EPA New England
FY 2003-2008
Strategic Plan

As of April 26, 2004

TABLE OF CONTENTS

CHAPTER 1:
REGIONAL OVERVIEW
NEW ENGLAND - ITS ENVIRONMENT TODAY AND TOMORROW

As EPA approaches its 34th year, we can be proud that efforts to protect and enhance our environment are paying substantial dividends. Working closely with our state and tribal partners, we have achieved cleaner air, purer water, healthier ecosystems and healthier communities.

From Bangor and Bridgeport to Pittsfield and Providence, we've made enormous progress on many fronts – fewer smog alert days, reduced childhood lead poisoning rates and lower mercury emissions, being just a few of the examples. But this region still faces significant challenges – challenges that require closer collaboration with our state, tribal and municipal partners and stronger working relationships with businesses and others in the regulated community to foster environmental stewardship.

Many of the challenges reflect New England's unique character and history. While blessed with unparalleled natural beauty and open space, much of New England is also heavily industrialized and densely populated. Compounding those challenges are the region's aging infrastructure and long manufacturing history. Some of our greatest accomplishments, as well as our greatest challenges, rest in our urban centers, with their aging infrastructures, dense population centers and economic histories based in manufacturing.

New England's unique challenges affect our lands, our waters and our air. While thousands of abandoned buildings and properties sit dormant in New England's cities, dozens of acres of open space and farmland are being lost each day to new development. Hundreds of coastal beaches are still being routinely closed each summer due to pollution, especially after rain events. Meanwhile, air pollution from inside and outside our borders continues to cause too many smog alert days each summer, as well as unacceptable mercury and acid contamination to our lakes and streams. We face public health challenges as well, including indoor environmental threats such as peeling lead-based paint, mold and overall poor air quality that is especially dangerous to susceptible populations such as children, the elderly and asthmatics.

Certainly, we have our work cut out for us. As we work in the months and years ahead to create the cleanest, healthiest environment we can for our citizens and our creatures, we must always keep in mind these clear and tangible goals. We must remember that all of our work must take into account environmental justice - the equitable distribution of environmental protection and environmental threats. And we must also remember that partnerships – with states, municipalities, environmental groups, businesses and other organizations – will be critical to our success. Lastly we must make sure that all of our efforts to improve the environment are done as efficiently as possible. This means carefully deploying our own limited resources, leveraging private sector resources, harnessing economic and market forces to drive environmental improvement and promoting innovative technology to help reduce compliance costs.

What follows are a more in depth look at some of the most critical environmental issues New Englanders are facing and the strategies we are using to combat them.

ENERGY

Energy use has an enormous impact on New England's environment. From the mercury in our wildlife, to the smog that we breathe, to the earlier spring thaws, most of these problems are traceable to energy use from power plants and the transportation sector.

EPA New England is focused on reducing the environmental impacts from energy use and increasing the reliability of our energy supplies. The US Energy Information Administration is predicting average annual growth in energy demand for New England of 1.2% through 2025. Through greater energy efficiency and development of cleaner energy sources, we can achieve our dual goal of meeting the region's growing energy needs while ensuring a healthy environment.

One way to achieve these goals is cleaner power plants. Since the late 1990s, the New England states have approved more than two-dozen permits for new, clean-burning power plants that will provide more than half of the region's electricity needs during peak summer months. The permits for these natural gas-fired generating plants are among the most stringent in the country.

EPA New England's Energy Team is also promoting energy-efficiency, renewable power and commuter-oriented transportation through various programs. Hundreds of municipalities, hotels, banks and other organizations, for example, are taking advantage of our Energy Star offerings, resulting in more than $2 billion of savings on their energy bills in New England alone. Meanwhile, more than 80 New England employers with nearly 120,000 employees are participating in our Best Workplaces for Commuters program.

We've also provided generous support to the region's states, cities and towns in their efforts to achieve the New England Governors/Eastern Canadian Premiers goal of reducing regional greenhouse gas emissions to 1990 levels by 2010. More than $600,000 has been provided in this regard to help the New England states to develop greenhouse gas inventories and mitigation plans.

PREPARING FOR EMERGENCIES AND CREATING HOMELAND SECURITY

As EPA New England strives to be part of a great national effort for homeland security, it is particularly focused on protecting the region's 12,000 public water supply systems from terrorist attacks. The region has held dozens of workshops and provided more than $4 million of funding to help communities and drinking water operators across New England understand the vulnerability of public water supply systems and to reduce the risks to their supplies. More recently, we have expanded our work to include wastewater treatment facilities.

We are also making sure that we are well prepared to respond to significant emergency incidents, clarifying who has what responsibilities for making decisions and communicating internally. We are working closely with federal, state and tribal partners to review and revise emergency response plans, working collaboratively to define EPA's authorities, responsibilities and abilities in responding to significant incidents. We are improving our ability to help local and state response personnel during these incidents.

As part of our efforts to protect our valuable environmental resources, we are working with State Emergency Response Commissions (SERCs), Local Emergency Planning Committees (LEPCs), industry, and community groups to make sure they have developed effective preparedness strategies. We have provided ways to disseminate data and environmental related information to the public in as short a time as possible and, we are assessing our current and potential analytical capability in light of major terrorist attacks.

URBAN FOCUS

In New England, the region's biggest cities combine a history of manufacturing with aging infrastructures. Often these urban areas contain a network of interrelated challenges: harsh economic conditions; abandoned buildings and sites; old pipelines and water systems and polluted rivers. EPA's New England office has made it a priority to address the special and interwoven environmental problems facing its urban residents. By revitalizing our city and town centers and encouraging development of abandoned urban areas, we will relieve pressures on "greenfield" development and urban sprawl.

We are well aware that not all of New England's residents share equally in the threats of environmental degradation. City dwellers, in particular, suffer disproportionately, while lower income residents and immigrants in general face a greater challenge in avoiding the risks of environmental threats.

The agency's Urban Environmental Program has already invested millions of dollars in projects to improve public health and the environment in such New England cities as Boston, Providence and Hartford. The program addresses hazards ranging from lead paint poisoning, to contaminated soil on vacant lots, to asthma caused by

poor indoor air quality. The effects of these hazards on urban residents and on high risk populations such as children and the elderly are compounded by economic development, older housing stocks and other social ills. More recently, we've implemented a regional Environmental Justice Action Plan to further reduce the likelihood that any group of people will bear a disproportionate share of the negative environmental consequences of industrial, municipal and commercial operations. We strongly believe that Environmental Justice needs to be an integral part of all our program work. To make this happen, every EPA New England Employee has received training on how to build an EJ perspective into their day-to-day work.

The New England Asthma Regional Council (ARC) is the first multi-state, cross-agency, cross-disciplinary group to mount a concerted effort to address the environmental aspects of asthma. To address the prevalence of asthma in New England and better understand its roots, the ARC and HHS convened public health surveillance professionals from the six New England states to investigate asthma rates in a collective fashion using the Behavioral Risk Factor Surveillance System. The results, published in 2003, indicate that New England has the highest adult asthma rates in the country. Research conducted by EPA identified indoor air quality as a major contributing factor. Since people in New England spend up to 90 % of their time indoors (long winters), environmental factors such as mold, pests, dust and environmental tobacco smoke can have a significant impact.

While school buses are the safest way to transport children to and from school, diesel exhaust from idling school buses can pose a health risk to kids in the inner city. More than 1.7 million children in New England ride a bus to and from school every day. EPA's New England office has launched several effective programs aimed at reducing this threat.

In Connecticut, for instance EPA has provided a grant to the city of New Haven for the purchase of ultra low sulfur diesel fuel for all of the 251 city's school buses. In Massachusetts, an enforcement case settled in 2002 is providing funds to fuel 200 of the city's school buses with ultra low sulfur diesel fuel and retrofit 100 of these buses with particulate matter filters. The project will eliminate 540 lbs of particulate matter, 2,480 lbs of smog causing hydrocarbons and 17,380 lbs of carbon monoxide each year.

And in Maine, the Maine Department of Environmental Protection is using funds from EPA's Clean School Bus USA program to help 21 school districts acquire diesel oxidation catalysts and retrofit 266 buses with these catalysts. For their contribution, the state will purchase 180 new school buses. As a result, a total of 446 school buses will be equipped with diesel oxidation catalysts as part of this project.

In all corners of the region, combating childhood lead poisoning has been a top priority. While there's been an overall decline in lead poisoning rates in recent years, it is unacceptable that thousands of New England children, most of them living in poorer urban neighborhoods, continue to be exposed to toxic lead-based paint every year. EPA New England has established a goal of eliminating medically confirmed blood lead levels greater than 10 ug/dL (micrograms of lead per deciliter of blood) among children under 6 in New England by 2010. Accomplishing this goal will require three broad strategies: working with local groups to address problem at the local level; doing more and better outreach and education; and helping polluters comply with regulations either through enforcement or technical assistance.

Among the primary targets of EPA's enforcement inspectors last year was compliance with federal lead paint disclosure laws. EPA staff carried out more than 100 inspections affecting more than 40,000 housing units to ensure that property owners and property managers were notifying tenants and prospective buyers of potential lead paint threats. A half-dozen enforcement actions were taken as a result of those inspections.

Mercury is another toxin that disproportionately affects some members of the population, especially children and pregnant women. Data from the US Centers for Disease Control, for example, indicates that over eight percent of women of child-bearing age – over 300,000 newborn babies each year – are being exposed in the US to levels

of mercury above those recommended by EPA and the National Academy of Science.

To help restore contaminated land in our urban centers, we must prepare for and respond quickly and effectively to releases of pollution, whether they are intentional or accidental. We must also clean and reuse contaminated land. The Brownfields program, which brings life back to abandoned and often contaminated properties, is central to this goal.

Since 1995, the Brownfields Program has distributed more than $73 million to dozens of communities, states, and agencies across New England. In New England, EPA's Brownfields assistance has led to over 660 completed site assessments and more than 140 cleanups, 74 of which have been completed. There are also more than150 New England redevelopment projects underway, creating thousands of new jobs.

For decades, 200 industrial acres in the Mystic River Valley north of Boston sat deteriorating, a sad reminder of New England's industrial decline, a tragic demonstration of the environmental damage progress can cause. Today, these 200 acres are being cleaned and redeveloped to bring jobs, energy and green space back to an area that once served as the center of the region's economy. TeleCom City will include 1.8 million square feet of office, laboratory and manufacturing space, as well as 200 units of housing and 60 acres of designated green space. This turnaround is among many success stories being heard around New England as the nine-year-old federal Brownfields Program bears fruit.

To help restore New England's urban rivers, polluted by decades of industrial discharge and runoff from populated cities, the region has launched an urban rivers restoration program. This program works to eliminate runoff from roads and yards at the same time it eliminates the direct discharges from factories and outdated sewer systems. Work focused on the Charles River in Massachusetts and the Woonasquatucket in Rhode Island exemplify the kinds of changes that are possible through partnerships with businesses, environmental groups, citizens and the state.

TOXICS

As mentioned above, New England faces many challenges when it comes to reducing toxic emissions, much of our work is place based with an urban emphasis, however, we also address toxics issue from a region-wide perspective. The following three examples describe some of our more recent region wide challenges.

There is growing concern world-wide with the increasing buildup of brominated flame retardants in the environment. Scientists will be working hard to better understand the fate, transport and impacts of these chemicals. With the scheduled bans on the use of some of these chemicals in Europe and California and voluntary phase out of production of some by the sole manufacturer in the United States, the search will intensify for alternatives that will meet critical fire safety goals without compromising public health and the environment. EPA New England will be an active participant, continuing to serve as a liaison between EPA and the National Association of State Fire Marshals and the International Consortium for Fire Safety, Health and the Environment to ensure balanced and well-informed dialogue on this important subject.

EPA's New England Office, in partnership with the Northeast States and Eastern Canadian Provinces, has been working aggressively to eliminate mercury air emissions through tighter regulations and voluntary programs. In just the past five years, mercury emissions in the region have been reduced by 54 percent, with the vast majority of those reductions coming from tighter emission requirements for municipal incinerators and medical waste incinerators. Additionally, more than 1,000 pounds of mercury have also been removed from waste streams of New England hospitals through voluntary programs. While continuing to focus attention on mercury reductions, EPA is also spending significant resources assessing the effects of mercury on fish and wildlife populations, as well as human populations. Among the region's biggest priorities is evaluating the potential health threats that mercury poses for tribal populations. About 98 percent of New England's fresh water bodies are subject to mercury-related fish advisories.

EPA New England and states in the region recognize that backyard burning of domestic waste is an important challenge in overall efforts to control dioxin emissions in the Northeast. Again, partnerships are playing a pivotal role in tackling the problem. Working with environmental organizations like the Northeast Waste Management Officials Association (NEWMOA), the region supports state efforts to educate the public about the health risks of burning trash at home, to enforce state bans on household trash burning and to identify alternatives for those who burned trash in the past.

INNOVATIVE TECHNOLOGY

Recognizing that New England has a rich supply of innovative ideas and technologies that can benefit both the environment and the economy—if only they find their way to the marketplace—EPA New England established the Center for Environmental Industry and Technology (the Center or CEIT). Many of the New England's environmental problems can be solved with innovative environmental technologies; however, it is difficult for these technologies to find their way to the marketplace because envirotech developers confront a range of market-based and regulatory obstacles to acceptance of their products. The regulated community also faces a range of barriers in adopting new environmental technologies which can escalate the costs of compliance and inhibit beyond compliance performance. CEIT addresses three specific problem areas that impede technology development and acceptance: 1) the access to information on government programs and resources for the technology developer, 2) the access to information on new technologies for the regulated and non-regulated communities, and 3) the regulatory and institutional barriers.

The mission of CEIT is to be a window to resources, people, and programs for the environmental technology industry in New England, and to promote the acceptance of innovative environmental technologies to solve our most significant environmental problems in New England.

In addressing the first problem, CEIT provides access to information through its Advisory Service, Web Site, and monthly issue of EnvirotechNews. It also increases the awareness of EPA's Small Business Innovation Research (SBIR) Program through Technovation, which summarizes all of CEIT's proposal preparation workshops.

In addressing the second problem, CEIT provides access to information for the regulated community through EnvirotechNews' Technology Connection, the Innovative Technology Inventory (ITI) and the Virtual Trade Shows, which focus on storm water and decentralized waste water technologies. Since all three of these services are available on CEIT's web site, the non-regulated community has access as well. Technology Connection anonymously announces enforcement actions and environmental problems in special issues of EnvirotechNews, which has over 1,120 U.S. environmental technology innovators as subscribers. In FY'04, the Technology Connection project will continue to work with EPA Enforcement on selected cases, and CEIT will manage the production of the Post Inspection Letter, which is sent to entities inspected by the Enforcement Office.

The New England Interstate Regulatory Cooperation Project addresses the third problem of regulatory and institutional barriers. Since 1996, the Project has created a forum for federal and New England state regulators to discuss specific technologies or technology areas thereby helping to create a regional marketplace for new technologies, and it has standardized the data needed for permitting and deployment of the new technologies, in order to facilitate technology transfer both within states and across state boundaries. For FY'04, CEIT will continue to work with the NE Regional Drinking Water Advisory Board, set up by this project. CEIT's work on drinking water is closely tied to A&P2's Small Drinking Water Systems Project. CEIT also works with EPA's Environmental Technology Verification (ETV) Program in order to make the states, the regulators and the public aware of the valuable performance data produced under this program.

In the 4th quarter of 2003, the Office of Policy, Economics and Innovation became interested in CEIT and proposed that it become a national program. If the agency decides to pursue this course, then CEIT will participate in the development of the national program.

WATER QUALITY STRATEGY

New England's landscape is filled with lakes and streams, rivers and wetlands. The complex network of waterways enhances the challenge of our environmental mission. This agency is dedicated to helping states find ways to monitor and assess the quality of their waters. States are asked to identify strengths and weaknesses, set goals and provide a strategy and schedule for creating better infrastructures and organization to achieve these goals. EPA recommends that the states achieve these goals within 10 years and us is working with states to have strategies final by Sept. 30 of this year. We anticipate that receiving Clean Water Act Section 106 grant funding may depend (at least in part) on states having comprehensive monitoring and assessment strategies. EPA's New England office puts a high premium on gathering statistics and quantitative information on the region's water resources and changes in the state of these resources. This kind of scientific approach ensures our efforts are effective.

Beaches are still closing due to pollution. In 2002, 130 of the region's freshwater and saltwater beaches were closed or posted with advisories at least one day due to pollution. These beaches were closed or posted more than 1,000 days. The results for 2003 were far worse, particularly in Rhode Island, Connecticut and Massachusetts where numerous beaches were closed far more frequently due to bacterial pollution. The closures were the direct result of heavy rains which increase the amount of pollution entering our waterways from storm water runoff, failing septic systems and other pollution sources.

As part of its emphasis on water quality, EPA New England launched a Beach Initiative aimed at protecting public health and water quality at the region's beaches. To meet this goal, we must close fewer beaches and close beaches less often. EPA will work closely with state environmental and public health agencies to put into place new beach initiatives. EPA will focus on helping state and local assess and monitor beach pollution, and will back up these efforts with regulations and enforcement where appropriate.

Following on the heels of EPA New England's successful work on the lower Charles River basin, the regional office continues to identify watersheds in need of attention and to apply a similar approach - combing enforcement, education and compliance, as well as technical and financial support to reach environmental goals defined jointly with states and local partners. This watershed approach integrates EPA's monitoring, water quality standards, permitting, wetland restoration, and other programs to tackle water pollution issues ranging from wet weather problems to runoff pollution.

The Total Maximum Daily Loading program has also been a focus for developing innovative approaches. In a collaborative effort with our state and tribal partners, we are aiming to strike the balance between program effectiveness and program integrity. We are exploring ways to reduce the amount of resources expended on TMDLs where they are less effective (i.e. single contaminate impaired waters) and leverage more resources for implementation and deployment of Best Management Practices (BMPs).

Drinking water is also a priority for our office. New England has a few very large public water supply systems and many, many, very small public water supply systems. More than 10,000 public water supply systems, representing about 90 percent of the public systems, depend on ground water. New drinking water regulations, like arsenic and the Ground Water Rule shall disproportionally impact small systems in New England. Although about 80 percent of the region's population relies on public water supplies, in Maine, New Hampshire, and Vermont more than 40 percent of the population uses private wells for drinking water. A recently released USGS study showed that 1 out of 5 private wells in New Hampshire had arsenic levels greater than the maximum acceptable contaminant level.

Since the 1970s, Region 1 and the state agencies have been implementing efforts to protect public water supplies. In response to local advocacy, Region 1 has designated 15 sole source aquifers, about one fifth of the national

total. As a result of extensive efforts by the states, more than 90 percent of the public source water areas have been assessed for susceptibility to contaminants in the environment. At the same time, state drinking water programs have been working with local officials to implement source water protection strategies.

ENFORCEMENT AND COMPLIANCE

The mission is to improve the environmental performance of businesses, government and the public through compliance with environmental requirements, preventing pollution and promoting environmental stewardship. The New England office tries to do this by complementing the enforcement efforts of states to maintain a comprehensive enforcement and deterrence presence in New England and by integrating compliance strategies, including incentives, enforcement and assistance to achieve improved compliance.

Tough environmental enforcement is alive and well in New England. The more than $12 million paid by violators to settle enforcement cases this past fiscal year was near an all-time high. In fact, fiscal years '02 and '03 are the two highest totals in the past 10 years. Especially noteworthy is that more than two thirds of the settlements – a record $8.7 million – was spent on environmental projects that focused on such problems as skyrocketing asthma rates, diesel air pollution and loss of wetlands. Among the projects funded were restoring 54 acres of freshwater wetlands in Berwick, Maine, installing diesel particulate filters on all of Rhode Island's public transit buses and building a new garbage transfer station with stringent air quality controls in Boston's Roxbury neighborhood.

EPA's regional office also carried out 700 inspections across New England this past year, a 33 percent increase from the previous year.

Inspections are not the only tool EPA uses to achieve compliance. EPA also provides extensive compliance assistance and outreach**,** so small businesses, municipalities and other entities can understand how to comply with environmental laws before EPA inspectors come knocking. Over the past year, the region's assistance program reached more than 25,000 New Englanders through 319 workshops and 74 stakeholder meetings. The program also enlisted 111 marine engine retailers, including two-dozen in New Hampshire, in a program aimed at encouraging the sale of low-pollution marine engines. Even though they are not required until 2006, more than 80 percent of the engines sold by participating retailers were the 'clean' engines.

EPA New England has also been successful using the agency's self-audit policy to improve compliance in specific sectors – in particular, colleges and universities and municipal public works facilities. The audit policy is designed to encourage facilities to find and correct environmental problems themselves, so EPA can focus its limited enforcement resources elsewhere. Under EPA's audit policy, if a facility finds an environmental violation and immediately corrects it and discloses the violation to EPA, penalties can be reduced or eliminated. Last year the region had 115 disclosures of environmental problems that were found and fixed – more than half of them at municipal facilities and college/university facilities. The agency also confirmed that thousands of corrective actions were taken at more than 200 municipal and college/university facilities last year.

LAND PRESERVATION AND RESTORATION

A vital part of protecting the environment involves preserving and restoring land. To protect our land, we must reduce the amount of waste we generate, and increase the amount of waste that is recycled. Protection of land also involves managing hazardous waste and petroleum products in ways that do not destroy our land resources, and does not inequitably burden urban or economically depressed populations.

The pressures of development continue to eat away open space in New England and further exacerbate an already challenging transportation scenario. Between 1970 and 2002, the population of New England increased by 19.3% while Vehicle Miles Traveled (VMT) increased by 115%. Traffic congestion in the greater Boston area wastes 136 million gallons of fuel each year and costs the Boston region more than 1.4 billion dollars annually. The average Boston commuter spends 67 hours stuck in gridlock each year. Because of these trends, EPA New

England has stressed a smart growth policy that encourages development in areas that reduces the cost to our natural environment. EPA regionally and nationally has developed strategies for 2004 that encourage development and transportation planning that is sensitive to smart growth.

The Brownfields program discussed above is central to EPA's ongoing effort to restore and protect land. The Superfund program is also critical to the success of this goal. This program cleans heavily contaminated sites with the maximum financial participation possible from potentially responsible parties. New England's Superfund office completed 57 enforcement actions last year, a 39 percent increase over 2002. Parties responsible for waste pledged to perform cleanup work valued at a total of $20.7 million. This figure represents work at 11 sites, including a $3.5 million removal by a responsible party at the Oak Street site in Taunton, Mass., and a $2.1 million removal by responsible parties at Picillo Farm in Coventry, RI, where construction was completed this year. It also includes extremely complex and costly work at the Nuclear Metals Site in Concord, Mass. and a consent decree for work at the Barkhamsted New Hartford Superfund Site in Connecticut. EPA's New England Superfund office also received a total of $26,965,960 in cash to pay the region back for its past costs or to pay for future cleanup costs. This covered work and settlements at 19 sites, including four sites where years of litigation came to an end – Charles George in Tyngsborough, Mass.; Stamina Mills in North Smithfield, RI: Johns Manville in New Hampshire and Re Solve in Dartmouth, Mass.

INVESTING IN PEOPLE

EPA New England knows that to protect the environment it must have a highly skilled, motivated workforce that reflects the community it serves. For this reason it puts a heavy emphasis on staff development, education and support. EPA New England is dedicated to creating a welcoming work environment and rewarding work experience as a central strategy for motivating employees to produce more and better results, more efficiently.

Several years ago, employees of minority heritage were invited to start this process by helping to shape the agency's human resources programs. Many employees contributed their thoughts and suggestions in drafting the plan to improve recognition, recruiting, hiring and promotion efforts, policy-building and accountability within the HR Program.

In 2001, the members of a Diversity Steering Committee joined with members of the regional HR Council, union officials, regional employees, and the office directors to develop ways improve the agency's working environment in line with these goals. In 2002, the regional office drafted a plan to continually improve HR programs, to make sure all staff are aware of these programs, and to build an organization that fully supports the vision. In 2003, this plan was reworked so it was integrated with the President's Management Agenda, which the Bush Administration developed to ensure federal employees can meet an ever-changing mission. The national agenda focuses on five areas: strategic management of employees; expanded e-government; competitive sourcing; improved financial performance, and budget and performance integration.

Just as EPA New England does for its environmental objectives, the region sets specific goals for its staff objectives. Audits and measurements play a crucial role in determining where the regional office has succeeded and where it falls short with its workforce agenda.

To help employees stay on track with their own environmental objectives, the region places a priority on planning and results. The office of Strategic Planning is charged with defining the region's environmental issues, establishing targets and measures for environmental improvement, and making sure we are delivering the program results to meet those challenges. The region was the first to have a comprehensive, outcome oriented strategic plan, and our five goal format was the precursor to the current national five goal model. Recognizing that our state, tribal and local partners needed a stronger voice and more flexibility in addressing local environmental problems, the region has had success in championing a more "bottoms-up" approach in the agency's planning and budgeting processes.

And finally, EPA New England believes it must walk the talk. In other words, we seek to hold ourselves and our own facilities to the same high standards we demand from other organizations and people in New England. From the award-winning “green”lab in Chelmsford to the recycling program in Boston, EPA staff work hard to reduce the organization’s environmental foot print. We believe that if each person, organization and governmental entity in New England works to be responsible environmental partners, we can create a region of cleaner, healthier land, air and water.

