settlement will recover \$17 million in past cleanup costs spent by the government at the sites, the largest Superfund cost recovery achieved to date. The total of 361 parties who have entered settlements in the Cannons case is the largest number of parties settling in any Superfund case.

### **Water Pollution Fines**

EPA's New England Office was the first region to issue administrative penalties under the 1987 amendments to the Clean Water Act. The Regional Counsel's Office and the Water Division issued 20 penalty orders in the past year to municipalities and industries for offenses ranging from failing to implement pretreatment programs for toxics to discharging inadequately treated wastes. Approximately \$200,000 in penalties were assessed through final settlements.

### **Hazardous Waste Penalties**

Final settlements were reached in the Region's "Loss of Interim Status" (LOIS) actions in Connecticut for violations of hazardous waste management laws. Susan Bates, Inc. agreed to a \$190,000 penalty, and Plainville Electro Plating Co., Inc. and Stanley Plating Co., Inc. each agreed to \$230,000 penalties. The facilities lost their interim status approval to handle hazardous waste because they were unable to certify to EPA that they were in compliance with groundwater monitoring and financial responsibility requirements.

### **Corrective Action**

Under the Resource Conservation and Recovery Act (RCRA), EPA issued corrective-action orders and permits requiring companies to study hazardous waste contamination resulting from past waste treatment, storage and disposal practices, and then to develop plans for cleanup. Six new facilities were addressed during the year.



**Wells Beach, ME.**



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## ***Planning and Management Division***

### **Cost Savings**

The Agency launched an "Awareness Campaign" encouraging employees to cut costs because the FY89 budget is very tight. Through an educational campaign of posters, notices and meetings, employees are being asked to cut back on supplies and services such as moving expenses, renovation, printing, phone calls and airborne deliveries.

### **Reducing Turnover**

EPA Region 1 is conducting a pilot human resources program to reduce the high turnover rate among Superfund site managers. The program reviews all site manager positions and then provides temporary promotions of some managers of the most complex sites; more training; and greater opportunity to compete for cash awards.

### **Management Innovations**

Following a trend observed in the business community, the Agency is experimenting with participatory management. Middle managers identified management problems in Region 1 and recommended innovative solutions to senior managers. This "bottom up" approach represents a departure from EPA's traditional, hierarchical management structure.

### **Office Assistant**

The personal computer is allowing secretaries to become able assistants. Word processing is changing the transcribe-draft-redraft chore. Staff members submit letters on a computer disk to an assistant for "sprucing-up" and distribution. Electronic Mail allows communication without paper. All correspondence appears on the computer screen. The role of the assistant will expand into analyzing and enhancing information with computer tools like spreadsheets, databases and desktop publishing.



**Jim Holloway,**  
**EPA mail operations manager.**

### **Parental Leave Manual**

An EPA committee drafted a Regional Parental Leave Manual to address the needs of our working parents. Based on applicable laws and regulations, the manual includes policies on maternity leave, paternity leave and leave for adoption. It includes arrangements to help meet family needs, including part-time work, job sharing, and limited periods of working at home.

### **Library**

Extending beyond traditional functions, EPA's Library provides information by computer links with other libraries across the nation. The links allow the library to scan computerized indexes for references on specific topics at any library. Another addition to the library is the start-up of the Canal Street Records Center for the Waste Division. The Center maintains and assists EPA staff with Superfund and RCRA files and provides the public with access to a variety of federal records.

### **Grants**

Region 1 is participating as a pilot region to test, improve and implement the Regional Automated Grants Document System. The computer system will streamline the awarding of more than 500 grant and cooperative agreement actions annually.

### **Preparing to Move**

The Agency is planning to move out of the John F. Kennedy Federal Building to another location in downtown Boston because of a proposed renovation of the building, including installation of sprinklers and asbestos removal. The move, affecting almost 400 EPA employees, will occur in late 1989. EPA will return to the renovated JFK Building in two or three years.



**Marcia McCarthy,**  
**EPA "Secretary of the Year"**



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## Office of Government Relations and Environmental Review



### Government Relations

EPA's mission is furthered by reaching out to elected officials with information on EPA's priorities and responding to their concerns. The officials have the responsibility to satisfy themselves that EPA is acting sensibly and carrying out the environmental laws properly. Their continued support and informed perception is important if EPA is to succeed.

### Congressional Delegation

The information we give to the congressional delegation must be prompt, correct, and absolutely nonpartisan. In this election year, the volume of both letters and phone calls has doubled. Our congressional staff answered more than a thousand phone calls and hundreds of letters from U.S. senators and congressmen. In addition, we gave 86 briefings. We were pleased that our congressional delegation continued to give bipartisan support to pollution control.

### State Legislators

Our staff also continued to work with key state legislators. One result was a law to remove from Deer Island in Boston Harbor the century-old prison to make space for the new giant Massachusetts Water Resources Authority sewage treatment plant. Other state legislative issues included the Underground Storage Tank program in Rhode Island and the radon situation in Connecticut. We fielded more than 250 phone calls from state legislators and their staffs. We also ran a special project with the Council of State Governments to help organize a conference of 700 state legislators.

