United States
Environmental Protection
Agency

Office of the Administrator (1102)
Office of Pollution Prevention
and Toxics (7401)

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EPA

EPA Pollution Prevention Accomplishments: 1993

Policy Leads to Action

"The Pollution Prevention Act established a new national policy for environmental protection: 'that pollution should be prevented or reduced at the source whenever feasible....' This deceptively simple statement heralds a profound change in how EPA meets its obligations to protect human health and the environment. In the past, we emphasized 'end of pipe' treatment of waste after it was produced. Today, we must move upstream in the manufacturing process to prevent the waste from being generated in the first place."

–Administrator Carol M. Browner

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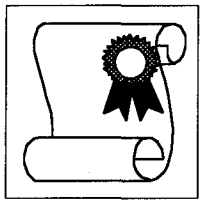
I. Introduction

On June 15, 1993, EPA Administrator Carol M. Browner signed the Pollution Prevention Policy Statement (see Appendix), which provides a framework for integrating pollution prevention into all EPA programs and activities. The Policy Statement outlined how the Agency expects to achieve the broad national goal established by the Pollution Prevention Act of 1990: reducing or eliminating waste at its source, rather than trying to control it after it has been produced. This report identifies major actions that EPA took in 1993 to achieve this goal through:

- Regulations and Compliance
- State and Local Partnerships
- Private Partnerships
- Federal Partnerships
- Public Information/The Right to Know

Extensive information on EPA's efforts related to environmental technology is available from the Office of Research and Development (ORD). An overview of this research, which underlies much of the Agency's pollution prevention work, is available in the following reports: "Environmental Technology Initiative: FY 1994 Program Plan," EPA 543-K-93-003, January 1994; and "Technology Innovation Strategy," EPA 543-K-93-002, January 1994. Please call Paul Shapiro of ORD at (202) 260-4969 for further information. If you have questions about this report, please call the specific contacts listed at the end of each section, or Mike Schiavo of the Pollution Prevention Policy Staff at (202) 260-2824. For additional copies of the report or for further information about other important activities not covered in this document, please call the Pollution Prevention Information Clearinghouse at (202) 260-1023.



II. Summary of 1993 Pollution Prevention Accomplishments

Office of Enforcement Reorganization: On October 12, 1993, Administrator Carol M. Browner announced a major reorganization of EPA's enforcement program. The reorganization established a new Office of Compliance, organized primarily around economic sectors, to support integrated approaches to compliance that promote pollution prevention as a means of meeting environmental requirements.

Source Reduction Review Project: EPA proposed a rule for the pulp and paper industry and issued a degreasing MACT standard, both of which are based on source reduction technology.

Green Sector Project: In November of 1993, the Administrator announced plans to develop comprehensive environmental protection strategies for specific industries, in order to provide cleaner, cheaper environmental protection and to serve as models for future interactions with all industries.

Pollution Prevention Integration into Media State Grants: States and EPA regions continued to demonstrate progress integrating pollution prevention into ongoing program activities in addition to EPA's special state prevention grants.

33/50 Program: Emissions of 33/50 program chemicals for the 1991 reporting year had declined 34 percent since 1988, surpassing the program's interim goal of a 33 percent national reduction a full year ahead of schedule.

Design for the Environment: The DfE program continued its successful work in many areas, including printing, dry cleaning, accounting, and capital budgeting.

Green Lights: By installing energy-efficient lighting, Green Lights participants reduced air pollution by 450 million pounds of CO_2, 3.3 million pounds of SO_2, and 1.6 million pounds of NO_x – over four times the amount of CO_2 and NO_x and over three times the amount of SO_2 emissions prevented by the program in 1992.

Other Partnership Programs: EPA continued to build pollution prevention partnerships with the computer industry (Energy Star Computers) and the lodging industry (WAVE), and also launched a program to encourage companies to voluntarily reduce solid waste (Waste Wi$e).

Presidential Executive Orders: In the latter part of 1993, EPA and other federal agencies began developing plans to implement five Executive Orders designed to make the federal government an environmental leader.

Toxic Release Inventory: 1993 marked the first year that data collected under the Pollution Prevention Act of 1990 were released with the Toxic Release Inventory. The Agency also announced plans to expand TRI to include over 300 additional chemicals.

III. Integrating Pollution Prevention into Mainstream Activities

"The mainstream activities at EPA, such as regulatory development, permitting, inspections, and enforcement must reflect our commitment to reduce pollution at the source and minimize the cross-media transfer of waste."

–except from the Pollution Prevention Policy Statement

Pollution prevention provides the critical link between environmental protection and economic productivity. It is therefore essential that EPA work across traditional program boundaries to integrate pollution prevention into its everyday activities. The reorganization of the Office of Enforcement, the Source Reduction Review Project, and the Green Sector project are three of the steps EPA has taken to shift its focus from single-media pollution control to multi-media pollution prevention within economic sectors.

Office of Enforcement Reorganization

Introduction

Since 1991, EPA has sought to modify its inspection and enforcement programs to encourage pollution prevention as the primary means of complying with federal environmental requirements. For example, EPA's Supplemental Environmental Projects (SEP) policy authorizes a reduction in civil penalties in exchange for pollution prevention projects that help correct underlying violations, as long as the net effect is to recover any economic benefits gained from noncompliance. In addition, EPA's grant flexibility encourages state innovations like the Massachusetts FIRST project, which uses pollution prevention technical assistance to correct problems identified during a multi-media inspection process.

Despite this progress, the division of responsibility among the Office of Enforcement and EPA's media programs has made it difficult to develop the kind of multi-media, whole-facility perspective that provides incentives for the use of pollution prevention to meet requirements. In addition, EPA has been criticized for inadequate attention to compliance strategies designed to prevent pollution at the source, thereby reducing the need for expensive and time-consuming enforcement actions.

The reorganization of the Office of Enforcement will address this problem by consolidating responsibility for these activities into a new Office of Enforcement and Compliance Assurance (OECA). A new Office of Compliance within OECA will be responsible for activities such as inspection, monitoring and measurement, and compliance assistance, and will be organized principally by economic sector. This organization breaks the single-media mold by requiring that basic compliance activities be organized around regulated activities in the chemical, commercial, energy, transportation and agricultural sectors.