CHAPTER 2:
REGIONAL STRATEGIES

GOAL 1: Clean Air and Global Climate Change

Objective 1.1	Healthier Outdoor Air
	Subobjective 1.1.1: More People Breathing Cleaner Air
	Subobjective 1.1.2: Reduced Risk from Toxic Air Pollutants
Objective 1.2	Healthier Indoor Air
Objective 1.3	Protect the Ozone Layer
Objective 1.4	Radiation
	Subobjective 1.4.1: Enhance Radiation Protection
	Subobjective 1.4.2: Maintain Emergency Response Readiness
Objective 1.5	Reduce Greenhouse Gas Intensity
Objective 1.6	Enhance Science and Research
	Subobjective 1.6.1: Provide Science to Support Air Programs
	Subobjective 1.6.2: Conduct Air Pollution Research
Goal 1:	Clean Air and Global Climate Change
Objective 1.1	Healthier Outdoor Air
Subobjective 1.1.1	More People Breathing Cleaner Air

Summary of Regional Targets and Baselines for Subobjective 1.1.1:

Target: By 2010, outdoor air quality for eight-hour ozone will improve to healthy levels for 10,187,032 people (or 84% of the people) living in areas determined to have poor air quality in 2002. Healthy levels of ozone will be maintained for the 1,873,839 people that had healthy air in 2002.

Baseline: Based on 2000-2002 monitored air quality, 12,048,678 people in New England lived in areas determined to have unhealthy levels of ozone.

Additional Related Targets: The three-year average number of days exceeding the eight-hour ozone standard in New England will decline from the 2000-2002 average of 31 days. By 2010, ozone precursors (NOx or VOC) emissions in all eight-hour ozone nonattainment areas will decline by an average of 3% per year from 2002 levels[1] (for a total of 24%). Additional specific numeric targets will be determined through the development of state attainment plans for the 8-hour ozone NAAQS.

Target: By 2010, air quality for fine particles will improve to healthy levels for 824,008 people (or 100% of the people) living in counties with poor air quality for fine particles in 2002. Healthy levels of particles will be maintained for the 13,098,509 people living in areas that had healthy air in 2002.

Regional Baseline: Based on 2000-2002 monitored air quality, 824,008 people in New England lived in counties with unhealthy levels of fine particles.

Additional Related Targets: By 2010, the annual average of fine particulate matter ambient levels at several key representative urban and rural monitors will be reduced. By 2010, the total annual SO_2, NO_x, and carbon emissions in New England will be reduced significantly. Specific numeric targets will be determined through the development of state attainment plans for the fine particulate matter NAAQS.

Target: Through 2008, healthy air will be maintained for the 13,922,517 people (or 100% of the people) in New England currently living in areas determined to have healthy ambient levels of the remaining criteria air pollutants (CO, SO_2, NO_2, lead).

Regional Baseline: Based on 2000-2002 monitored air quality, all 13,922,517 people in New England lived in areas determined to have healthy levels of the other criteria air pollutants (CO, SO_2, NO_2, lead).

Additional Related Targets: Continued reduction in emissions and ambient concentrations for criteria air pollutants.

Regional Narrative for Subobjective 1.1.1:

Overview of Environmental Conditions for Subobjective 1.1.1:
While the air quality in New England has improved markedly over the last thirty years, the forty three (43) days of unhealthy ozone levels during the summer of 2002 serve as a stark reminder that we still have significant work to do. Connecticut continues to violate regularly both the 1-hour and the 8-hour ozone standard. While areas in Massachusetts, Rhode Island, southern New Hampshire and southern Maine stand on the cusp of attainment with the 1-hour ozone standard, they will be designated nonattainment for the 8-hour ozone standard. Preliminary monitoring indicates that the New Haven area, which is an environmental justice area, is above the fine particulate matter standard, and visibility in the region is regularly diminished by regional haze. The unhealthy levels of ground-level ozone and fine particulate matter in New England lead to thousands of respiratory-related illnesses and premature deaths each year. As shown by both monitoring and EPA's National Air Toxics Assessment, ambient levels of air toxics also pose serious health risks, especially in congested urban areas, which are often also environmental justice areas.

EPA New England will work to improve air quality through implementation of the Clean Air Act's base programs and several unique regional strategies. The Region will work with the New England states to develop air control measures necessary to bring the area into attainment with the national ambient air quality standards. Continued implementation of the regional control measures adopted in the 1990s, such as automobile inspection and maintenance requirements, the Ozone Transport Commission's NOx budget program, other stationary source controls, and cleaner gasoline, will play a critical role in achieving attainment. Control measures implemented upwind, such as EPA's NOx SIP Call and the proposed Interstate Air Quality Rule, will also play a significant role in New England's attainment strategies.
Some of the most significant sources of air pollution, such as new mobile and nonroad sources, are best controlled by national emission standards. In recent years, EPA has set (or proposed) stringent new emission standards for automobiles, diesel trucks and buses, and nonroad diesel engines. Starting with model year 2004, EPA will require new cars, sports utility vehicles and light-duty trucks to meet tailpipe standards that are 77 to 95% tighter than previous standards. By 2007, new heavy-duty diesel trucks and buses will be required to be 95% cleaner than today's models. Proposed standards for new nonroad diesel engines used in construction, agricultural and industrial operations will cut NOx and PM emissions by 90%. Given EPA Headquarters' responsibility for setting emission standards for *new* mobile and nonroad sources, Region 1 will focus its attention on the reduction of emissions from *existing* mobile and nonroad sources. As described below, Region 1 has adopted several successful strategies to discourage unnecessary idling of vehicles, encourage the retrofitting diesel vehicles and the use of cleaner diesel fuel, and work with private employers to reduce reliance of their employees on single-

occupancy vehicles for commuting. The Region will also continue to work with the states on the implementation of effective inspection and maintenance programs for vehicles.

The Region and its partner states also have a critical role to play in the implementation and enforcement of emission standards for stationary sources, including power plants and industrial facilities. While EPA Headquarters sets New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) for stationary sources, the Region and states have responsibility for the permitting and enforcement of these sources. In many instances, such as power plants and municipal waste combustors, the New England states have chosen to set emission standards tighter than the national standards. The Region will continue to make a high priority our work with the New England states to permit and enforce these sources. The Region will also work to reduce air quality emissions related to the generation of energy by promoting greater energy efficiency and conservation and supporting the development of renewable sources of energy.

Unique Regional Strategies for Subobjective 1.1.1:
Region I has developed several voluntary programs which serve as models for the rest of the nation, including our real-time air quality reporting and forecasting programs, diesel programs, and energy programs. We are also targeting the development of community-based strategies to reduce air toxics in two communities which experience disproportionately high concentrations of air toxics.

Reporting and Forecasting of Air Quality: In order to gain public support for implementation of new strategies to reduce ozone and fine particle formation, the public must be well informed of the health risks posed by air pollution in New England. Consequently, Region 1 will continue to place substantial emphasis on air quality outreach activities. Region I staff will continue to produce the year-round daily ozone forecast map for the NESCAUM states and will promote use of this product by the media. In an effort to educate the public on air quality issues and warn of unhealthy conditions, the Region will continue to issue press releases relating to air quality throughout the summer and will issue its Smog Alerts to the roughly 2000 schools, day care centers, summer camps and individuals who have subscribed to this Region 1 service. Finally, the Region will promote use of its ozone and particulate matter exhibits (which incorporate real-time air quality data) at science centers across New England.
Reducing Emissions from Diesel Engines: Emissions from diesel vehicles contribute significantly to air toxics and fine particle levels in urban areas, particularly the two New England cities with fine particle levels over or near EPA's national ambient air quality standard for fine particulate matter. In order to reduce the health risks from these pollutants, Region 1 will continue to devote significant effort to its voluntary programs to reduce emissions from in-use diesel engines. Our efforts will focus on three key activities: (1) retrofitting existing diesel vehicles with pollution controls; (2) creation and implementation of anti-idling programs; and (3) education and outreach on the health effects of diesel exhaust and strategies to reduce pollution from diesel vehicles. The Region will emphasize diesel reductions in Boston and New Haven. These efforts will benefit disproportionately environmental justice communities.

Boston Breathes Better Pilot Transportation Project: EPA Region 1 and the OAR's Office of Transportation and Air Quality are leading a pilot project designed to reduce air pollution and air toxics from transportation sources in Boston. One of the goals of the pilot project is to increase participation in EPA's national voluntary transportation programs in Boston. EPA's voluntary transportation programs include the Voluntary Diesel Retrofit program, Anti-Idling Initiatives, Best Workplaces for Commuters and SmartWay Transport. This pilot could also explore how a state might build these voluntary programs into its SIP and possibly serve as a national model for how to implement a community-based voluntary transportation program.

Boston is well positioned to be a national model for such an effort. As in many other urban areas, air pollution is a persistent problem in Boston. Fortunately, existing regulatory and non-regulatory programs in the state already underway provide a strong foundation from which to build an integrated pilot. In addition, many governmental

organizations, businesses and environmental groups in Boston are strongly committed to finding innovative ways to reduce air pollution from transportation sources.

EPA is forming a steering committee with representatives from business, environmental, health and environmental justice organizations, as well as state and local government agencies. The steering committee will help shape the pilot and identify potential participants from the business community to participate. This winter, EPA will launch the pilot by hosting a forum for Boston area businesses. At this forum, we will present the concept of *Boston Breathes Better* and provide information about EPA's voluntary transportation programs. We will invite local leaders to share their perspective on the benefits of these programs. This forum will help identify the core elements of an action plan for *Boston Breathes Better*.

Promoting Energy Efficiency and Renewable Energy: Because of the enormous impact of energy generation on our air quality, we have placed energy efficiency and increased reliance on renewable power at the core of Region 1's mission. These efforts can lead to reduced emissions of many outdoor air pollutants, including ozone precursors, particulate matter precursors, and air toxics. To lead this effort on energy, the region has created a new Energy Team. By pooling and coordinating staff resources, the team is in a better position to promote energy efficiency and renewable power, support state and tribal efforts to reduce greenhouse gas emissions, and create strong partnerships with federal and state energy offices, tribes, academic institutions and private industry. Further discussion of these efforts can be found under Objective 1.5 – Reduce Greenhouse Gas Intensity.

Regional Indian Air Work Group: EPA New England has formed a Regional Indian Air Work Group, made up of representatives from the New England tribes and EPA, to assist the Tribes in addressing air toxic issues. Air deposition and mercury were identified as primary areas of concern for the New England Tribes because of the high rate of fish consumption among tribal members due to sustenance practices. By targeting mercury, the New England Regional Indian Air Workgroup developed the following study for assessing risk: a model QAPP for fish tissue testing; a model fish consumption survey; an air monitoring network; and assessment and communication strategies. The Region has assisted the Tribes in developing several fish tissue studies based on the models developed and will continue to provide assistance in evaluating the data collected and assessing effective communication risk strategies.

Core Program Work and National Priorities for Subobjective 1.1.1:
Over the next several years, EPA New England and our state and tribal partners will focus on completing the adoption of several outstanding one-hour ozone attainment strategies, implementing the new fine particle and eight-hour ozone standards, and completing issuance of the initial Title V operating permits.

Ground-level Ozone: The Region has already approved attainment demonstrations for one-hour ozone nonattainment areas in Connecticut, Massachusetts, Rhode Island and New Hampshire. The Region will work with the State of Maine on its attainment demonstration for the one-hour standard. The Region will also work with the New England states to complete the designation of eight-hour ozone nonattainment areas and will work with the states and tribes on their submission of recommendations for nonattainment areas for the new fine particle standard. A major focus of our efforts in the next few years will be working with our states on development of 2002 inventories, modeling and control measures which will make up the states' attainment demonstrations for these new standards, which will be due in 2007.

Fine Particles: In New England, current monitoring indicates that only New Haven may be over the fine particulate matter standard. However, given the potential health risks which may exist even below the current annual standard, reduction of ambient levels of fine particulate matter is a major priority for the Region. The reduction of visibility due to fine particulate matter is also a significant issue for the New England states.

The Region is already working with the New England states on their plans for implementation of the fine

particulate matter standard. The primary emphasis in FY'04 will be to: (1) continue to work with the New England States to assure that PM2.5 data is complete and available; (2) insure that states submit credible PM2.5 nonattainment recommendations to EPA by February 2004; (3) participate on the national workgroup to assist in the development of the PM2.5 implementation rule; (4) assist the states in understanding EPA's proposed PM2.5 implementation rule; (5) work with our States to develop PM2.5 emission inventories; (6) continue to work on local programs that promote the reduction of particulate matter (e.g., diesel retrofits, etc.); (7) conduct outreach on the PM2.5 standard, including making sure the state PM2.5 forecasts are as widely available to the public as possible; and (8) participate in the Mid-Atlantic and Northeast Visibility Union (MANE-VU) efforts to develop sound technical tools to assist the states in their development of regional haze and fine particulate matter state implementation plans (SIPs).

NSR Reform and Prevention of Significant Deterioration (PSD) Permitting: During 2004, the Region will continue to work with the six New England states, and interstate organizations like NESCAUM, to assist the states in modifying their NSR programs consistent with EPA's NSR Reforms or to prepare equivalency demonstrations for their programs. We expect that many of Region 1's states will seek to demonstrate equivalency with EPA's NSR revisions. We will work with OAR and the other regions to determine appropriate criteria for demonstration of equivalency. The Region will provide support to the states by providing presentations on NSR Reform at state-sponsored sessions such as interstate regulator meetings, industry and stakeholder meetings, and public hearings on rule packages. Prior to the states' finalization of regulatory changes, the Region will work with states to assist them as they implement case-specific changes of the new features, such as PALs (e.g., in New Hampshire and Maine).

As the permitting authority for PSD in Massachusetts, the Region will issue any major source permits needed. Given that under the state's regulations, the state will need to issue an NSR permit to any source in need of a PSD permit, the Region will coordinate closely with the state prior to the issuance of the federal and state permits in an effort to reduce duplication of effort and uncertainty for the facilities. Additionally, the Region will be conducting enforcement activities for sources with PSD permits issued under the previously delegated program.

Title V Operating Permits: Region 1 will continue to assist the New England states in their efforts to issue all initial Title V permits. All six New England states have submitted schedules to issue the remainder of their Title V permits by December 2003 (with the exception of Rhode Island, which committed to July 2004). We expect that all of the states will meet (or come very close to meeting) their commitments. We will closely monitor milestones and work with the states to try to avoid missing any milestones and will continue to identify alternative methods for expediting permit issuance. As the states draft permit renewals, Region 1 will review permits to ensure that Compliance Assurance Monitoring (CAM) is included and properly documented.

Development of Effective Tribal Air Quality Programs: EPA New England has been working with the tribes to build greater capacity in tribal air quality programs. The New England tribes have collaborated with EPA New England and their State counterparts to identify air monitoring gaps in New England. Currently, the tribal air monitoring network consists of three IMPROVE monitors, three ozone monitors, and two acid rain samplers. The Region plans to assist with the installation of two mercury deposition sampler and two direct mercury analyzer(DMA-80). The Region is working with the tribes in developing real-time air monitoring programs. Through an EPA grant, one tribe is in the process of establishing a real time air monitoring station for a number of air pollutants and three of the tribes have weather stations up and running. The Region is working with several tribes to establish an ozone monitoring capability and in the summer of 2004 there will be tribal ozone monitors operating by the Pemobscots, Passamaquoddy Pleasant Point, and the Wampanoags. The Region is also assisting in reviewing tribal QAPPs and assuring that EPA QA requirements are achieved for the tribal air monitoring programs, as well as providing assistance for evaluating the data and interpreting the risk to tribal members from various sustenance practices.

The Region is working to develop tribal direct implementation tribal cooperative agreements (DITCA) with the New England Tribes. This is a mechanism that allows for funding without having to address complex jurisdictional issues that are required to apply for 105 funding eligibility. The Region has received a Treatment-as-State (TAS) application along with a Tribal Implementation Plan from one tribe, and is working with another tribe on the development of a similar program (TIP/TAS). The Region is working with the Tribe on necessary revisions to this TAS and TIP and hopes to approve it in FY2004.

Objective 1.1 - Healthier Outdoor Air (Continued)

Subobjective 1.1.2: Reduced Risk from Toxic Air Pollutants

Summary of Regional Targets and Baselines

Target: Through 2010, reduce ambient concentrations of and exposure to toxic air pollutants both through implementation of federal regulations and implementation of area-specific, community-based strategies.

Regional Baseline: Based on the 2002 National Air Toxics Assessment (using 1996 emissions), concentrations of 12 chemicals exceeded health benchmarks in at least one New England state. Diesel concentrations are also very high but there is no EPA benchmark. An estimated 1,894 additional cancer cases per year occur in New England as a result of inhalation of air toxics.

Additional Related Targets: Emissions trends and ambient concentrations of 12 air toxics of greatest concern and diesel will decline. If funding is available, 8 communities with current high risks from air toxics will adopt community-based, area-specific action plans to reduce air toxics. By 2010, emissions of anthropogenic mercury will be reduced by 75% from a 1996 baseline.

Regional Narrative for Subobjective 1.1.2:

Overview of Environmental Conditions for Subobjective 1.1.2:
The levels of toxic air pollutants in both outdoor and indoor air in New England are of significant concern. Throughout New England, and particularly in urban areas, air toxics such as benzene, formaldehyde and chromium exist at levels in the outdoor air well above EPA's health benchmarks. And the levels of these air toxics in indoor air are often even higher.

Air toxics, also known as hazardous air pollutants (HAPs), are generally defined as those pollutants that are known or suspected to cause cancer or other serious health problems in humans. The Clean Air Act Amendments of 1990 identified 188 chemical compounds as HAPs. Since 1990, most of EPA's efforts on air toxics have been focused on the development and implementation of technology-based emission standards — known as Maximum Achievable Control Technology (MACT) — for certain categories of stationary sources (e.g., pulp and paper mills, dry cleaners, chrome electroplaters, and so on). These efforts, combined with such other efforts as VOC Reasonably Available Control Technology (RACT) requirements, reformulated gasoline, tighter tailpipe standards, and voluntary pollution prevention activities, have all resulted in significant reduction of HAPs.

However, the levels of many ambient air toxics continue to be well above health benchmarks. EPA has modeled air toxic concentrations for 32 air toxics and diesel emissions in its National Air Toxics Assessment (NATA). The modeled concentrations revealed that a number of air toxics were ubiquitously high in comparison to health benchmark concentrations and may pose a potential health problem. NATA estimated that air exposure concentrations of 12 air toxics: acetaldehyde, acrolein, benzene, 1,3-butadiene, carbon tetrachloride, chloroform,

chromium, ethylene dibromide, ethylene dichloride, formaldehyde, polycyclic organic matter exceeded health based risk values in at least one New England state. Diesel particulate matter is also an air toxic of concern since the estimated exposure concentrations are highest in most of the New England states. The risks are generally highest in urban and environmental justice communities.

Not included in the NATA analysis were the health risks posed by persistent bioaccumulative toxins, such as mercury and dioxin. These PBTs are addressed in the Goal 4 – Healthy Communities.

In order to address the risks from air toxics to New England communities, Region 1 has shifted its air toxics program to a more risk-based approach. We have worked with our states to adopt the most effective approaches to different commercial and industrial sectors, which at times has meant adoption and EPA approval of alternative emission standards. The Region has also formed a workgroup which analyzes modeling, monitoring and risk assessment data in order to identify 1) geographic areas with higher ambient levels of air toxics, and 2) sources and source categories which contribute most significantly to those high ambient levels. This effort has led to more effective targeting of its enforcement, monitoring and community-based efforts. This year, Region 1 will continue to improve the air toxics monitoring network and will work with several communities on community-based air toxics projects.

Unique Regional Strategies for Subobjective 1.1.2:
Risk-Based Community Projects: In FY'04, the Region will continue working with state, municipal, and community groups in implementing community-based air toxics projects, with a particular focus on disadvantages and/or environmental justice communities. In FY'04, the Region will continue work with two existing community projects in New Haven, Connecticut and Lawrence, Massachusetts. Both of these two cities experience high levels of air toxics as a result of mobile, stationary and area sources. In New Haven, the Region will support the City's and community's efforts to develop and implement a risk reduction plan that includes both indoor and outdoor pollution reduction measures. As part of this project, the City is taking steps to reduce emissions from diesel vehicles. In Lawrence, the Region will continue to support the community's efforts to provide technical assistance and promote pollution reduction measures at the 130+ autobody shops located in the city. During FY'04, the Region will also explore the possibility of monitoring and modeling health risks caused by air toxics in both of these communities.

Additionally, in FY'04, the Region will begin working with the Maine Department of Environmental Protection and a Boston area environmental advocacy group known as "Healthlink." The goal of these projects is to use the National Air Toxics Assessment to identify the greatest sources of air toxics in these communities and then develop risk reduction plans.

Approval of Alternative Air Toxics MACT Standards: In FY'04, Region 1 will continue to support regulatory flexibility by processing state alternatives to Maximum Achievable Control Technology (MACT) standards under the Subpart E delegation rule. The Region has already approved four such alternative MACT standards: two as equivalency by permit programs (pulp and paper mills in New Hampshire and Maine) and two as rule substitutions (asbestos in New Hampshire and dry-cleaning in Massachusetts). In FY'04, the Region will be processing a rule substitution for Maine for dry cleaning, as well as working with Rhode Island on finalizing rule substitutions for degreasers and dry-cleaners, and with Vermont on finalizing a rule substitution for wood furniture coating. Although resource intensive for the Region, these alternative MACTs provide the states and sources flexibility and are typically more stringent than the federal requirements.

Core Program Work and National Priorities for Subobjective 1.1.2:
Implementation of Air Toxics Standards: Since 1990, EPA has issued rules covering air toxics emissions from over 80 categories of major industrial sources such as chemical plants, aerospace manufacturers, and pulp and paper mills, as well as categories fo smaller sources such as dry cleaners, secondary lead smelters, and chromium

electroplating facilities. The Region will continue its efforts to assist states and individual sources in compliance with these standards, as well as enforcement in cases of noncompliance. Region 1 will target its compliance efforts at those sources which pose the greatest risks to human health. The Region will also continue working with the states to support regulatory flexibility by processing state alternatives to MACT standards under the Subpart E delegation rule.

Objective 1.2 - Healthier Indoor Air

Summary of Regional Targets and Baselines for Objective 1.2

Target: By 2008, 20% of schools in New England will have healthier indoor air as a result of EPA's Tools for Schools program, pediatric asthma education, and radon measures. By 2008, 10,000 homes in New England will be tested for radon and, if necessary, reduction measures taken where high concentrations found.

Regional Baseline: As of 2002, approximately 15% schools have been trained on the Tools for Schools Toolkit and 30,000 homes in New England have been tested and, if necessary, implemented radon reduction measures.

Additional Related Targets: Reduction in pediatric asthma rates.

Regional Narrative for Objective 1.2:

Overview of Environmental Conditions for Objective 1.2
As serious a concern as are air pollutants in the outdoor air, air pollution levels are often even higher inside our homes, businesses and schools. Research indicates that people spend approximately 90 percent of their time indoors. Consequently, many people may face greater health risks from indoor air pollution than they do from outdoor air pollution. The people who may be exposed to indoor air pollutants for the longest period of time are often most susceptible to their effects: the young, the elderly, and the chronically ill, especially those suffering from respiratory or cardiovascular disease. In New England, EPA has emphasized implementation of the several base indoor air programs, such as Tools for Schools and radon, as well as the development of new approaches to indoor air quality problems, including greater integration of our indoor and outdoor programs.

Unique Regional Strategies for Objective 2.1:
Merging of Indoor and Outdoor Air Programs: In FY2002, EPA New England strategically merged the indoor air quality (IAQ) program with the Region's ambient air program. In FY2004, this merger will allow us to broaden the indoor air quality program focus to include a more comprehensive air quality and risk reduction planning effort. The merger will allow the IAQ program to work synergistically with the Region's criteria pollutant reduction and outreach work. For example, in the Region's air toxics work with urban communities, such as New Haven, Connecticut, and Lawrence, Massachusetts, our combined indoor/outdoor program will be better able to communicate expanded opportunities for communities to reduce health risk in a holistic manner - both indoors and outdoors. The Region is also working with tribes on opportunities to reduce health risks in a holistic manner (e.g., support for Head of Household Conferences which educate tribal members on personal risk reduction strategies).

Integrating Region's Schools Work: During FY 2004, we will expand our Tools for Schools work considerably by increasing our coordination with the Region's other schools-related efforts, such as our Office of Environmental Stewardship's pollution prevention and environmental management system programs in schools. Currently, the Region is developing an integrated schools strategy for the Region as well as a number of pilot projects with school systems to promote an environmental management systems (EMS) approach. The schools EMS is largely based on and promotes Tools for Schools. We believe that these efforts will enhance the Region's efforts to obtain and measure long term, positive results of Tools for Schools implementation.

Core Program Work and National Priorities for Objective 2.1:
Region 1's Indoor Environments Program consists of a Tools for Schools (TfS) Coordinator and Assistant, a Radon Coordinator, and an Asthma Coordinator.