### Environmental Review

Our goal has been to prevent significant or avoidable environmental damage and to protect the integrity of the National Environmental Policy Act (NEPA) process of full disclosure and public accountability on behalf of an environmental ethic. We have been active in numerous important cases, including the following:

#### Georges Bank

Opposed the leasing of Georges Bank for offshore oil and gas exploration because it unnecessarily places at risk a proven renewable fisheries resource of national importance.

#### Loon Mountain Ski Area

Advocated that the Forest Service prepare an environmental impact statement for the proposed expansion of the Loon Mountain Ski Area in the White Mountain National Forest.

#### Sears Island

Confirmed that there is a reasonable, less environmentally damaging alternative to the proposed Sears Island cargo port in Maine. The NEPA review disclosed critical information about project impacts, need, costs, and alternatives.

#### Big River Reservoir

Advocated an unbiased analysis of the true need for and alternatives to the quarter-billion dollar Big River Reservoir in Rhode Island, which would destroy 600 acres of wetlands.

#### White Mountain National Forest

Called for an environmental review of the full consequences of minerals mining in the White Mountain National Forest prior to the Bureau of Land Management's issuance of prospecting permits.



#### Ocean State Power Plant

Recommended less harmful alternative locations and mitigation measures for the large proposed Ocean State Power Plant on the Massachusetts-Rhode Island state line. We persuaded the Federal Energy Regulatory Administration to prepare an Environmental Impact Statement on this 500 megawatt project, the first time it had ever done so on a power plant.



## Office of Public Affairs

### Media

Recognizing that EPA informs the public about environmental issues through the media, the Agency wrote and released to newspapers, radio and television stations approximately 175 news and feature stories in 1988. EPA officials regularly spoke with reporters from the *Boston Globe*, the *Boston Herald*, the *Boston Phoenix*, the *Hartford Courant*, the *Providence Journal*, the *New York Times*, the *Wall Street Journal*, *Time*, *Newsweek*, and other major television, radio and newspaper outlets in New England. Top EPA administrators met with many New England editorial boards, general station managers and editorial directors. EPA newsletters served to update public and private interest groups of new regulations and actions.

### Superfund Community Relations

To ensure that local citizens are involved in decisions about cleanup actions at the 59 major hazardous waste (Superfund) sites in New England, the Superfund Community Relations Program held 20 public meetings and nine public hearings in site communities for citizens to learn, raise issues and ask questions about site developments. Public input and comments were solicited on the proposed cleanup options for several of the Region's sites which had reached the stage for the design of a final cleanup plan. EPA distributed 36 site-specific fact sheets and more than 65 news releases to keep citizens apprised of Superfund actions. Also, the staff commented on four Technical Assistance Grant (TAG) applications and held workshops on the new TAGs for interested citizen groups. TAGs are grants to help community groups review and comment on Superfund technical documents.



A news conference in Woods Hole, MA announcing the designation of Buzzards Bay as an estuary of national significance.

### Freedom of Information

EPA received and processed 1,344 Freedom of Information requests. The written requests come from individuals, corporations, associations, public interest groups and local, state and foreign governments for records held or believed to be held by EPA.

### Public Education

Educational activities for the public increased awareness through the National President's Environmental Youth Awards program, the Boston Harbor slide/video show and the participation of EPA employees in the Adopt-a-School program. Other public-oriented activities included the Environmental Education Ecology Poem and Poster Contest, the annual environmental forum, a speaker's bureau, staffing display booths and exhibits, the publication of the *Directory of Environmental Groups in New England*, and the availability of environmental videotapes, films, pamphlets and brochures.

Former EPA Administrator Lee Thomas speaks from a podium at a news conference in Providence, RI. Seated to the left of Thomas are EPA Regional Administrator Michael Deland and U.S. Sen. Claiborne Pell.

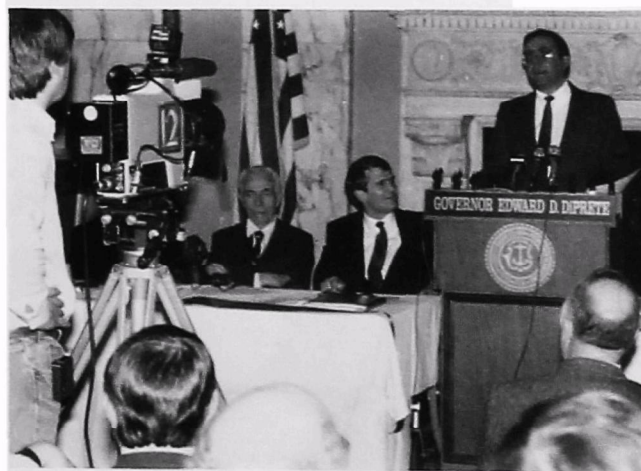
## EPA Regional Efforts

### Contracts for Minority and Women Businesses

More than seven percent of Region 1's total contracts under the municipal facilities construction grants program in 1988 were awarded to women-owned or minority-owned businesses. Approximately \$15 million went to minority-owned businesses and more than \$5.5 million went to women-owned businesses from the contracts totaling approximately \$280 million. The effort represents EPA's commitment to address the challenge to increase contract dollars to minority and women businesses.