Goals

The goals of the reorganization include:

- maintaining a strong enforcement presence to deter noncompliance;
- improving compliance rates and environmental quality;
- offering compliance assistance activities to complement traditional enforcement efforts; and
- pursuing multi-media, whole-facility approaches to compliance whenever appropriate.

1993 Highlights

- On October 12, 1993, the Administrator announced a major reorganization of EPA's enforcement program, which is expected to take effect in the early spring of 1994. The new office will report to the Assistant Administrator for Enforcement and Compliance Assurance.
- The reorganization establishes a new Office of Compliance, organized principally around economic sectors, to support integrated approaches to compliance that promote pollution prevention as a means of meeting environmental requirements.
- This sector orientation was strongly supported during the public comment process by groups such as the Environmental Defense Fund, Amoco, Ciba-Geigy, and the States of Massachusetts and New York. The new office will support a renewed emphasis on multi-media strategies that make pollution prevention the cornerstone of compliance.
- The reorganization also establishes a new Multi-Media Division within the Office of Regulatory Enforcement responsible for multi-media enforcement actions and for encouraging the use of pollution prevention in settlements. This will greatly reduce the transaction costs associated with multi-media cases, which may present the best opportunity for incorporating pollution prevention into settlements.

Future Plans

EPA expects to complete the reorganization of the new enforcement program in the early Spring of 1994. As part of establishing its new agenda, the OECA expects to host public meetings to solicit suggestions as to how the Agency can promote pollution prevention through multi-media inspections, compliance assistance, and auditing, as well as through enforcement actions.

Contact

- **Debbie Villari**, Office of Compliance, (202) 260-1787

Source Reduction Review Project

Introduction

The Source Reduction Review Project (SRRP) was initiated in 1992 by EPA to evaluate pollution prevention alternatives during the regulatory development process. The project was established in response to Section 4(b) of the Pollution Prevention Act of 1990 (P.L. 101-508), which requires EPA to "review regulations of the Agency prior and subsequent to their proposal to determine their effect on source reduction." While the Pollution Prevention Act requires EPA to review all regulations, the SRRP allows EPA to focus its review on key regulations mandated by the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act.

Goals

The goal of the project is to foster the use of source reduction measures as the preferred approach for achieving environmental protection, followed in descending order by recycling, treatment, and, as a last resort, disposal.

1993 Highlights

- EPA proposed regulations in November to dramatically reduce and prevent air and water discharges of dioxin and other toxic pollutants by the U.S. pulp and paper industry. This represents the first time the Agency has ever proposed a rule that takes an ecosystem-wide approach to improving and protecting public health and the environment by combining air and water requirements in the same regulation.

- EPA issued the Degreasing MACT Standard, which includes pollution prevention language in the preamble. The rule is based on maximizing the efficiency of cleaning processes through equipment modifications, work practices, and good housekeeping, and explicitly discourages the use of treatment technologies, such as carbon absorption systems. The Agency's solvents work group is also analyzing potential substitutes to halogenated solvents, such as aqueous and semi-aqueous systems.

- The Office of Pollution Prevention and Toxics (OPPT) convened a workshop in September for SRRP participants from across the Agency to discuss SRRP successes to date, obstacles to source reduction in rule making, and ways to overcome those obstacles. The results of this workshop are being developed into an assessment paper tentatively titled: "Pollution Prevention Through Regulation: The Source Reduction Review Project."

Future Plans

- Document effective approaches to incorporating pollution prevention into rules to assist future Agency rule drafters.
- Work on expanding pollution prevention into all rules, and into all stages of rule makings (e.g., permitting and compliance activities).

Contact

- **Jocelyn Woodman**, Pollution Prevention Division, (202) 260-4418

Green Sector Project

Introduction

On November 19, 1993, the Administrator announced that EPA will develop comprehensive environmental protection strategies for specific industrial sectors. The effort will be led by the Assistant Administrator of the Office of Air and Radiation and the Assistant Administrator of the Office of Water. For each industry, EPA sector teams will:

- coordinate the development of regulations;
- review reporting requirements and institute more efficient reporting through electronic transmission of data;
- investigate opportunities for permit streamlining as proposed in the National Performance Review;
- review the effectiveness of the Agency's existing compliance strategy and enforcement activities;
- identify and apply the best innovative approaches to environmental protection, including pollution prevention and source reduction strategies, and voluntary programs such as Green Lights and WAVE; and
- establish close working relationships with industry sector representatives, states, other federal agencies, and environmental groups.

Goals

The goal of the project is to create comprehensive environmental programs for several pilot industrial sectors that will provide cheaper, cleaner environmental protection and serve as models for future interactions with all industries.

1993 Highlights

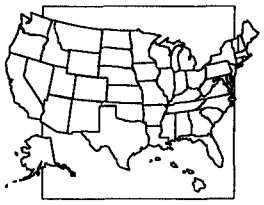
- The Agency's Green Sector team worked to identify the initial project time line, a preliminary list of candidate industries, potential industry selection criteria, and an outreach/public relations plan.

Future Plans

- A cross-Agency team is currently working to identify four to six potential sectors to participate in the program and to develop an implementation plan. The team will look to industry, states, and environmental groups for recommendations.

Contacts

- **Steve Harper**, Office of Air and Radiation, (202) 260-8953
- **Lea Swanson**, Office of Policy, Planning and Evaluation, (202) 260-5276
- **Vivian Daub** Office of Water, (202) 260-6790



IV. State and Local Partnerships

"Increasingly, state and local agencies are the 'face of government' for the general public. We will strengthen the national network of state and local pollution prevention programs, and seek to integrate prevention into state and local regulatory, permitting, and inspection programs supported with federal funds."

–except from the Pollution Prevention Policy Statement

Close cooperation between federal, state, and local government is critical in defining and achieving national environmental policy goals. State and local governments are often in better touch with industry and public needs and how to meet, and can serve as national laboratories for new experiments in pollution prevention. EPA is committed to working in partnership with state and local governments to encourage pollution prevention.

