

Office of Environmental Stewardship

2002 ANNUAL REPORT

Addendum

for the

Office of Assistance and Pollution Prevention (A&P2)

*Using Voluntary Approaches to Improve
Environmental Performance Throughout New England*





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
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Spring 2003,

Dear Reader,

The Assistance and Pollution Prevention (A&P2) Office's mission is to improve New England's environment by encouraging more companies, organizations, and communities to achieve higher levels of environmental performance and compliance. This Addendum to the Office of Environmental Stewardship's Annual Report provides an overview of the A&P2 Office's activities by highlighting 13 areas of activity conducted in 2002. Although these ongoing projects use a variety of approaches to influence multiple audiences, they fall into the following three categories:

- Improving the environmental performance of regulated communities by providing sector-based regulatory and technical assistance.
- Encouraging corporate and municipal responsibility, leadership, and improved environmental performance by providing new and innovative approaches to traditional regulatory strategies.
- Solving environmental problems by supporting environmental technologies, providing regulatory flexibility, and supplying financial assistance for pollution prevention projects.

A summary report such as this can only briefly touch upon topics of significance and complexity; therefore, each project description includes a list of contacts and resources for further inquiry. Readers are encouraged to contact us with questions or comments.

Finally, we acknowledge that our efforts and accomplishments require a high degree of involvement and support from many internal and external partners. With this in mind, we wish to thank our state and interstate partners, business associations, advocacy groups, and the public. For more information, please visit our web site at www.epa.gov/ne/enforcementandassistance/.

We hope that you find value and import in the work summarized in this report.

Sincerely,

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In Memoriam

This publication is dedicated to the memory of Fred Friedman, an EPA New England contractor who directed the Research Library for the RCRA Program. Fred's professionalism and vast knowledge of information resources greatly improved the Region's ability to address complicated topics in a timely manner. More importantly, his personal dedication to environmental protection and social justice inspired his colleagues and added immeasurably to the Agency's mission. Fred will be deeply missed.

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Executive Summary

EPA New England's Assistance and Pollution Prevention (A&P2) Office manages many ongoing projects in a variety of sectors and areas. This Annual Report highlights 13 ongoing activities conducted in 2002.

The A&P2 Office was created in 1995 to provide environmental assistance to the regulated community and encourage improved environmental performance through innovative and voluntary approaches. To do so, the A&P2 Office forms partnerships with a wide range of stakeholders, including states, municipalities, companies, trade organizations, non-profits, environmental organizations, colleges, universities, hospitals, and federal agencies. By establishing these important partnerships, the A&P2 Office improves outreach, strengthens voluntary commitments, and develops cohesive environmental strategies.

The A&P2 Office also experiments with innovative approaches that enhance environmental performance by overcoming regulatory, technical, and institutional barriers. In particular, efforts are made to encourage regulated communities to move beyond minimal levels of compliance.

Pollution prevention and sustainability are fundamental principles that guide A&P2's work. These principles support a systems approach to promoting environmental protection, public health, and a sustainable economy.

In 2002, A&P2 staff completed more than 169 activities that reached over 8,824 companies, agencies, organizations, and individuals. These activities use a wide assortment of communication, outreach, and assistance tools, including meetings, conferences, mailings, publications, on-site and phone assistance, and Internet resources. The A&P2 Office's ongoing work falls into three categories: (1) Improving performance in targeted sectors, (2) Encouraging superior environmental performance, and (3) Solving environmental problems with innovative programs and pollution prevention funding.

Improving Performance in Targeted Sectors

The A&P2 Office provides compliance and technical assistance to targeted sectors that lack the awareness, resources, or expertise to fully address their environmental responsibilities. For 2002, the sectors targeted were colleges and universities, healthcare facilities, marinas, metal finishers, K-12 schools, storm water facilities, small drinking water systems, and university laboratories.

The outreach and educational efforts used to influence these sectors include the following:

- Workshops on regulatory compliance, pollution prevention, best management practices, and emerging technologies.
- Specialized services, such as technology demonstrations, on-site assessments, and roundtables.
- Written resources, including the development of manuals, checklists, and fact sheets.

- Telephone and on-site assistance.
- Internet resources.

The innovative approaches used to encourage higher levels of compliance and environmental performance, included the following:

- Self-audit programs that reduce the risk of enforcement action for a limited time as regulated entities identify and correct violations.
- Environmental management systems (EMSs) that enable organizations to identify and systematically manage their environmental responsibilities.
- Performance measures and benchmarks to better understand and report on environmental outcomes.

Encouraging Superior Environmental Performance

The A&P2 Office develops and promotes innovative voluntary programs that encourage superior environmental performance, leadership, and responsibility. In particular, the A&P2 Office attempts 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.
- Work with states, municipalities, industries, trade organizations, environmental groups, and other stakeholders to develop solutions for emerging environmental problems.

Solving Environmental Problems with Innovative Programs and Pollution Prevention Funding

The A&P2 Office promotes alternative approaches to traditional command and control environmental protection. These include innovative programs that provide the regulated community access to environmental technologies and increased regulatory flexibility by:

- Fostering networking and collaboration through publications, workshops, and on-line databases to match technology users with developers and other resources.
- Providing regulatory flexibility in appropriate circumstances to overcome regulatory barriers, increase efficiencies, and improve environmental protection.
- Assisting state and interstate organizations with pollution prevention funding.

Work for 2002

The majority of A&P2 projects are multi-year in scope. As priorities shift and programs accomplish their goals, A&P2 staff engage in research and development (R&D) to identify ongoing environmental problems.

Improving Performance in Targeted Sectors

Many regulated entities – the majority of which are small – lack the environmental awareness, expertise, and/or resources to understand and achieve their environmental obligations. Although the environmental impact of each entity may be small, their cumulative environmental impacts are of critical concern to regulators. To address this situation, the A&P2 Office targets sectors that require assistance with compliance and environmental performance. In 2002, these sectors included the following:

- Colleges and universities
- Healthcare facilities
- Marinas
- Metal finishers
- K-12 schools
- Small drinking water systems
- Storm water facilities



Colleges and Universities

Promoting environmental compliance and “beyond compliance” performance through education, self-audits, and environmental management systems (EMSs)

Environmental Problem

There are 331 college and university (C/Us) facilities in New England, each operating like a small town, complete with auto repair facilities, power plants, wastewater treatment systems, laboratories, office buildings and residential housing. To operate these facilities, C/Us handle toxic substances, generate solid and hazardous waste, and manage trash disposal programs, including incineration. The environmental decisions made by C/Us influences the health and safety of hundreds of thousands of students, faculty, staff, as well as neighboring communities.