### Affirmative Action

Region 1 has an aggressive affirmative action program, and is committed to creating and sustaining a diverse workforce. In 1988, 75 percent of the regional increases were women and minority employees. To further promote gender and racial equality, the Region also developed affirmative action training for supervisors and managers which created forums for dialogue concerning the management of a diverse workforce. Also, the Region developed an AIDS action policy and a regional training program for all employees.







# Expanded State Roles in the 1990's

*By Paul G. Keough*

*Deputy Regional Administrator*

*EPA's New England Office*

**T**here is no question that our achievement of regional and national environmental goals will become increasingly dependent on the states as we head toward the year 2000.

During the last decade, states have been delegated operational or day-to-day responsibilities for carrying out a wide array of EPA programs, and that trend will continue. Previously, the U.S. Congress passed environmental legislation requiring EPA to establish programs and then delegate responsibilities to the states. Recently, congressional legislation has directly assigned major responsibilities to the states. Thus, it is imperative that EPA and the states continue to work on establishing a true partnership through a joint effort to improve the environment.

In the years ahead, I see EPA emphasizing technical assistance to a far greater degree. Environmental problems and programs are becoming increasingly more technically complex. There will be a tremendous expansion of EPA's technology transfer programs.

States will be given more flexibility to decide how best to utilize federal dollars. I do not anticipate a large increase in the amount of dollars that will be going to the states to help them run their programs. Risk-based decision making will be utilized by EPA and the states to make sure that the limited, available federal dollars are being spent to achieve the most environmental benefit. The states will also need to become more involved in policy formation and decision-making if the partnership is to be successful.

I expect both the federal and state governments to shift their emphasis to pollution prevention programs rather than using all of their resources to clean up the problems of the past. This will be particularly true in the solid waste area where EPA and the states will be developing more aggressive programs in the waste minimization and recycling areas.

I believe that both the state and federal governments will turn to the private sector for assistance in carrying out many pollution-control construction programs. The demand for new construction and rehabilitation of existing facilities will far outstrip the ability of federal and state governments to pay. There will be a trend toward the privatization of these facilities.

EPA and the states will have to continue to strive diligently to improve their working relationships. Cooperation is essential because they have a shared responsibility and a shared commitment to improve the environmental quality for all New Englanders.



**Deputy Regional Administrator Paul Keough (center) and U.S. Rep. Nicholas Mavroules (right) examine granular carbon at a new \$1 million granular carbon system to treat contaminated well water in Groveland, MA.**



# State Highlights: 1988

*Working Today for a Cleaner Environment in the Next Decade*

## *Department of Environmental Protection*

*Commissioner  
Leslie Carothers*

## Connecticut

### **Environment/2000**

Gov. William A. O'Neill adopted Environment/2000 in September 1987 as Connecticut's environmental plan and called on all public and private organizations and individuals to participate in its implementation. During 1988, Commissioner Leslie Carothers established an advisory committee representing a broad cross-section of government and private interests to assist in the task. Addressing 42 issues, Environment/2000 provides a comprehensive long-range plan for the Department and all the other groups that have an impact on the state's natural resources and environmental quality. The Environment/2000 plan has been recognized by the Council of State Governments and selected for inclusion in the Council's Innovations Transfer Project.

### **Land Acquisition**

In connection with ongoing, open-space acquisitions under the new Recreation and Natural Heritage Trust program, the Department has established a comprehensive priority-rating system and an advisory committee to expedite the acquisition of the most valuable properties in the state, using the \$15 million appropriation of the last legislative session.

### **State Parks Mark 75th Anniversary**

The Connecticut State Park system observed the 75th anniversary of the legislation establishing the first State Park Commission in Connecticut. Although extensive private sector activity had previously taken place, the first legislation was passed in 1913. A series of diverse, anniversary activities was held throughout the 90-park, 29,856-acre system, including a special birthday celebration at Rocky Neck State Park in August.

### **Long Island Sound**


The joint, federal/multi-state study of Long Island Sound continues to be a major priority for the Department. In addition to data collection and analysis, the state has initiated the process of acquiring a new vessel for use in water-quality and living-resource monitoring. Plans are being developed for an education center and for remedial actions to deal with the complex problems in the Sound.

### **Water Enforcement Efforts**

A strengthened commitment to the enforcement of water-quality related statutes was reflected in a stipulated judgement entered at Hartford Superior Court in November. The judgement provided for two forfeiture payments totalling \$180,000 by the City of New Haven, the largest fine ever levied in connection with a water quality violation by a Connecticut municipality. It also provided for a \$150,000 payment towards a future water-related project to be approved by the Department.