EPA continued to demonstrate this commitment in 1993 by offering Pollution Prevention Incentives for States (PPIS) grants for the first time through EPA's regional offices and by integrating pollution prevention into media state grants. The PPIS grant program, which has provided $20 million to more than 70 state and regional organizations since 1991, offers matching funds to states to support pollution prevention activities and develop state programs. Many PPIS grant recipients focus resources on technical assistance, outreach and education, regulatory integration, awards and recognition, or demonstration projects. EPA's efforts to integrate pollution prevention into media state grants are described in more detail below.

Pollution Prevention Integration into Media State Grants

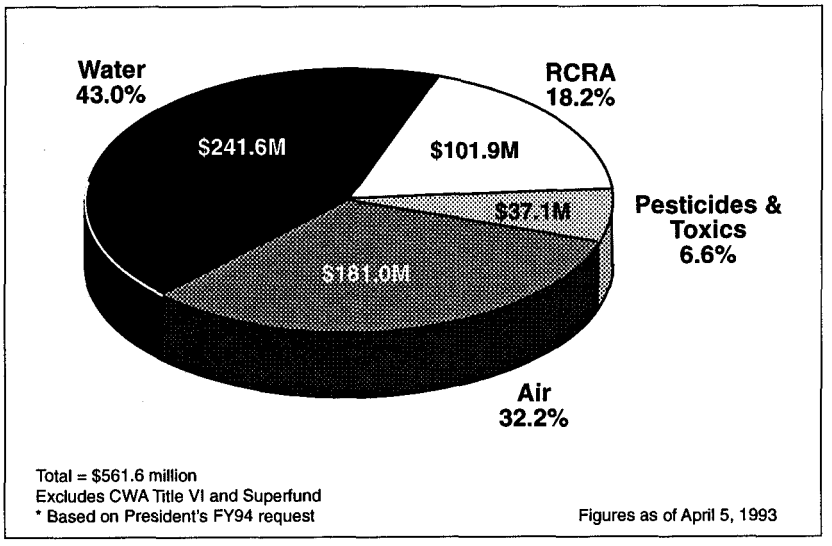
Introduction

In the November 12, 1992 Memorandum from the Deputy Administrator, "State Grants Guidance: Integration of Pollution Prevention," EPA established objectives for Agency-wide pollution prevention integration into media state grants. This media grant guidance is consistent with the new Executive Order 12875, *Enhancing the Intergovernmental Partnership*, signed by President Clinton on October 26, 1993, which requires federal agencies to "consider any application by a state, local or tribal government for a waiver of statutory or regulatory requirements...with a general view toward utilizing flexible policy approaches at the state, local and tribal level..."

Goals

- ❑ Support state pollution prevention activities by ensuring flexibility in grant requirements.
- ❑ Promote pollution prevention in federally funded state programs.
- ❑ Share information on successful programs and identify statutory or other barriers to pollution prevention.
- ❑ Build self-sustaining pollution prevention programs.

FY94 EPA Operations Grant Program Funding*



1993 Highlights

In FY 1993, states and EPA regions demonstrated progress in the integration of pollution prevention into ongoing program activities using media grants:

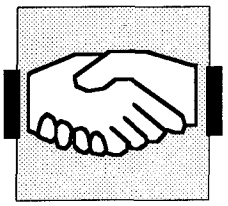
- EPA Region 1 granted Massachusetts' Waste Prevention Project the flexibility to identify alternate inspection goals.
- The Alaska Department of Environmental Conservation and EPA Region 10 agreed to direct 3% of eligible federal and state grant match dollars to support pollution prevention activities.
- The New York Department of Environmental Conservation's pollution prevention proposal to EPA Region 2 will incorporate Multi-Media Pollution Prevention (M2P2) program priorities as an integral part of Clean Air Act §105, Clean Water Act §106, and RCRA Subtitle C grant programs.
- From FY 1992 through FY 1994, Ohio and EPA Region 5, using the Great Lakes Basin Activities program element of the RCRA grant, have promoted a wide variety of pollution prevention activities.
- Maine's Department of Environmental Protection, working with EPA Region 1, has used Clean Water Act grants to focus pollution prevention activities on a single geographic area (Androscoggin River Watershed) using a multi-media approach that addresses both RCRA and Clean Air Act concerns.

Future Plans

EPA is committed to continued integration of pollution prevention into program activities using media grants. Administrator Browner has issued a memorandum to Associate Administrators and Regional Administrators requesting their full support for this Agency goal. In upcoming grant cycles, EPA will continue to document and publish media grant success stories that demonstrate progress in the integration of pollution prevention in media grants.

Contacts

- **Tom McCully**, Pollution Prevention Policy Staff, (202) 260-8617
- **Lena Hann**, Pollution Prevention Division, (202) 260-2237



V. Private Sector Partnerships

"We will identify and pioneer new cooperative efforts that emphasize multi-media prevention strategies, reinforce the mutual goals of economic and environmental well-being, and represent new models for government/private sector interaction."

–except from the Pollution Prevention Policy Statement

EPA's voluntary programs, including 33/50, Design for the Environment (DfE), and Green Lights, enjoyed many successes in 1993. These programs are designed to produce tangible environmental results quicker than regulation alone, and to encourage pollution prevention and energy efficiency by influencing corporate design, manufacturing, packaging, distribution, and marketing decisions. The programs offer encouragement, assistance, and public recognition to companies and organizations willing to commit the resources needed to get the job done.

33/50 Program: Reducing Risks Through Voluntary Action

Introduction

The 33/50 Program is aimed at determining whether voluntary reduction programs can achieve targeted reductions more quickly than the Agency's traditional command and control approach to environmental protection regulations. The Program encourages pollution prevention as the best means of achieving reductions in toxic chemical emissions, and seeks to instill a pollution prevention ethic at the highest echelons of American business by directing program communications to the chief executive officers (CEOs) of corporations that own manufacturing installations throughout the United States.