Tools for Schools and Indoor Air: For a number of years, Region 1 has been developing innovative partnerships for leveraging public and private support to improve indoor air quality, particularly in schools. One of the primary components of our regional Indoor Air Quality (IAQ) program is the training and assistance of school systems in the adoption and implementation of Tools for Schools. During FY'04, the Region will continue to focus on Tools for Schools as a priority area. During FY'04, we will expand our Tools for Schools work by increasing our coordination with the Region's other schools-related efforts, such as our Office of Environmental Stewardship's pollution prevention and environmental management system programs in schools. The Region has developed an integrated schools strategy and is piloting a number of projects with school systems to promote an environmental management systems (EMS) approach in Maine and Massachusetts. The schools EMS is largely based on and promotes Tools for Schools and we believe that these efforts will enhance the Region's efforts to obtain and measure long term, positive results of Tools for Schools implementation. In FY'04, the Region will be working with our state and non-profit partners to promote the training and implementation of TfS.

Radon: In FY 2004, Region 1 will continue working with our six state partners as well as two tribes (Maliseets in Maine and Wampanoags in Massachusetts) to promote the seven EPA Radon Priority Areas. For the priority area of **Getting Homes Built Radon Resistant,** we will continue to promote the adoption and implementation of statewide radon resistant construction codes as well as working with the states/tribes to encourage homes in high radon areas to be built voluntarily using radon resistant techniques. We will continue to promote **Getting Statewide Real Estate Disclosure and/or Testing A Statewide Practice,** an area in which we have seen clear progress over recent years. In the area of **Building & Sustaining Coalitions of Local Governments and Other Partners,** we will continue to assist the states/tribes in their eforts to work with State/Tribal and local organizations (e.g., ALA affiliate, city or county radon programs, radon training centers, SIRG recipient radon programs and others). Similarly, we will continue to work with the states and tribes to promote **Setting Results Goals for Radon Testing, Mitigation, and New Construction,** particularly quantitative results within a certain time frame for awareness, testing, mitigation, and radon resistant new construction. Comprehensive school testing and mitigation program has been or is being conducted in several of the states and we will continue to work with the states and tribes on **Getting Schools Tested and Where Necessary Mitigated for Radon,** including promoting these activities through our Tools for Schools work. Also, we will continue to support the states and tribes in the development or refinement of **Multi-Media Mitigation Plans**, including their preparation for the implementation of a radon in water regulatory program. Finally, in FY'04, we will continue to help the states and tribes to design and implement other innovative activities which achieve measurable results in radon awareness, testing, mitigation and radon resistant new construction.

Asthma: During FY 2004, Region 1 will continue to support pilot intervention to reduce the asthma risk to children and minority populations posed by indoor environmental triggers. The focus of Region I's program has been on addressing the environmental triggers of asthma, particularly pediatric asthma. Our main efforts have been to build a broad infrastructure of external partners from many sectors including, academia, community groups, schools, and the public health/medical community. The main components of the regional program include: outreach and training of school, health care, and housing personnel; in-home asthma education and surveillance, and efforts to reduce environmental tobacco smoke, e.g., through "smoke outside" campaigns. In addition, the Region supports and participates actively on an interagency Regional Asthma Council, consisting of federal regional administrators and state-level commissioners of housing, environment, health and human services, and education, as well as non-governmental leaders. The Council works jointly across sectors to reduce rates of asthma in New England.

In FY'04, Region I will work directly with three new grant recipients as well as a number of current grant

recipients, recipients of other Regional grant funding, and other interested partners to reduce risks associated with asthma. For example, we will begin working under a grant with the Naugatuck Valley Health District (NVHD) in Naugatuck, Connecticut, on a Child Asthma Indoor Risk Reduction Ways (CAIRWAYS) Program to mitigate asthma incidence through an educational program targeted towards children with asthma and their caregivers. The program will focus on indoor asthma triggers including secondhand smoke, dust mites, pets, molds, and pests and actions that can be taken to reduce exposure to these triggers. Similarly, we will be working under a grant with the Hasbro Children's Hospital Pawtucket School Asthma Partnership to work with families to more effectively treat and manage asthma to reduce hospitalizations and emergency room visits and increase the capacity of the Pawtucket Schools to help students manage their asthma. Workshops will be conducted at six of the eleven elementary schools in Pawtucket. Families of children with asthma in those schools will be invited to participate. The Region will also be working with the Chinese Progressive Association to translate and promote asthma education materials for Chinese immigrant children in Boston. The Region will continue working with Harvard University on the Healthy Public Housing Initiative in order to train residents and resident trainers in the management of environmental asthma triggers.

Objective 1.3 - Protect the Ozone Layer

Summary of Regional Targets and Baselines for Objective 1.3:

Target: By 2010, in New England, there will be full compliance with handling requirements for ozone-depleting substances.
Regional Baseline:

Regional Narrative for Objective 1.3:

Under Title VI of the Clean Air Act (CAA), EPA's Global Programs Division is responsible for several programs that protect the stratospheric ozone layer, such as the phase-out of the production and import of certain ozone-depleting substances, the regulation of car and truck air-conditioning, and the handling of other air-conditioning and refrigeration systems. However, policy implementation is not complete without effective enforcement. The Region's role in protecting the ozone layer is focused on ensuring compliance with the handling requirements for ozone-depleting substances. The Region has taken significant enforcement actions for violations of regulations on ozone-depleting substances, such as its 2002 settlement with Allied Waste Systems involving a $782,550 civil penalty and $2.3 million supplemental environmental project and with Waste Management of Massachusetts, Inc. with a $775,000 cival penalty and a $2.6 million SEP. The Region will continue to play an important role in the enforcement of these requirements.

Subobjective 1.4.1: Enhance Radiation Protection:
Through 2008, protect public health and the environment from unwanted releases of EPA-regulated radioactive waste and minimize impacts to public health from radiation exposure. By 2008, increase the total number of drums of radioactive waste certified by EPA as properly disposed to 140,171 (420.5 thousand curies) from 47,171 (141.5 thousand curies) in 2003. (The estimated total drums to be deposited at the Waste Isolation Pilot Plant [WIPP] is 860,000 [2.6 million curies] over the next 35 years.)

Regional Targets and Baselines for Subobjective 1.4.1:
Target: None
Baseline: n/a

Regional Narrative–Environmental Conditions and Program Strategies for Subobjective 1.4.1 :

Overview of Environmental Conditions for Subobjective 1.4.1.:
One of EPA's major responsibilities related to radiation is certifying that all radioactive waste shipped by the Department of Energy (DOE) to the Waste Isolation Pilot Plant (WIPP) is disposed of safely and according to EPA's standards. We inspect waste generator facilities and biennially evaluate DOE's compliance with applicable environmental laws and regulations. Every 5 years, EPA must recertify that the WIPP willcomply with EPA's radioactive waste disposal regulations.

Strategies for Achieving Subobjective 1.4.1:
Unique Regional Strategies: n/a
Core Program Work and National Priorities:
This is an EPA program administered by Headquarters, there is no specific regional component to this activity.

Subobjective 1.4.2: Maintain Emergency Response Readiness
By 2008, ensure Agency readiness to inform the public about and protect them from airborne releases of radiation. By 2008, 80 percent of EPA's 300-person Radiation Emergency Response

Regional Targets and Baselines for Subobjective 1.4.2:

Target: Ensure Agency Readiness to inform the public about and protect them from airborne releases of radiation.
Baseline: n/a

Target: By 2008, 80 percent of EPA's 300-person Radiation Emergency Response Team will meet scenario-based response criteria.
Baseline: This is a national goal, EPA Headquarters reports that the 2005 baseline is estimated to be 50 percent. Regional emergency response readiness will also be increased via training, equipment, and exercises.

Narrative–Environmental Conditions and Program Strategies for Subobjective 1.4.2:

Overview of Environmental Conditions for Subobjective 1.4.2.:
EPA continues to meet the statutory mandates for managing radiation waste and controlling radioactive emissions and to fulfill its responsibilities under Presidential decision directives for radiological emergency preparedness and response. These responsibilities form the core of our strategy to protect the public and the environment from unnecessary exposure to radiation. EPA works
with states, tribes, and industry to develop innovative training, public information, and voluntary programs to minimize these exposures and to ensure that emergency response personnel are adequately equipped, trained and prepared to respond to a potential release of radiological material.

Strategies for Achieving Subobjective 1.4.2:

Unique Regional Strategies for Subobjective 1.4.2:
Region I will contribute to this goal by continuing to coordinate with our federal, state and local partners. EPA serves on the Executive Board of the New England Radiological Health Committee which consists of representatives of EPA, FDA, FEMA, NRC and the State Radiation Control and Emergency Management personnel. Through the work of this committee EPA will ensure that the NE Interstate Radiation Assistance Plan remains up to date. In 2005 through 2008, the NERHC will provide health and safety and radiation incident-related training to state Radiation Control personnel to enhance the readiness and response capabilities across NE. Also, EPA participates on the Radiological Advisory Committee and participates in drills and exercises at the nuclear power plants in New England.

Core Program Work and National Priorities for Subobjective 1.4.2:
The Radiation Emergency Response Team (RERT) are housed in EPA's Las Vegas and Montgomery labs. Regional emergency response personnel and the Region I Radiation Program Manager will continue to work closely with HQ RERT personnel on radiological-incident exercises, and training to enhance EPA Region I's radiation monitoring and response capabilities. In the short-term, our focus will be to enhance our OSCs/START capabilities. The region recently acquired new monitoring equipment and will continue to conduct radiation training and include radiological scenarios in our drills and exercises over the next several years.

Objective 1.5 - Reduce Greenhouse Gas Intensity

Regional Targets and Baselines for Objective 1.5:

Target: The Region will support the New England Governors in their goal of reducing regional greenhouse gas emissions to 1990 levels by 2010.

Regional Baseline: Greenhouse gas emissions in 1990 in New England were 44.61 million metric tons of carbon equivalent (MMTCE).

Additional Related Targets: By 2010, 4,000 state, municipal, institutional or commercial buildings will be benchmarked and made more energy efficient. By 2010, all six states will be implementing aggressive climate change action plans. By 2010, 50 cities or towns will have taken greenhouse gas reduction activities. By 2010, 1,500 new megawatts of renewable energy will have been developed.

Narrative for Objective 1.5:

Overview of Environmental Conditions for Objective 5.1
In FY 2002, Region 1 created an Energy Team in order to address the enormous impact our energy use has on our air quality and our environment. Since then, energy efficiency and increased reliance on renewable power have been placed at the heart of Region 1's mission. The Region's Energy Team is working with dozens of communities on adoption of strategies to reduce energy use, particularly through energy performance improvements of municipal and school buildings. We are also providing training in Fall 2003 and Winter 2004 to state building managers on the EnergyStar Building Portfolio Manager tool, in order the assist the states in their goals to benchmark at least 10 state buildings each in the next few months. We have joined with a business coalition in southwestern Connecticut to an effort to benchmark millions of square feet of commercial building space in order to reduce energy demand. Through our Performance Tracks program, we have also challenged 33 businesses to reduce their greenhouse gas emissions and, in collaboration with EPA's Climate Leaders Program, will provide training for those businesses on development of greenhouse gas emission inventories.

Unique Regional Strategies for Objective 1.5:

Region 1 and State Collaboration on Energy Issues: Region 1's Energy Team works closely with the New England state energy and environmental offices on energy use reduction and renewable power through the framework of the New England Governors/Eastern Canadian Premiers Climate Change Action Plan. For 2004, Region 1 is providing to the states training on the benchmarking of the energy performance of state buildings, assistance with the planning of a climate change adaptation conference for natural resources managers, and development of a catalog of energy best management practices for colleges and universities.

Energy Use Reduction by Towns and Cities: The Region has also developed a network of cities and towns which are setting goals to reduce their energy consumption. The Energy Team has assisted more than a dozen communities, including Boston, Medford, Lowell, Cambridge, Somerville, and Stamford, in benchmarking their school buildings and using this information to improve the energy performance of these schools.

Energy Use Reduction by Colleges and Universities: The Region is working with the states to develop a structure to coordinate the various climate change activities at New England colleges and universities. To assist the colleges and universities, the Region is developing a web-based Green Campus College Catalog on best sustainable campus practices. The Catalog will provide case studies of efficiency, clean technology, and renewable energy projects and highlights EPA tools and programs such as EnergyStar, WasteWise, Climate Leaders, and the Green Power Partnership. The Region is also leading an effort to develop a steering committee of interested colleges, universities and public air quality officials that will help coordinate the various activities occurring on campuses in New England.

Education on Climate Change through the New England Science Center Collaborative: Region 1 and Headquarters continue to support 24+ science centers, nature centers and reserves, and aquaria across New England that are actively educating their audiences of over 3 million visitors a year about the science of climate change. Collaborative members receive training for interpreters, docents and education staff; hear presentations from top Regional climate scientists; educate school teachers; and develop and share exhibits, displays, videos, and educational materials about climate change.

Using Energy Efficiency to Improve Electric Reliability in Southwestern Connecticut: Over the last year, Region 1 and a business organization in Southwestern Connecticut has developed a project to encourage improved energy performance at the many large corporations headquartered in the area. In a pilot effort, over 8 million square feet of office space has already been benchmarked and many energy upgrades targeted. Over the next year, the region and its business partners plan to roll out this project in a more public way.

Energy Challenge to Performance Track Facilities: Region 1 is also working with our Performance Track program to challenge participating facilities to commit to reductions in their greenhouse gas emissions. In December, the Region held a very successful workshop, with Headquarters' participation, to train facilities in developing greenhouse gas inventories and identifying strategies to reduce energy consumption or use renewable power.

Best Workplaces for Commuters: Finally, in order to reduce greenhouse gases and other pollutants from the transportation sector, Region 1 will continue pursuing opportunities to increase the number of New England employers participating in *Best Workplaces for Commuters* program. The New England list currently has 83 employers, employing more than 119,000 people. We released the first annual list of "New England's Best Workplaces for Commuters" to the media in late October 2003. After that media outreach, we will continue and expand our recruitment efforts to add additional employers in preparation for release of a second "annual list" in fall 2004.

Energy Efficiency in Banks: Banks and other financial institutions are one of the largest commercial sectors in New England. Working with Massachusetts Bankers Association, Region 1 is holding a series of workshops on energy efficiency for banks. The workshop programs focus on the use of EPA's Building Portfolio Manager tool. In FY 2004, the Region plans to expand these workshops to the other states in New England.

Objective 1.6: Enhance Science and Research

Subobjective 1.6.1: Provide Science to Support Air Programs
Subobjective 1.6.2: Conduct Air Pollution Research

Summary of Regional Targets and Baselines for Objective 1.6:

Target: Through 2010, use the best available scientific information, models, methods and analyses to support air program-related guidance and policy decisions. By 2005, have the Regional State/Tribal Air Monitoring Programs

fully compliant with EPA Order 5360.1.

Regional Baseline: Currently all the New England States have approved PM2.5 and PAMS QAPPs, two have approved criteria pollutant QAPPS, and two toxics monitoring QAPPs. The Tribes and States operating IMPROVE monitors are using the National IMPROVE QAPP.

Additional Related Targets: Under the regional audit program EPA will conduct a minimum of 35 performance audits and certify the ozone standards for each New England State. The Region is planning on conducting two technical systems audits of state air monitoring programs each year.

Regional Narrative for Objective 1.6:

Overview of Environmental Conditions for Objective 1.6:
Although air quality in New England has improved considerably during the last several decades, the Region still is recording unhealthy levels of ozone, has areas that are near or above the fine particulate matter standard, and experiences visibility that is regularly diminished by regional haze. In addition, both air quality monitoring and EPA's National Air Toxics Assessment demonstrate that ambient levels of air toxics pose serious health risks, especially in congested urban areas. The Region's science program through implementation of the Clean Air Act's base programs and several unique regional strategies will provide scientific information to address these issues and ensure the quality of the air monitoring data.

Core Program Priorities and Unique Regional Strategies to Achieve Objective 1.6:
Ensuring Quality Air Monitoring Data: The Region is making implementation of the quality assurance requirements a priority through the approval of the QAPPs for all air data collection activities, conducting performance audits, certifying state ozone standards and conducting technical system audits. The Region is also assisting in reviewing tribal QAPPs and assuring that EPA QA requirements are achieved for the tribal air monitoring programs, as well as providing assistance for evaluating the data and interpreting the risk to tribal members from various sustenance practices.
Reassessment of Air Monitoring Network: In an effort to ensure that our monitoring resources are used as effectively as possible, the Region has worked with all six New England States to reassess their air monitoring programs. For FY2004, the Region will continue working with the New England States to integrate the state proposals into the regional air monitoring network reassessment and to begin to phase in changes to the New England air monitoring network. Working with the Region, the states have already implemented a number of changes to the PM2.5 and PM10 networks and are also phasing in changes to the PAMS network. The Region has already approved reductions in PM10, PM2.5, sulfur dioxide and/or carbon monoxide monitoring in four states and expects to make further reductions in FY 2004. Further modifications to the criteria pollutant and air toxics monitoring networks will be occurring throughout FY 2004 and FY 2005.

Enhancing the Air Toxics Monitoring Program: With our increased focus on risk in our air toxics program has come the need for better air toxics monitoring data. For FY 2004, the Region will assist the New England States

GOAL 2: Clean and Safe Water

Objective 2.1 Protect Human Health

Subobjective 2.1.1 Water Safe to Drink
Subobjective 2.1.2 Fish and Shellfish Safe to Eat
Subobjective 2.1.3 Water Safe for Swimming

Objective 2.2 Protect Water Quality

Subobjective 2.2.1: Improve Water Quality on a Watershed Basis
Subobjective 2.2.2: Improve Coastal and Ocean Waters

Objective 2.3 Science and Research

Subobjective 2.3.1: Apply Best Available Science
Subobjective 2.3.2:Conduct Leading Edge Research

Objective 2.1 Protect Human Health

Subobjective 2.1.1: Water Safe To Drink.

Regional Strategic Targets and Baselines:

Target: By 2008, 80% of the population served by community water systems will receive drinking water that meets health-based standards which systems need to comply as of December 2001.
Baseline: By 2003, 80% of the population served by community water systems received drinking water that met heath-based standards that were place by 2001. [Note: This estimate is based on a partial year SDWIS run of October 2003]

Target: By 2008, 80% of the population served by community water systems will receive drinking water that meets health-based standards which systems need to comply as of January 2002 or later.
Baseline: By 2003, 99% of the population served by community water systems received drinking water that met health-based standards with compliance dates of no earlier than January 2002. [Note: Noncompliance with Stage 1 Disinfectant Byproducts and Arsenic is expected to reduce this current measure]

Target: By 2008, 95% of the community water systems will provide drinking water that meets health-based standards which systems need to comply as of December 2001.
Baselines: In 2003, 91% of the community water systems provided drinking water that met health-based standards in place as of December 2001 [Note: This estimate was based on a December 2003 SDWIS run].
In 2003, the Lead and Copper Rule (8% system violations) and the Total Coliform Rule (6% system violations) represent the bulk of the system violations of health- based standards.
In 2003, of the 234 community water systems with health-based violations, 74% of the system violations were in the very small system size category of less than 500 people served.

Target: By 2008, 80% of the community water systems will provide drinking water that meets health-based standards which systems need to comply as of January 2002 or later.
Baseline: In 2003, xxx% of the community water systems provided drinking water that met health-based standards with compliance dates no earlier than January 2002.

Target: By 2008, efforts have been taken in 50% of the source water areas (both surface and groundwater) for community water systems to minimize risk to public health.
Baselines: In 2003, 92% of the community water systems have received final source water assessments which identify potential contaminant threats within their source water areas.
In 2003, 42% of the population served by community water systems use drinking water sources that are covered by local source water protection programs.

Target: By 2008, increase the population in New England using private wells that have been tested for appropriate health-based standards. By 2010, increase to 75% the number of Maine households with private wells to test for arsenic.
Baselines: About 20% of New England's population use private wells as a source of drinking water.
More than 40% of the population for each of the northern New England states of Maine, New Hampshire, and Vermont rely on private wells as their source of drinking water.
It has been reported that about 50-60% of the Maine households with private wells have not tested for arsenic, a contaminant that has been frequently detected in ground water in Maine.

Target: By 2005, 85% of the population served by community systems that serve more than 3,300 people will have enhanced public health protection through action at the water system level to assess security vulnerabilities and to update emergency response plans.
Baselines: In 2003, 100% of large community systems (serving > 100,00 people) have submitted completed vulnerability assessments.
In 2003, 100% of large community systems (serving > 100,000) have updated their emergency response plans .
In 2003, x% of medium community systems (serving between 50,000 and 100,000) have submitted completed vulnerability assessments. [Note: No data is available at this time]

Narrative - Environmental Conditions and Program Strategies for Objective 2.2.1:

Overview of Environmental Conditions for Subobjective 2.1.1:
New England is a region of a few very large public water supply systems and many, many, very small public water supply systems. The vast majority of public water supplies (>90%), about 10,000 systems are ground water-dependent. New drinking water regulations, like arsenic and the Ground Water Rule shall disproportionally impact small systems in New England. Unique hydrogeological features contribute to the susceptibility of public water supply wells to naturally occurring contaminants such as arsenic, radon and uranium. In addition, because of its compact and largely developed land area, New England's drinking water sources are susceptible to anthropogenic contaminants like Methyl Tertiary Butyl Ether (MTBE) and volatile organic solvents.

Although about 80% of the total New England population rely on public water supply drinking water sources, use of private wells as drinking water sources significantly increases in the three northern states and may continue to expand in the future. In Maine, New Hampshire, and Vermont more than 40% of the population use private wells for their drinking water. A recently released USGS study showed that 1 out of 5 private wells in New Hampshire had arsenic levels greater than the maximum contaminant level of 10 parts per billion.

Since the 1970s, Region 1 and the New England State Drinking Water Primacy Agencies have been very proactive in implementing efforts to protect public water supplies. In response to local advocacy, Region 1 has designated fifteen sole source aquifers, about one fifth of the national total. In addition, the strong emphasis of integrating source water protection into the implementation of EPA programs has resulted in many new cross-program efforts (e.g. prioritizing Underground Storage Tank (UST) inspections in source water areas). As a result of the very extensive efforts undertaken by the New England States, more than 90% of the public source

water areas have been assessed for susceptibility to contaminants in the environment. At the same time, state drinking water programs have been very active working with local officials to implement source water protection strategies.

Regional Strategies for Achieving Subobjective 2.1.1:

EPA New England's Small Systems Initiative

The sheer number of small drinking water utilities and the extent of the new regulatory requirements to be borne by such systems have prompted the region to implement the Small Systems Initiative. More than ten projects have been or will soon be implemented to address existing system weaknesses in understanding new requirements, water quality sampling and reporting, financial planning, and system upgrading.

Lead in Drinking Water in Schools Initiative

This important work is two pronged: compliance/technical assistance; and education. The overall goal is to identify and address any threats to children from elevated lead levels in school drinking water. Working with a multitude of state, municipal, and educational partners, the Region has worked to provide services to Boston schools. Assistance included water quality monitoring, school inspections, and technology information exchange. Lessons learned from this pilot city will be incorporated into outreach materials as part of an educational campaign for schools throughout Massachusetts and Maine. A booklet entitled "Are You Providing Safe Drinking Water at Your School" has been developed to aid this outreach campaign.

EPA New England's Private Well Initiative

The Region shall continue to work with many regional and state partners on the Private Well Initiative to get the word out to citizens to "Test Private Wells". This initiative is built on an effective and productive collaboration established with the New England State Drinking Water Programs and the New England State University Cooperative Extension Programs. Initial outreach materials produced under this initiative focused on providing the public specific recommendations on what to test for , when to test, and where to get additional information. Such materials included state-specific Private Well Testing Brochures, Private Well Magnets, and Updated Websites. In addition, as part of a partnership with the United States Geological Society, and New Hampshire state agencies, EPA Region 1 provided analytical and technical assistance support to an arsenic study of private wells in New Hampshire, thus providing empirical data about the critical need to test private well water.

The Businesses for Safe Drinking Water Initiative

Understanding that the business community have both the resources and local incentives to get involved in source water protection, the Region has initiated an effort to reach out to businesses as partners in safe water. The goal of this initiative is to educate, inspire, and recognize businesses that have worked with water suppliers to protect public sources of drinking water. With funding provided from the Office of Water and in partnership with the New England Water Works Association, the Region has put together a multi-faceted campaign consisting of an outreach brochure on best business management practices, cross-training workbooks, a Business for Safe Water Recognition Program and the "It's Everyone's Business" video. More than 20 businesses have come forward to be recognized for source water protection efforts such as storm water management around reservoirs, water conservation, land acquisition, integrated pest management and public education.

Drinking Water Security

Since the events of September 11, 2001, the Region has been very active in promoting and supporting drinking water security. With the New England Water Works Association and the New England States as strong partners, the Region has conducted more than 30 drinking water security workshops for water supply operators. Thousands of operators have been trained in the areas of general awareness , vulnerability assessment, and emergency response planning. Working closely with the Water Security Division in the Office of Water, the Region has also eveloped and initiated a number of national models including the Top Ten (Security) List for Small Water Utilities, the Top Ten List for Law Enforcement, a Water Watchers Citizen Brochure, and the ASSET Tool - a vulnerability assessment software package.

Core Program Work and National Priorities for Achieving Subobjective 2.1.1:
The 1996 amendments to the Safe Drinking Water Act heralded an expanded core program in a number of important areas. Work related to state primacy rule development and approvals have sharply increased to reflect the more than ten new rules recently promulgated. Within the New England Region, one federal regulation results in the need to support, review and approve six new state primacy applications.