### **Toward a New Century**

Although the restoration of Long Island Sound, aquifer protection and any number of other critical items require the Department's attention, probably the single most urgent problem is the handling of solid waste. A revised state plan for solid waste management was developed and submitted for public comment in September. This integrated plan places a substantial emphasis on recycling and includes a controversial proposal to override local zoning in the siting of ash disposal facilities.



Chris Rowlands (right), as superhero Ray Cycle, promotes Connecticut's recycling efforts.



# Maine

## *Department of Environmental Protection*

*Commissioner  
Dean C. Marriott*

### **Reorganization**

What was once an informal board dealing with recreational water problems in Maine is now the Department of Environmental Protection (DEP) with more than 350 employees and a budget of \$16 million dealing with a myriad of complex issues and regulations. Recognizing the stresses that accompany such growth, the Governor commissioned a management study to identify changes that would enhance departmental operations and service delivery. Chief among the study's recommendations were: (1) create an executive staff to "free up" the Commissioner to be a policy creator and environmental advocate, (2) increase regional focus, (3) improve written procedures and automated systems, and (4) create a Bureau of Solid Waste Management to better integrate waste management policy. An action plan has been drawn up and recommendations are being implemented.

### **Ozone**

Residents of quiet Isle au Haut found that they too can suffer from ozone. The highest concentration ever recorded in Maine—0.20 ppm—occurred on the remote island this summer. In August, the Board of Environmental Protection adopted rules proposed by DEP to reduce hydrocarbon emissions, a known precursor to ozone formation. The rules require vapor controls at northern bulk storage gasoline terminals, Stage 1 controls for major gasoline service stations, an annual self-certification program for gasoline tank-truck tightness, and reduced gasoline volatility.

### **Solid Waste**

Responding to public concern about solid waste, DEP's new Bureau of Solid Waste Management is implementing the provisions of the comprehensive solid waste legislation enacted in 1987. Changes in how the state manages solid waste may occur in the upcoming legislative session when issues like disposal capacity and recycling are expected to be examined and debated.

### **Aesthetic Water Quality**

Now that their rivers are technically "clean," Maine citizens are voicing concerns about the water's aesthetics. Color, odor, foam and combined sewer overflows are restricting recreational activity on many of Maine's rivers. DEP has spent 10 months studying the problem and likely solutions. A report containing recommendations and proposed legislation will be issued to the Governor in early 1989.

### **Looking a Decade Ahead**

Maine like other states faces a solid waste management challenge of monumental proportions. The state has worked steadily on the technical aspects of solid waste management for a number of years and now strives to better implement many of the solutions that exist in a cost-effective and environmentally-sound manner. During the next 10 years, DEP will work with industries, communities and individual citizens to develop an integrated solid waste management system that incorporates elements of source reduction, recycling, incineration and landfilling.



**Maine's rocky coast.**

### **Underground Tanks**

Gasoline contaminated the drinking water of families and school children in the coastal village of Friendship four years ago. On October 13, townspeople celebrated the solution to their problem as they assumed ownership and operational responsibilities for a new municipal water system. Planned and built by DEP, the system was completed in August 1988. Work on long-term groundwater remediation is underway.



# Massachusetts

## *Executive Office of Environmental Affairs*

*Secretary  
James S. Hoyte*



**Collecting household hazardous waste.**

### **Open Space**

Massachusetts in 1988 invested \$80 million in the preservation of watersheds, coastal areas, farmland, riverways, local conservation lands and other natural resources. The bulk of the funds came from the 1987 open space bill totalling \$500 million.

### **Boston Harbor Cleanup**

Gov. Michael S. Dukakis in August launched the construction for the Boston Harbor cleanup, the largest environmental project in New England since the construction of the Quabbin Reservoir in Central Massachusetts in the 1930s.

### **Recycling**

Reinforcing the Commonwealth's leadership in recycling, Secretary James S. Hoyte in November led the groundbreaking in Springfield for the state's first materials-recovery facility.

### **Waste Prevention**

The newly-appointed commissioner of the state's Department of Environmental Quality Engineering, Daniel Greenbaum, announced organizational changes designed to make waste prevention—the agency's primary objective.

### **National Ranking**

Massachusetts environmental programs were ranked number one in the country—tied with Wisconsin—in a 1988 nationwide survey of environmental groups conducted by the Washington-based Fund for Renewable Energy and the Environment.

### **Polystyrene Ban**

Calling on the public and private sectors to get away from the "throw-away society," the Governor issued an executive order in May banning the state purchase of non-recyclable disposable plastics such as Styrofoam and expanding the state purchase of recycled goods.

### **One-Year Pause on Incinerators**

Massachusetts in November announced a one-year pause on the siting and construction of waste-to-energy incinerators in an effort to encourage communities and private investors to look more closely at recycling and other alternatives.