Goals

The 33/50 Program derives its name from its goals:

- a 33% reduction by 1992 of releases and offsite transfers of 17 high-priority toxic chemicals (see box below), using 1988 TRI reporting as a baseline; and
- a 50% reduction of these emissions by 1995.

17 PRIORITY CHEMICALS TARGETED BY THE 33/50 PROGRAM

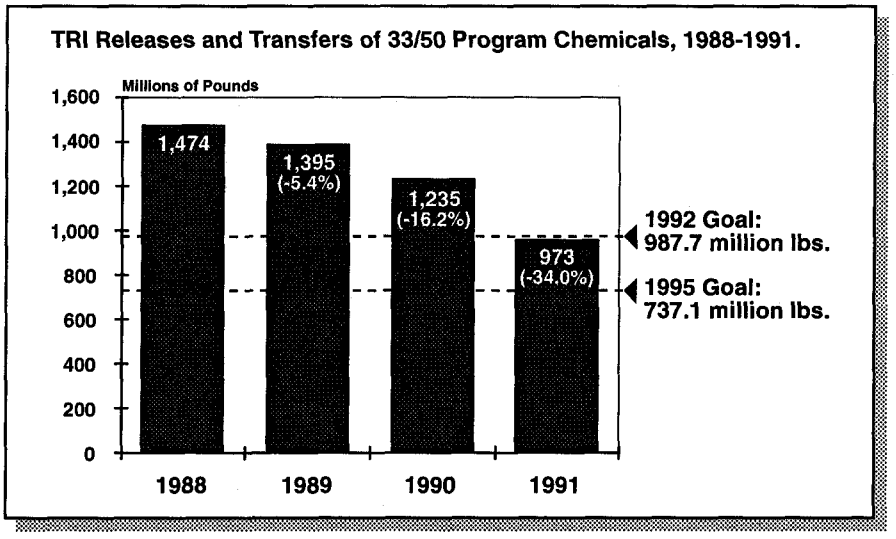
- Benzene
- Cadmium & Compounds
- Carbon Tetrachloride
- Chloroform
- Chromium & Compounds
- Cyanides
- Dichloromethane
- Lead & Compounds
- Mercury & Compounds
- Methyl Ethyl Ketone
- Methylene Chloride
- Nickel & Compounds
- Tetrachloroethylene
- Toluene
- Trichloroethane
- Trichlorethylene
- Xylenes

1993 Highlights

- TRI data released in May 1993 covering the 1991 reporting year revealed that emissions of 33/50 Program chemicals declined by 34% between 1988 and 1991, surpassing the program's 1992 interim 33% national reduction goal a full year ahead of schedule (see graph).

- Facilities' projected emissions through 1993 offer strong encouragement that the 33/50 Program's ultimate goal of a 50% reduction by 1995 will indeed be achieved, perhaps as much as two years ahead of schedule.

- Nearly 1,200 companies had elected to participate in the 33/50 Program by the end of 1993. The participation rate for the nation's top 600 firms exceeds 60%.



Future Plans

The 33/50 Program will follow an ambitious agenda in coming years:

- Efforts to expand company participation will continue with initial invitations to be offered to more than 1,000 new companies.

- Industry trade associations are being asked to assist EPA in convincing smaller companies to participate.

- The 33/50 Program is co-sponsor of a national conference in the Spring of 1994 to publicize the accomplishments of voluntary pollution prevention programs and their company and community partners.

- A formal 33/50 Program evaluation has been initiated to assess the program's success. To ensure its integrity, the 33/55 Program evaluation is being conducted under a cooperative agreement by INFORM, an independent environmental advocacy organization.

Contact

- Call EPA's Toxic Substances Control Act (TSCA) Hotline at (202) 554-1404, or fax your request to the TSCA Assistance Service at (202) 554-5603.

Design for the Environment Program

Introduction

The Design for the Environment (DfE) program in EPA's Office of Pollution Prevention and Toxics harnesses EPA's expertise and leadership to facilitate information exchange and research on pollution prevention efforts. Its wide-ranging projects include helping to change general business practices to provide incentives for pollution prevention efforts, working with businesses and trade associations in specific industries to evaluate the risks, performance, and costs of alternative chemicals, processes, and technologies, and helping individual businesses undertake environmental design efforts through the application of specific tools and methods.

Goals

- Create voluntary and cooperative partnerships between EPA, industry, communities, and other government entities.
- Create standard methodologies for using risk information and provide access to that information.
- Develop customer-focused information products to convey risk reduction and pollution prevention options.
- Provide incentives for industries to engage independently in risk reduction activities.

1993 Highlights

- EPA has formed strong partnerships with the printing and dry cleaning industry to evaluate alternative solutions to some of the environmental concerns these industries would like to address.

- The DfE Printing Project is currently conducting product demonstrations on a wide range of chemical solvents used in the printing industry. The information gathered will be included in a Cleaner Technologies Substitutes Assessment (CTSA), a document that will systematically evaluate a number of alternatives to current printing products and practices that may be polluting the environment.

- In October 1993, EPA announced the results of a joint DfE–dry-cleaning industry study that demonstrates the viability of an alternative, non-solvent, "wet" cleaning process that relies on biodegradable soaps, heat, steam, and pressing to clean clothes that are usually dry cleaned.

- DfE has begun a Chemical Design Project through which EPA aims to change the way organic chemists approach the design of synthetic pathways for chemical production. Many methods of synthesizing organic chemicals generate toxic by-products or use high-risk substances as feedstocks, solvents, and catalysts. EPA is encouraging consideration of alternative synthetic pathways through: 1) grant awards to academic institutions; 2) discussion at national symposia; and 3) use of computer programs to assist in the design of chemical pathways.

- Through the DfE Program, EPA is working with the General Services Administration (GSA) to develop standards for environmentally preferable cleaning agents that federal agencies can apply when making purchasing decisions.

- In December, EPA and its partners in the business, accounting, and engineering community held the first national workshop on integrating environmental costs into management accounting and capital budgeting practices. The "Stakeholder's Action Agenda," which is the culmination of the agenda-setting phase of the project, will be widely distributed in the Spring of 1994.