National priorities that will be continue to be supported include the emphasis on compliance with microbial contaminants and source water protection. Since the majority of noncompliance with the Total Coliform Rule is from small systems, efforts to provide assistance through the tools and support of the Region's Small Systems Initiative should address some potential microbial threats. In addition , significant new rule training (e.g. Interim Enhanced Surface Water Treatment Rule, Stage 1 Disinfectant Byproducts) for state personnel, technical assistance providers, and utility operators shall continue.

The emphasis on integrating source water protection into cross-office EPA programs shall be maintained, with an emphasis on utilizing the threat information provided by the state Source Water Assessment Programs.

Environmental justice is both a regional and national priority. This emphasis is supported through our work with rural communities, as captured by our Small Systems Initiative. Creative efforts to provide technical and financial assistance is needed in order to address the public health concerns and needs of such rural communities.

As stated above, compliance assistance efforts shall be maintained under the Small Systems Initiative to address disproportionate challenges faced by such utilities. Enforcement actions shall be taken, as needed, to address noncompliance with the Safe Drinking Water Act. Such work is expected to increase over the next few years because of the extension agreements negotiated with the states and the inability of some states to keep up with timely primacy updates.

Oversight of the State Revolving Loan Program shall continue to be a high priority. State work plans will be negotiated and approved in a timely manner. Annual state program reviews shall continue to be comprehensive, addressing the use of SRF for projects and setasides for program management and technical assistance.

The Region shall continue to be active nationally in rule development, and regionally in training and technical assistance. In addition, data reliability shall continue to be a priority for the drinking water program. Consistent with our regional data reliability improvement strategy and with Headquarters support, the Region shall continue to conduct lab certification audits and enforcement data verifications, and to work with states to address deficiencies.

Subobjective 2.1.2: Fish and Shellfish Safe to Eat. By 2008, improve the quality of water and sediments to allow increased consumption of fish and shellfish as measured by the strategic targets described below.

Regional Strategic Targets:

Target: By 2008, no increased consumption of fish in the water miles/acres identified by states or tribes as having a fish consumption advisory in 2002. [National Target is 3%]
Baseline: Within New England, we currently have statewide mercury fish consumption advisories in five of the six states, covering 63,366 river miles (98% of regional streams and rivers) and 1,595,382 lake acres (97% of regional lakes and ponds). Rhode Island does not have a statewide mercury advisory but EPA is working with RI to initiate a fish tissue testing program which would likely result in a statewide advisory. Since mercury is largely transported in from outside the region and until mercury emissions (outside the region) and subsequent deposition are reduced, we do not expect to see reductions in fish tissue contaminant levels, and therefore, we do not anticipate being able to allow increased consumption of fish between now and 2008. [Note: mercury deposited

into water moves rapidly into organisms and fish; water and sediments generally do not have high levels of mercury.]

National Target: By 2008, 85 percent of the shellfish-growing acres monitored by states will be approved for use. **At this time, we cannot come up with a regional target. We need to check with Bill Kramer at HQ discuss this measure further. We understand that this target came from a straight-line extrapolation. In New England, this is not a good measure as some states have recently opened new offshore areas to shellfishing so trends may not be attributed to water quality improvements.**
National Baseline: 66 percent approved for use of 21.6 million acres monitored: 67 percent approved and 8 percent conditionally approved.). **There is no regional baseline at this time.**

Narrative: Environmental Conditions and Program Strategies for Subobjective 2.1.2.

Environmental Conditions for Subobjective 2.1.2:
Two of the primary threats to safe fish and shellfish in the region are mercury deposition and bacteria pollution. In New England, based on extensive monitoring data showing high levels of mercury in fish tissue exceeding state action levels, Maine, New Hampshire, Vermont, Massachusetts, and Connecticut have issued statewide advisories for mercury in fish for all freshwater surface waters (lakes, ponds, streams, rivers, etc.). Mercury concentrations in fish tissue above levels of concern have been found throughout New England, from urban areas to the most remote and pristine northern forests. Because the major source of mercury to New England is from deposition from air transported from outside the region, most of the work on mercury will be the result of national efforts. Furthermore, the New England states have implemented extremely aggressive mercury action plans. Therefore under this subobjective, Region 1 will focus more on restoring shellfish uses along coastal waters. Our strategies to restore shellfish beds include the NPDES, TMDL, and NEP programs.

Core Program Work and National Priorities for Achieving Subobjective 2.1.2:

(1) TMDLs - EPA will work with the New England states to develop and approve TMDLs for waters that do not meet their designated shellfishing. Particular attention will be paid to restoring policy differences between states and the Region on bacteria TMDLs.

(2) NPDES - The region will continue its effort to reduce the permit backlog and will work with the states to develop and implement the permitting for environmental results strategy.

(3) Several National Estuary Programs, including the Casco Bay Estuary Project, the Massachusetts Bay Program, the Narragansett Bay Project, and the New Hampshire Estuaries Project, have prioritized restoration of impaired shellfishing waters in their Comprehensive Conservation and Management Plans (CCMPs).

Unique Regional Strategies for Achieving Subobjective 2.1.2:

(4) Mercury – The Region working with the New England states, NEIWPCC, and USGS to develop regional GIS-based models that provide information about sources of mercury, the susceptibility of fish to mercury contamination, the influences of certain landscape and water-quality variables on mercury in fish tissue, and relative magnitude of loading from mercury sources in watersheds throughout New England. The models will be used to estimate the amount of mercury reduction needed from sources, especially air deposition, necessary to meet EPA's mercury criterion of 0.3 mg/kg methyl mercury in fish tissue.

Subobjective 2.1.3: Water Safe for Swimming:
By 2008, restore water quality to allow swimming in not less than 5 percent of the stream miles and lake acres identified by states in 2000 as having water quality unsafe for swimming. (2000 Baseline: approximately 90,000

stream miles and 2.6 million lake acres reported by states as not meeting a primary contact recreational use in the 2000 reports under section 305(b) of the Clean Water Act.)

Strategic Targets and Baselines for Subobjective 2.1.3:

Target: By 2008, protect the quality of recreational waters nationwide so that there will be zero waterborne disease outbreaks attributable to swimming in, or other recreational contact with, the ocean, rivers, lakes, or streams.
Baseline: 0 for 2002

Target: By 2008, coastal beaches monitored by state beach safety programs will be open and safe for swimming in 99 percent of the days of the beach season.
Baseline: In 2002, monitored beaches were open approximately 98.8 percent of the days of the beach season in New England.

Narrative Section for Subobjective 1.4.1:

Overview of Environmental Conditions for Subobjective 1.4.1.:
New England is blessed with a plethora of freshwater and saltwater beaches and swimming holes that are critically important to our quality of life. EPA, the states, and local communities have done a lot of work in the last decade to identify and address sources of bacteria (and pathogen) contamination to recreational and shellfish waters through a variety of regulatory and planning programs. Despite these efforts, too many beaches are still closed to the public for swimming during both wet and dry weather. EPA will continue to work with state and local agencies to improve water quality monitoring, public notification, and source identification and control efforts through the Regional Beach Strategy, which builds on the federal Beach Act as well as core programs like the TMDL and NPDES programs.

Core Program Work and National Priorities for Subobjective 1.4.1:
(1) EPA will work with the states of Massachusetts and Rhode Island to adopt EPA-recommended bacteria criteria (E. coli or enterococci) by the end of 2005.

(2) EPA will work with the New England states to develop and approve TMDLs for waters that do not meet their designated swimming uses.

Unique Regional Strategy for Subobjective 1.4.1:

(3) Regional Beach Strategy – The goal is to protect public health by reducing beach closures in New England, with appropriate and consistent, high-quality monitoring and public notification. The strategy goes beyond the requirements of the federal BEACH Act by providing financial and technical assistance to support sanitary surveys to identify and eliminate sources of bacteria and pathogens, conducting extensive public outreach on the strategy and the importance of reducing pollution sources, and supporting new technologies to improve our ability to identify pollution sources (e.g., microbial source tracking) and eliminate them (e.g., innovative storm water controls). Region 1 also has developed a regional beach initiative. EPA will focus its efforts on providing technical assistance to state and local environmental and public health agencies for assessment and monitoring as needed and as funds allow, and will back up its assistance efforts with regulatory and enforcement tools where appropriate.

Objective 2.2 Protect Water Quality

Subobjective 2.2.1: Improve Water Quality on a Watershed Basis.
By 2008, use both pollution prevention and restoration approaches so that:

• In 600 of the Nation's watersheds, water quality standards are met in at least 80 percent of the assessed water segments (2002 Baseline: 453 watersheds of the total 2,262 U.S. Geological Survey (USGS) cataloguing unit scale watersheds across the Nation) **This target is based on watersheds as defined at the 8-digit HUC code level. Using the 8-digit HUC codes to measure progress against this target is not practical in New England. We do our work in watersheds at a much smaller scale. In addition, many of our TMDLs are completed for much finer segments (some as small as ½ mile stretches of river). Between now and 2008, it will be difficult to show much progress towards this goal.**
• In 200 watersheds, all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002. (2002 Baseline: 0 USGS cataloging unit scale watersheds (2002 Baseline: 0 USGS cataloging unit scale watersheds)

Regional Strategic Targets for Subobjective 2.2.1:

From National Strategic Plan:

• By 2006, fully attain water quality standards in over 5 % of those water bodies identified in 2000 as not attaining standards. **Five of our six states did not submit 2000 list. The more appropriate baseline in New England is 1998. Furthermore, a 5% target is too aggressive for this region. It takes many years to actually develop, approve, and fully implement a TMDL or strategy to restore an impaired water body. By 2005, I suspect there will be very few waters on the 303(d) lists that fully attain water quality standards.**

• By 2008, reduce levels of phosphorus contamination in rivers and streams so that phosphorus levels are below levels of concerns established by USGS or levels adopted by a state or authorized tribe in a water quality standard in:
- 55% of test sites for major rivers ('92-'98 Baseline: 50%)
- 38% of test sites for urban streams ('92-'98 Baseline: 33%)
- 30% of test sites for farmland streams ('92-'98 Baseline: 25%)

(We cannot develop a regional target at this time. We need further information on test sites from HQ.)
• By 2008, improve water quality in Indian country at not fewer than 90 monitoring stations in tribal waters for which baseline data are available (i.e., show at least a 10% improvement for each of four key parameters: total nitrogen, total phosphorus, dissolved oxygen, and fecal coliforms). (2002 Baseline: four key parameters available at 900 sampling stations in Indian country.) **Regional Target and Baseline Still Under Development**
• By 2015, in coordination with other federal partners, reduce by 50% the number of households on tribal lands lacking access to basic sanitation. (2000 Baseline: Indian Health Service data indicating that 71,000 households on tribal lands lack access to basic sanitation.) **Regional Target and Baseline Still Under Development**

Narrative of Environmental Conditions and Program Strategies for Subobjective 2.2.1:

Overview of Environmental Conditions for Subobjective 2.2.1:
The majority of the surface water programs support this subobjective to improve water quality on a watershed basis. In New England, we have had a long history of supporting the watershed approach with our states and we are making good strides to improving water quality on a watershed basis. This does not mean, however, that all of our permits are issued on a watershed basis or that all of our nonpoint source money is going to pay for new watershed plans. We feel it is appropriate to use the watershed approach strategically in our work depending on the nature of the environmental problem and the type of program involved. For example, CT has used the watershed approach in implementing its nitrogen credit exchange program to reduce nutrients to Long Island

Sound from major wastewater treatment plants across the state. States and EPA Region 1 are using a variety of other factors to prioritize work in the surface water program throughout the region. For example, TMDL development is driven by the priorities each state selects as part of its 303(d) process. Nonpoint source funds are used to support base program work as well as projects that help to improve impaired water bodies and that implement TMDL's. In certain circumstances (ME), nonpoint source funds are also used to protect vulnerable water bodies from degradation. We see the need for flexible approaches to watershed management and water quality improvement.

In terms of our water quality programs, the majority of our efforts will be in support of base programs. The Region will continue to work with the six New England states to: (1) improve what we believe are already strong, protective water quality standards; (2) develop and implement comprehensive state water quality monitoring and assessment programs; (3) develop and approve TMDLs that will meet WQS for priority watersheds; and to (4) issue NPDES permits and target 319 NPS grant funds on a watershed basis to implement TMDLs. We are also committed to implementing the national watershed initiative.

Core Program Work and National Priorities for Subobjective 2.2.1:

(1) Work to reduce the NPDES permit backlog to targeted levels by the end of CY 2004. The effort will emphasize the use of various general permits targeted specifically to the minor permit backlog. Efforts will continue to issue a number of power plant permits (the power plant subset equates to the permissible backlog rate of 10%). In addition, the region will implement a revised NPDES Permit Strategy and put more resources into the permitting units.

(2) Emphasis will be placed on issuing POTW permits with appropriate nutrient limits that implement existing narrative criteria supplemented by the nationally recommended criteria for this ecoregion.

(3) EPA, in conjunction with the states, evaluated their existing water quality monitoring programs during 2003, and during 2004, will provide assistance in the development of comprehensive state monitoring strategies. These strategies are due by September 30, 2004, and implementation will begin during 2005.

(4) Region 1 is committed to supporting the watershed initiative program. In FY'03 our region had three winners. We will continue to support the program in future years and not only provide project officer support for the grants, but also provide additional support by leveraging other regional programs in support of the projects as appropriate.

Unique Regional Strategies for Subobjective 2.2.1:

(1) The Clean Charles 2005 Initiative will continue as a regional priority. The region will work closely with the Charles River Watershed Association and other interested constituencies to develop, implement and promote watershed restoration activities in the Charles Basin. The activities include the issuance of a NPDES permit for the Mirant-Kendall power generating facility discharge that will focus on controlling the heat load to the river and working with the CRWA to develop and implement a flow-based trading strategy for the River. Significant emphasis will continue to be placed on the management of wet weather discharges into the Charles.

(2) Work with the CT DEP and the LIS Office to evaluate the Nitrogen Credit Exchange Program to ascertain its success as well as monitor implementation progress for the LIS TMDL.

(3) The NPDES minor permit backlog will continue to be addressed by aggressively implementing our strategy that includes optimizing the development and issuance of general permits, assuring the accuracy of the NPDES universe, working with MA and NH state staff to leverage their permit writing assistance while continuing to work on individual permits that are environmentally significant. New England has a large universe of energy-

related permits that are resource extensive but very significant to estuarine environments that will receive priority attention.
(4) EPA will work with the states and NEIWPCC to implement two pilot "innovative" TMDL projects intended to: (1) provide guidance on how to determine whether enforceable water pollution controls for the purpose of streamlining the "off-ramping" of impaired waters from the 303(d) list; and (2) develop a generic technical approach to the development of TMDLs for waters impaired predominately by storm water. The purpose of these projects is to ensure that the states' 303(d) lists include only those impaired waters for which NPDES permits and other enforceable control mechanisms are not expected to lead to the attainment of water quality standards, and to develop a technically-sound, legally-defensible method for "bundling" multiple TMDLs for waters impaired by pollutants associated with storm water.

(5) Implement a probability-based statistically valid region wide monitoring program to enable determination of water quality for the entire region. Wadeable streams were completed in 2003 and assessment of lakes and ponds will take place in 2004-2006. Wetlands are scheduled after lakes and ponds.

Subobjective 2.2.2: Improve Coastal and Ocean Waters.

Regional Strategic Targets for Subobjective 2.2.2::
At this time, we cannot develop regional targets for this subobjective. Further information is needed from HQ on the origin of these targets and the regional break-down.

National Strategic Targets:
• By 2008, maintain water clarity and dissolved oxygen in coastal waters at the national levels reported in the 2002 National Coastal Condition Report (2002 Baseline: 4.3 for water clarity; 4.5 for dissolved oxygen.)
• By 2008, improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for:
- Coastal wetlands loss by at least 0.2 points (2002 Baseline: 1.4)
- Contamination of sediments in coastal waters by at least 0.2 points (2002 Baseline: 1.3)
- Benthic quality by at least 0.2 points (2002 Baseline: 1.4)
- Eutrophic conditions by at least 0.2 points (2002 Baseline: 1.7)
• By 2010, in cooperation with other nations, federal agencies, states, tribes, and local governments, reduce the rate of increase in the number of invasions by non-native invertebrate and algae species of marine and estuarine waters. (2000 Baseline: rate of increase approx. 1% per year.)

Regional Strategic Target Baseline: This baseline will be developed at a later date.

Narrative of Environmental Conditions and Program Strategies for Subobjective 2.2.2:

Overview of Environmental Conditions for Subobjective 2.2.2:
According to the National Coastal Condition Report (EPA, 2001), ecological conditions in northeast estuaries are borderline poor. While 57 percent of the area surveyed, which extends from Chesapeake Bay to the Canadian border, showed undegraded ecological conditions, 23 percent of the sediments were characterized by degraded biology, and 30 percent of the estuarine area had impaired human uses. Although these results may be skewed by the inclusion of heavily urbanized areas stretching from Washington, D.C. to New York City, certain coastal areas in New England like western Long Island Sound, upper Narragansett Bay, and Boston Harbor also exhibit water quality and habitat impairments associated with large population centers. In general for the northeast coastal area, water clarity is good, dissolved oxygen levels and coastal wetlands are fair, and eutrophic conditions, sediment, benthos, and fish tissue are poor.
EPA will continue to utilize its authorities under the Clean Water Act, the National Environmental Policy Act

(NEPA), and Marine Protection, Research, and Sanctuaries Act (MPRSA) to restore and protect water quality and marine habitat. EPA will work with other federal and state agencies, local governments, businesses, and citizen organizations to implement the Comprehensive Conservation and Management Plans (CCMPs) produced by the six National Estuary Programs in New England (Casco Bay Estuary Project, New Hampshire Estuaries Project, Massachusetts Bay Program, Buzzards Bay Project, Narragansett Bay Project, and Long Island Sound Study). The CCMPs identify and prioritize for management the water quality and habitat impairments facing each of these six "estuaries of national significance," and provide action plans to address the priority problems. EPA will work with the U.S. Army Corps of Engineers and other federal and state resource agencies to regulate dredging and the disposal of dredged and other material in estuarine and ocean waters to minimize adverse impacts to the marine environment. EPA will use its environmental review authorities to ensure federal actions and projects, including its own, avoid and minimize adverse environmental impacts by evaluating various alternatives that meet the basic project purpose and need.

Core Program Work and National Priorities for Achieving Subobjective 2.2.2:

(1) Work with the Corps of Engineers to develop Environmental Impact Statements to evaluate the potential designation of dredged material disposal sites in Long Island Sound and Rhode Island Sound.

(2) Work with five coastal New England states and marine industries to establish no discharge areas for marine waters.

(3) Protect and restore tidal wetlands and other coastal habitat by: 1) reviewing ACOE section 404 and section 10 permits that impact coastal water ways, 2) issuing NEP and 319 grants to support state and local habitat restoration efforts, and 3) participating in the Corporate Wetland Restoration Partnership in several states.

(4) Increase level of participation in regional and national invasive species control efforts, including representation on the Northeast Regional Panel for Aquatic Nuisance Species (NEANS) and working with other federal, state and local entities to develop a regional model for rapid response to an invasive species outbreak.

Unique Regional Strategy for Subobjective 2.2.2:

(1) Continue to support the Gulf of Maine Council on the Marine Environment, which was established by the governments of Nova Scotia, New Brunswick, Maine, New Hampshire, and Massachusetts to foster cooperative actions that will help maintain and enhance environmental quality in the Gulf and its watershed, to allow for sustainable resource use by existing and future generations.

Objective 2.3: Enhance Science and Research
Subobjective 2.3.1: Apply the Best Available Science

Regional Targets and Baselines: None

Regional Narrative:
Overview of Environmental Conditions for Subobjective 4.3.1: NA

Strategies for Achieving Subobjective 4.3.1:
Core Program Work and National Priorities:
1. Implementation of a regional STORET policy targeting all water quality data to be entered into STORET by Dec. 31, 2005, including setting up an EPA NE users group, a NE States/EPA users group, and providing contractor support and technical assistance to states and others.

Unique Regional Strategies:
1. Development of a PCR (polymerase chain reaction) laboratory with capability of MST (microbial source

GOAL 3: Land Preservation and Restoration

Objective 3.1 Preserve Land

Subobjective 3.1.1 Reduce Waste Generation and Increase Recycling
Subobjective 3.1.2 Manage Hazardous Wastes and Petroleum Products Properly

Objective 3.2 Restore Land

Subobjective 3.2.1: Prepare for and Respond to Intentional and Accidental Releases
Subobjective 3.2.2: Clean Up and Reuse Contaminated Land
Subobjective 3.2.3: Maximize Potentially Responsible Party Participation and Superfund Sites

Objective 3.3 Enhance Science and Research

Subobjective 3.3.1: Provide Science to Preserve and Remediate Land
Subobjective 3.3.2: Conduct Research to Support Land Activities

Objective 3.1 Preserve Land
By 2008, reduce adverse effects to land by reducing waste generation, increasing recycling, and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.

Subobjective 3.1.1:Reduce Waste Generation and Increase Recycling
By 2008, reduce materials use through product and process redesign , and increase materials and energy recovery from wastes otherwise requiring disposal.

Regional Targets and Baselines for Subobjective 3.1.1:

1. By 2008 maintain the national average municipal solid waste generation rate at no more than 4.5 pounds per person per day.*

2. By 2008 increase recycling of total annual municipal solid waste produced to 35% from 31% in 2002.**

We will rely on the national averages as they are reported by OSWER because the states do not report their solid waste generation rate nor their recycling rates in a consistent format. The States do report the amount of materials that are sent to recycling which is a measure of the health of their recycling program, but not of the participation rate of the citizenry. The following 2001 figures were reported for the New England states as collected by the Northeast Recycling Council, a nonprofit that represents the ten Northeastern states.

State	Tons recycled in 2001
CT	882,000
ME	687,000
MA	5,925,000
NH	274,000
RI	94,000
VT	179,000

Environmental Conditions and Program Strategies for Subobjective 3.1.1:

Core Program Work and National Priorities for Subobjective 3.1.1:

EPA's strategy for reducing waste generation and increasing recycling is based on establishing and expanding partnerships with businesses, industries, states, communities, and consumers; stimulating infrastructure development, new technologies, and environmentally responsible behaviour by manufacturers users and disposers; and helping business, government, institutions and consumers by providing education, outreach, training and technical assistance. Much of this falls under the new Agency vehicle called the Resource Conservation Challenge (RCC). The Region engages in far too many related activities through our Pollution Prevention and other innovative initiatives and activities to discuss all of them. We focus below on some of our highest priority activities.

Unique Regional Strategies for Subobjective 3.1.1:

Over 40% of the solid waste in New England is incinerated due to high land values and lack of landfill space. Tip fees for disposal are higher than the national average which serves as an incentive for recycling as recycling services can be provided at a lower tip fee than disposal. Recycling is available in most of the Region, however, economic strains on the Region since 2001 have cut state budgets for recycling and market development for recyclables, cutting the growth of the industry.

We will continue to concentrate in two areas of solid waste recycling - food waste and electronics. Food waste makes up 14% of the waste stream that is disposed and is the largest commodity by percentage without significant recycling (estimated at 2.8% recycling). Our efforts will continue to work with the New England to build the infrastructure for composting food waste through education, work with the generators (supermarkets, restaurants, growers, etc), haulers and processors (composters). On electronics, we will continue our work on product stewardship with the original equipment manufacturers, states and non-profits in order to establish the mechanisms for recycling of electronics. Additionally, we will continue to work on the recyclability of electronic equipment.

* These numbers are from the Franklin Characterization report of 2000 as these figures are not kept on a Regional level.

**These numbers are from the Franklin Characterization report of 2000 as each State individually reports recycling rates and all have different commodities that are included in their recycling rates.

Sub-objective 3.1.2 Manage Hazardous Wastes and Petroleum Products Properly
By 2008, reduce releases to the environment by managing hazardous wastes and petroleum products properly.

Environmental Targets and Baselines for Subobjective 3.1.2:

1. Target: By 2008, prevent releases from RCRA hazardous waste management facilities by increasing the number of facilities with permits or other approved controls to 95 percent.
Baseline: There are 169 Region I facilities on the current Permit or Post Closure Baseline; 129 or 76% have approved controls in place by the end of FY03. There are no facilities on Tribal Lands.

2. Target: By 2008, update controls for preventing releases at facilities that are due for permit renewals.
Baseline: This Baseline and regional targets will be established by the end of 2006.

3. Target: By 2008, reduce hazardous waste combustion facility emissions of dioxins and furans by 90 percent and particulate matter by 50 percent from the 1994 established levels.
Baseline: There are 2 Region I Combustion facilities that would need to meet these levels.

4. Target: By 2008, increase the percentage of UST facilities that are in significant operational compliance with both release detection and release prevention requirements by 4 percent compared to 2004, out of a total estimated universe of approximately 14,500 facilities in New England.
Baseline: The baseline compliance rate will be determined in 2004.

5. Target: Each year through 2008, minimize the number of confirmed releases at UST facilities in New England to 350 or fewer.
Baseline: Between FY 1999 and FY 2003, confirmed releases in New England averaged approximately 570 per year.

Environmental Conditions and Program Strategies for Subobjective 3.1.2:

Core Program Work and National Priorities for Subobjective 3.1.2:
EPA's strategy for addressing hazardous wastes that must be treated or store is based on meeting the base requirements of RCRA permits and permit renewals. Despite the age of the program, significant work remains to be done in completing permitting tasks and in achieving greater efficiencies at waste management facilities through more focused permitting processes and tightening standards where appropriate. We will work with all our authorized States to help resolve issues and implement successful permitting strategies. In addition, we will continue to work with our states in the implementation of permitting regulations to reduce emissions of dioxins, furans and other air emissions.