### **Acid Rain**

By year's end, Massachusetts was preparing to enact some of the toughest in-state regulations in the nation to reduce the smokestack emissions which contribute to acid rain.

### **Tougher Environmental Reviews**

The Governor filed a package of amendments to further strengthen the state's environmental impact review process. The amendments, if adopted, would block construction on projects until all reviews are completed; would set a direct fine for violators; would guarantee citizens the right to appeal all impact decisions; and would allow local communities to refer projects for state review which do not automatically trigger the review process.

### **Beach Cleanups**

The Massachusetts Coastal Zone Management office organized a cleanup of the entire Massachusetts coastline. Some 2,200 volunteers collected 25 tons of trash from New Bedford to Newburyport.

### **Looking a Decade Ahead**

While environmental policy at the state and federal level traditionally has focused on end-of-the pipe regulation and response, Massachusetts moves into the next decade and century with a much more aggressive, prevention-minded strategy. Instead of merely cleaning up past mistakes, Massachusetts considers prevention—stopping pollution and other environmental harm at the source—its top priority. Current efforts in waste management, resource protection and the enforcement of tough standards on discharges reflect the momentum Massachusetts already has gained on prevention.



# New Hampshire

## *Department of Environmental Services*

### *Commissioner Alden H. Howard*

#### **Waste Management**

The Department of Environmental Services (DES) completed a major revision of the state's Solid Waste Management Plan in 1988. This document provides the most current data and options needed for making management decisions at the state, regional, and local levels. Other solid waste initiatives included legislation establishing a state solid waste study committee, providing funds for hiring a recycling coordinator, mandating a training program for facility operators, and authorizing solid waste research grants. Additionally, hazardous waste settlements with potentially responsible parties were completed at six of the state's Superfund sites, including a multi-million dollar settlement involving the Gilson Road Site in Nashua.

#### **Wastewater Treatment**

New Hampshire issued more court-ordered consent decrees than any other New England state by July 1, 1988 to all of the communities failing to meet the wastewater treatment requirements of the Clean Water Act. The consent decree documents contain compliance schedules for construction of treatment facilities as well as monetary penalties for not meeting the schedules.

#### **Water User Program**

DES implemented its first full year of a water-user registration and reporting program. This involved approximately 500 facilities that use more than 20,000 gallons of water per day, including industrial, agricultural, sewage treatment, and water supply facilities. The extensive data gathered by this program assists the Department in planning for the state's future water needs.

#### **Air Compliance**

The Department conducted an active air regulations enforcement program by inspecting 360 permitted air emission devices at more than 130 plant sites statewide. Additional compliance activities included conducting more than 40 stack tests to verify emission rates for particulates, nitrogen oxide, carbon dioxide and hydrocarbons. Enforcement orders were issued to all facilities found in violation of state regulations.

#### **Prime Focus for the Nineties**

A prime focus of the Department in the 1990's will be the improvement and expansion of solid waste management programs. The recently revised State Solid Waste Management Plan will result in the strengthening of solid waste management districts and the implementation of waste reduction goals, including increased municipal recycling. Following the plan's guidance, DES will provide additional leadership and expertise to municipal and regional officials in a cooperative effort to successfully resolve New Hampshire's solid waste problems.



DES Commissioner Alden H. Howard (second from left) speaking at the dedication of a town solid waste recycling facility.

#### **Rivers Protection**

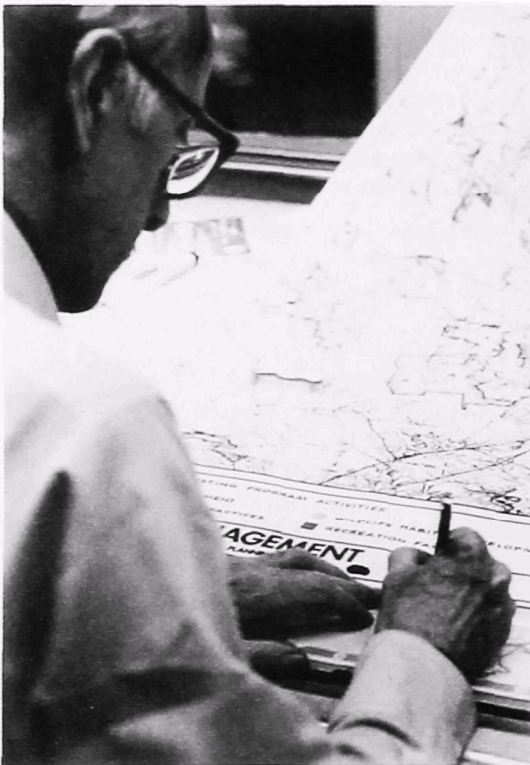
The Department began implementing a rivers management and protection program initiated by 1988 state legislation. Under the direction of a newly-hired DES rivers coordinator, the program assesses various rivers and river segments for possible protection through a state nominating process. The coordinator also develops river corridor management plans and provides assistance to local officials to implement such plans.