Future Plans

- DfE is in the beginning stages of projects in the computer, metal plating, and aerospace industries.

Contact

- **Libby Parker**, Design for the Environment Staff, (202) 260-0686

Green Lights Program

Introduction

Launched in January of 1991, Green Lights is a voluntary, non-regulatory program designed to prevent pollution through the initiative of organizations around the country. Green Lights seeks to engage the free market in an effort to promote profitable investments in energy-efficient technologies.

Any organization can join Green Lights. The over 1,200 current Green Lights participants represent a wide array of organizations: large and small corporations; state, city, and county governments; environmental organizations; electric utilities; and most of the lighting industry. By joining the program, participants can:

- save money on their annual electric bills;
- enhance their image by publicizing their participation in the program; and
- receive an array of continually evolving tools and services to help make a smooth transition to energy-efficient lighting.

By treating lighting as an investment opportunity rather than a fixed overhead cost, Green Lights participants realize average returns on their lighting investments of over 25 percent. These organizations are reducing their light electricity bills by 42 percent or more, while maintaining or improving lighting quality.

All Green Lights participants sign a Memorandum of Understanding (MOU) with EPA, agreeing to: (1) survey 100 percent of their domestic facilities; (2) upgrade their lighting where profitable and wherever it maintains or improves the quality of light; and (3) complete their lighting upgrades within five years. Participants also agree to appoint an implementation director responsible for ensuring timely implementation of lighting upgrades, and to work with EPA in publicizing the benefits of the program.

Goals

- Increase energy efficiency.
- Prevent pollution associated with electricity generation.
- Save money on energy bills.
- Increase economic competitiveness.

1993 Highlights

- The number of Green Lights participants increased from 725 to 1,238—an increase of over 70 percent.
- Participants have committed themselves to upgrade a total of four billion square feet of facility space—up from three billion square feet in 1992. The total facility space currently committed is more than three times the total office space of New York, Los Angeles, and Chicago combined.
- Over 430 participants have reported progress on lighting upgrades, with close to 18 percent of their total square footage currently being upgraded.
- As of December 1993, investment in these new lighting technologies reduced air pollution by 450 million pounds of CO_2, 3.3 million pounds of SO_2, and 1.6 million pounds of NO_x—four times the amount of CO_2 and NO_x and over three times the amount of SO_2 emissions prevented by the Green Lights program in December 1992.
- Green Lights participants are already saving over 371 million kilowatt-hours (kWh) annually—an energy saving that equals $29.6 million in avoided annual electricity costs. This is a significant increase over the corresponding numbers for 1992, 95 million kWh and $9.4 million respectively, and most participants are still in the earliest phases of program implementation.

Contact

- **Green Lights Hotline,** (202) 775-6650

Other Partnership Programs

Energy Star Computers

Computers are the fastest-growing electricity load in the business world. They are believed to account for five percent of commercial energy consumption, and ironically, much of this electricity is wasted: research shows that the vast majority of time personal computers are on, they are not actively in use. EPA's Energy Star Computers program represents an expansion of the concept implemented with such success by Green Lights: that using more energy-efficient equipment in homes, offices, and factories can help reduce emissions of carbon dioxide, sulfur dioxide, and nitrogen oxides.

In 1993, EPA signed partnership agreements with industry-leading manufacturers who sell 60 percent of all desktop computers and 90 percent of all laser printers sold in the United States. These companies will introduce desktop computers, monitors, or printers that can automatically "power down" to save energy when they are not being used. This "sleep" feature can cut a product's electricity use by over half.

Contact

- **Brian Johnson**, Office of Air and Radiation, (202) 233-9320

Waste Wi$e

In late 1993, Administrator Browner sent letters to the CEOs of Fortune 500 and Fortune Service 500 companies inviting them to join a new, voluntary partnership with EPA called Waste Wi$e. The partnership is designed to "encourage and assist companies to minimize solid waste and thus protect the environment, cut costs, and improve competitiveness." Participants will design their own programs and set their own goals in each of three areas: waste prevention, recycling collection, and buying or manufacturing recycled products.

Contact

- **Waste Wi$e Hotline**, 1-800-EPA-WISE, (1-800-372-9473)

WAVE (Water Alliances for Voluntary Efficiency)

WAVE is a voluntary partnership program designed to focus national attention on the value of water and the need for efficient use of this important natural resource. The program encourages hotels and motels, through voluntary partnership agreements with EPA, to install water-efficient equipment wherever it is profitable and practical. With WAVE, both the environment and the lodging industry benefit. Water and energy consumption can be reduced, hotels and motels can become more efficient and more profitable, and hotel guests and employees can become better informed about the benefits of water efficiency.

Contact

- **John Flowers**, Office of Wastewater Enforcement and Compliance, (202) 260-7288

VI. Federal Partnerships

"We must work closely with our counterparts in other agencies to ensure that pollution prevention guides our management and procurement decisions, and to pursue opportunities for reducing waste at the source in the non-industrial sector."

–except from the Pollution Prevention Policy Statement

President Clinton said on Earth Day 1993 that the federal government must "lead by example, not by bureaucratic fiat." The President signed five Executive Orders in 1993 to honor that commitment. EPA's efforts to implement these orders are described in more detail below.

EPA is already working with other agencies to spread the pollution prevention ethic throughout the government. Agriculture in Concert with the Environment (ACE) grants are administered by EPA and the U.S. Department of Agriculture to help farmers reduce the risk of pollution from pesticides and soluble fertilizers. EPA and the Department of Energy are also working together on the National Industrial Competitiveness through Efficiency: Energy, Environment, Economics (NICE^3) program, which provides grants to support new processes and equipment that reduce high-volume wastes, conserve energy, and improve cost competitiveness.