2002 Highlights

- Three C/U events on environmental requirements, best management practices (BMPs) and sustainable practices.
- Five video workshop conferences on Storm Water requirements.
- More than 175 C/Us participating in the voluntary self-audit program.
- Three C/Us testing an EMS Guide.
- EPA’s C/U website received 71,678 requests from January to December - almost double from the previous year.

Since the mid-1990s, EPA Region I focused a portion of its enforcement efforts on colleges and universities as significant environmental compliance problems continued to be identified. While enforcement efforts contributed to making environmental compliance an issue for institutions of higher education, enforcement, in and of itself, was not improving the sector's understanding of environmental requirements or upgrading their compliance management practices. Further, EPA's heightened enforcement presence generated requests for assistance to help C/Us understand and comply with environmental requirements.

The challenge for EPA was to develop a strategy that integrated compliance assistance and enforcement programs to yield maximum environmental impact. In March 1999, EPA New England launched such an initiative with a letter to all C/Us in New England. The Region stated that our targeted enforcement efforts would continue, but that the Region would now offer assistance including workshops. More recently, EPA commenced an environmental auditing initiative and developed Environmental Management System tools specifically tailored to C/Us.

Work in 2002

In 2002, EPA encouraged C/Us to perform self-audits and to implement environment management systems (EMSs). More specifically, EPA Region I conducted the following activities.

- Co-sponsored eight educational workshops to improve environmental compliance with state and federal requirements, including workshops on sustainable practices, environmental management systems, storm water, and spill prevention control and countermeasure (SPCC).
- Launched a Self-Audit Initiative offering C/Us the opportunity to reduce their exposure to penalties by auditing their facilities, identifying violations and voluntarily correcting them within a limited period of time during 2002. Approximately 175 colleges and universities (53% of the facilities) participated.
- Developed an EMS Guide to help C/Us design and implement an environmental management system in a streamlined, cost-effective manner. Three C/Us (the University of New England, Wentworth Institute of Technology, and the University of Massachusetts-Amherst) are piloting the EMS Guide to test its efficacy and provide feedback to EPA.
- Worked with Campus Consortium for Environmental Excellence (C2E2) to create a "Best Management Practices" Catalogue to supplement the EMS Guide. The BMP Catalogue will provide a comprehensive list of environmentally sustainable practices that can be more fully researched on the EPA C/U web site. This catalogue will enable colleges and universities to learn about existing practices already implemented by New England institutions and how they might implement them.

Future Work

In 2003, EPA will continue its enforcement activities at C/Us and offer basic regulatory information to those requesting assistance. In addition, EPA will undertake the following efforts:

- Pilot test the EMS Guide at six to eight additional C/Us in New England (and possibly two C/Us in EPA Region 2) and design a workshop to help C/Us implement EMSs.
- Co-sponsor workshops or make presentations to help C/Us implement BMPs. These efforts will promote the BMP Catalog (www.epa.gov/ne/assistance/univ/bmpcatalog) and encourage C/Us to submit additional case studies to be incorporated into it. The featured topics will include: waste minimization, “green” chemistry, recycling, “green” building, energy efficiency, transportation management, storm water control, and composting.
- Evaluate the overall effectiveness of the C/U strategy, especially the effect of the Audit and EMS Initiatives.

Contacts and Information

For more information about the EPA’s C/U program, assistance tools, and the EMS Implementation Guide, visit: www.epa.gov/ne/assistance/univ/.

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Healthcare Facilities

Creating “green” hospitals in New England

Environmental Problem

There are approximately 280 hospitals in New England. In providing quality health care, hospitals use large volumes of material, generate diverse waste streams (including biological, chemical and radioactive waste), and consume great amounts of energy. In particular, healthcare facilities 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 addition, hospitals generate two million tons of solid waste (1% of the total municipal solid waste in the US) and manage a host of hazardous wastes such as chemotherapy and antineoplastic chemicals (used to treat cancer), solvents, formaldehyde, photographic chemicals, radionuclides, ethylene oxide and waste anesthetic gases.

2002 Highlights

- Ten hospital events including an EPA sponsored SPCC amendments training.
- Mailings sent to 280 hospitals in New England about the H2E program and sustainable opportunities.
- 320-member Hospital email group received bi-weekly environmental information.
- SPCC and EPCRA fact sheets developed and distributed to hospitals.
- 96 New England H2E partners and nine H2E Champions (including EPA Region I)

Hospitals also rank second in intensity of energy usage and use more than twice as much energy per square foot as office buildings. In total, hospitals consume almost 50 billion kilowatt hours of electricity and spend close to \$3 billion each year in electricity alone (a cost that represents as much as 8% of operating expenses).

By improving energy efficiency and reducing the generation of solid and hazardous waste, hospitals can better serve their patients, healthcare workers and neighboring communities. Reducing the negative impacts of the hospital's environmental footprint is the objective of creating "green" and healthy hospitals in New England.

Work in 2002

To encourage hospitals to minimize waste and energy usage, EPA Region I sent letters to all New England hospitals that included a brochure on Hospitals for a Healthy Environment (H2E), the Region I Mercury Challenge directory, material about the Sustainable Hospital Project (SHP), and information on the ENERGY STAR Benchmarking tool for hospitals.

To continue the educational outreach, EPA Region I maintains a hospital email group with 320 members who receive environmental information about every two weeks.

The H2E program is a voluntary program created to help health care facilities enhance work place safety, reduce waste and waste disposal costs and become better environmental stewards. There are currently 96 New England H2E partners and eight H2E Champions (partners who help recruit new members) from New England. In 2002, EPA Region I became the ninth New England Champion of the H2E program because of its efforts to recruit health care facilities to become H2E Partners for Change.

Future Work

Region I plans to promote compliance and sustainable practices to New England health care facilities through the following efforts:

- Compliance training designed to increase compliance with environmental regulations.
- Development of a hospital assessment tool that will gather information on compliance and pollution prevention activities.
- Training to hospitals on the ENERGY STAR hospital benchmarking tool and water conservation opportunities.
- Promote the H2E programs and goals.
- Training on resource management for solid waste.

Contacts and Information

For more information about the Hospitals for a Healthy Environment (H2E) Program, visit: www.h2e-online.org. If you are a health care facility and would like to join the email group, contact Janet Bowen.

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Marinas

Improving marina compliance and environmental practices through targeted and regionally coordinated assistance

Environmental Problem

In New England, more than 1,000 marinas repair, store, maintain and fuel water craft. These activities can present a number of significant environmental issues, including:

- Point and non-point source pollution from storm water contaminated by marina operations.
- Spills and emissions from fuel and oil.
- Generation of hazardous waste from paints, solvents, degreasers, oils, and fuels.