# Rhode Island

## Department of Environmental Management

**Director**  
**Robert L. Bendick, Jr.**



**A DEM planner adjusts boundary lines to reflect Rhode Island's most recent purchase of open space.**

### Medical Waste

Medical waste washed ashore on Rhode Island's beaches in 1988. The Department of Environmental Management (DEM) commissioned oceanographers to study wind and tidal currents and the locations where the waste came ashore. The study set the dumping location in the New York bight in mid-June.

### Auto Fluff

After a DEM investigation, tests showed that "loam" used to cover a closed landfill contained PCBs. An extensive cleanup followed with removal of the "auto fluff" from nearby lawns. DEM and the Attorney General's Office secured an 800-point criminal indictment against the firms responsible. Ultimately, EPA's help was requested when the contaminated fluff was found at 13 separate locations around the state. By June, shredders of junk cars had closed down when landfills refused to accept the resulting fluff. Appliances manufactured before the ban of PCBs in the late 1970s appeared to be the source of contamination.

### Trash

The state's mandatory recycling program began in the fall. Residents are required to separate newspapers and to place aluminum and glass in blue bins picked up with their regular trash. More than 70 percent participated on the first collection day and 90 percent on the second. The Source Reduction Task Force released a plan recommending education, legislation to ban the use of some materials, and technical assistance to manufacturers and businesses to reduce generation.

### Drinking Water

The Scituate Reservoir Task Force recommended actions to protect the Scituate from contamination, including road salt reductions and new septic system regulations. Progress was made in implementation of the state's innovative Watershed Protection Program. Statewide Planning introduced a new guide to water supply policies which became part of the State Guide Plan.

### Water Quality

Gov. Edward D. DiPrete proposed a trust fund for clean water to help replace cuts in federal funds available for sewage treatment plants. The legislation received the support of the General Assembly. DEM ordered three municipalities on the Pawtuxet River to upgrade their sewage facilities to advanced treatment. The projects are expected to cost upward of \$60 million. Rhode Island also increased its water quality budget sufficiently to offset a 35 percent cutback in the federal share of the cost of implementing the Clean Water Act requirements.

### Toward a New Century

In November 1987 a new state open space bond was approved, providing \$65 million to protect land from development. Competition was heavy for the state's matching grants for open space and recreation area preservation. By September, \$37 million of the state funding had been committed to projects to preserve 3,325 acres of land across the state, including hundreds of acres of waterfront land along the coastline, rivers, lakes and ponds. The grant program was in addition to ongoing programs in which the state purchased hundreds of acres of open space during the year.



## Vermont

### *Agency of Natural Resources*

### *Secretary Jonathan Lash*

#### **Lake Champlain**

Vermont, New York and Quebec signed a memorandum of understanding which provides for the cooperative management of Lake Champlain. The 126-mile-long lake has not suffered pollution problems as severe as her five sister Great Lakes, but accelerated lakeshore development and heavy recreational use have spurred the three governments to take action. A workplan of research and management needs and a Citizen's Advisory Committee have been established. Also, Vermont and New York will nominate Lake Champlain, along with New York's six-million acre Adirondack State Park, as a Biosphere Reserve in the United Nations' "Man and the Biosphere Program."

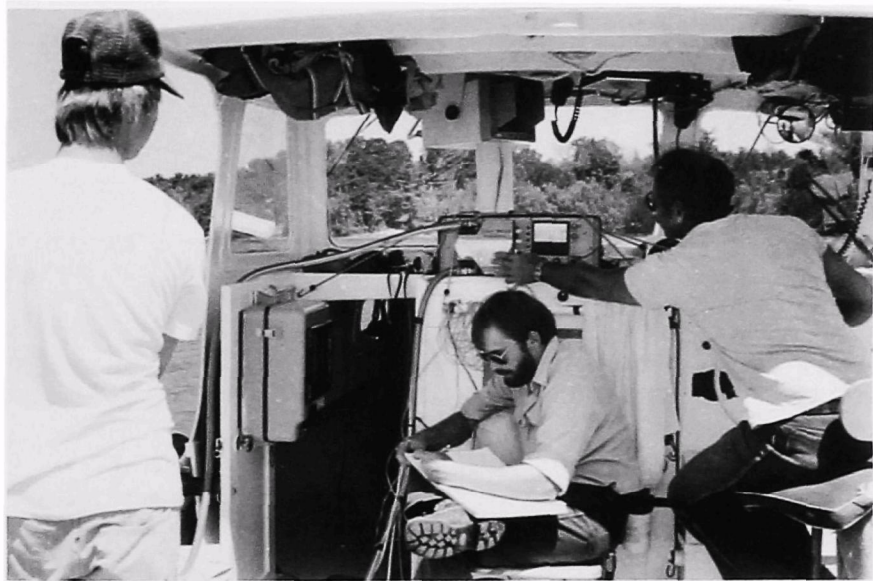
#### **Growth**

In response to the land-use and environmental pressures associated with Vermont's accelerated economic growth, the 1988 Legislature passed a growth bill which provides planning funds to communities and sets 32 goals to guide communities. The law also requires state agencies making land-use decisions to develop plans consistent with state goals, and commits \$4.5 million to develop a state-wide computerized geographic information system.