Presidential Executive Orders

Introduction

Federal agencies can play a major role in preventing pollution through more effective management of facilities, and through procurement and acquisition standards that consider the environmental impact of goods and services purchased by the government. The signing of five environmental Executive Orders (EOs) in 1993 represents a major accomplishment for EPA and the entire federal government. The orders represent an opportunity for the federal government to integrate pollution prevention into all phases of its everyday operations, thereby reducing its impact on the environment and saving taxpayer dollars.

Goals

All of these orders strongly emphasize federal government purchasing practices. They were written to strengthen the role of the federal government by:

- ❑ setting an example as an environmental leader;
- ❑ substantially reducing the release of pollutants and toxic chemicals;
- ❑ minimizing operating costs to make better use of tax dollars;

- realizing significant economic and environmental benefits from pollution prevention and energy efficiency;
- strengthening the role of the federal government as an enlightened, environmentally conscious consumer; and
- building strong markets for green products..

1993 Highlights

- EPA worked closely with the White House and other federal agencies to develop EO 12856, which for the first time will subject federal agencies to the Emergency Planning and Community Right-to-Know Act (EPCRA). That means federal agencies must publicly report toxic wastes and emissions effective in the 1994 calendar year, even though they are not technically required to do so under current law.
- EO 12856 also requires federal agencies to cut toxic emissions 50% by 1999, and to establish goals for reducing the use of extremely hazardous materials in procurement. EPA has completed draft guidance for federal agencies to use in meeting the requirements of this order, and has begun providing training to assist in meeting the reporting requirements.
- EPA also played a key role in developing EO 12873, which establishes new procurement and acquisition standards. For example, the order includes a requirement that copier, printer, and several other types of paper purchased by the federal government include not less than 20% post-consumer content. It also directs the General Service Administration (GSA) to eliminate non-performance-related barriers to the purchase of chlorine-free paper.
- To help agencies meet the requirements of EO 12873, EPA began preparing the Comprehensive Procurement Guideline and Guidelines for Environmentally Preferable Products. The Agency has also prepared a case to amend the Federal Acquisition Regulations (FAR) to incorporate the requirements of the order.
- The President signed three additional orders on April 21, 1993: EO 12843, Procurement Requirements and Policies for Federal Agencies for Ozone Depleting Substances; EO 12844, Federal Use of Alternative Fueled Vehicles; and EO 12845, Requiring Agencies to Purchase Energy Efficient Computers.

Future Plans

Efforts to implement all of these orders will continue throughout 1994. Implementation efforts will include public meetings, training sessions, issuing procurement guidelines and general guidance documents, and amending the FAR, as appropriate.

Contact

- **James Edward**, Office of Federal Facilities Enforcement, Office of Enforcement, (202) 260-8859

VII. Public Information/ The Right to Know

"We will collect and share useful information that helps identify pollution prevention opportunities, measure progress, and recognize success."

–except from the Pollution Prevention Policy Statement

The goal of pollution prevention is furthered by public information and outreach activities. These activities help industry identify opportunities to reduce waste and improve efficiency, and empower states and local communities to become stronger advocates for pollution prevention. The foundation of EPA's efforts to provide useful public information, the Toxic Release Inventory (TRI), is discussed in more detail below.

EPA's improved Pollution Prevention Information Clearinghouse (PPIC) makes information resources available to the public and industry to facilitate the adoption of methods, processes, and technologies for pollution prevention. The clearinghouse also maintains a collection of documents, including journals, course curricula, conference proceedings, and federal and state government publications on source reduction and recycling that is available nationwide through interlibrary loan. EPA is working with states and other technical assistance providers to strengthen the national network of prevention information.

Toxic Release Inventory

Introduction

TRI is EPA's compilation of the type and quantities of toxic chemicals being released to the environment from manufacturing facilities. Since the passage of EPCRA, TRI has become a cornerstone of efforts to identify, target, measure, and reduce emissions of toxic chemicals. Facilities must report their annual releases of TRI chemicals (320 chemicals are currently listed) to EPA and the states. EPA makes the data available to the public, who can use the information to assess risks in their communities.

Goals

- ❑ Expand the Right-to-Know program to provide the public with a more complete inventory of toxic chemicals and major sources of toxic pollutants.
- ❑ Focus attention on pollution prevention and source reduction opportunities through the new Pollution Prevention Act requirements.

1993 Highlights

- In 1993, EPA released the first year is data collected under the Pollution Prevention Act. Beginning with the 1991 reporting year, companies reported quantities of toxic chemicals in waste streams as well as amounts released directly to the environment.

- Executive Order 12856 requires federal facilities to begin reporting their toxic chemical wastes and emissions under TRI for the first time. These requirements take effect for the 1994 calendar year.

- In early January of 1994, EPA proposed expanding TRI by adding 313 toxic chemicals to the inventory based on their acute human health effects, carcinogenicity, other chronic health effects, and their environmental effects. An extensive hazard assessment was performed on each chemical proposed for addition to the inventory. Of the 313 proposed additions, approximately 170 are active ingredients in the formulation of pesticides.

Future Plans

- EPA plans to announce a second phase of the TRI expansion, which will broaden the list of facilities that must report releases. Currently, only manufacturing industries are required to report under TRI. EPA is in the process of identifying non-manufacturing industries associated with significant releases to determine their suitability for TRI reporting.

Contact

- **EPCRA Hotline,** 1-800-424-9346

Appendix: Pollution Prevention Policy Statement

EPA

POLLUTION PREVENTION POLICY STATEMENT

New Directions For Environmental Protection

1. Pollution Prevention: The New Environmental Ethic

The Pollution Prevention Act establishes a bold national objective for environmental protection: "[T]hat pollution should be prevented or reduced at the source whenever feasible." This policy statement offers my thoughts on how we can achieve that goal by making pollution prevention the guiding principle for all our programs at the Environmental Protection Agency.

We have already taken concrete actions that reflect the Clinton-Gore Administration's commitment to environmental solutions that reduce pollution at its source. For example:

- The Administration's budget request for the 1994 fiscal year includes a $33 million increase in spending for pollution prevention programs at EPA;

- On Earth Day, the President announced his commitment to an Executive Order establishing voluntary source reduction goals for procurement, and requiring federal agencies to comply with Right-to-Know public reporting requirements for toxic chemical wastes;

- On May 25, I released new Pollution Prevention Act data on the type and amount of toxic chemicals generated as waste, and announced my intention to expand Right-to-Know to include different chemicals and sources of pollution.