Marinas often lack the environmental expertise and resources to achieve high environmental standards. This problem is compounded by the decentralized and fragmented nature of marina regulations. To help remedy this situation, EPA New England developed a regionally coordinated assistance initiative to improve marina environmental compliance and to promote best management practices (BMPs).

2002 Highlights

- Nearly 20% of New England marinas received environmental training on regulatory requirements and best management practices.
- Several assistance tools were implemented in coordination with federal, state and private marina assistance providers.
- A Clean Marine Engine Initiative was developed to encourage industry stakeholders to promote the sales of low pollution marine engines.

To help measure performance under this effort, EPA developed a statistically-valid measurement approach, featuring on-site marina assessment surveys that identified key environmental compliance requirements and desired best management practices. Using this approach, the office randomly targets a sample group of 70 New England marinas to establish both a baseline and a followup measure of regulatory awareness. The initial baseline measure, which was completed in 2001, confirmed the existence of many problems identified by the A&P2 Office's initial research on the marina sector.

Work in 2002

EPA worked with stakeholders to promote best management practices and establish EMSs, including the following:

- Guidance documents were designed in several states. The guides help marinas to understand their environmental requirements and implement best management practices.

- Environmental workshops for marina owners were completed in each state. Through these training sessions, nearly 20% of New England marinas have received environmental training on regulatory requirements and best management practices.
- Planning was completed for the development of a marina environmental management plan template to help marinas develop an EMS.
- The regional marina workgroup, which was formed to provide stakeholders a forum for improved communications, met quarterly. Their efforts include the initial implementation of a regional shrinkwrap reduction initiative and the clarification of several regulations for the marina community.
- The initial design phase of a regional marina website was completed.

In addition, EPA New England collaborated with EPA Region 2 and marine industry stakeholders from New England and New York to launch a New England Clean Marine Engine Initiative. As part of this effort, participating organizations agreed to encourage customers to purchase and use lower-pollution marine engines in New England and in the Lake Champlain area.

Future Work

In 2003, EPA will continue to implement assistance tools for improving marina compliance and environmental practices. These efforts will include the following:

- Expand the Clean Marine Engine Initiative by signing up additional marine engine retailers to participate and educating the public on low pollution engine benefits.
- Continue to conduct marina owner environmental training workshops.
- Complete the regional marina website.
- Develop the environmental management plan template and pilot it with several New England marinas.
- Design new guidance document materials such as fact sheets and continue to distribute existing guidance documents.

These activities will be conducted in coordination with regional stakeholders, including state environmental departments, trade associations, marina owners, and nonprofit organizations.

Contacts and Information

For more information about marinas and the Clean Marine Engine Initiative, visit:
www.epa.gov/region01/assistance/cmei/.

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Metal Finishers

Using Environmental Management Systems and a Greening the Supply Chain program to promote compliance and encourage “beyond compliance” practices

Environmental Problem

The 1,300 metal finishing facilities in New England generate hazardous waste and emit metals, solvents, and toxic chemicals to the air and waterways. Many of these facilities are small and, due to limited resources, face challenges in achieving environmental compliance and pollution prevention. Environmental agencies have historically made these facilities an enforcement priority, but enforcement alone has not been able to deal with the root causes of non-compliance, which runs as high as 30% of all inspected facilities.

To encourage the metal finishing industry to adopt “beyond compliance” approaches, the industry, in partnership with EPA, developed the Strategic Goals Program (SGP). To join this program, companies voluntarily signed up to meet seven environmental goals including 50 % reduction in water use, 25% reduction in energy use, 50% reduction in sludge shipped off site for disposal, 90% reduction in air emissions, 98% utilization of metals in process and compliance with pertinent regulations. Region I has been active in the goals program since it began in 1997.

Through the SGP database, the region can determine that participating companies have made a great deal of progress in meeting their goals. Approximately 50 New England companies have achieved an average of 35% reduction in water use, a 50% reduction in sludge generated, and a 58% reduction in metals emissions to water since 1992, the baseline year. Despite this success, many metal finishers have not made progress and require additional incentives and support to achieve the goals of cleaner, cheaper, smarter environmental protection.

Work in 2002

While the SGP data gathering phase has been completed, the program will continue with an emphasis on assisting metal finishers to develop Environmental Management Systems. To further this objective and promote beyond compliance practices, EPA New England is participating in the Corporate Sponsorship Program. This program takes advantage of a growing industrial trend in which large corporations subcontract out most of their manufacturing to small

2002 Highlights

- 25 companies participated in three EH&S training sessions at Raytheon.
- Ten Companies are involved in ongoing EMS training sponsored by Pratt & Whitney.
- An additional EMS training program is scheduled to begin the spring of 2003 at New Hampshire Ball Bearings, Peterborough, NH.
- UNH Interns visited 52 metal finishing companies in RI, MA, and ME to review compliance and develop facility specific compliance protocols.

suppliers. For example, 80% of a Pratt and Whitney airplane engine is made at facilities that are not owned by Pratt & Whitney. By leveraging the contractual relationship between buyer and supplier, the Corporate Sponsorship Program develops working partnerships with suppliers to address quality concerns.

The Corporate Sponsorship Program gave Raytheon and Pratt & Whitney a role in the SGP, by giving them a mechanism that they could use to mentor their suppliers, providing technical information and a powerful incentive to small suppliers. The ultimate goal of this program is to encourage companies like Raytheon and Pratt to write environmental requirements into the quality requirements that they give to their suppliers, a practice known as “greening the supply chain.”

Nation-wide, EPA’s Office of Prevention, Pesticides and Toxic Substances (OPPTS) is working on a Supplier Partnership Project. In 2002, Region I worked to establish a Suppliers Partnership for the Aerospace industry involving Raytheon and Pratt & Whitney as well as several other large aerospace companies who have suppliers in New England.

Future Work

In 2003, A&P2 will focus on the Corporate Sponsorship Program, expanding it to new companies and additional industry sectors through a partnership program with OPPTS.

Contacts and Information

For more information about the National Strategic Goals Program visit its homepage at: www.strategicgoals.org

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K-12 Schools

Improving chemical and environmental management in K-12 schools

Environmental Problem

Secondary schools routinely face a host of environmental problems, some of which are regulatory in nature, and some of which may be remedied through the use of “best practices.” The improper management of these environmental responsibilities may cause harm to the environment, students, and school staff. Despite the scope and severity of the environmental problems facing schools, there are often inadequate resources and lack of a system in place to help schools prioritize among environmental responsibilities. EPA has found that many schools have significant problems associated with chemical selection, management, and disposal.