#### **Solid Waste**

The state's new Solid Waste Plan calls for a 40 percent recycling goal and strong state and regional waste reduction programs. The plan, the product of nearly 30 public meetings and innumerable discussions with many interested parties, will help regions design solid waste programs during the next five years.

**Agency fisheries biologists monitor currents in Lake Champlain.**



#### **Groundwater Regulations**

The State Department of Health and the Agency implemented a comprehensive set of groundwater regulations. The regulations require the Agency to develop a management and protection strategy for the state's groundwater, which will be classified into four categories based on intended use and the range of activities permitted in recharge areas. A separate wellhead protection category was created to give extra protection to the state's 400 well or spring-fed public drinking water supplies.

#### **Air Quality**

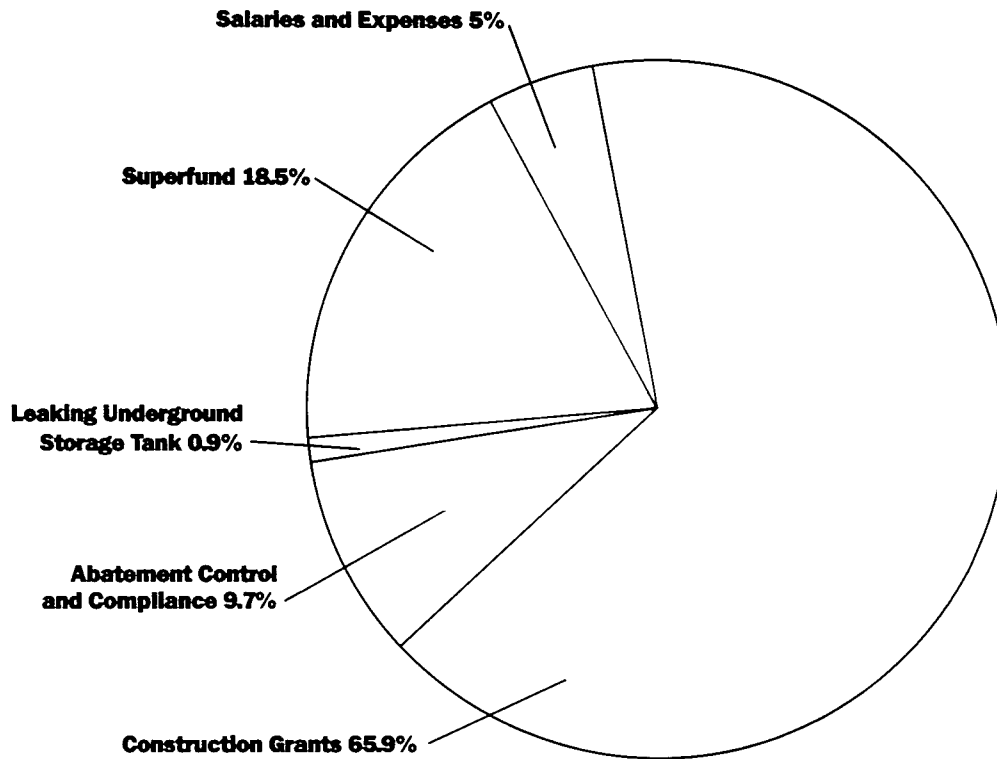
Vermont and other Northeastern states have proposed regulations to control the volatility of gasoline, a move which is expected to reduce the formation of surface-level ozone. The Agency also developed air toxics regulations to set standards for approximately 200 pollutants. The regulations will affect industrial facilities, dry cleaners, gas stations and waste disposal operations.

#### **Toward the Year 2000**

Aside from global climate change, which requires federal and worldwide action, we consider growth and associated environmental pressures as the single biggest challenge facing Vermont's environment. Dairying and forestry help define Vermont's landscape, but they have been squeezed by economic changes largely outside the control of the state. Growth in other sectors, chiefly tourism and a second-home market, threaten the landscape and environment that characterize Vermont. However, the Legislature's Growth Management Act provided the tools and the mandate to plan and guide growth, and set up tax incentives for the dairy industry. Also, a \$250,000 congressional appropriation was obtained by Vermont Sen. Patrick Leahy and New Hampshire Sen. Warren Rudman to study the future of large tracts of forest lands in Vermont, New Hampshire, Maine and New York, and to recommend management strategies to keep northern forestry a viable rural economy.