The upgrade requirements for all single wall storage tanks (to either new double wall tanks or tanks with cathodic protection), as mandated by EPA's UST regulations, have been fully implemented. However, in recent years, the rate of compliance with the monitoring requirements has been low. The region continues to work to increase the percentage of UST facilities that are in significant operational compliance with both release detection and release prevention requirements via a robust inspection and enforcement program and partnerships with states and the industry.

Unique Regional Strategies for Subobjective 3.1.2:
Many of the EPA New England states have already met the GPRA Permitting Goal. Most of the remaining sites without adequate controls in place are located in Connecticut. We have an agreed upon strategy with the CT DEP for attaining the established goal of having 98% of their facilities with controls in place. This strategy includes frequent meetings with the State, the provision of significant EPA technical assistance, and flexibility as agreed to by HQ on the documentation of achieving controls in place, and using the broad spectrum of regulatory tools available to achieve controls in place.

Related to these efforts, as well as central to all the RCRA Program Components, the Region is investing heavily in helping all our states to update their RCRA regulations and become fully authorized. Again, there is a major effort in CT and we have been working vigorously on an authorization package.

In an effort to improve operational compliance with UST requirements, EPA New England has embarked on a unique partnership, in conjunction with the six New England states, New York, and the New England Interstate Water Pollution Control Commission (NEIWPCC), to bring together UST regulators from EPA, states, and many of the large petroleum corporations gain the regulated community's perspective on UST compliance issues.
Objective 3.2 - Restore Land

Subobjective 3.2.1 Prepare for and Respond to Intentional and Accidental Releases
By 2008, reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies.

Regional Targets and Baselines for Subobjective 3.2.1:
Target: Each year through 2008, improve the Agency's emergency preparedness by achieving and maintaining the capability to respond to simultaneous large-scale emergencies and by increasing response readiness by 10 percent from a baseline established by the end of 2003 using the core emergency response criteria.
Baseline: In FY 2002, EPA New England received a score of 849 out of a possible 1000 points in our Core Emergency Response evaluation. Scores for FY 2003 have yet to be released.

Target: Each year through 2008, respond to 20 hazardous substance releases (Superfund removal actions) and 20 oil spills in New England.
Baseline: EPA New England has historically conducted 20 to 25 removal actions, approximately 10 hazardous substance emergency responses, and responded to and/or monitored approximately 20 oil spills each year.

Target: Each year through 2008, minimize impacts of potential oil spills by inspecting or conducting exercises or drills at 6 percent of 138 New England oil storage facilities required to have Facility Response Plans.
Baseline: Each year, EPA New England has typically conducted 20 to 25 of these facility inspections.

Narratives of Environmental Conditions and Program Strategies for Subobjective 3.2.1:

Overview of Environmental Conditions for Subobjective 3.2.1:
EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil pose to human health and the environment. EPA's emergency preparedness, prevention, and response staff are vital to this work. We will continue to develop technical personnel in the field, ensuring their readiness and protecting their health and safety when responding to releases of dangerous materials. In addition, EPA will strengthen its information infrastructure by making information management decisions
Agency-wide and by improving operations and the security, collection, and exchange of information.
Preparedness on a national level is essential to ensure that emergency responders are able to deal with multiple, large-scale emergencies, including those that may involve chemicals, oil, biological agents, or weapons of mass destruction. Over the next several years, EPA will enhance its core emergency response program to respond quickly and effectively to chemical, oil, biological, and radiological releases and will improve coordination mechanisms to enable response to simultaneous, large-scale national emergencies, including homeland security incidents. We will focus our efforts on Regional Response Teams and coordination among regions; health and safety issues, including provision of clothing that protects and identifies responders, training, and exercise; establishment of delegation and warrant authorities; and response readiness, including equipment, transportation, and outreach.

Each year, EPA personnel assess, respond to, mitigate, and clean up numerous releases—whether accidental, deliberate, or naturally occurring. These incidents range from small spills at chemical or oil facilities to national disasters, such as hurricanes, earthquakes,
terrorist events like the 2001 World Trade Center/Pentagon and anthrax attacks, and the 2003 Columbia shuttle tragedy.
EPA will work to improve its capability to respond effectively to incidents that can involve harmful chemical, oil, biological, and radiological substances. Another important component of EPA's land strategy is preventing potential oil spills and
being prepared for spills that do occur from reaching our Nation's waters. Under the Oil Pollution Act, the Agency requires certain facilities (defined in 40 CFR 112.2) to develop Facility Response Plans and to practice

implementing the plans by conducting drills and exercises to be prepared in the event of a spill. Compliance with these requirements reduces the number of oil spills that reach navigable waters and prevents detrimental effects on human health and the environment should a spill occur.

Strategies for Achieving Objective 3.2.1:

Unique Regional Strategies for Achieving Objective 3.2.1::
The region has developed its own Security and Preparedness Action Plan outlining numerous activities supporting this Objective.
In addition, to further the response readiness goal, the region is developing a “surge capacity” plan - establishing a regional Response Support Corps (RSC) of EPA staff that could assist in a large-scale emergency - to increase our overall number of trained responders and support personnel.

Core Program Work and National Priorities for Achieving Objective 3.2.1:
Regional areas of emphasis include: ensuring the safety of emergency response personnel and other regional personnel; increasing response readiness through training, equipment, and additional support; and, improving internal and external communication and coordination via Regional Incident Coordination Team (RICT) and Regional Response Team (RRT) activities. The region will also continue to emphasize oil spill pollution prevention and response activities under this subobjective.
Subobjective 3.2.2 Clean Up and Reuse Contaminated Land:
By 2008, control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.

Regional Targets and Baselines for Subobjective 3.2.2:

Target: By 2008, perform 88,000 health and environmentally based site assessments and make 41,700 final-assessment decisions under Superfund, and assess 100 percent (currently 167 in New England) RCRA baseline facilities. Universe of RCRA baseline facilities will be evaluated and, if necessary, adjusted in FY 2004.
Baseline:

Target: By 2008, control all identified unacceptable human exposures from site contamination to at or below health-based levels for current land and/or ground-water use conditions at 95 percent (158 in New England) of RCRA baseline facilities and 84 percent (90) of 107 New England Superfund human exposure sites.
Baseline: Through Fiscal Year 2003, we have achieved this target at 72% (121) of New England RCRA baseline facilities and 79% (84) of New England Superfund human exposure sites

Target: By 2008, control the migration of contaminated ground water through engineered remedies or natural processes at 80 percent (153 in New England) of RCRA baseline facilities and 65 percent (66) of 101 New England Superfund ground-water exposure sites.
Baseline: Through Fiscal Year 2003, we have achieved this target at 60% (101) of New England RCRA baseline facilities and 63% (64) of New England Superfund ground-water exposure sites.

Target: By 2008, select final remedies (cleanup targets) at 30 percent (50 in New England) of RCRA baseline facilities and approximately 82 percent (88) of 108 New England Superfund sites.
Baseline: Through Fiscal Year 2003, we have achieved this target at 66 of 108 (61%) New England NPL sites. This is a new measure for RCRA sites and the baseline has yet to be determined.

Target: By 2008, clean up and reduce the backlog of leaking UST sites by 50 percent, and complete construction of remedies at 20 percent (33 in New England) of RCRA baseline facilities and approximately 63 percent (68) of 108 New England Superfund sites. (Construction completion is a benchmark used to show that all significant

construction activity has been completed, even though additional remediation may be needed for all cleanup goals to be met. Achieving this goal for Superfund sites is contingent upon the availability of sufficient cleanup funding.) Baseline: Through Fiscal Year 2003, we have achieved this target at 53 of 108 (49%) New England NPL sites. This is a new measure for RCRA sites and the baseline has yet to be determined.

Narrative–Environmental Conditions and Program Strategies for Subobjective 3.2.2:

Overview of Environmental Conditions for Subobjective 3.2.2:
EPA and its partners work to clean up contaminated land to levels sufficient to control risks to human health and the environment and to return the land to productive use. Through strong policy, leadership, program administration, and a dedicated workforce,
EPA's cleanup programs will merge sound science, cutting-edge technology, quality environmental information, and stakeholder involvement to protect the region from the harmful effects of contaminated property. EPA and its partners follow four key steps to accomplish cleanups and control risks to human health and the environment: assessment, stabilization, selection of appropriate remedies, and implementation of remedies. We will continue to work with our federal, state, tribal, and local government partners at each step of the process to identify facilities and sites requiring attention and to monitor changes in priorities, addressing new priority sites or removing previously identified facilities that will be addressed through other mechanisms.

Usable land is a valuable resource. However, where contamination presents a real or perceived threat to human health and the environment, options for future land use at that site may be limited. EPA's cleanup programs have set a national goal of returning formerly contaminated sites to long-term, sustainable, and productive use. This goal creates greater impetus for
selecting and implementing remedies that, in addition to providing clear environmental benefits, will support reasonably anticipated future land use options and provide greater economic and social benefits.

Strategies for Achieving Subobjective 3.2.2 :

Unique Regional Strategies for Achieving Subobjective 3.2.2 :
By striving to meet the "groundwater release under control" indicator and completing cleanups at Superfund, RCRA, and UST sites, the goals of Goal 1.1.1 (Water Safe to Drink) are also furthered. The region's cleanup programs and drinking water program continue to work in concert to ensure that sites within areas of critical concern (source-water protection areas) remain a high-priority.

To further the goal of making land available for reuse, the region has embarked upon an effort to complete "Preliminary Reuse Assessments" for New England NPL sites. These assessments evaluate local reuse/ redevelopment plans and needs, zoning and land use restriction issues, and help identify the reasonably anticipated future land use at a site to inform the remedy selection process. The reports developed as part of this assessment summarize the site characteristics, contamination, and land use issues.
The region continues to leverage Superfund program resources and expertise to further the investigation and cleanup of sites under other authorities. Where possible EPA will work to encourage cleanups at proposed NPL sites via innovative agreements that will yield desired results without final listing on the NPL (GE-Housatonic, Broad Brook Mill, e.g.). EPA New England also continues to oversee site investigation and cleanup under authorities such as TSCA, Brownfields, and the Safe Drinking Water Act, as well as cleanups under Superfund removal authority. All of this work, though not specifically reflected in the national strategic architecture, serves to further the goals of this Objective.

Core Program Work and National Priorities for Achieving Subobjective 2.2.2:
Regional areas of emphasis include: completing cleanup construction at sites listed on the NPL prior to 1986; completing cleanup construction at other NPL sites; and, meeting environmental indicators for RCRA high priority

sites. The region will continue to strive towards meeting the various output and outcome measures, as outlined in this subobjective, to contribute to the progress in meeting the program's national goals. Achieving these goals for Superfund sites is contingent upon the availability of sufficient cleanup funding.

Subobjective 3.2.3 Maximize Potentially Responsible Party Participation at Superfund Sites
Through 2008, conserve Superfund trust fund resources by ensuring that potentially responsible parties conduct or pay for Superfund cleanups whenever possible.

Regional Targets and Baselines for Subobjective 3.2.3:

Target: Each year through 2008, reach a settlement or take an enforcement action before the start of a remedial action at 90 percent of Superfund sites having viable, liable responsible parties other than the federal government.
Baseline: The region has typically achieved 90% or greater for this measure.

Target: Each year through 2008, address all Statute of Limitations cases for Superfund sites with unaddressed total past costs equal to or greater than $200,000.
Baseline: The region historically has met this target each year.

Narrative–Environmental Conditions and Program Strategies for Subobjective 3.2.3:

Overview of Environmental Conditions for Objective 3.2.3:
Enforcement authorities play a critical role in all Agency cleanup programs. However, they have an additional and unique role under the Superfund program: they are used to leverage private-party resources to conduct a majority of the cleanup actions and to reimburse the federal government for cleanups financed by the Trust Fund.

Strategies for Achieving Objective 3.2.3:

Unique Regional Strategies:
At several sites, the region has been challenged to develop cleanup agreements with parties who are likely not liable, but who seek to clean up their properties in order to develop them for future reuse. Currently, the region is working with the Department of Defense to effect the first early transfer of a Federal Facility on the National Priorities List – the South Weymouth Naval Air Base – to a private developer, which will perform the Superfund cleanup of the base using Navy funds but under EPA's supervision and, eventually, create a "smart growth" redevelopment on the site. This early transfer raises unique Superfund enforcement issues, because the recent Brownfields Amendments to CERCLA contain a broad defense to liability for new owners. Thus, the new owner/developer likely will not have liability for the cleanup, making it necessary for the region to fashion a new set of agreements, the purpose of which is to ensure that the developer performs the response actions properly and that, in the event of significant problems, the Navy steps back in to fulfill its legal obligation under CERCLA to clean up the site. Similarly, but on a very different scale, the region is being asked to fashion enforceable agreements with new owners of removal sites who wish to clean up their properties and receive EPA's covenant not to sue, but who are also likely not liable. We expect to see this trend continue in the future, as an increasing number of sites become owned by non-liable parties who nevertheless want to perform the cleanups under EPA supervision, and who seek legal protection from liability and from the potential imposition of a windfall lien.

Core Program Work and National Priorities:
The Superfund program's "Enforcement First" strategy will allow EPA to focus limited Trust Fund resources on sites where viable, potentially responsible parties either do not exist or lack the funds or capabilities needed to conduct the cleanup. By taking enforcement actions at sites where viable, liable parties do exist, EPA will continue to leverage private-party dollars so that Trust Fund money is used only when absolutely necessary to

clean up hazardous waste sites. Cost recovery is another way to leverage private-party resources through enforcement. Under Superfund, EPA has the authority to compel private parties to pay back Trust Fund money spent to conduct cleanup activities. EPA will continue its efforts to address 100 percent of the Statute of Limitations cases for Superfund sites with unaddressed total past costs equal to or greater than $200,000 and to report the value of costs recovered.

Objective 3.3 - Enhance Science and Research

Subobjective 3.3.1 - Provide Science to Preserve and Remediate Land

Through 2008, provide sound science and constantly integrate smarter technical solutions and protection strategies that enhance our ability to preserve land quality and remediate contaminated land for beneficial reuse.

Regional Targets and Baselines for Subobjective 3.3.1:

Target: Provide scientific and technical expertise to support cleanup decision-making at Superfund, RCRA, UST, and Brownfields sites.
Baseline: n/a

Narrative–Environmental Conditions and Program Strategies for Subobjective 3.3.1:

Overview of Environmental Conditions for Subobjective 3.3.1:
Cleanup decision-making must be supported by sound technical advice, based on sound science, and should employ smart, cost-effective technical solutions, employing innovative technologies where appropriate.

Strategies for Achieving Subobjective 3.3.1:

Unique Regional Strategies for Subobjective 3.3.1::
The region continues to be a leader in the promotion and use of innovative investigation and cleanup technologies. In-house and contractor expertise must be kept current to ensure that projects are adequately supported with expert advice from technical support staff. The region should also solicit the assistance of the Office of Research and Development (ORD) where their expertise is needed.

Core Program Work and National Priorities for Subobjective 3.3.1::
Scientific and technical work on site investigation and cleanup project must be focused on producing results - namely, support of the targets outlined in Objective 3.2.

Subobjective 3.3.2 - Conduct Research to Support Land Activities

Through 2008, conduct sound, leading-edge scientific research to provide a foundation for preserving land quality and remediating contaminated land. Research will result in documented methods, models, assessments, and risk management options for program and regional offices, facilitating their accurate evaluation of effects on human health and the environment, understanding of exposure pathways, and implementation of effective risk management options. Conduct research affecting Indian country in partnership with tribes.

Regional Targets and Baselines for Subobjective 2.3.2:
Target: Ensure waste program research priorities and needs are identified and addressed via membership in Regional Science Council, working through our lead region(s) on the ORD Waste Research Coordination Team, and other headquarters research-related workgroups and teams, as appropriate.
Baseline: n/a

Narrative–Environmental Conditions and Program Strategies for Subobjective 2.3.2:

Overview of Environmental Conditions for Objective 3.3.2.:
In concert with the use of sound science and innovative approaches to site cleanup activities outlined in Objective 3.3.1., the region needs to ensure that the need for research into new methods, approaches, and emerging technologies are brought forward to the appropriate research arms of the Agency and made a priority. One major emerging research need revolves around Homeland Security issues, including the research into investigation and cleanup technologies for chemical, biological, and radiological agents.

Strategies for Achieving Objective 3.3.2:

Unique Regional Strategies for Subobjective 2.3.2::
The region should ensure broad-based program representation on the Regional Science Council as a way to ensure that waste program and cleanup research priorities and needs are brought forward and addressed.

Core Program Work and National Priorities for Subobjective 2.3.2::
The region should provide input, wherever possible, on the scientific priorities at the Office of Research and Development. Homeland security activities, including the research into investigation and cleanup technologies for chemical, biological, and radiological agents, will likely continue to be at the forefront of EPA's research needs. The region should provide input, wherever possible, on the scientific priorities at the Office of Research and Development.

GOAL 4: Healthy Communities and Ecosystems

Objective 4.1	Chemical, Organism and Pesticide Risks	
	Subobjective 4.1.1	Reduce Human Exposure to Toxic Pesticides
	Subobjective 4.1.2	License Pesticides
	Subobjective 4.1.3	Reduce Chemical and Biological Risks
	Subobjective 4.1.4	Reduce Risks at Facilities
Objective 4.2	Communities	
	Subobjective 4.2.1	Sustain Community Health
	Subobjective 4.2.2	Restore Community Health
	Subobjective 4.2.3	Assess and Clean-up Brownfields
	Subobjective 4.2.4	U.S. Mexico Border (NA)
Objective 4.3	Ecosystems	
	Subobjective 4.3.1	Protect and Restore Ecosystems
	Subobjective 4.3.2	Increase Wetlands
	Subobjective 4.3.3	Great Lakes (NA)
	Subobjective 4.3.4	Chesapeake Bay (NA**)**
	Subobjective 4.3.5: Gulf of Mexico (NA**)**	
Objective 4.4	Enhance Science and Research	
	Subobjective 4.1.1:Apply the Best Available Science	
	Subobjective 4.1.2:Conduct Relevant Research (NA)	

Goal 4: Healthy Communities and Ecosystems

Goal 4, Objective 4.1: Chemical, Organism and Pesticide Risks.

Subobjective 4.1.1 Reduce exposure to toxic pesticides: through 2008 protect human health, communities and ecosystems from pesticide use by reducing exposures to pesticides posing the greatest risk.

Subobjective 4.1.2 (Not Applicable to Region, HQ specific)

Subobjective 4.1.3 Reduce Chemical and Biological risk - through 2008 prevent and reduce chemical and biological organism risk to humans, communities and ecosystems

Overview of Environmental Conditions and Program Strategies for 4.1.1 & 4.1.3:

PESTICIDES:

1. Strategic Agriculture Partnership

New England agriculture is unique in that all of our crops are minor crops. The regional top minor crops are sweet corn,strawberries and apples. Thus, the impact that FQPA has had on this region is substantial, and has been a challenge for our growers. Nearly all of our farms are family operations. These family operations contributed $2,296 million to the New England economy in 2002. This number does not reflect the environmental and social impacts of agriculture, such as open space preservation, diversity of species, animal and wildlife habitat, and local access to fresh and nutritious vegetables and fruits.

In Region 1 our agricultural priorities focus on grower needs. We strive to obtain feedback from producers, telling us their needs. We have regular interaction with growers, state departments of agriculture, and USDA Extension. We achieve this at grower meetings, field days, and educational sessions. We participate on several grower advisory boards,such as the Northeast IPM Center, USDA SARE, and several other IPM workgroups.

The region will focus on communicating the results of two grants. One grant will revise the New England Vegetable Management Guide and add color photos of pests for proper pest identification. Proper pest identification is a primary component in integrated pest management (IPM). The grant will also specifically identify (from growers) those products they no longer can use on their minor crops as a result of FQPA and which reduced risk product they are presently using, and it's effectiveness. The results of this work will benefit the Agency and the New England grower community. The second grant looks at reduced rates of reduced risk herbicides in sweet and silage corn, and how it impacts weed control.

2. Pesticide Worker Safety Programs

The New England states continued to have among the strongest Certification and Training Programs in the nation. We continue to work with the states to review their plans and where appropriate update them. The Worker Protection Safety Program will continue to be integrated into the state's inspection and compliance assistance efforts. However, it is important to note that there are only a small number of migrant field workers in New England but a significant number of workers in the green industries.

3. Water Quality Issues

Pesticide/water quality issues continued to evolve since the introduction of the pesticides and groundwater program in the early 1990's. We have concurred on three generic plans, and in addition all six New England states have incorporated certain basic components of the EPA state management plan guidance into their programs, including improved coordination with other agencies, water resource monitoring and resource characterization, and response mechanisms. All our states continue to focus on prevention of contamination with ground water monitoring and analysis for pesticides, either within the pesticide program or in coordination with other state programs. By implementing measures to prevent contamination, New England states have succeeded in reducing the levels of contamination of the five corn herbicides originally included in the draft "Pesticides in Ground Water Rule". For the past several years, sample results have shown levels detected are far below established health standards.

4. Integrated Pest Management (IPM) in Schools and Urban Areas

The Pesticide Program participates in the Region 1 "Healthy Schools" Initiative, a cross media, cross program effort targeted to reducing environmental threats in our schools including a module on IPM in school buildings and associated grounds. We also are non-voting members of the Massachusetts IPM Council which works on non-agricultural IPM issues. Council members include: the Massachusetts Pesticide Bureau, structural pest control associations, lawn care associations and environmental advocacy groups. Most of our states now have IPM in Schools Programs, either through new regulations under state statute or voluntary programs. We will continue to focus many of our efforts in urban schools through coordination with the Urban Environmental Program (UEP), Sensitive Population Initiative, and the Indoor Air Program.

5. West Nile Virus

Communication is the primary role for the region in assisting states with West Nile Virus. The Pesticide Program created a Communications Plan for addressing, with our states, questions and concerns pertaining to West Nile Virus in an efficient manner conducive to greater public understanding. This included updating the EPA Region 1 Pesticides web page, which features links to each state department of public health, and lists phone numbers in each state to report dead birds and seek advice.

In this past season, verified infections of avian, mammal and mosquito infections were found in all of the New England states. Four states- Connecticut, Massachusetts, Rhode Island and Vermont - recorded human cases. There was a total of 42 human cases, and Massachusetts had the most cases at 23, resulting in three confirmed deaths. There is growing concern that various mosquito control programs will be severely impacted by the outcome of the NPDES permitting issue for pesticide applications

Toxics

1. Lead Program
Region 1 has long been a leader in lead reduction strategies and Pb is our highest national toxic chemical program priority.Through our Interstate and Tribal consortia (NELCC, TBEP and CONEST) we remain leaders in working with broad coalitions in both regulating Pb and in implementing creative Pb Poisoning Prevention Efforts across programs in the Region, especially the Urban Environmental Program (UEP), EJ Program, and Sensitive Population Initiative. We highlight below a few, of many, particularly notable programs.

a. Keep It Clean Campaign
This is a key feature of the Region's 406 (b) program. It was designed by NELCC/CONEST to create a link between the consumer and hardware store employees and small contractors . The goal is to inform "do-it-yourself" home renovators, contractors, and those who employ contractors, about the risk of lead poisoning in children and adults during the renovation and repainting of older homes. 225 hardware stores throughout New England are "Keep it Clean" partners.

b. Springfield, MA Health Awareness Project:
EPA Region I is piloting a multi-agency environmental health awareness project. The selected inner city community is the North End of Springfield, MA (a low income population of 10,000) which has among the highest incidences of childhood lead poisoning and other illness. A neighborhood organization has surveyed and inventoried land usage, lead abated homes and family health history to identify the general health of the community in their environment. The North End Outreach Network (NEON) will be compiling the survey data electronically through the Community Health Awareness Program (CHAP) software that is being developed and crosswalk all the environmental and health information on the Time Relational Environmental Numeric Health Data System (TRENHDS)

c. The Boston Lead Collaborative:
Our innovative Urban Environmental Program (UEP) is working with the Boston Lead Action Collaborative. As a result of a November 2001 summit, community leaders, nonprofit groups, local, state, and federal government officials have joined forces to set the goal of virtually ending childhood lead poisoning in Boston over the next five years. A draft "Blueprint to End Childhood Lead Poisoning" has been created to target Boston's high-risk communities. These "Tier 1 Neighborhoods" were identified through a GIS mapping project conducted in the fall of 2001. The major activities underway are: 1) Create a GIS database and resource tool using available data to provide current information to parents, non-profit groups, and government officials; 2) Create Neighborhood Profiles for Tier 1 Neighborhoods and begin engaging, informing and involving local stakeholders; 3) Start developing a "Lead Smart Home" campaign and seal of approval program, and identify "Lead Safe" and lead free housing for families and children in need.

2. Durable Fibers Program
We continue to struggle to meet the technical assistance needs of our states in implementing asbestos in schools programs. Prior decisions by OPPTS to dis-invest in this area are continuing to leave us under-staffed, and there is an increasing number of cases with high public and political negative visibility. Risk communication and assessment needs at such school systems (as defined by media and parent attention), strain our available

resources. Additional demands for information and technical assistance on asbestos products has added considerably to the problem. We are working with our states to re-evaluate strategies to keep schools in compliance, via additional activities beyond site-visits, e.g. web-based outreach, news letters etc.