We can take pride in each of these accomplishments, but we must go further. We must build pollution prevention into the very framework of our mission to protect human health and the environment.

The new focus on pollution prevention will require a significant change in the way EPA carries out its responsibilities and allocates resources. The discussion below explains the multiple dimensions of EPA's investment in pollution prevention, and establishes basic principles to guide programs and regions toward our goal of integrating prevention into the Agency's "corporate culture."

This policy statement is only a starting point: if we are to succeed, we must continually renew our commitment by questioning established practices, working cooperatively across program and agency boundaries, and not hesitating to acknowledge shortcomings as well as success stories. I know I can count on your support as we work together to chart a new course for environmental protection.

2. Why Pollution Prevention?

When EPA was created in the early 1970's, our work had to focus first on controlling and cleaning up the most immediate problems. Those efforts have yielded major reductions in pollution in which we should all take pride. Over time, however, we have learned that traditional "end-of-pipe" approaches not only can be expensive and less than fully effective, but sometimes transfer pollution from one medium to another. Additional improvements to environmental quality will require us to move "upstream" to prevent pollution from occurring in the first place.

Preventing pollution also offers important economic benefits, as pollution never created avoids the need for expensive investments in waste management or cleanup. Pollution prevention has the exciting potential for both protecting the environment and strengthening economic growth through more efficient manufacturing and raw material use.

3. Summary Of Objectives

Pollution prevention is influenced by a number of factors, including EPA regulations and state programs, collaborative efforts that offer recognition and technical assistance, public data, the availability of clean technologies, and the practices and policies of large public agencies. To be effective, our pollution prevention program must establish the following objectives for each of these areas:

- Regulations and Compliance: The mainstream

activities at EPA, such as regulatory development, permitting, inspections, and enforcement, must reflect our commitment to reduce pollution at the source, and minimize the cross-media transfer of waste.

♦ State and Local Partnerships: Increasingly, state and local agencies are the "face of government" for the general public. We will strengthen the national network of state and local prevention programs, and seek to integrate prevention into state and local regulatory, permitting, and inspection programs supported with federal funds.

♦ Private Partnerships: We will identify and pioneer new cooperative efforts that emphasize multi-media prevention strategies, reinforce the mutual goals of economic and environmental well-being, and represent new models for government/private sector interaction.

♦ Federal Partnerships: We must work closely with our counterparts in other agencies to ensure that pollution prevention guides our management and procurement decisions, and to pursue opportunities for reducing waste at the source in the non-industrial sector.

♦ Public Information/The Right-to-Know: We will collect and share useful information that helps identify pollution prevention opportunities, measure progress, and recognize success.

♦ Technological Innovation: We will try to meet high priority needs for new pollution prevention technologies that increase competitiveness and enhance environmental stewardship, through partnerships with other federal agencies, universities, states, and the private sector.

♦ New Legislation: Where justified, we must not hesitate to seek changes in federal environmental law that will encourage investment in source reduction.

4. Definition

EPA has defined pollution prevention as "source reduction" as that term is explained under the Pollution Prevention Act, as well as protecting natural resources through conservation or increased efficiency in the use of energy, water, or other materials. EPA staff should continue to use this definition, as elaborated in the Agency guidance issued in May of 1992.

The guidance makes clear that pollution prevention is not the only strategy for reducing risk but is the preferred one. Environmentally sound recycling shares many of the advantages of prevention -- it can reduce the need for treatment or disposal, and conserve energy and natural resources. Where prevention or recycling are not feasible, treatment followed by safe disposal as a last resort will play an important role in achieving environmental goals. In all cases, we must be guided by applicable statutory requirements.

5. Regulations And Compliance

Our first obligation at EPA is to fulfill the statutory responsibilities we have been given by Congress. That generally means developing environmental standards through regulation, and ensuring compliance through a system of permits, inspections, and enforcement actions. I firmly believe that strong environmental requirements, if designed to encourage cost-effective compliance strategies from industry, can promote pollution prevention and improve the competitiveness of American industry.

We can take a number of actions to realize this potential. First, we must work within the law to design and implement our regulations to provide incentives for source reduction. That will mean better coordination of different regulations that affect the same industry to reduce transaction costs, minimize cross-media transfers of waste, and provide a clearer sense of our long-term goals for the regulated community.

EPA's Source Reduction Review Project (SRRP), which is exploring how best to encourage pollution prevention in the design and implementation of rules affecting 17 high priority industries, is a good start toward this goal. I also will expect programs to evaluate opportunities for preventing pollution in each major proposed regulation, as the Pollution Prevention Act requires.

Second, we must encourage pollution prevention as a means of compliance through our permitting, inspection, and enforcement programs, relying on the first-hand experience of regions and states in this area. We can learn valuable lessons from experiments like the Massachusetts Waste Prevention F.I.R.S.T. project, through which the state promotes source reduction as the principal means of correcting violations detected through multi-media inspections.

Finally, we need to collect better data on those cost savings that occur when regulations encourage investments in cleaner, more efficient manufacturing processes. As part of this effort, we must develop credible measures of the economic value of natural resources protected through prevention. We must also explore non-traditional alternatives, such as life-cycle analysis, that help shed light on the advantages prevention can offer in meeting our objectives.

6. State and Local Partnerships

The Clinton Administration has called for a full partnership between federal, state and local governments in defining and carrying out national policy objectives. We delegate so many responsibilities to states and

localities under federal environmental law; we simply cannot hope to offer effective incentives for pollution prevention in permits or inspections without their close cooperation. Furthermore, some states have served as national laboratories for the incubation of exciting new multi-media experiments in reducing waste at the source, and are often more in touch with industry and public needs and how best to meet them. Several states also have taken the lead in helping their citizens and businesses use energy more efficiently.