Work in 2002

In 2002, Region I took steps to address chemical management in schools by collaborating with state, local, and non-governmental partners. These networks focused on educating schools and

each other on the range of environmental problems faced by schools. To provide assistance to schools and municipal officials, and state agencies, EPA began reaching out to chemical suppliers and green chemical advocates, and conducted the following activities:

- Coordinated and cosponsored two statewide workshops in Maine and one in Connecticut, that reached over 175 attendees with information on mercury and chemical management issues in schools.
- Worked with Rhode Island agencies to co-sponsor “Mercury in Schools and Your Community,” a workshop that reached 30 participants.
- Collaborated with the Massachusetts Multi-Agency Task Force on EHS Issues in Schools to develop a comprehensive environmental audit checklist for K-12 schools, addressing regulatory requirements and BMPs in environmental, health and safety issues.
- Trained over 500 individuals, including teachers, administrators, nurses, firefighters and other state and local officials through more than a dozen workshops, trainings, and meetings across the Region.
- Distributed over 40 copies of the Toxics Free Schools environmental tools for schools compilation. Much of the information on this CD ROM was built into the national healthy schools web portal, found at <http://www.epa.gov/schools>.

2002 Highlights

- Educated more than 700 individuals about mercury and chemical management at more than a dozen workshops and meetings.
- Helped develop an environmental audit checklist for K-12 schools that addresses regulatory, health, and safety issues.
- Distributed over 40 CD ROMs containing a compilation of environmental tools for Toxics Free Schools.
- Held cross-office discussions and trainings to better coordinate the many EPA programs that work with or impact schools.
- Funded two EMS pilot projects with schools in MA and ME to identify ways to improve environmental performance.

To coordinate the many EPA programs that involve secondary schools and develop a holistic/integrated approach to schools, the Region began cross-office discussions and initiated the following activities:

- Held Learning Sessions for Regional staff that work with schools. The sessions focused on Environmental Management Systems and Tools for Schools.
- Obtained funding from several headquarters offices for holistic schools work. Funding was provided from the Office of Water, the Office of Children’s Health, and the Office of Enforcement and Compliance Assurance. This funding was combined with existing funding from the Office of Pollution Prevention and Toxic Substances in order to pilot test EMS development in schools in MA and ME, and to initiate a project designed to determine the existing barriers that prevent schools from performing well with respect to environmental responsibilities, as well as incentives which could be provided to improve performance.

Future Work

In 2003, EPA will:

- Pilot test the use of environmental management systems as an efficient and effective tool for comprehensively identifying and addressing environmental concerns in schools.
- Systematically evaluate the barriers preventing schools from dealing with environmental problems and the incentives that would be most effective in promoting change and then use these findings to encourage improved environmental performance.
- Develop a Regional schools web page.
- Develop a Regional schools database, which incorporates information from individual programmatic efforts in the Region, in order to provide a more complete picture of EPA interactions with particular schools, and pertinent environmental data.
- Continue internal EPA coordination efforts designed to improve understanding among EPA staff on the range of environmental issues in schools, as the Region moves towards a more holistic and multi-media approach to addressing these issues.

Contacts and Information

For more information about K-12 schools, visit: <http://www.epa.gov/schools>.

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Small Drinking Water Systems

Providing compliance and technical assistance to small drinking water systems

Environmental Problem

In New England, 95% of the 12,000 public drinking water systems are small (each serving less than 3,300 people) and 90% of these small systems are the very smallest, each serving less than 100 people. In total, small systems (SS) serve approximately 1,950,788 people in New England (14% of the total population). Drinking water sources for these small systems are threatened by potential contamination from multiple sources, including failed septic systems, leaking sewer lines, agricultural runoff, and land discharges which may seep through soils. To address these problems, small system operators need to know how to conduct water sampling and implement water quality improvements in accordance with state and federal requirements.

Work in 2002

In 2002, EPA chose to address drinking water in schools and developed an integrated strategy (to be implemented in 2003) that addresses lead in drinking water at K-12 schools in New England. Planning in 2002 also resulted in a January 2003 New England Drinking Water Technologies Advisory Board meeting with NEIWPC and the New England states where the states were

updated on arsenic technology development and pilot demonstrations, technology approval protocols to streamline region-wide technology adoption, and discussed waste generated from drinking water treatment.

Future Work

In 2003, A&P2 staff will conduct the following activities:

- Create a "Lead in Drinking Water at Schools" outreach package that will initially be distributed to schools in Maine and Massachusetts.
- Select an additional sector for drinking water assistance outreach (possible options include mobile home parks, day-care facilities, campgrounds, churches or welcome centers).
- Assist the Maine Drinking Water Program with developing, implementing and measuring the impacts of arsenic removal training for small systems.
- Conduct additional New England Drinking Water Technologies Advisory Board Meetings to enhance state collaboration on protecting drinking water.

Contacts and Information

For contacts in the Drinking Water program, visit:
www.epa.gov/region01/eco/drinkwater/contacts.html.

For information on the Drinking Water program in New England, visit:
www.epa.gov/region01/topics/water/drinkwater.html.

For information and tools for small systems, visit: www.epa.gov/safewater/smallsys.html.

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Storm Water Outreach

Maximizing awareness of expanded requirements under the National Storm Water Phase II Program

Environmental Problem

Storm water runoff is a significant source of chemicals, sediments, trash, and microbe contamination of New England waters. The national Storm Water Phase II program will reduce this contamination by applying requirements to an expanded number of communities, municipal facilities, and construction projects. Hundreds of smaller communities will have to apply for permits for the first time and develop comprehensive

2002 Highlights

- Four meetings on ways to meet Phase II obligations for VT, ME, and NH communities, and the Charles River Watershed Committee.
- Eight workshops for publicly-owned wastewater treatment plants on how to plan and budget to meet Phase II requirements or apply for a no-exposure exclusion.

storm water management programs. Developers and construction firms will need permits for projects of one acre or larger (the current threshold is five acres). Municipal operations such as solid waste recycling, vehicle maintenance, and wastewater treatment facilities may need to apply for permits. The first compliance deadline for Phase II was March 2003.

Due to the large number of facilities and sites affected for the first time by Phase II, EPA New England is working to publicize both the requirements of the Phase II program, and practical solutions to meet them. The goal is to maximize the number of successful permit applications and quality of storm water plans.