3. Safe PCB Disposal

PCB's continue to be a significant source of risk in Region 1, and we are challenged to keep up with the demand for our attention to contaminated sites, both under TSCA regulation, and assistance to other programs such as Superfund and RCRA Corrective Action. Prior OPPTS dis-investment decisions, again, appear unjustified in terms of the residual risk and the demands placed upon us. We note that the bulk of this risk is from historical contamination, much of it pre-dating 1978, and that our industry and municipal compliance with PCB equipment requirements, as well as voluntary phase-out of PCB equipment, is quite high. It proved very difficult to track the number of acres remediated and cost savings of decontamination vs disposal. The FY2001 annual reports indicated 2,511,553 Kg shipped from commercial storage facilities. Because of limited resources we project one approval for FY04. We also saw increased interaction with other programs in the region, including RCRA, Superfund, and Brownfields. Brownfield sites are requiring more attention. The PCB program receives many calls from entities with BF grants that are requesting help with PCB-related issues. The region expects increased requests for site assistance in FY2004, and we are concerned with how we will meet this need.

4. Dioxin

The Region will continue to address dioxin issues as they surface within the traditional programs of Superfund and RCRA. In an effort to reflect the interests of our states regarding dioxin, we are providing support in the areas of education and outreach, enforcement and solid waste infrastructure. Barrel burning is the largest unregulated source of dioxin and an activity common in the New England rural communities. NEWMOA and NESCAUM along with EPA and state partners are developing education and outreach materials tailored to the states. Additionally, they will develop methods for improving the solid waste infrastructure in the northern tier states of Maine,Vermont and New Hampshire where the majority of the rural population lives.

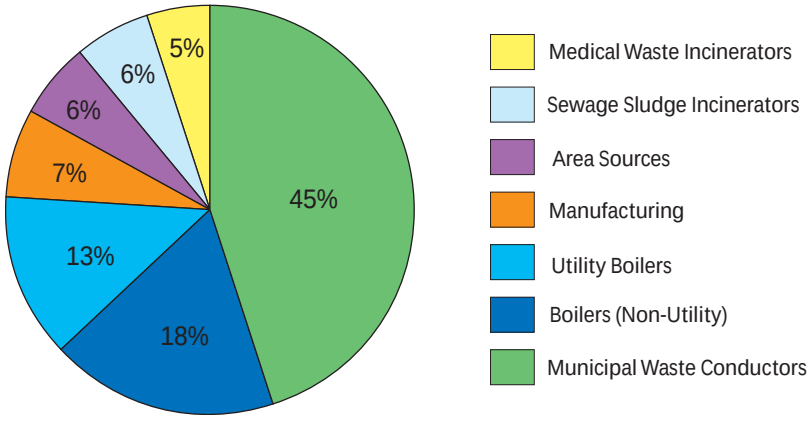
5. Mercury

Background: In 1998, the New England Governors and Eastern Canadian Premiers (NEG/ECP) adopted a Regional Mercury Action Plan, which established as a long-term regional goal "the virtual elimination of the discharge of anthropogenic mercury into the environment." The plan also established a short term goal of 50% mercury reduction by 2003 and 75% by 2010. The Plan identified more than forty actions to address mercury in the environment, ranging from emission standards, source reduction, outreach and education, and research.

As of August 2003, the NEG/ECP had successfully achieved their short term goal of reducing mercury emissions by 50% by 2003, from a 1998 baseline. A June 2003 NESCAUM report concluded that the overall decrease in mercury emissions in the NEG/ECP region was 55%. The reductions in the New England portion of the region were even greater – 59%.

New England's progress in reducing mercury emissions was largely the result of emission reductions in three source categories: municipal waste combustors, medical waste incinerators, and a single chlor-alkali facility.

***1998 Mercury Emissions in the Northeast*[1]**



These three source categories were significantly reduced in the last five years:

• *Municipal waste combustors (MWCs):* In 1998, by far the largest source of mercury emissions in the Northeast were MWCs, which were responsible for 45% of mercury emissions. In 1995 and 2000, EPA established emission guidelines (EGs) for existing large MWCs and small MWCs, respectively. These emission guidelines required states to adopt MWC standards with compliance dates no later than 2000 for large MWCs and 2005 for small MWCs. The New England states then developed MWC standards which were, in some cases, even more stringent than the federal standard. As the result of these new standards, MWC mercury emissions were reduced by 84% in the region between 1998 and 2003.

• *Medical waste incinerators:* In 1997, EPA also established emission guidelines for medical waste incinerators. EPA's guidelines required states to adopt emission standards with a compliance date no later than 2002. As a result of these emission standards, mercury emissions were reduced by 98%, mostly due to the closure of incinerators.

• *Chlor-alkali plant:* The closure of New England's one chlor-alkali plant in Orrington, Maine resulted in a 100% reduction in mercury emissions from this source category.

Pollution prevention strategies to reduce use of mercury-containing products, and thereby prevent mercury from entering the waste stream, also play an important role in the NEG/ECP action plan. All six New England states have adopted legislation to reduce mercury in products, such as the banning of mercury thermometers. EPA New England has played an important role in supporting mercury pollution prevention strategies, by

• *Reducing mercury in hospitals in New England*: EPA New England has recruited 101 hospitals to participate in the National Hospitals for Healthy Environment Program (nearly one-quarter of the total national participants). Over the past two years, participants have eliminated more than 1,120 pounds of mercury.

• *Addressing mercury in auto switches:* EPA New England is supporting two projects to eliminate mercury from cars before they go to the shredders.

• *Reducing mercury in schools:* EPA and the states have sponsored conferences for key school staff on how to reduce mercury in schools. We have also participated in mercury and chemical clean-outs, removing more than 1300 pounds of mercury from schools in the Northeast.

• *Education and outreach on mercury exposure:* EPA New England funded a mercury education display created by the New England Aquarium. This display has traveled throughout the region and has promoted mercury-reducing strategies.

• *Fluorescent lamps:* EPA has provided almost $175,000 in grants to increase the recycling of flourescent bulbs.

EPA has also provided critical assistance to states' efforts to reduce the use of mercury and to research and monitor mercury in New England's environment. In all, over the past five years, EPA has awarded at least $3,672,934 in grants to support research or programmatic mercury work in New England:

FY03:	Research: $997,219	Programs: $185,000
FY02:	Research: $100,000	Programs: $110,000
FY01:	Research: $75,219	Programs: $115,000
FY00:	Research: $786,680	Programs: $155,000
FY99:	Research: $767,035	Programs: $382,000
Totals:	**Research: $2,725,934**	**Programs: $947,000**

EPA grants have also helped some of the New England states fund mercury coordinator or staff positions, which has assisted the states in becoming national leaders on mercury reduction strategies.

Subobjective 4.1.4: Reduce Risks at facilities: Through 2008 protect humans health, communities and ecosystems from chemical risk and release through facility risk reduction efforts and building community infrastructure.

Regional Baseline and Environmental Targets for Subobjective 4.1.4

Environmental Targets for Subobjective 4.1.4::
• By 2008, we, in consultation with the State Emergency Response Commissions (SERCs) and Local Emergency Planning Committees (LEPCs), have identified and mapped the location of 80 % of all of the region's Tier II facilities.
• By 2008, increase by 25% the number of LEPCs that have incorporated facility risk information into their emergency preparedness and community right-to-know programs. Special emphasis will be placed on facilities in high risk communities.

Environmental Baseline for Subobjective 4.1.4:
• Tier II Facilities Universe

Overview of Environmental Conditions and Program Strategies to Achieve Subobjective 4.1.4:

Chemical Right to Know
New England has a diverse industrial base, and some the quality of each state's Tier II submissions varies greatly. Some of the SERCs and most of the LEPCs have not adequately captured the Tier II data, because they view the work as an unfunded mandate and they lack key resources to do the work properly. Anecdotal data leads us to believe that the region has approximately 30,000 Tier II facilities (including PBTs). The states report approximately 7,000 Tier II facilities. Tier II facilities also include CAA 112r facilities as well.

Tier II reports required under the Emergency Planning and Community Right-to-Know Act (EPCRA) provide

state and local officials and the public with specific information on certain chemicals that are present at facilities during the previous calendar year. EPCRA requires facilities storing any substance for which an MSDS is required by OSHA and in quantities exceeding the Threshold Planning Quantity (specified for Extremely Hazardous Substance, 10,000 pounds for everything else) to report those substances to the state and local government and fire departments. These facilities will also provide: basic facility identification information, employee contact information for both emergencies and non-emergencies, and information about chemicals stored or used at the facility, including the chemical name or the common name as indicated on the MSDS; an estimate of the maximum amount of the chemical present at any time during the preceding calendar year and the average daily amount; a brief description of the manner of storage of the chemical; the location of the chemical at the facility; and an indication of whether the owner of the facility elects to withhold location information from disclosure to the public.

Beginning in FY 04, the region will increase its efforts with each state to update its Tier II data. Special emphasis on reporting will occur in CT and MA. Based on the Tier II data submissions, we will work with key communities to develop vulnerability assessments using sophisticated applications. The data will include preparedness data (Accidental Release Information Program (ARIP) CAIT Accident Investigation Summary Matrix; CAMEO, ALOHA and MARPLOT; Emergency Response Notification System (ERNS); HATS 3; LandView; RMP*Comp; RMP*InfoTM; RMP*ReviewTM; RMP*SubmitTM; Tier2 Reporting & Inventory System; Title III Consolidated List of Lists October 2001 Version); water data; health data; biological hazards data; socio economic data; etc. This work will be coordinated with OEP's urban and water groups. The region will then provide Tier II and CAMEO training to state and local officials. Based on the data and training, the region will work with four communities to model and test the effectiveness of the system in the form of tabletop and full scale exercises.

Goal 4, Objective 4.2: Community Health

Subobjective 4.2.1 Sustain Community Health:
By 2008 220 U.S. communities working with EPA will adopt and begin to implement environmental planning and management processes for sustaining local ecosystems and pursuing ecologically compatible development Baseline for 2002 is 0 communities. By 2008, reduce the rate of increase of land converted to development. This

will entail working with states, communities, and others to encourage reinvestment in our urban centers, and better land use decisions in our urban, suburban, and rural areas.

Environmental Baseline for Subobjective 4.2.1:
Sprawl is accelerating: land converted to development in New England grew at a rate 3 times faster than the rate of population growth between 1982 and 1987; at a rate 5 times faster between 1987 and 1992; and at a rate 8 times faster between 1992 and 1997. (Data sources: US Census Bureau and USDA's National Resources Inventory).

Regional Environmental Targets for Subobjective 4.2.1:
By 2008, reduce the rate of increase of land converted to development. This will entail working with states, communities, and others to encourage reinvestment in our urban centers, and better land use decisions in our urban, suburban, and rural areas.

Environmental Conditions and Program Strategies for Subobjective 4.2.1:
The environmental impacts of development directly affect the Agency's ability to achieve our statutorily mandated national air, water, and brownfield goals. Current patterns of development also pose economic and other problems for urban, suburban, and rural communities. EPA's National and Regional Smart Growth Strategies in 2004 will focus on five target issues: 1. Promote Infill and Redevelopment; 2. Catalyze Smart Growth Transportation Solutions; 3. Partner for Innovative Development and Building Regulations; 4. Support State Smart Growth Initiatives, and 5. Ensure EPA Policies Recognize the Environmental Benefits of Smart Growth.

In Region 1, some key activities in 2004 include working with transportation agencies to address growth impacts of highway and transit projects; working with Brownfield communities to help them incorporate smart growth principles into their reuse plans and projects; working with states to ensure that Clean Water State Revolving Funds are not used to sewer sprawl; working with South Weymouth Naval Air Station to ensure that the reuse plan is a smart growth plan based on compact, mixed-used development; and encouraging leadership on smart growth in state agencies and nonprofit organizations through regional forums and other venues.

Subobjective 4.2.2 Restore Community Health:
Through 2008 facilitate the restoration of communities impacted by environmental problems; by 2008 increase by 50% the number of communities working with EPA that have addressed disproportionate environmental impacts and risks through comprehensive integrated planning and environmental management compared to the 2002 baseline of 30 communities.

Strategic Environmental Targets and Baselines for Subobjective 4.2.2
Urban Environmental Program as a multimedia program develops annual and multi-year targets for major urban centers throughout New England based on high priority environmental and public health issues in each area. Emphasis since 2000 has been on servicing the needs of urban communities in Massachusetts, Rhode Island, and Connecticut.

Environmental Targets for Subobjective 4.2.2: As with baselines, targets may be annual or multiyear, and focus on a particular sensitive populations or target geographic focus areas.
Lead: Eliminate childhood lead poisoning in Boston within the next five years (baseline 1300 cases): reduce by 10% in targeted high risk communities every other year.
Asthma: Reduce environmental triggers through intervention in target communities throughout Connecticut (emphasis in Hartford and Bridgeport).
Vacant Lots: Restore to productive use 25 acres of property in major urban centers annually.
Comprehensive Community Planning: Assist in the development or implementation of at least 5 efforts by 2008.

Environmental Baseline for Subobjective 4.2.2:
Lead: CDC 2000 census data for all cities and states city healthy statistics where available.

Asthma: Currently surveillance data is being collected by all six states and is thus unavailable. However, some target areas collect data on hospitalization rates for populations that receive interventions.
Vacant lots: Number of vacant lots prior to interventions
Comprehensive Community Environmental and/or Public Health Plans: Number of community-based or community involvement plans which include UEP, Chlidrens Health and/or sensitive population priority issues such as lead, asthma, vacant lots, urban rivers and urban air toxics issues (3 New England urban communities: Chelsea, MA; Boston, MA; and Hartford, CT).

Environmental Conditions and Program Strategies for Subobjective 4.2.2:
In urban areas throughout New England, residents are exposed to significant multimedia environmental and public health hazards every day, including lead poisoning, rat-infested vacant lots, contaminated urban rivers, and asthma exacerbated by poor indoor and ambient air quality. These conditions create cumulative, disproportionate, and inequitable health risks to urban residents, especially high risk and sensitive populations such as children and the elderly, and degrade the quality of the air, water, and land in urban neighborhoods. Most EPA programs are structured to address environmental media separately as a result of the way Congress created different environmental statutes. While multi-media approaches are gaining acceptance, there is no single EPA program that specifically addresses the magnitude and complexity of urban environmental problems in a holistic way. Millions of urban residents across the country suffer every day from disproportionate environmental health risks, and EPA must respond. EPA New England launched a five year pilot program called the Urban Environmental Initiative (UEI) to address the challenge of making meaningful improvements in the environment and public health for urban residents in the areas of environmental justice concerns including Boston, MA; Providence, RI; and Hartford, CT. In 2000, the initiative was formalized into the Urban Environmental Program(UEP) and emphasis areas established to service the needs of urban communities across the states of Massachusetts, Rhode Island, and Connecticut.

Most urban areas within the region are actively involved with at least one focus area for the UEP and/or Environmental Justice. None of the issues can be addressed exclusively by EPA but require multi-stakeholder coalitions of Federal, Tribal, State and local agencies as well as non-profit and community-based organizations to build a sustainable infrastructure to achieve long term results. This approach has required substantial investments of time to ensure results oriented goals are identified, agreed upon and achieved. It also provides great opportunities for leveraging EPA investments through joint funding with internal and external partners. Consequently, the regional emphasis centers around opportunities that provide the greatest alignment of HQ MOA commitments, regional and national strategic plans, agency values such as Environmental Justice, and those efforts that maximize scarce resources in a sustainable manner.

Public health is of critical importance in urban areas and is inexorably linked with environmental conditions. Elimination of childhood lead poisoning by 2010 galvanized local efforts to eliminate childhood lead poisoning on Boston within five years. Once achieved, this effort can serve as a model for the region/nation as a realistic achievable goal. Currently, no city in the nation is poised to achieve this historic goal on schedule, no less ahead of the 2010 target date. Asthma is another multi-media hydra that requires the same approach to achieve modest success. Connecticut represents one of the best opportunities to maximize efforts to reduce childhood asthma focusing on community-planning, TfS, diesel retrofits, outreach and education, surveillance efforts and other agency resources that can focus to achieve meaningful results. Both of these worthy goals receive RGI, Office of Children Health, OPPTS and ORIA discretionary funds which are critical but somewhat unreliable sources of EPM funding. These funds - not STAG funds - provide the best opportunity to develop the necessary coalitions and effective partnerships which drive innovation and achieve critical breakthroughs which stimulate achieving NPM priorities and measurable results.

One of EPA New England's (EPA NE) highest and most challenging priorities is to promote Environmental Justice (EJ) to ensure that citizens of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont all enjoy an equal measure of environmental protection. The UEP has traditionally been the major implementation arm of Region 1's EJ Program for New England communities and showcases the power of providing fair treatment and meaningful involvement for urban communities.

However, ensuring that EJ is included as a priority as the region carries out its strategic and operational planning is the best way to align with the Government Performance and Results Act (GPRA). The region's management strongly believes that this operational step to incorporate EJ into the priority setting process is a short-term measure. For the long term, the successful implementation of the region's yearly EJ Action Plans is key to achieving the goal of institutionalizing EJ into the day-to-day work of the organization. When EJ is no longer viewed as a separate and distinct program to be implemented- but rather a way of doing business- there will no longer be a need to build processes to ensure that alignment is achieved. Instead, alignment will occur automatically every day as staff conduct inspections, write permits and develop Performance Partnership Agreements, among other things, with EJ principles in mind.

In the short term, however, EPA NE has built a connection between EJ and strategic and operational planning in the region. Each of our Deputy Office Directors has been assigned the lead for one of the region's five strategic goals. It is their responsibility, working with other EJ Council members, to ensure that EJ is one of the factors considered when priorities are established and plans to meet them are created. EPA NE aims to include EJ commitments under each of the five goals in the strategic plan, including (1) Clean Air, (2) Clean and Safe Water, (3) Preserve and Restore the Land, (4) Healthy Communities and Ecosystems, and (5) Compliance and Environmental Stewardship. Major EJ commitments from goals 1,2,3, and 5 are included in the matrix for goal 4.2.2.

Regional Subobjective 4.2.3 Assess and Clean-up Brownfields:
By 2008 provide funding to eligible recipients and working with our state and tribal partners assess and promote the clean-up and reuse of 9200 Brownfield properties leveraging 33,700 jobs and 10.2 billion in clean-up/ redevelopment funding (2nd quarter 2003 baseline are 4,300 properties.

Regional Environmental Baseline for Subobjective 4.2.3: *(For quarter ending 9/30/2002)*

# of Properties With Assessment Started :	706
# of Properties With Assessment Completed :	626
# of Properties With Cleanup Started :	127
# of Properties With Cleanup Completed :	61
# of Properties With Redevelopment Underway :	126

Regional Environmental Targets for Subobjective 4.2.3:
Increase by 20%
1). # of EPA Targeted Brownfields Assessments
2). # of properties assessed
3). # of properties cleaned up
4). # of properties redeveloped

Environmental Overview and Unique Regional Areas of Emphasis for Subobjective 4.2.3:
New England is one of the oldest industrial regions in the country with hundreds of potential Brownfield sites

ranging from a decaying mill industries along miles of rivers to abandon industrial sites in the heart of our urban centers. Upon passage of the Brownfields legislation on Jan 11, 2002, Bob Varney, the Region 1 Administrator, led an effort of Region 1 stakeholders to develop a written communication and outreach strategy to solicit input and explain the new law . This effort to date has generated a huge demand for new funding under the competitive national solicitation process. We have received over 100 proposals requesting $46.8M of the $90M provided in the Agency FY 2003 approved budget . At the same time we have embarked on a strategy to promote our successes in this program . Without this effort , support for this program could languish in the future In selecting sites for Targeted Brownfields Assessments, the Region 1 Brownfields Program will take into consideration whether or not the site is located in a source water protection area utilizing information stored in GIS .

Objective 4.3: Ecosystems

Subobjective 4.3.1: Protect and Restore Ecosystems

Regional Targets and Baselines Subobjective 4.3.1:

Target: By 2008, improve the overall aquatic system health of the 6 estuaries that are part of the National Estuary Program (NEP) compared to 2006, as measured using the National Coastal Condition Report and NEP indicators.
Baseline: Cannot determine until national baseline established in 2006.

Target: By 2008, working with NEP partners, protect or restore an additional xx [250,000 is national target] acres of habitat within the study areas for the 6 estuaries that are part of the NEP.
Baseline: 2002 baseline: 0 acres of habitat restored.

Narrative of Environmental Conditions and Program Strategies for Subobjective 4.3.1:

According to the National Coastal Condition Report (EPA, 2001), ecological conditions in northeastern estuaries are borderline poor. While 57 percent of the area surveyed, which extends from Chesapeake Bay to the Canadian border, showed undegraded ecological conditions, 23 percent of the sediments were characterized by degraded biology, and 30 percent of the estuarine area had impaired human uses. Although these results may be skewed by the inclusion of heavily urbanized areas stretching from Washington, D.C. to New York City, certain coastal areas in New England like western Long Island Sound, upper Narragansett Bay, and Boston Harbor also exhibit water quality and habitat impairments associated with large population centers. In general for the northeast coastal area, water clarity is good, dissolved oxygen levels and coastal wetlands are fair, and eutrophic conditions, sediment, benthos, and fish tissue are poor.

EPA will continue to utilize its authorities under the Clean Water Act, the National Environmental Policy Act (NEPA), and Marine Protection, Research, and Sanctuaries Act (MPRSA) to restore and protect water quality and marine habitat. EPA will work with other federal and state agencies, local governments, businesses, and citizen organizations to implement the Comprehensive Conservation and Management Plans (CCMPs) produced by the six National Estuary Programs in New England (Casco Bay Estuary Project, New Hampshire Estuaries Project, Massachusetts Bay Program, Buzzards Bay Project, Narragansett Bay Project, and Long Island Sound Study). The CCMPs identify and prioritize for management the water quality and habitat impairments that characterize each of these six “estuaries of national significance,” and provide action plans to address the priority problems. EPA will work with the U.S. Army Corps of Engineers and other federal and state resource agencies to regulate dredging and the disposal of dredged and other material in estuarine and ocean waters to minimize adverse impacts to the marine environment. EPA will use its environmental review authorities to ensure federal actions and projects, including its own, avoid and minimize adverse environmental impacts by evaluating various alternatives that meet the basic project purpose and need.

Subobjective 4.3.2: Increase Wetlands

Regional Targets and Baselines for Subobjective 4.3.2:

Target: Annually, beginning in FY 2003, work with the U.S. Army Corps of Engineers (COE) and other partners to minimize wetlands lost under Section 404 of the Clean Water Act regulatory program.
Baseline: No national baseline at this time.

Target: By 2006 and each year thereafter, work with COE and other partners to minimize loss in wetland function based on quantifying functions gained and lost through mitigation for authorized wetlands impacts.
Baseline: No national baseline at this time.

Narrative for Subobjective 4.3.2:

Overview of Environmental Conditions for Subobjective 4.3.2:
Meeting the goal of no net loss of wetlands is extremely challenging in New England given the nature of our landscape, the high rate of development, and population growth. The state and federal wetlands programs in New England issue more than 10,000 wetlands permits to fill approximately 300-400 acres of wetlands per year. The vast majority of projects are regulated under State Programmatic General Permits and fill less than 0.25 acre of wetlands, and most fill less than 0.1 acre. Most of the smaller projects, given the limited staff time available, usually result in no mitigation or a mitigation site selected by the applicant, the results of which generally have been poor. We also lose vast amounts of upland each year (approximately 50-100,000 acres). Much of this upland loss greatly reduces the functions and values of the aquatic environment by fragmentation and nonpoint source pollution. Given these factors, EPA New England focuses a lot of effort on avoidance and minimization, and when wetland losses are unavoidable, on negotiating strong mitigation plans.

Core Program Work and National Priorities for Subobjective 4.3.2:
(1) Significant wetland program resources are being utilized to address and minimize wetland impacts associated with large transportation (highway, railroad, airport)) projects in Connecticut, Maine, Massachusetts, New Hampshire, and Vermont.

(2) EPA is working with all six New England states to develop and improve their wetland monitoring programs, with the ultimate goal of integrating wetland monitoring into state water quality monitoring programs.

Unique Regional Strategies for Subobjective 4.3.2:

(1) EPA New England is promoting the protection of large tracts of undeveloped, relatively unfragmented land as part of the compensatory mitigation package to help mitigate for the direct and indirect, cumulative impacts associated with the I-93 widening project in New Hampshire.

(2) Continue to work with the state of Rhode Island on the pilot wetland profiling project to improve our ability to measure losses and gains of wetland acreage and functions, and expand the project to other states depending on the success of the pilot and availability of resources.

Objective 4.4: Enhance Science and Research

Subobjective 4.4.1: Apply the Best Available Science

Unique Regional Strategies for Subobjective 4.4.1:
1. Developing key ecosystems measures (environmental indicators and geospatial tools) to support regional decision-making.

2. Implement a probability-based statistically valid regionwide monitoring program to enable determination of water quality for the entire region. Wadeable streams were completed in 2003 and assessment of lakes and ponds will take place in 2004-2006. Wetlands are scheduled after lakes and ponds.

Subobjective 4.4.2: Conduct Relevant Research (NA)

(Footnotes)
[1]This inventory does not include source categories for which information was not available such as refineries, mobile sources, landfills, hazardous waste sites and the thermal treatment of contaminated soils at hazardous waste sites. Some of these sources may be significant emitters of mercury.