# Financial Overview





	Salaries and Expenses	Superfund	Leaking Underground Storage Tank	Abatement Control and Compliance	Wastewater Treatment Construction Grants	Total EPA Region 1
<b>Personnel Compensation and Benefits</b>	15,612,100	5,868,200	206,000			21,686,300
<b>Travel</b>	540,300	303,500	11,900			855,700
<b>Operating Expenses</b>	2,269,500	1,379,700	18,200			3,667,400
<b>Interagency Agreements</b>		28,096,500				28,096,500
<b>Program Contracts</b>		23,873,600		1,717,600		25,591,200
<b>Cooperative Agreements</b>		7,770,100	3,044,900			10,815,000
<b>Grants to States</b>				33,698,100		33,698,100
<b>Wastewater Treatment Construction Grants</b>					240,179,100	240,179,100
<b>Total</b>	18,421,900	67,291,600	3,281,000	35,415,700	240,179,100	364,589,300







# Region One Work Force

**Engineers**  **28%**  
Environmental 151, Chemical 8. Total: 159.

**Life Scientists**  **3%**  
Aquatic Biology 13, Micro Biology 2, Ecology 1, Other 3. Total: 19.


**Physical Scientists**  **13%**  
Environmental 50, Geology 8, Chemical 11, Hydrology 8. Total: 77.

**Attorneys and Paralegals**  **7%**  
Attorneys 36, Law Clerk 3, Paralegal 1. Total: 40.

**Environmental Protection**  **7%**  
Specialists 39. Total: 39.

**Technicians**  **3%**  
Environmental Assistants 13, Engineering Technician 1, Physical Science Technician 1, Physical Science Assistant 1. Total: 16.

**Administrative Support**  **18%**  
Finance 14, Personnel 13, Office Service 8, Computer 11, Grants 11, Management and Program Analysis 13, Public Affairs 4, Other 31. Total: 105.

**Secretarial and Clerical**  **21%**  
Secretarial and Clerical 118. Total: 118.

**Total Number of Employees: 573**

# For Further Information

If you would like additional information about specific EPA programs, please visit or write the Office of Public Affairs, U.S. Environmental Protection Agency, John F. Kennedy Building (22nd Floor), Cambridge Street, Boston, MA 02203, or call (617) 565-3420.

The office maintains a limited supply of EPA publications, operates an informal speakers' bureau and coordinates regional distribution of environmental films and videos. There is no charge to the public for the services.

For extensive research, EPA also has an environmental library on the 15th floor (Room 1500) of the JFK Building in Boston which is open to the public, Monday through Friday, 8:30 a.m. to 4:30 p.m. The library contains books, documents, EPA reports, journals and microfiche reports about air, water and solid and hazardous waste issues. For further information, call the library at (617) 565-3300.

If you encounter an environmental problem, report it first to your local, and then your state pollution control agency at the phone numbers which follow. For specific information about EPA programs, call the following EPA phone numbers:

## **U.S. EPA, New England Office (Region 1) (617) 565-3420**

Asbestos	(617) 565-3744
Air Division	(617) 565-3800
Automobile Complaints	
Massachusetts	1-800-631-2700
Other N.E. States	1-800-821-1237
Chemical and Oil Spills,	
24-hour number	(617) 223-7265
Government Relations	(617) 565-3414
Impact Statement	
Review	(617) 565-3414
Lexington Lab	(617) 860-4300
Pesticides	(617) 565-3744
Pesticides Hot Line	1-800-858-7378
Personnel	(617) 565-3719
Regional Counsel	(617) 565-3334
Title III	(617) 860-4385
Superfund	(617) 573-9610
Underground Storage	
Tanks	(617) 573-9604
Waste Division	(617) 573-5700
Water Division	(617) 565-3478
Permit Compliance	(617) 565-3493
Surface Water Quality	(617) 565-3538
Drinking Water	(617) 565-3610
Groundwater	(617) 565-3610

## **New England State Environmental Agencies**

### **Connecticut Department of Environmental Protection**

165 Capitol Ave.  
Hartford, CT 06106  
(203) 566-5599  
24-hour spill number: (203) 566-3338

### **Maine Department of Environmental Protection**

State House, Station 17  
Augusta, ME 04333  
(207) 289-7688  
24-hour spill number: 1-800-482-0777

### **Massachusetts Executive Office of Environmental Affairs**

100 Cambridge St., 20th Floor  
Boston, MA 02202  
(617) 727-9800  
24-hour spill number:  
(617) 292-5648 (Business hours)  
(617) 566-4500 (After business hours—  
State Police Communications Center)

### **New Hampshire Department of Environmental Services**

Health and Human Services Building  
6 Hazen Drive, P.O. Box 95  
Concord, NH 03301  
(603) 271-3503  
24-hour spill number: 1-800-346-4009

### **Rhode Island Department of Environmental Management**

9 Hayes St.  
Providence, RI 02908  
(401) 277-6800  
24-hour spill number: (401) 277-3070

### **Vermont Agency of Natural Resources**

103 South Main St.  
Waterbury, VT 05676  
(802) 244-7347  
24-hour spill number: 1-800-641-5005



**Susan McGroddy, a  
graduate student at  
U Mass, Boston, gathers  
sediment criteria at  
EPA's library.**



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