Work in 2002

Beginning in 2001 and continuing in 2002, our efforts focused on helping states develop Phase II programs (including outreach components) and build relationships with regulated municipalities, companies, and organizations to spread information about the program. Specific accomplishments in 2002 included the following:

- Four introductory conferences for VT, ME, NH, and the Charles River Watershed Committee.
- 25 workshops for wastewater treatment plants, highway garages, and the construction sectors.
- A seminar for EPA and state staff on optimal construction industry soil and erosion control practices.
- A construction permitting decision tree to help contractors and developers determine which storm water permits they need and where to get them (developed in partnership with the state agencies).
- The creation and distribution of model storm water plans for highway garages and wastewater plants.
- Five magazine articles on Phase II requirements.
- Flyers and other handouts for outreach events.

Future Work

In 2003, A&P2 will continue to work with municipalities to help them develop and implement their community storm water management plans. In addition, outreach regarding storm water permitting for construction projects will intensify in an attempt to reach the myriad companies, local governments, institutions, and others whose smaller (1+ acre) projects are newly regulated as of March 10, 2003.

Contacts and Information

For more information about storm water, visit:
www.epa.gov/region1/topics/water/stormwater.html.

Storm water information for communities

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Storm water information for construction

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Encouraging Superior Environmental Performance

While traditional regulatory approaches keep most forms of pollution in check, additional gains can be made by developing more dynamic ways of improving environmental protection. In and of themselves, regulations fail to provide positive incentives to motivate regulated parties to move beyond compliance. In some cases, regulations may be too cumbersome or complicated for businesses that lack basic expertise and resources. Finally, existing regulations may not address emerging environmental issues that require new solutions.

To address these limitations, the A&P2 Office works as a laboratory to test voluntary programs that improve environmental protection and promote superior environmental performance. In particular, the A&P2 Office undertakes the following efforts:

- Become a model of environmental achievement by “greening” EPA New England’s facilities and operations.
- Establish and promote voluntary programs that commit participants to environmental goals that exceed minimum compliance levels.
- Work with states, municipalities, industries, trade organizations, environmental groups, and other stakeholders to develop solutions for emerging environmental problems.



Greening Government Agencies

Reducing the environmental impact of EPA New England's facilities and operations

Environmental Problem

With 1.5 million employees, tens-of-thousands of facilities and a budget that accounts for 7% of the Gross National Product, the federal government makes operational and resource management decisions that greatly impact the environment and the economy. The federal government is the largest consumer of energy in the nation (with an annual energy bill of nearly \$8 billion) and the largest single purchasing entity for copy and printing paper, computers, office supplies, and many other products and services. As a result of this consumption, taken as a whole, federal facilities deplete natural resources and generate large quantities of air pollution, greenhouse gases, ozone depleting chemicals, wastewater, solid and hazardous waste.

EPA New England first began to address its environmental footprint in 2000 by establishing a goal of reducing carbon dioxide emissions from the One Congress Street building by 20%, mainly through energy and solid waste reductions. In response to this goal, the building owner installed an energy and lighting management system that is expected to achieve a 30% reduction

in energy use. The development of the Green Team expands upon these efforts by examining all of the region's operational and business activities for cost-effective ways to protect the environment.

Work in 2002

In 2002, the Green Team was established as an employee-run initiative to identify and implement projects that minimize the agency's environmental impact. The mission of the Green Team is:

To "green" EPA New England's operational practices and change employee behaviors at work and home to reduce negative impacts on the environment, and through these actions, provide information and leadership for others to do the same.

After recruiting 50 individuals from all EPA divisions, the team generated 115 possible ideas for projects. Of these, ten project areas were chosen, including mass transit, fleet management, the region's future location, developing an Environmental Management System (EMS), mail, printers, electronic transmissions, environmentally preferable products and green meetings, and communications and education of employees.

The team also committed to assure the long term viability of our environmental programs through implementation of an Environmental Management System (EMS) in our Boston Office and at our Chelmsford laboratory.

Future Work

In 2003, the Green Team will continue to identify and implement sustainable projects that improve the operational efficiency and environmental performance of the region's office and laboratory facilities. These accomplishments will be featured on a Green Team web site planned for the fall of 2003. Efforts will also be made to integrate Green Team projects with the EMS program.

2002 Highlights

- Established a 50-member Green Team to identify and implement sustainable practices at EPA New England's Boston office and laboratory.
- Reduced paper use by providing on-line access for internal newsletters, notices, news clips, and reservation requests for rooms and vehicles.
- Leased four hybrid vehicles, resulting in 6,000 pounds of CO₂ reduction per year when compared to average gasoline-powered motor pool sedans.
- Purchased approximately 1,750 cartons of 100% recycled content, process chlorine free copy paper, saving over 40 trees per year.
- Used recycled content, soy-based award plaques at ceremonies.

Contacts and Information

For more information about EPA New England's laboratory, visit:
www.epa.gov/region01/about/lab/index.html.

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National Environmental Performance Track

Encouraging and recognizing environmental excellence through voluntary commitment

Environmental Problem

Regulators do not have the resources to assure compliance at all regulated facilities. Furthermore, many environmental problems are not adequately addressed by laws and regulations (e.g., natural resource depletion, greenhouse gas emissions). At the same time, many in the regulated community are implementing EMSs, whether based on ISO 14001 or some other model, in order to maximize environmental protection through the use of good business strategies and best management practices. Innovations in environmental management can be used to create strategic business opportunities and advantages while maximizing the health and productivity of our ecosystems and communities.

2002 Highlights

Thirty-three New England facilities have committed to 132 environmental improvements over the course of their three year participation in the Performance Track program. For example:

- 6 facilities have committed to reduce VOC emissions by 34,100 pounds.
- 20 facilities have committed to reducing their hazardous solid waste generation by 4,500 tons.
- 25 facilities have committed to reducing their generation of non-hazardous solid waste by 4,130 tons.

The National Environmental Performance Track program is an important public/private partnership that encourages environmental excellence, involves communities in environmental protection, and focuses on measurable results. Performance Track members demonstrate in their daily business operations that economic prosperity and environmental protection can go hand in hand. Performance Track is open to facilities of all types, sizes, and complexity, public or private, manufacturing or service-oriented. Performance Track is designed to recognize facilities that consistently meet their legal requirements and have implemented high-quality environmental management systems. Performance Track encourages facilities to continuously improve their environmental performance and to work closely with their community and employees. Facilities applying to Performance Track must have: An EMS in place; a history of sustained compliance; a commitment to continuous environmental improvement; and a community outreach program.

Work in 2002

Of the approximately 300 Performance Track facilities nationwide, 35 facilities (covering 63 locations) are located in New England. In 2001, EPA New England held:

- Three Performance Track Roundtables and Luncheons for New England members. These semi-annual events help to deliver one of the important program incentives – information sessions with senior EPA officials to share lessons learned and to improve the program.