Goal 5: Compliance and Environmental Stewardship

Objective 5.1	Improve Compliance	
	Subobjective 5.1.1	Compliance Assistance
	Subobjective 5.1.2	Compliance Incentives
	Subobjective 5.1.3	Monitoring and Enforcement
Objective 5.2	Improve Environmental Performance Through Pollution Prevention and Innovation	
	Subobjective 5.2.1	Prevent Pollution and Promote Environmental Stewardship by Government and the Public
	Subobjective 5.2.2	Prevent Pollution and Promote Environmental Stewardship in Business
	Subobjective 5.2.3	Business and Community Innovation
	Subobjective 5.2.4	Environmental Policy Innovation
Objective 5.3	Build Tribal Capacity:	
Objective 5.4	Enhance Science and Research	
	Subobjective 5.4.1	Strengthen Science (NA)
	Subobjective 5.4.2	Conduct Research (NA)

Objective 5.1: Improve Compliance
By 2008, maximize compliance to protect human health and the environment through compliance assistance, compliance incentives, and enforcement by achieving a 5 percent increase in the pounds of pollution reduced, treated, or eliminated, and achieving a 5 percent increase in the number of regulated entities making improvements in environmental management practices. Maximize compliance by identifying significant problems/ risks (environmental, public health and persistent non-compliance) and fixing them through the most appropriate integration of compliance assistance, incentives, monitoring and enforcement tools.

Strategic Environmental Targets for Objective 5.1:
By 2008, prevent noncompliance or reduce environmental risks by achieving:

1. a 5 percentage point increase in the percent of regulated entities seeking assistance reporting that they improved their understanding of environmental requirements as a result of the Region's actions;
2. a 5% increase in the number of regulated entities that improved environmental management practices as a result of Regional actions;
3. a 5 percentage point increase in the percent of regulated entities that reduced, treated, or eliminated pollution;
4. a 5% increase in the number of complying actions taken during inspections;
5. a 90% rate of facilities that self-disclose violations to the Region that use audits or compliance management systems to discover the violation;
6. a 90% rate of self-disclosures submitted to the Region that reduce, treat or eliminate pollution or improve environmental management practices;
7. a 5% increase in the number of enforcement actions requiring that pollutants be reduced, treated, or eliminated; and
8. a 5% increase in the number of enforcement actions requiring improvement of environmental management practices.

Baselines for Strategic Targets in Objective 5.1:
• 25% of regulated entities that were targeted for assistance reported an increased understanding of

environmental requirements;
• 10% of regulated entities that were targeted for assistance reported an improvement in environmental management practices;
• 3% of regulated entities that were targeted for compliance assistance from the Region demonstrated reductions in pollution generated or released;
• 50 complying actions taken during inspections;
• 30% of regulated entities reduced, treated, or eliminated pollution;
• 90% of facilities that self-disclosed violations use audits or compliance management systems to discover the violation;
• 90% of self-disclosures submitted to the Region reduce, treat or eliminate pollution or improve environmental management practices;
• 50 enforcement actions require that pollutants be reduced, treated, or eliminated; and
• 45% of enforcement actions required improvement of environmental management practices.
Overview of Environmental Conditions and Compliance Outlook for Objective 5.1:

EPA New England continues to try to develop means to decrease pollution occurring from aging private structures and public infrastructures, and continues to try to alleviate the impacts of pollution on citizens living in densely populated, minority and/or low-income communities.

As one of the oldest settled population areas in North America, New England has very old housing stock, with many structures covered with multiple layers of lead paint. According to the 2000 U.S. Census, Massachusetts led all states in the percentage of old housing units with 34.5% of the housing inventory having been built before 1940. Additionally, 28.9% of housing units in the Northeast Region were built before 1940, and 80% of housing structures in the Northeast were built before 1980. The federal government banned the use of lead-based paint in 1978.

Aging sewer collection infrastructure in New England contributes to significant environmental pollution and human health problems for New England's taxpayers. Approximately 100 municipalities in two non-authorized New England states have reported at least one unauthorized overflow in the past five years. Historically, Regional work in the area of Sanitary Sewer Overflows (SSOs) has involved civil judicial enforcement actions, while past actions to address unauthorized discharges or illicit connections to storm sewer systems involved information requests, administrative orders and outreach.

In New England, 95% of the 12,000 public drinking water systems are small, serving less than 3,300 people; about 90% of our systems are the smallest, serving less than 100 people. The term "small system" refers to populations served by any single system, but many small systems draw water from the same source (approximately 10,000 are ground water-dependent.) The potential population impacted by small systems in New England is about 1,950,788. Since the majority of noncompliance with the Total Coliform Rule is from small systems, efforts to provide assistance through the tools and support of the Region's Small Systems Initiative should address some potential microbial threats.

Surveys of major urban and suburban population centers in New England demonstrate that most of the Region's substantial Emergency Planning Community Right-to-Know Act Program Tier II facilities are within five miles of some of the poorest and most densely populated communities in the area. In addition, a number of the New England states have not had adequate resources to identify much of the universe or properly collect and analyze data. These resource constraints and past regional disinvestments have the potential to leave the Region vulnerable to accidental and intentional releases.

While the air quality in New England has improved markedly over the last thirty years, the forty-three (43) days of unhealthy ozone levels during the summer of 2002 serve as a stark reminder that we still have significant work

to do. Connecticut continues to violate regularly both the 1-hour and the 8-hour ozone standard. While areas in Massachusetts, Rhode Island, southern New Hampshire and southern Maine stand on the cusp of attainment with the 1-hour ozone standard, they will be designated nonattainment for the 8-hour ozone standard. Preliminary monitoring indicates that the Boston and New Haven downtown areas are near or above the fine particulate matter standard, and visibility in the region is regularly diminished by regional haze. As demonstrated by both monitoring and EPA's National Air Toxics Assessment, ambient levels of air toxics pose serious health risks, especially in congested urban areas. Since 1990, EPA has issued rules covering air toxics emissions from over 80 categories of major industrial sources such as chemical plants, aerospace manufacturers, and pulp and paper mills, as well as categories for smaller sources such as dry cleaners, secondary lead smelters, and chromium electroplating facilities.

The focus of Region I's asthma program has been on addressing the environmental triggers of asthma, particularly pediatric asthma. Our main efforts have been to build a broad infrastructure of external partners from many sectors including, academia, community groups, schools, and the public health/medical community. This group, the New England Asthma Regional Council, issued a recent report which indicates that self-reported adult asthma rates in New England as a whole were significantly higher than the combined rate for the other 44 states and three territories that participated in the Centers for Disease Control (CDC) 2001 survey on asthma. While causes for asthma are unknown, environmental triggers such as ozone, sulfur dioxide and particulate matter exacerbate the disease symptoms, especially for children. Emissions from diesel vehicles contribute significantly to air toxics and fine particle levels in urban areas, particularly in the two New England cities (New Haven and Boston) with unhealthy fine particle levels. Both cities are Environmental Justice communities. In order to reduce the health risks from these pollutants, Region 1 will continue to devote significant effort to its voluntary programs to reduce emissions from in-use diesel engines. The Region will emphasize diesel reductions in Boston and New Haven.

Core Program and National Priority Strategies for Objective 5.1
Regional strategies being deployed to address these priority issues encompass a balance of core program work, National Program Manager (NPM) priorities and programs unique to the Region. To that end, EPA New England will undertake the following strategic priorities:

1.) Work with States on Title V, Air Toxics/MACT Compliance
The Region will continue its efforts to assist states and individual sources in compliance with these standards, as well as enforcement in cases of noncompliance. Region 1 will target its compliance efforts at those sources which pose the greatest risks to human health, particularly in urban and environmental justice areas.

2.) Wet Weather Program Compliance
In addition to continuing work with communities which have Combined Sewer Overflows (CSOs) and Sanitary Sewer Overflows (SSO), the Region will devote attention to implementation of stormwater regulations. The Region published a Stormwater General Permit that covers municipal separate storm sewer systems (MS4) in Massachusetts, New Hampshire and Indian Country in Massachusetts, Rhode Island and Connecticut, as well as federal facilities that qualify as MS4s in Vermont. The Region has done a substantial amount of outreach to MS4s in advance of permit issuance. We anticipate conducting some enforcement against those MS4s who fail to submit Notices of Intent (NOI) or submit inadequate information in their NOIs.

3.) Toxic and Pesticide Programs
In FY 03 the Region conducted a significant number of Worker Protection (WPS) inspections, because we recognized that this was an area where little investment had been made and where the potential for human harm was significant. We will conduct additional WPS inspections, and much of our state review process will emphasize the WPS programs. Also, inspectors will target additional establishment inspections in urban and low income communities, as this is an area where we have seldom targeted inspections. While a new targeting

strategy for the Region, it is expected that issues like unregistered products, adulteration and misbranding may be significant problems. Using both enforcement and outreach, we hope to highlight that FIFRA is a consumer protection law designed to protect the user. It will take some time to devise strong measures that can show a direct reduction in the sale and use of unregistered, misbranded or adulterated products that should otherwise not be in the stream of commerce.

4.) RCRA Waste Generators
EPA New England's RCRA Program will continue to implement core program activities. We will conduct inspections for the college/university and public agency sectors, Subpart CC, and in urban and environmental justice areas. The Region will participate in the Region's Toxics Strategy and will continue inspections at biotechnology firms and laboratories in the Region.

5.) Improve Data Quality and Use Data to Manage Programs
We will continue to develop customized reports for our managers using ICIS and will also continue to volunteer to participate in national workgroups related to ICIS. We will work with HQ to upgrade ICIS to include pipeline reporting and voluntary disclosure reporting capabilities. Additionally, we will continue to provide support for ICIS-NPDES development.

Unique Regional Strategies for Objective 5.1:

1.) Use and Promote Integrated and Compliance Assistance Strategies to Address Priority Compliance Problems

Integrated Strategies*:* The Region will continue integration of assistance and enforcement capabilities, strategically blending use of these tools as appropriate for specific problems. Examples include consideration of the timing of inspections in relation to assistance, promoting use of the self audit policy, and publicizing inspections as a way of increasing interest in assistance opportunities.

Sector- and Problem-Specific Assistance*:* Assistance priorities will include priority regional and national sectors including auto salvage yards, the health care sector, small drinking water systems, construction, municipalities (focusing on infrastructure needs), community-based toxics efforts, and work on supply chain management.

2.) Focus on Problems for Sensitive Populations, Especially in Environmental Justice Areas

Lead Paint : Much of our work to address lead poisoning has a geographic focus, and we will continue our lead paint outreach and enforcement efforts in at least eight New England municipalities with a goal of increased awareness of lead hazards in housing by tenants and purchasers. Additionally, the Region will work with the Urban League of Eastern Massachusetts to pilot an Environmental Justice (EJ) lead compliance project led by the Urban League. Focusing on communities in Boston with the highest blood lead levels, the League will develop and host a series of lead compliance conferences that emphasize the unique informational needs of the minority real estate and construction community in Boston's Roxbury, Dorchester and Mattapan areas. The Region hopes that it will be able to replicate the work done by the Urban League for the benefit of similarly-situated communities and businesses in future years.

Lead in Drinking Water in Schools: The Region's drinking water program has piloted a Lead in Drinking Water in Schools project with the Boston Public School (BPS) District. The overall project goal is to identify and address any threats to children from elevated lead levels in school drinking water. Working with a multitude of state, municipal and educational partners, BPS was selected for the pilot because it is an Urban Environmental Initiative/Environmental Justice area, because the local water authority (MWRA) has optimized corrosion control treatment under the Lead and Copper Rule, and because comprehensive data is available on

child blood levels. Lessons learned from this pilot city will be incorporated into outreach materials as part of an educational campaign for schools throughout Massachusetts and Maine.

Asthma: Environmental triggers such as ozone, sulfur dioxide and particulate matter exacerbate the symptoms of asthma, especially for children. Emissions from diesel vehicles contribute significantly to air toxics and fine particle levels in urban areas, particularly the two New England cities (New Haven and Boston) with unhealthy fine particle levels. Both cities are Environmental Justice communities. In order to reduce the health risks from these pollutants, Region 1 will continue to devote significant effort to its voluntary programs to reduce emissions from in-use diesel engines. Key enforcement efforts supporting these programs will be continued inspection and enforcement activities, as well as the development of community-specific environmental benefit projects such as diesel bus retrofit Supplemental Environmental Projects (SEP).

Small Systems Initiative: Significant new rule training (e.g., Interim Enhanced Surface Water Treatment Rule, Stage 1 Disinfectant Byproducts) for state personnel, technical assistance providers, and utility operators will continue. Compliance assistance efforts will be maintained under the Small Systems Initiative to address disproportionate challenges faced by small system utilities. Enforcement actions will be taken, as needed to address noncompliance with the Safe Drinking Water Act. These efforts are expected to increase over the next few years because of the extension agreements negotiated with the states and the inability of some states to maintain timely primacy updates.

3.) Address Problems in Impaired Waters, with a Focus on Wet Weather

Sanitary Sewer Overflows and Unauthorized Discharges: Over the next three-year period, the Region intends to work with our state partners to better define the universe of SSOs in authorized and unauthorized states in the Region. Further we intend to assess a number of compliance approaches for this sector ranging from informal enforcement actions and targeted compliance assistance [including assessment of capacity, management, operations and maintenance (CMOM) programs as appropriate] to continued use of formal enforcement action. We intend to focus assistance and enforcement on unauthorized connection of sanitary sewers to storm sewers and have developed workshops on detection and elimination of illicit discharges for municipalities.

4.) Strengthen Homeland Security by Vigorously Enforcing Laws and Regulations That Increase the Safety and Security of Facilities That Produce, Use or Store Hazardous Chemicals

Community Right-to-Know/Non-reporters: When Congress enacted the Emergency Planning Community Right-to-Know Act, a key justification included a safe and informed community. Post-9/11, it is critical that we add the resources to meet this commitment. We will increase both our enforcement work and EPCRA TRI and Tier II inspections, and will sponsor multiple technical assistance and self-disclosure conferences in highly populated urban areas. Surveys of major urban and suburban population centers in New England demonstrate that most of the Region's substantial Emergency Planning Community Right-to-Know Act Program Tier II facilities are within five miles of some of the poorest and most densely populated communities. After numerous conversations with Local Emergency Planning Committee (LEPC) representatives, we selected urban areas because of the potential for terrorist activities, their proximity to populations, and low reporting rates. Based on a revamped targeting strategy, the Region expects to find a high rate of Tier II non-compliance. In addition, a number of the New England states have not had adequate resources to identify much of the universe or properly collect and analyze the data. Thus, these resource constraints and past regional disinvestments have the potential to leave the Region vulnerable to accidental and intentional releases.

CAA 112r (RMP): Inspections will emphasize Risk Management Program (RMP) data quality and an evaluation of RMP resubmissions. Targeting will be focused on facilities with large chemical quantities in high risk

communities with priority on facilities experiencing significant accidental chemical releases. Outreach activity will continue to focus on plant safety and site security. Safety and general security information and guidance will be disseminated to a wide audience - including responders, planning and facility personnel.

Objective 5.2 Improve Environmental Performance through Pollution Prevention and Innovation:
By 2008, improve environmental protection and enhance natural resource conservation on the part of government, business, and the public through the adoption of pollution prevention and sustainable practices that include the design of products and manufacturing processes that generate less pollution, the reduction of regulatory barriers, and the adoption of results-based, innovative, and multimedia approaches.

Strategic Targets for Objective 5.2:
• Six EPA-funded state P2 assistance programs providing on-site assistance capacity;
• a 5 percentage point increase in the percent of regulated entities seeking assistance reporting that they improved their understanding of environmental requirements as a result of the Region's actions;
• a 5 percentage point increase in the percent of enforcement actions requiring improvement of environmental management practices;
• a 5% increase in the number of enforcement actions requiring that pollutants be reduced, treated, or eliminated;
• 40 facilities will be participating in the Performance Track program in the Region;
• a 50% increase in the number of facilities participating in the Performance Track "energy challenge";
• Double EPA New England's yearly purchases of "green" products and services including office supplies, electronic equipment, fleet operations, janitorial and maintenance services, meetings and conference management, from a baseline year of 2002;
• All Federal agencies in New England will have defined Environmentally Preferable Purchasing (EPP) programs and policies in place and will be expanding their purchases of available "green" products and services;
• Implementation of two regulatory innovation projects;
• Reduce waste minimization priority list chemicals in hazardous waste streams reported by New England businesses to TRI by 50% from 1991 levels of non-PBT waste minimization priority list chemicals and 2003 levels of PBT waste minimization priority chemicals; and
• Reduce by 10% industrial TRI chemical releases and wastes produced from a baseline year of 2002.

FY 2005 Baselines for Strategic Targets in Objective 5.2:
• Six EPA-funded state P2 assistance programs provided on-site assistance capacity;
• 25% of regulated entities that were targeted for assistance reported an increased understanding of environmental requirements;
• 10% of regulated entities that were targeted for assistance reported an improvement in environmental management practices;
• 3% of regulated entities targeted for compliance assistance from the Region demonstrated reductions in pollution generated/released;
• 34 facilities participated in the Performance Track program in the Region;
• Four facilities participated in the Performance Track "energy challenge";
• EPA New England's purchases of "green" products and services in 2002, including office supplies, electronic equipment, fleet operations, janitorial and maintenance services, meetings and conference management;
• One Federal agency in New England with defined Environmentally Preferable Purchasing (EPP) programs and policies in place in 2002;
• Implementation of two regulatory innovation projects;
• 1991 levels of non-PBT waste minimization priority list chemicals and 2003 levels of PBT waste minimization priority chemicals in hazardous waste streams reported by New England businesses to TRI; and
• Industrial TRI chemical releases and wastes produced in 2002.
Regional Environmental and Compliance Conditions for Objective 5.2:

In creating our pollution prevention program strategies, particular emphasis is placed on development and use of

Environmental Management Systems (EMS). Our strategy generally addresses the implementation of EMSs within the regulated community as a means of achieving sustained compliance and beyond compliance performance. Each project or activity is designed to promote EMS implementation in support of the Region's overall assistance and enforcement work. When a facility's compliance problems indicate fundamental failures in the facility's ability to manage its environmental programs, inclusion of an Environmental Management System (EMS) as part of the consent order/agreement can be an effective way to ensure that the facility develops the infrastructure necessary to ensure long-term compliance. Increasingly, the regional EMS team is acting as a resource to enforcement case teams as they work to incorporate EMS requirements into enforcement documents . The following sector strategies will include EMS elements: Hospitals; Marinas; K-12 Schools; Colleges and Universities; Metal Finishing; and Green Team/EMS.

New England's more than one thousand marinas significantly impact coastal environmental issues. According to the National Oceanic and Atmospheric Administration (NOAA), more than half the coastal water problem comes from runoff pollution and marinas are identified as one of five major contributors to runoff pollution.

There are approximately 280 hospitals in Region I whose facilities present several environmental and public health concerns. First, they contribute to the presence of mercury, dioxin and other PBTs in the environment. Hospitals are the fourth largest source of mercury discharged into the environment. In the process of providing quality health care hospitals use large quantities of materials and generate large quantities of diverse types of waste, portions of which are hazardous (i.e., biological, chemical or radioactive in nature). Hospitals generate two million tons of solid waste annually (1% of the total municipal solid waste in the US) and a wide variety of hazardous wastes such as chemotherapy and antineoplastic chemicals used to treat cancer, solvents, formaldehyde, photographic chemicals, radionuclides, ethylene oxide and waste anesthetic gases. In addition, hospitals rank second in intensity of energy usage and use more than twice as much energy per square foot as office buildings.

Colleges and universities are analogues of small cities, conducting myriad activities within their campus borders including (but not limited to): research laboratories, auto repair facilities, power plants, wastewater treatment plants, drinking water supply, hazardous and solid waste disposal, agricultural research and asbestos management. However, unlike the typical municipality, most have no central authority coordinating environmental practices. Most have transient teaching and student populations (which impacts both short and long-term environmental behavior); and exhibit a varied range of understanding and sophistication on environmental issues - from sophisticated to largely unaware.

Large corporations subcontract out most of their manufacturing to small suppliers, a trend that industry analysts predict will increase in the future. For example, 80% of a Pratt and Whitney airplane engine is made at facilities that are not owned by Pratt & Whitney. Communicating with and developing working partnerships with suppliers is an increasing trend in the manufacturing industry, driven by economic and quality concerns. The Corporate Sponsor Program was begun in New England, in order to take advantage of this trend and to help small manufacturers, many of whom are third- , fourth- or fifth-tier suppliers to large manufacturers, The ultimate goal of this program is to write environmental requirements into the quality specifications that companies like Raytheon and Pratt give to their suppliers.

Core Program Strategies for Objective 5.2:
The Region will continue to promote the creation and adoption of systems, approaches, tools, and practices that result in compliance and improved or superior environmental performance by the public, the government and the regulated community in a sustainable manner through sector-based approaches, performance-based programs, and assistance to small business. Further, we will strive to improve the environmental performance of governments, businesses, and the public by preventing pollution, increasing efficiency in operations, activities, and products; and by creating incentives and reducing regulatory barriers for the adoption of cost-effective, multi-media and results-based approaches**.**

Strategies being deployed to address issues and implementation of related base programs and National Program Manager (NPM) priorities, which include completion of innovation agreements with The Environmental Council of the States (ECOS); Performance Track program participation; Performance Track "energy challenge" development; development of a "supply chain" commitment category for Performance Track; and State Pollution Prevention (P2) grants to maintain state infrastructure.

Unique Regional Program Highlights for Objective 5.2:
Our regional innovation and pollution prevention work is designed to:
• Establish and promote voluntary programs that commit participants to environmental goals that exceed minimum compliance levels;
• Act as a model of environmental achievement by "greening" EPA New England's facilities and operations; and
• Work with states, municipalities, industries, trade organizations, environmental groups, and other stakeholders to develop solutions for emerging environmental problems.

Specific Elements include:
(1) State/EPA Innovations Workgroup;
(2) Sector-specific EMS strategies;
(3) Development of Pollution Prevention tools for targeted sectors and facilities (e.g., metal finishing);
(4) Greening the Supply Chain;
(5) Expansion of the Environmental Results Program (ERP) model to new program areas; and
(6) Leadership and support of EPA New England's Green Team.

Objective 5.3: Build Tribal Capacity:

Environmental Targets for Objective 5.3:
By 2008,
• all Tribes shall have an environmental presence,
• all Tribes shall have a mix of multi-media grant, cooperative agreement, performance partnership agreement, contract, DI and DITCA to build environmental capacity,
• all Tribes shall have the opportunity for EPA training & technical assistance in tribally identified environmental program, policy and enforcement areas,
• all Tribes shall be computer-linked to EPA for GIS, grants, reporting, and general communication,
• all Tribes and EPA will have at least 1 annual training meeting,
• all Tribes shall have representation on the Regional Tribal Operations Committee and select the National Tribal Operations Committee member(s),
• all Tribes shall have a Tribe Coordinator who's main function is to "Champion the Tribe's Cause" within EPA and act as EPA's tribal liaison,
• all Tribes shall have the capability and capacity to develop and execute QAPPs, QMPs, or other documents and implement the respective processes,
• all Tribes shall receive adequate notice and timely consultation on issues affecting them, and
• all Tribes shall have the opportunity to participate and assist in providing direction for the Indian Program regarding R1 Indian environmental activities and functions.

Indicators for Objective 5.3:
By 2008,
1) At least fiveTribes will have improvements to surface water quality (including wetlands) and/or reductions to risks to water quality.
2) At least fiveTribes will have environmental health risk reductions brought about by preventative, educational or remedial measures.
3) The tribes will have a better understanding of their environmental risks to tribal members from sustenance

practices.
4) At least two tribes will have entered into a tribal DITCA.
5) GAP will be available to all Tribes.
6) Eight Tribes will at least receive GAP and CWA106, and competitive grants as PPIS, EJ, Env. Ed., CWA104WQ, CWA104WL, CWA319 and Lead.
7) Annual tribal environmental reports will commence in 2004.

Narrative of Conditions and Strategies for Objective 5.3:

Tribal Partnership work in New England is based on the following 4 key needs of the Tribes.

Promote Efficient Tools: Promote the creation and adoption of systems, approaches, tools, and practices that result in improved or superior environmental performance by the tribe in a sustainable manner through consultation and training approaches, performance-based programs, and assistance.

Capacity Building: Improve capacity of tribes to conduct, monitoring, assessments, enforcement, compliance and multimedia program capability. EPA will provide classroom, in-house and on-site training as well as assistance for tribal environmental staff to build program, monitoring, administration and management capacity.

Consultation & Partnerships: Increase EPA/Tribe relationships with continued tribal consultations and development in assistance agreements, MOA's and direct implementation tribal cooperative agreements (DITCA) for specific tribes, consortia and region-wide tribal programs for efficient and effective tribal programs in partnering with EPA.

Science: Maximize EPA/Tribe multi-media environmental effectiveness and efficiency by assisting the tribes to identify significant problems/risks (human health and their ecosystem) and identify the appropriate technical information and tools available to address the problems and risks.

Unique Regional Strategies for Objective 5.3.
(1) Tribal involvement, via bi-weekly TOC meetings and conference calls, site meetings, annual conference and continuous communication.
(2) EPA Indian Program and Tribal staff interaction, daily.
(3) EPA RA, OD's and regional support via regional Indian work group members, the environmental technicians and experts.
(4) Tribal representatives assist in determining the priorities of EPA New England Indian Program and collectively are successful.