We can explore different methods for offering state and local governments more flexibility in the federal grants used to support delegated activities like permitting, inspections, and enforcement actions. EPA's new guidance, beginning in the 1994 fiscal year, encourages our regions to work with states to adjust administrative procedures in grant workplans to make room for pollution prevention investments. EPA regions and states should make maximum use of this flexibility, working within the statutory limits that govern grant eligibility. The guidance requires programs to report on legal barriers to funding worthwhile state pollution prevention projects, so that we may consult with Congress to seek appropriate remedies.

We also must trust our state partners with greater responsibility for the Pollution Prevention Information Clearinghouse, which will facilitate prevention technology transfer and technical assistance. Our Regional Offices also have lead responsibilities in the allocation of State grant monies under the Pollution Prevention Act and in the use of Regional extramural resources (i.e. the 2% funds) allocated to pollution prevention activities. We must make effective use of these resources to support strong state and local pollution prevention programs.

7. Private Partnerships

Collaborative efforts with industry or public agencies in many cases can help us achieve results through pollution prevention more quickly than could be obtained through regulation alone. For example, EPA's Green Programs to promote voluntary energy efficiency will play a critical role in helping meet our obligations under the U.S. Action Plan to stabilize greenhouse gas emissions by the year 2000.

Furthermore, regulations often do not reach the more complicated corporate decisions needed to evaluate design, manufacturing, packaging, distribution and marketing practices to reduce pollution and energy consumption. We must encourage these efforts by entering into partnerships with public and private organizations where such cooperation can produce tangible environmental results. EPA's collaborative efforts -- like the Green Programs, 33/50 and Design for Environment -- offer encouragement, assistance and public recognition to those companies and groups willing to commit the resources needed to get the job done.

Recently, these initiatives have expanded to include WAVE, a program to encourage water conservation with the hotel/motel industry. Earlier this year, EPA proposed an "Environmental Leadership" program to reward corporations willing to go beyond compliance by making measurable commitments to pollution prevention. EPA's FY 94 budget proposal requests a substantial increase in funding for these programs, reflecting our commitment to achieve environmental gains by working cooperatively with industry. These investments will supplement, but not substitute for, regulatory approaches to pollution prevention.

8. Federal Partnerships

President Clinton's Earth Day speech challenged the federal government to, "lead by example -- not by bureaucratic fiat." Our government has a tremendous impact on the environment as the nation's largest landlord, and its biggest consumer of goods and services. Later this summer, we expect to complete action on an Executive Order that commits federal facilities to publicly report wastes and emissions under TRI, establishes a voluntary goal of cutting federal TRI releases 50% by 1999, and builds pollution prevention into the specifications and standards that guide federal purchases. EPA recognizes that other federal agencies can create major opportunities for pollution prevention through investments in new technologies, and through policies that shape decisions in agriculture, energy, transportation, and the management of natural resources. If we want pollution prevention to expand in these sectors, we must form partnerships that take advantage of the authority and expertise at other federal agencies.

9. Public Information/The Right-To-Know

Since pollution prevention is motivated in part by public information, one of EPA's most important tasks is to collect and disseminate "user-friendly" data that measures progress in reducing waste at its source. The Toxics Release Inventory (TRI) as amended by the Pollution Prevention Act now requires 28,000 industrial facilities to publicly report on the amounts of toxic chemicals generated as waste or released to the environment. These and other environmental data have proved vital in helping industry to identify opportunities to reduce waste and improve economic efficiency. Through public disclosure, the TRI empowers local communities, State agencies and other public interest groups to become stronger advocates for pollution prevention.

I am committed to strengthening the Toxics Release Inventory, both by improving the quality of the

information and by making more effective use of EPA's existing authority to expand the scope of reporting to additional chemicals and major sources of pollution. We will also make the information more accessible and understandable to states and local communities that depend on timely and accurate data.

EPA's public data bases are not limited to TRI. Preventing chemical accidents also is important, and the Agency collects information on chemicals that can present a hazard if released during an accident. Data collected under laws such as the Clean Air, Clean Water, and Resource Conservation and Recovery Acts are important indicators of environmental risk as well as prevention opportunities, and EPA must take steps to integrate this information and make it more readily accessible to the public.

We cannot stop at collecting and interpreting data. We should encourage public education, from the university to the grade school level, that illustrates the importance of environmental protection and the benefits of prevention.

10. Technological Innovation

Cooperative efforts with universities, industry, and other Federal agencies help raise awareness of prevention opportunities and attract leading scientists and engineers to engage in demonstration, development, and research focused on new prevention technologies. Accordingly, we must expand work with groups like the Department of Energy and its National Laboratories, the National Science Foundation, the National Institute for Standards and Technology (NIST), states, and the private sector to advance both the development of new pollution prevention technology and the effective delivery of information about such technology to companies looking for more efficient environmental solutions.

I want to make sure that some of the funding available through the President's Environmental Technology Initiative is targeted to help small businesses meet compliance requirements through pollution prevention while remaining competitive. As part of this effort, I will expect our programs to work together to identify small business needs so that we may target short term technical assistance and long term cooperative research in developing cleaner, more efficient technologies.

11. New Legislation

I am convinced that we can achieve many important pollution prevention goals working under existing federal environmental laws. Where these statutes present significant barriers to reducing waste at the source, however, we should not hesitate to share this information with Congress and, if needed, seek appropriate statutory changes. I want to be sure that any effort to seek new authority is informed by fact. That is why it is particularly important to gather specific and accurate information on legal barriers to source reduction identified when developing regulations and negotiating grants with states.

12. Conclusion

I expect pollution prevention to continue to evolve at EPA. As we learn more, no doubt we will have to make adjustments to our programs that reflect new knowledge. In the final analysis, what is critical in our efforts to advance pollution prevention is a willingness to take chances, to question established practices and experiment with new ideas, and above all to cooperate with each other as we try to harmonize environmental protection with economic growth. I hope you share my excitement at the new possibilities for pollution prevention in the Clinton-Gore Administration, and I look forward to working with all of you to achieve the ambitious goals of this policy.

Carol M. Browner
EPA Administrator
June 15, 1993