- An application workshop to assist facilities interested in applying to the program.
- A meeting in conjunction with Maine Department of Environmental Protection to inform the regulated community about Maine’s Step-Up Program and Performance Track.

To evaluate the effectiveness of Performance Track, EPA conducted 4 facility site visits to assess the implementation of the Performance Track program. While some areas for improvement were noted, no major issues were identified.

Future Work

In 2003, EPA New England will continue to strategically target sectors that will benefit from the use of EMSs. EPA New England will be preparing a summary of the environmental accomplishments and outcomes of the New England Performance Track facilities, based on the first Annual Performance Reports which were finalized in late 2002. These findings will be made available to the public.

Contacts and Information

For more information about Performance Track, visit: www.epa.gov/performancetrack.

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Solid Waste Management

Collaborating with multiple stakeholders to build infrastructure for food residuals and electronic waste

Environmental Problem

Food residuals, which include plate wastes, prep wastes, and agricultural spoils, make up over 10% of the municipal waste stream in the United States and only 2.4% of it is recovered and diverted from disposal. The United States Department of Agriculture estimates that more than one quarter of food is wasted in this country and that a 5% reduction of this waste would result in a \$50 million savings in solid waste disposal costs. EPA has also recognized that food waste is one of the next recycling frontiers to tackle.

Disposal of electronic equipment (defined as any device that transfers voice and visual information) represents between 1% and 4% of the solid waste stream. In 2000, 2.1 million tons of consumer electronics (including audio, video and information products) were generated with approximately 9% recovered for reuse or recycling. Furthermore, electronic equipment contributes toxic materials such as lead, zinc, nickel, and cadmium to the solid waste stream. Electronics also contain precious metals, plastics, glass; valuable resources that could be recovered. However, the infrastructure to properly reuse, recycle, dismantle, and dispose of used electronics in an environmentally safe manner is in the formative stages.

Work in 2002

EPA New England has funded and worked with stakeholders to promote the diversion of food waste from disposal and assist in the creation of infrastructure to collect and process food waste into compost. Similarly, EPA and state regulators, electronics manufactures, and other stakeholders worked together on long term solutions to properly manage E-waste. Some specific activities include the following:

- Through a grant to the Center for Ecological Technology (CET) and partnering with the Massachusetts Department of Environmental Protection (MA DEP), A&P2 continued to explore opportunities for increasing the infrastructure for food residuals composting in the state of Massachusetts.
- Supported by an EPA grant, CET organized a summit meeting in Massachusetts to discuss barriers to food residual composting and identify cost-effective solutions. As a result, more infrastructure will be established in Massachusetts.
- Region I funded the Northeast Recycling Council (NERC) to conduct a Rural Community Electronics Recycling Project. The objective of this project was to promote interstate cooperation in developing and implementing rural recycling/re-use programs. The project created a model for other multi-state and regional collaborations to establish cost-effective CRT recycling/re-use programs in rural settings.

Future Work

The following solid waste management activities are planned for 2003.

- EPA New England will fund NERC to conduct a study of Reused Electronics Market Sustainability in New England. The study will surveying vendors involved with the reuse of computers and TVs and determine the economic viability and sustainability of this aspect of used electronics management.
- The Region will work with the Product Stewardship Institute (PSI) and other state procurement officials to develop informational resources that will assist state and local government procurement officials in the procurement of environmentally preferable electronics. The specifications will call for less toxic materials and equipment designed to foster dismantling, recycling and remanufacturing.

2002 Highlights

By partnering with stakeholders, EPA New England accomplished the following:

- Supported the National Electronics Product Stewardship Initiative (NEPSI). The goal of the NEPSI dialogue is “the development of a system, which includes a viable financing mechanism, to maximize the collection, reuse, and recycling of used electronics, while considering appropriate incentives to design products that facilitate source reduction, reuse and recycling; reduce toxicity; and increase recycled content.”
- Sponsored Tufts University’s Gordon Institute to convene representatives from the industrial supply chain for engineering thermoplastics, government and academia. The project resulted in the recommendation for recycled material guidelines to the Institute of Scrap Recycling. The specifications will be discussed and voted on in their Spring 2003 meeting (visit www.isri.org/specs for more information).

- Supported by an EPA grant, the State of Massachusetts will create a model supermarket publication for the collection of food waste for composting.

Contacts and Information

To learn how to set up and operate a municipal electronics recycling/reuse program, visit the NERC website at:

<http://www.nerc.org/adobe/survey/index.html>.

Food Residuals Management

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Solving Environmental Problems with Innovative Programs and Pollution Prevention Funding

The A&P2 Office promotes alternative approaches to traditional command and control environmental protection. These include innovative programs that provide the regulated community access to environmental technologies and increased regulatory flexibility. The A&P2 Office also provides federal funds to New England state and interstate organizations to support innovative pollution prevention projects.

- The Center for Environmental Industry and Technology (CEIT) was created specifically to help technology users and developers overcome information barriers. Through its publications, on-line technology databases, and workshop series, CEIT fosters the necessary networking and collaboration that helps match technology users and developers to each other and to proper resources.
- The A&P2 Office supports innovative programs, such as the Experimental Projects program to help companies overcome regulatory barriers, increase efficiency, and improve environmental protection.
- The A&P2 Office provides pollution prevention funding to state agencies and interstate organizations to develop address the source of environmental problems.



Center for Environmental Industry and Technology (CEIT)

A clearinghouse of environmental technology information for technology users and developers

Environmental Problem

Technology innovation is indispensable to achieving environmental goals. Many current technologies fail to solve pressing environmental problems and, in some cases, are too costly for widespread adoption. Unfortunately, technology developers confront a range of regulatory and market-based obstacles to acceptance of their products. Furthermore, when new technologies are developed, the regulated community frequently lacks the expertise to select the technology that will achieve compliance or take them beyond compliance. To address this situation, the Center

for Environmental Industry and Technology (CEIT) was established to help environmental technologies find their way to the market place.

Work in 2002

One the Center's main functions is to act as a clearinghouse for information, simplifying the technology developer's search for the right federal or state program. The Center's free monthly electronic newsletter

EnvirotechNews provides technology developers with information relevant to the environmental technology industry, such as government funding opportunities, Environmental Technology Verification (ETV) opportunities, and an events listing. The newsletter also provides a "Technology Opportunity" section that solicits environmental technologies through anonymous requests by organizations seeking solutions to their regulatory problems. For more in-depth information, CEIT publishes *Technovation*, a technical bulletin that highlights government programs and promising technologies. Additionally, through the **CEIT Hotline**, CEIT staff refer callers to the appropriate organization, program or agency.