Regional Areas of Emphasis for Base Programs.
(1) Training of the Tribes and Training of EPAers, Working Effectively with Tribal Governments.
(2) Region applies the Indian Policy in all relations with the Tribes, Regional leadership is aware of trust and protecting tribal trust natural resources.
(3) Regional Indian Program with American Indian Environmental Office (AIEO) will develop the GPRA Tracking System, Strategic Plan Tracking System using the Tribe Information Management System (TIMS) utilizing information from FOSTTA, Tribal Pesticide Council, Tribal Science Council, Tribal Association for Solid Waste and Emergency Response and Tribal Operations Committee.

Objective 5.4: Enhance Science and Research

Subobjective 5.4.1: Strengthen Science (NA)

Subobjective 5.4.2: Conduct Research (NA)

CHAPTER 3:
CROSS-CUTTING STRATEGIES

1. Homeland Security and Emergency Preparedness

2. Human Capital

3. Information and Data Strategy

4. Innovation

5. Science

1. Homeland Security and Emergency Preparedness

In an overall context, EPA NE works to identify threats to and reduce the vulnerability of critical environmental infrastructure and the public health and safety. The Region's efforts focus on four main areas of responsibility: critical infrastructure protection; preparedness, response and recovery; communication and information; and protection of EPA personnel and infrastructure.
of, and help protect critical environmental infrastructure. Specifically, the Region works on the following efforts:

- providing technical support and other resources to state and interstate organizations to assist water utilities with understanding and reducing the vulnerability of public water supply systems. We undertake similar efforts with wastewater treatment facilities;
- better clarifying roles and responsibilities for regional response decision-making and internal communications during significant emergency incidents;
- working closely with federal, state, and tribal partners to review and revise interagency emergency response plans and structures;
- conducting outreach to partners to clearly define EPA's authorities, responsibilities, and capabilities for responding to significant incidents;
- improving our ability to assist local and state response personnel during significant emergency incidents;
- working aggressively with State Emergency Response Commissions (SERCs), Local Emergency Planning Committees (LEPCs), industry, and community groups to ensure that they have developed effective preparedness strategies;
- providing the means to disseminate data and environmental related information to the public in as short a time as possible from the point at which it is generated; and,
- assessing our analytical capability in light of major terrorist attacks and investigating and documenting the availability of additional analytical capabilities (state and private labs).

These cross-cutting efforts are coordinated by a Regional Homeland Security Coordinator currently located in the Office of the Regional Administrator.

2.) The People Goal: EPA New England's Strategy for Human Capital

The **People Goal** describes EPA New England's commitment to our staff to create a work place that provides a welcoming work environment and rewarding work experience. The **People Goal** was approved by the Office Directors in April, 2002.

The People Goal identifies action items developed through a consensus-building process begun in 2000 and continuing through today. The first important efforts were made by employees of minority heritage who were invited to help shape the human resources programs across the agency. Many employees contributed their thoughts and suggestions in drafting the plan to improve recognition, recruiting, hiring and promotion efforts, policy-building and accountability within the HR Program.

In 2001, the members of the Diversity Steering Committee took on the challenge of ensuring that the region met its commitments. They broadened the development and updating of the action items by including comments and suggestions from the members of the regional HR Council, Union officials, regional employees, and the Office Directors. Over subsequent years, we solicited comments and suggestions from employees at all levels to ensure our work was on target to improve the working environment of EPA New England.

In 2002, when we incorporated the action items into the new People Goal, EPA New England had constructed a plan to continually improve HR programs, build accountability measures to ensure all staff had accurate and timely data about HR programs, and build an organization fully supportive of the vision.

As of August, 2003, the **People Goal** is realigned to reflect the priorities and goals set by the President's Management Agenda (PMA), a plan which documents the Administration's efforts to improve the Government's operations and to ensure that employees are well positioned to successfully meet our ever-changing mission. The PMA provides 5 areas of focus: strategic management of human capital; expanded e-government; competitive sourcing; improved financial performance, budget and performance integration.

Agencywide, EPA used the PMA to establish its own national human capital vision. Therefore, we are able to ensure our **People Goal** reflects not only the PMA, but also the agency's framework for human capital without losing our own unique set of goals and accomplishments. As a final link, we reviewed the **People Goal** against the accountability measures set by the U.S. Office of Personnel Management (OPM) for all agencies to meet the governmentwide human capital initiative.

The **People Goal** is further aligned to incorporate the vision defined by EPA-New England Vision for diversity. Therefore, EPA New England now has one comprehensive **People Goal**, reflecting our personal regional commitment to excellence in human resources management.

VISION:

A highly skilled, motivated and performing workforce that reflects the community which it serves. All EPA New England employees are understanding of and sensitive to our differences and treat all with respect.

EPA New England GOALS and OBJECTIVES:

• **Improve our ability to attract and hire the skilled and diverse workforce we need for the future.**
The composition of EPA New England reflects the diversity of the people it serves. All employees understand, respect and appreciate differences in the workplace and in the public they serve.

• **Increase the development of our workforce - preparing people for the work of the future, encouraging them to stay and allowing them to perform at their highest potential.**
All employees have equal opportunity to advance to the full potential of their chosen careers.

• **Improve organizational performance through coaching, accountability and recognition that motivates people to be high performers.**

• **Increase sense of fairness/equity/diversity/community within EPA New England.**
All EPA New England decisions which impact employees or the public consider diverse views and perspectives.

3. Information Use and Technology

An integrated strategic planning approach depends on integrated information. A central part of our mission is to provide environmental professionals and the public with useful information management tools and products. The Region will use technology to support and improve access to environmental information for us, our partners and the public.

• **Invest in data analysis cadre** - Dedicated program-based information managers can work with programmatic end users to manage and deliver complex information. This role will be essential as EPA and states make the transition from focusing on bean counting to managing for results. As we do so, we will need information managers who know their data's strengths and weaknesses, and how to use it and improve it to support the needs of decision makers, partners and stakeholders. Information managers will help the Region's staff and managers develop a clear idea of what data is relevant, where to get it and how to use it. We should identify, assess and further develop, where necessary, staff expertise in this area.

• **Advance information integration** - Integration is the key to avoiding mission delay, half-considered environmental decisions, and redundant information. Integration means delivering a single, unified view of each of our regulated facilities, critical resources, monitoring efforts and geographic context. Integrated information can help regional staff unearth and readily evaluate every scrap of data we own. We do not need to build a new system from scratch. We can get more from what we already have in multiple formats and multiple databases. We want to translate this into real customer insight which means more cross- program thinking and acting, and more efficient operations.

• **Improve information and information product exchange with partners** - The Region is working with the Office of Environmental Information (OEI) and states to develop and use the Environmental Information Network to share information. This and other means will help share information with our partners and the public. Partners include, state environmental and health agencies, NGOs including community organizations, and other federal agencies. For example, we need to work with health agencies to develop ways for state environmental agencies and EPA to use health information without compromising confidentiality. Integrating health with environmental data will improve our effectiveness in protecting human health. The Region should promote meetings with state environmental and health commissioners to discuss means of exchanging information to help us carry out our shared missions to protect human health and the environment.

• **Develop and use smarter, more integrated workflow support**- Explore the use of techniques such as automated rules-based processing combined with the use of technologies such as PDAs, tablet PCs and wireless remote. For example, an RCRA inspector would begin an inspection report in the field with a tablet PC. Returning to the office, the inspector would dock the tablet, download and check the data for quality. The inspector would then use the data to produce the finished report. The information in the report would contribute to draft enforcement documents and record the inspection and enforcement actions in all relevant databases (for example, RCRA Info and ICIS). All of this would happen without redundant data entry. Information will become a value-added by-product of work, rather than an added burden.

• **Research and adopt emerging technologies -** The Region will continue to explore application of emerging technologies to make our information systems more responsive, secure and efficient to use and manage. The move to our new space will give us the opportunity to plan for improvements such as building-wide emergency backup power, wireless LAN, voice over IP (internet telephone) and integrated desktop videoconferencing.

• **Streamline and standardize software and equipment -** The Region needs to move greater towards standardization in its PCs, operating systems and end user software. Standardization of computing hardware and software will mean not only better performance for end users and increased support efficiency; more importantly, it will also mean better security and less vulnerable to external security threats.

• **Improve remote access -** Remote access to the Region's network is an essential part of its continuity of operations (COOP) plan. If there is a disaster, travel to our COOP site may not be an option for some key staff. Enhanced remote access would allow them to connect with the EPA New England network from home or other remote sites. Expanding this capacity would also allow those who work at home (for example, Flexiplace or after hours), or who are on the road greater access to network resources such as files on network drives.

• **Improve our ability to continue operating in an emergency -** It is important the Region improve its means of defense against and recovery from the effects of disaster. Besides improved remote access, the Region is developing, where possible, increased redundancy in our basic telecommunication and computing equipment (for example, telephone and data network trunks, PBX, Email and application servers and GIS). We will also improve backup power for Congress Street and Chelmsford.

• **Strengthen the Region's information security -** The Region is working to improve security on several fronts. This includes continued efforts in tightening network security, raising security awareness and making security more transparent to end users.

These points highlight the many dimensions of Region's information responsibilities. Information and the technology we use to manage and deliver it must be: Understood, integrated, shared, smart, current, standardized, accessible, robust, and secure. Integrated planning and management of EPA's programs demand an increased effort in information stewardship by all. Program staff, and managers, supported by their information resource and technology counterparts, will increasingly align information with regional direction and priority.

4. Innovation:

Region 1's innovation work is directly tied to core program goals. The Region does not see innovation as a separate category of interesting projects being done off to the side of our "real" work, but rather as an opportunity to solve important environmental and regulatory problems in new and better ways. In this sense, we try to build innovation into all of our regional work. Organizationally, we do have a central Office responsible for managing the "flagship" national innovation programs, but the emphasis of their work is always on innovation accomplishments that help solve priority problems.

The following provides a perspective on some of these accomplishments and future directions:

• Formation of the **New England State-Federal Innovations Workgroup**. This regional workgroup is co-chaired by our Deputy Regional Administrator and the Deputy Commissioner of MADEP. Its mission is to identify important regional environmental problems and evaluate the potential for collaborative regional solutions. As noted below, two specific projects came out of this group that will be built on in future years.

• Last winter, the Innovations Workgroup convened a **TMDL Innovations Summit** that was attended by all six New England states), EPA New England, the New England Interstate Water Pollution Control Commission

(NEIWPCC) management and managers from EPA Headquarters Office of Water and the Office of Policy, Economics and Innovation At that meeting, a vigorous discussion highlighted the strengths of many of the approaches to TMDL development and implementation throughout New England, as well as some of the opportunities for approaching our TMDL challenges in new and more effective ways. As a result of these discussions, EPA and the New England states developed two pilot TMDL proposals for development in 2004. These will form the basis for future TMDL innovation work.

• At a New England Governors' Conference Environment Committee Meeting, we raised the idea of hosting a **regional innovations symposium**. The purpose of this symposium would be to set up a day and one-half meeting to enable Commissioners, and relevant managers and senior staff, to engage in focused discussions on a small number of priority topics as we all continue to address our priority environmental problems with fewer resources. The summit is now being planned for next spring, and will help shape our innovations work for future years. These topics may include organizational issues(leadership, motivation and culture change in changing times); "innovating" to achieve core program results in times of decreasing budgets; air issues such as community-based toxics; water issues (notably, TMDLs), waste (areas of opportunity for change under RCRA, brownfields); ERP strategies; the evolving use of EMSs, and how state/federal regulatory actions can promote sustainable business behavior.

• The Region also continues to implement national innovation priority programs, including **regulatory innovation projects** developed under XL and ECOS agreements. Generally, it is the purpose of such projects to demonstrate that equivalent or superior environmental protection can be achieved in a simpler, more straight-forward, more cost effective manner. Over the past eight years, more than a dozen experimental projects have been tried in this Region,. As with all experiments, some have been outstandingly successful, many are still in process, and one failed to prove its anticipated advantages, and was closed out.

• We also are strengthening our commitment to **Performance Track** and to other programs that promote use of effective **Environmental Management Systems**. For example, at a recent meeting of Performance Track facilities we launched a regional Energy Challenge Program that would reduce commit facilities to measurable reductions in greenhouse gas emissions.

In summary, the Region considers it a priority to invest resources in innovation, much as major manufacturing companies need to invest resources in research and development. Our investments in innovation are designed to be strategic and directed to solving our most significant problems. Because of significantly constrained state and federal budgets, we anticipate an even greater need for innovative approaches in the years ahead so that the resources we do have are used most effectively.

5. Science:

EPA New England has always strived to ensure our staff and management are informed and current on the latest technical advances in environmental science as it pertains to our agency mission . The region continues to demonstrate their commitment to advancing scientific knowledge and incorporating new scientific developments into our work and encourages innovative forward thinking to help meet potential science needs of the future

As the region moves into 2004, considerable accomplishments have been completed to bring better science to EPA New England. In just the past five years alone, the region adopted the development of a Regional Science Council with a defined mission for building science capacity in all realms of the agency scope and mission. EPA New England was the first region to form a multi-disciplinary cross programmatic forum for addressing important science issues and policy. The primary directive for the RSC was (1) facilitating improved communication of scientific knowledge; (2) identifying scientific gaps and needs and ensuring a process for addressing these needs; (3) enable staff and management to use the very latest and best scientific developments to help them make both

reliable and credible decisions; and (4) ensure our regional science needs and priorities are collectively shared with the rest of the agency in the science planning and decision making processes.

The Regional Science Council initiated a Science Needs Survey in 2000 to help identify the important technical needs of both management and staff in performing their day to day routine job functions. The compilation of these needs was broken down into various categories such that subcommittees in the region, HQ's, Program Offices, and ORD could help us solve specific science needs gaps and do this in a timely and efficient manner. A multi-year operating plan with goals and objectives was developed to accomplish this task and is updated yearly as progress is made on each science need. Some of these actions, which are highlighted below have enabled both the regional management and staff to prioritize and address the most critical needs and bring them to the attention of the National Regional Science Council and the Office of Science and Policy in Washington DC. The majority of action items focus on specific technical needs and in some instances, they address policy issues.

SCIENCE ACTION ITEMS:

1. Designed, developed and conducted a full regional scale science needs survey that provided input from both staff and management on scientific gaps and needs. The results of this first survey continues to provide the RSC with direction on how best to address the science needs requests for the future.

2. Created multi-year plan that integrated the prioritized science needs into clearly defined grouping s that enables the region to address the needs with other offices in the agency.

3. Initiated the first collaboration with the agencies multimillion dollar scientific grant program (EPA-STAR) to bring award recipients and investigators to the region to share their technical expertise with our staff and report on the results of their research and how it is applicable to regional needs.

4. At the request of the region, the RSC has implemented a new monthly science seminar series where regional staff report on significant projects in their respective programs to help facilitate the exchange of scientific information among their peers. This continues to be a very visible and highly attended forum.

5. The RSC continues to collaborate with ORD to build the first pilot web site that provides "One Stop Shopping" for an extensive universe of scientific information and data that can be accessed on any desk top computer in the agency. The region also developed their own science web site that interfaces with this national portal. The science portal design is largely due in part to the needs requests that came from the Region 1 Science Needs Survey and yet helps address science needs for all 10 regions. This is a model that is now currently being evaluated for future use by the entire agency.

6. EPA New England participated in the development of a National Regional Science Council as well. This Council is now chaired by two Regional DRA's and enables the regions to collectively share scientific information and address priority science needs at the highest levels in the agency. This stems from the hard work of regional staff scientists and managers who recognized this important mission and advocated for a centralized forum for bringing both technical and policy science issues to the attention of the senior executive policy council in DC.

7. The region continues to address routine requests from both HQ's and the Program Offices on science matters. For example, each year the regional staff assist the agency by inputting the latest scientific developments into the Science Inventory; prepare posters and presentations for the annual agency Science Forum; provide technical input to the 45-Day science study requested by the AA for Science; and ensure that credible scientific questions and issues are raised at strategic meetings held by the RA's and DRA's on a monthly basis.

8. The region also ensures the integrity of the regional science conducted by our staff and management as it closely aligns the work with policy rules and regulations as outlined in both the agency peer review handbook and in the quality assurance guidance.

9. Lastly, the region actively participates in the agency strategic planning for future science research with ORD in developing the 5 year multi-media plans with the Research Coordination Teams (RCTs). This is an annual process whereby the regional representatives and RSC provide input on priority scientific needs to influence the direction both ORD and HQ's takes in budgeting our research agenda.

The RSC and Regional Laboratory continue to engage both staff and management to incorporate their input on evolving scientific needs and on-going studies to ensure that the region is up to date in meeting the scientific challenges of the future.

CHAPTER 4:
REGIONAL ACCOUNTABILITY AND PERFORMANCE MEASUREMENT

EPA is a complex organization with an evolving mission that serves many different constituents and stakeholders. These stakeholders, ranging from Congressional staffers to local community groups, each have different expectations for the agency. Evaluating success in this environment can be a complicated and challenging prospect. This complexity is especially true for regional offices where there are multiple "bosses" (RAs and AAs) and important partners (States and Tribes) that each have unique needs and priorities.

Managing a large organization under this scenario is a challenging task and one that EPA New England has taken very seriously over the last few years. Our management, accountability and information systems are constantly evolving to provide better information while at the same time being more efficient. Breaking down cross-office "stove pipes," leveraging resources and increasing communication are always a central focus in all our work. Because of this complexity, we constantly force our selves to go back to the two underlying tenets:

• ***Always focus on results and outcomes:***
Is the air cleaner, water healthier, land safer and better protected? Is human health improving? Are our ecosystems healthier?

• ***All our management practices must be "transaction light and value added:"***
Although we want to be as strategic as possible, we must always strive to strike the appropriate balance between planning, evaluating and performing work. This requires a constant effort to make our planning and accountability systems as efficient and streamlined as possible.

In all of our work we aim to take an environmental problem solving approach; looking at a wide array of data and indicators but also listening to our stakeholders and tapping the expertise and knowledge of our staff and other partners. We aim to set clear long-term goals with measurable milestones supported by activity measures. As we all know, doing this can be a challenge. We often lack the data necessary to evaluate our progress and we also want to be careful of spending too much time evaluating and not enough doing the actual work. Multiple stakeholders and partners combined with complex work requires equally complex and often overlapping accountability systems. Because of this, it is very important to focus on clearly defined outcomes, that way different organizations avoid redundancy and "pull at the same oar" to achieve maximum results from our limited resources. Listed below is a brief summary of EPA New England's efforts to build outstanding accountability systems.

We define our efforts by three categories:
1.) Regional accountability to national goals and programs;
2.) Internal accountability systems, and
3.) Region and State/Tribal mutual accountability.

1.) Regional Accountability to National Programs and Goals:
Under the leadership of the Office of the Chief Financial Officer (OCFO) with support from the Environmental Council of States (ECOS) the agency has made great progress in building its capacity to articulate environmental issues and strategies from the bottom up. One key development has been the replacement of the "MOA," one of the primary accountability tools between regions and headquarters, by annual regional plans. Accordingly, there is an even heavier burden on regions to clearly articulate their environmental goals and associated work commitments. In EPA New England's Strategic plan we have clearly defined the region's contribution towards

the agency's strategic goals. We have then defined our program strategies showing what we will do to achieve those targets. On an annual basis, we will show our regional contribution towards the agency's annual performance goals (APGs). We will then articulate the regional strategies being deployed and the specific work commitments we need to deliver to satisfy national program managers. The region has developed an internal tracking system that monitors (on a monthly basis) our annual progress towards meeting national annual work commitments. On a quarterly basis the region's Administrator, Deputy Administrator and Office Directors convene to identify areas of concern and develop strategies to solve them.

2.) Regional Internal Accountability:
Internal regional accountability also occurs at multiple levels and through different systems. At the broadest level, the Region conducts annual goal team meetings to assess the progress we have made towards our environmental targets. During these meetings, we make a substantial effort to look at the latest environmental trends and data and make substantive changes to our program strategies. One example of a cross office program change was the development of a desk top GIS system which allows our Office of Site Remediation & Restoration (OSRR) to better prioritize sites in source water protection areas.

Obviously, the region also has more traditional office accountability and line management procedures for program implementation. Office Directors submit comprehensives monthly reports for RA/DRA review. Work plans for branches, teams and new initiatives are standard operating procedure. The region also puts substantial effort into developing individual performance agreements that are directly tied to outcomes. As articulated in the "Cross-Cutting Strategies" chapter, we have even set specific goals for our human capital development, including an annual look at the data and making program adjustments.

The region has also embarked on a number of more focused program evaluations. Candidate programs are selected for evaluation based on a number of criteria including environmental results and efficiency measures.
State/Tribal Mutual Accountability:
(Please note this issue is covered in much more depth in "Chapter V: State and Tribal Partnerships,") Like the rest of our work, we gear our state and tribal planning and accountability around environmental outcomes. We have PPAs with all our states which are focused on environmental goals. We conduct annual leadership meetings with our states to assess our progress towards those goals and make program adjustments. We conduct quarterly meetings with our state commissioners to address priority developments and have a Regional Tribal Operations Committee. We also employee direct program oversight and joint priority setting, one example of which is our annual enforcement meeting.

We have made great progress in our goal of aligning national, regional and state/tribal accountability systems. However, we recognize we still have a long way to go. We are always in search of better data, better evaluation systems and less burdensome ways of reporting an analyzing our progress.

CHAPTER 5:
STATE AND TRIBAL PARTNERSHIPS

EPA New England State Partnerships:
Region 1 and the New England states embraced the opportunity for partnership, and joint priority setting available under NEPPS. All Region I states entered into PPAs and PPGs soon after the inception of NEPPS and have continued to use PPAs as the principle governing document for the EPA and state environmental agency relationship. The approach to joint planning and partnerships that characterizes the PPA process has crossed over into our relationships with agencies that receive categorical grants outside of the PPA process (like state agriculture and health agencies).

There is agreement between the Region 1 states and the Regional Office that the PPA process has resulted in improvements in our working relationships and our ability to approach problem solving in a more collaborative fashion. Among the benefits of the PPA process that have been reported to us by our states are,

- it provides an over-arching framework for discussion and overview of EPA funded programs in the states,
- it has helped to jump start and/or improve strategic planning in some of our states,
- it has facilitated more integrated approaches to solving cross-media problems,
- it has helped to foster focus on results and performance measurement,
- it has allowed us to focus some additional attention on current and emerging environmental problems which require strategies that go beyond our traditional statutory and regulatory approaches.

Through the PPAs process we have established a foundation for joint planning and priority setting with our state partners that is institutionalized in the Region and that will help bring about the next level of planning and joint accountability envisioned in the development of Regional plans.

The Region and the New England States find additional opportunities for collaboration and joint planning through a variety of regular meeting like quarterly leadership level meetings (EPA Region 1 Office Directors and State Environmental Commissioners), regular and issue oriented forums organized by the interstates organizations for waste, water and air interests involving regional and state program managers and staff, and periodic conference calls between regional and state planning coordinators.

EPA New England Tribal Partnerships:
Region 1 has worked closely with the federally recognized tribes of New England to build a partnership for the protection of tribal environments and the health of tribal members. Several years ago, the Region worked collectively and individually with the tribes to develop Tribal/EPA Agreements (TEAs) to define the terms of the tribal/EPA relationship and to set forth the tribes' long term environmental goals. Six tribes (Micmac, Maliseet, Penobscot, Passamaquoddy- Indian Township, Passamaquoddy- Pleasant Point, and Narragansett) signed TEAs with the Region. The development of TEAs set the foundation for the development of tribal capacity with through the use of General Assistance Program Grants, program grants, and for seven tribes (the six listed above and the Wampanoag) Performance Partnership Grants to allow more holistic planning and implementation.

To facilitate the partnership relationship, the Region set up a system of tribal coordinators for each tribe to provide a central point of contact for the tribe to respond to tribal needs and help the tribe establish necessary relationships with EPA programs. The Indian Program has also established strong communication between the tribes and the Region. The communication includes monthly calls with the Regional Tribal Operations Committee (the Environmental Directors of the tribes) and joint attendance at tribal environmental organization meetings (Native American Fish and Wildlife Association, United Southern and Eastern Tribes' Natural resources

Committee, etc.). Each year the Indian Program, Tribal Coordinator, and other relevant EPA staff also visit each tribe to review progress, discuss future plans, and deal with administrative grant issues.

An EPA sponsored annual Tribal Environmental Training Conference is also held. The conference has provided an annual opportunity for discussion of tribal accomplishments, tribal issues and concerns, and tribal plans.

At the latest Tribal Environmental Training Conference in February of 2004, the tribes' developed a draft Tribal Strategic Plan for their environment efforts. This Plan has been compared with the Region's Plan to develop a cross walk between it and the goals and objectives in the Region's Plan and EPA's Strategic Plan. The Tribal Plan is broad in scope and contains items depending on mutual support, support from other federal agencies or governmental entities, or actions with non-governmental entities. However, substantial portions of the Tribal Plan relate to the scope of EPA's work, and the Tribal Plan will be utilized by the Region as a basis for continuing consultation with the tribes as the Region develops annual plans and revises and updates the Regional Plan. While the tribes will periodically update their Plan, the current draft of the Tribal Plan is on the Region's Indian Program website..