2002 Highlights

- Sent 12 monthly issues of EnvirotechNews to over 950 subscribers.
- Answered 750 technology requests.
- Published an issue of Technovation entitled: "Small Business Access to Research and Development Funds.
- Sent 26 Post Inspection Letters to recently inspected facilities and developed a companion web site, "Solutions".
- Added 14 New Technologies to the Innovative Technology Inventory on the web, bringing total number of technologies to 140.
- Placed 11 Technology Connection announcements in EnvirotechNews, each received several responses.
- Received an average of 14,000 requests per month for pages from CEIT's web site.

The Center also sponsors **Golden Opportunity Seminars** in which participants learn of opportunities for research and development funding, such as EPA's Small Business Innovation Research (SBIR) Program. In recognition of CEIT's support for EPA's SBIR program, headquarters allocated \$2 million for a special EPA-NE SBIR solicitation for technologies to address arsenic in drinking water, storm water, combined sewer overflows (CSOs), infrastructure, and resulting contaminated sediments in urban rivers. Phase I opened on January 30, 2002 and closed on March 21, 2002. Between December and March, CEIT and ORD staff answered hundreds of telephone calls and distributed 1,000 copies of CEIT's updated SBIR *Technovation*, a technical bulletin which summarizes all the presentations from CEIT's SBIR workshops. By the close of the solicitation, EPA received 84 Phase I proposals; 50 proposals for the Arsenic topic and 34 for the remaining topics. CEIT participated in the selection of the winning proposals. On September 30, 2002, HQ announced that 14 proposals were selected for Phase I funding with the following breakdown by topic: two Storm Water, two CSO, two Urban Infrastructure Rehabilitation, and eight Arsenic Removal.

CEIT also helps regulators and technology developers overcome regulatory and institutional barriers. The **New England Interstate Regulatory Cooperation Project** (a collaboration among CEIT, EPA New England program staff, the six New England states, and interstate organizations such as the Northeast Waste Management Officials' Association [NEWMOA] and the New

England Interstate Water Pollution Control Commission [NEIWPC]), shares information about new technologies and speeds their common adoption among the six states. Two key areas for activities in 2002 included (1) improving the quality of site characterization at small hazardous waste sites and (2) assisting small water supply systems in meeting regulatory requirements through new drinking water treatment technologies. CEIT sponsored two trade shows for Site Characterization and Monitoring with NEWMOA in June, 2002, and over 150 regulators, scientists, and business representatives attended these meetings. **The New England Regional Drinking Water Advisory Board**, a cooperative effort with EPA New England's Office of Ecosystem Protection, NEIWPC, the New England states and the Water Treatment Technology Assistance Center at the University of New Hampshire, organized a meeting for Fall, 2002, but due to state budget constraints it was postponed until 2003.

In 2002, CEIT developed a Post Inspection Letter with the Enforcement Office and this letter is now being sent to facilities after they receive inspections by EPA. The letter includes an attachment of Environmental Sustainability Resources listed under ten topics. These resources are also available on the companion "Solutions" web site: www.epa.gov/ne/solutions. CEIT also offers web-based resources for the regulated community to access information about new technologies. These include a web-based searchable **Innovative Technology Inventory** and Virtual Trade Shows for storm water and wastewater treatment technologies, totaling 140 available technologies. In addition, Technology Connection, a service which searches for technologies to solve environmental problems, is now available on CEIT's web site.

Future Work

In 2003, CEIT will continue to offer its Ombudsman Hotline, EnvirotechNews, Technovation publications, and Golden Opportunity Seminars. CEIT will also promote its web services, including the Virtual Trade Shows, the Innovative Technology Inventory, and Technology Connection to the regulated community through mailings and outreach activities. Under the New England Interstate Regulatory Cooperative Project, CEIT will organize two Drinking Water Advisory Board meetings. Through EPA's Small Business Innovation Research Program, CEIT will also follow the progress of the Phase I technologies that address New England's environmental needs. In addition, CEIT will work with the Enforcement Office by following up inspections with the mailing of the Post Inspection Letter.

Contacts and Information

For more information, visit CEIT's web site at: www.epa.gov/ne/assistance/ceit/ or call the CEIT Hotline (from New England only) at 1-888-575-CEIT (1-888-575-1783).

To access a list of environmentally sustainable resources, visit the "Solutions" web site at: www.epa.gov/ne/solutions.

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Experimental Projects

Testing and implementing innovative regulatory approaches to deliver superior environmental protection

Environmental Problem

Thirty years of “command and control” regulations have minimized the effects of pollution and improved the quality of the nation’s air, soil and water. Regulators and businesses, however, continue to search for more cost-effective ways to improve the process of environmental protection. In part, this search is driven by shrinking state budgets and the need to address environmental problems more effectively with fewer resources. In addition, businesses say they are willing to accept more responsibility for their environmental performance and are calling for a more

collaborative approach to environmental protection. This new attitude is based on a growing business trend that promotes environmental performance as a key business strategy. Consequently, companies are willing to accept greater responsibility and accountability in exchange for a less prescriptive regulatory approach. The A&P2 Office’s Experimental Projects Group addresses these trends by assessing and implementing new regulatory approaches in cooperation with private and public sector stakeholders.

2002 Highlights

- Supported the Regional Innovations Workgroup to investigate better ways to achieve core regulatory goals.
- Worked with the New England states to explore the potential for establishing Environmental Results Programs (ERP) for selected sectors.
- Collaborated with stakeholders to introduce innovative regional programs as potential models for national implementation.

Work in 2002

Work accomplished in 2002 falls into three categories. First, EPA New England, in conjunction with the states, established the Regional Innovations Workgroup to explore innovative solutions to problems in traditional core program areas. With members from the states and the region, the Workgroup explores how to overcome inconsistencies and inefficiencies that exist between federal and state regulatory implementation. The Workgroup has concentrated on such issues as Total Maximum Daily Loads (TMDLs) and “functional equivalency” for state regulatory programs.

Second, the A&P2 Office continued to support, implement, and assess projects that use innovative regulatory approaches to achieve better environmental results. This effort included the following projects:

- The P4 Permit for Pulp & Paper Partners (P7) project, with support from EPA Headquarters, began a process to develop a P2-oriented permit for pulp and paper mills that is holistic,

flexible and better for the environment. This collaborative project garnered interest from offices within EPA, the states of Maine and New Hampshire, and industry.

- New Hampshire’s Groveton Paperboard ECOS Project proposed a different method of achieving the results sought by the Cluster Rule, a comprehensive regulation of pulp and paper facilities. As a result, the mill controlled almost four times the hazardous air pollutants (HAPs) than would have been controlled under maximum achievable control technology (MACT) and saved \$950,000 in avoided costs.
- The New England University Labs XL Project allowed participating educational institutions (Boston College, University of Massachusetts - Boston, and the University of Vermont) limited regulatory flexibility to develop and implement tailored environmental management plans (EMPs) to improve their compliance and environmental performance. Lessons from this lesson will inform how laboratories are regulated in the future.

Third, the Experimental Projects group worked with stakeholders to identify and evaluate successful experimental projects in New England and propose them as national models of environmental innovation. Projects that were evaluated and prepared for “scaling up” included the following:

- The International Paper Predictive Emissions Monitoring Systems (IP-PEMS) project provided limited regulatory flexibility to allow the International Paper company to test a computer model that provides a continuous estimate of emissions from its waste fuel incinerator. In 2002, the resulting analysis showed that the PEMS allowed the facility to develop increased power production by more than 40%, decreased fossil fuel usage by nearly 75%, and reduced emissions of criteria pollutants by 16%.
- The Massachusetts Department of Environmental Protection (MA DEP) created the Environmental Results Program (ERP) to reduce the regulatory burden on small business while improving compliance and encouraging better environmental performance. The ERP program replaces formal state-issued permits with simplified and standardized requirements and a self-certification procedure for small businesses (i.e., dry cleaners, printers, and photo-processors). In 2002, MA DEP reported that the ERP program achieved a 98 percent compliance rate with the self-certification requirement. This model is now being expanded in other sectors.

Future Work

In 2003, the Experimental Projects group will continue to:

- Work with the Regional Innovations Workgroup to investigate better ways to achieve core regulatory goals.

Contacts and Information

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- Implement projects that use regulatory flexibility and enhanced accountability to attain better environmental results.
- Evaluate and promote regional innovative projects as models for national innovation.



Pollution Prevention Grant Program

Providing financial assistance to support innovative P2 projects and build state P2 capabilities

Environmental Problem

In its first twenty years, EPA relied on waste management and end-of-pipe treatment to address the problem of industrial pollution. While this approach succeeded in controlling many egregious environmental problems, it has also proved to be expensive. For example, in 1999, pollution abatement capital expenditures and operating costs in the United States totaled more than \$17.6 billion. Acknowledging the need to reduce pollution “at the source” as a more efficient approach, Congress passed the Pollution Prevention Act of 1990 to authorize EPA to promote source reduction.

2002 Highlights

- Awarded almost \$480,000 to eight state agencies and one tribe to address some of the region’s most pressing environmental problems using preventive approaches.
- Helped set priorities and procedures for P2 grant and other resources at the EPA national level.

Recognizing the economic and environmental benefits of P2, EPA provides about \$5 million annually to states to assist businesses, institutions, and others in adopting P2 – often as a means for complying with state and federal environmental regulations. The P2 Grant Program, formerly known as Pollution Prevention Incentives for States (PPIS), builds and supports state pollution prevention capabilities and tests, at the state level, innovative approaches. EPA regional offices make P2 Grant awards to states agencies and federally-recognized Indian tribes. These grants have helped companies and others generate less pollution, reduce waste manage costs, improve production efficiency, enhance worker health and safety, and decrease their environmental regulatory burdens.

Work in 2002

In 2002, the Assistance and Pollution Prevention Office provided almost \$480,000 in P2 Grants to nine state and tribal organizations: CT DEP, MA OTA, ME DEP, NH DES, VT DEC, the Houlton Band of Maliseet Indians, Rhode Island Narragansett Bay Commission, University of Massachusetts - Lowell, and University of Rhode Island. The P2 funds allowed grant recipients to offer environmental assistance to the regulated community and citizens, and to try new ways to encourage regulated entities to move beyond minimal levels of compliance toward improved environmental performance. The P2 Grant recipients targeted a variety of sectors for assistance,

including auto repair, boat building and repair, dry cleaning, hospitals and healthcare, K-12 schools, municipalities, printers, shooting ranges, surface coating, residential septic systems, and vehicle salvage. The types of P2 assistance provided to these sectors included on-site assistance, technology demonstration, workshops, mentoring programs, recognition and certification programs, and publications (i.e., fact sheets, case studies, and newsletters).

Future Work

In 2003, the A&P2 Office will continue to manage the P2 Grants program by soliciting P2 proposals from New England state agencies and tribes. Efforts will also be made to help grant recipients achieve their goals and support P2 priorities at the national level.

Contacts and Information

For more information about EPA's Pollution Prevention Grant Program, visit:

www.epa.gov/oppt/p2home/grants/ppis/ppis.htm

For information about the P2 Grant Program, visit:

www.epa.gov/oppt/p2home/grants/ppis/ppis.htm

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List of Acronyms

A&P2	EPA New England's Assistance and Pollution Prevention Office
APWA	American Public Works Association
BMP	Best Management Practice
CAA	Clean Air Act
C/Us	Colleges and Universities
CEIT	EPA New England's Center for Environmental Industry and Technology
CET	Center for Ecological Technology
COD	Chemical Oxygen Demand
CSO	Combined Sewer Overflow
CT DEP	Connecticut Department of Environmental Protection
EHS	Environmental, Health and Safety
EMS	Environmental Management System
EPCRA	Emergency Planning and Community Right-to-Know Act
EPM	Environmental Management Plan
ERP	EPA New England's Environmental Results Program
ETV	EPA's Environmental Technology Verification Program
H2E	Hospitals for a Healthy Environment
HVAC	Heating, Ventilating, and Air Conditioning
IBM	International Business Machines, Inc.
IP	International Paper Company
MA DEP	Massachusetts Department of Environmental Protection
ME DEP	Maine Department of Environmental Protection
MPG	Miles Per Gallon
NEIWPCC	New England Interstate Water Pollution Control Commission
NEPSI	National Electronic Product Stewardship Initiative
NERC	Northeast Recycling Coalition
NEWMOA	Northeast Waste Management Officials' Association
NH DES	Department of Environmental Services
NPDES	National Pollutant Discharge Elimination System
OES	EPA New England's Office of Environmental Stewardship's
OPPTS	EPA Office of Prevention, Pesticides and Toxic Substances
P2	Pollution Prevention
R&D	Research and Development
RCRA	Resource Conservation and Recovery Act's
RI DEM	Rhode Island Department of Environmental Management
SBIR	Small Business Innovation Research
SPCC	Spill Prevention Control and Countermeasure
SPG	Strategic Goals Program
VT DEC	Vermont Department of Environmental Conservation
WFI	Waste Fuel Incinerator
XL	EPA's eXcellence in Leadership Project