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841 Chestnut Building
Philadelphia PA 19107

November 1988

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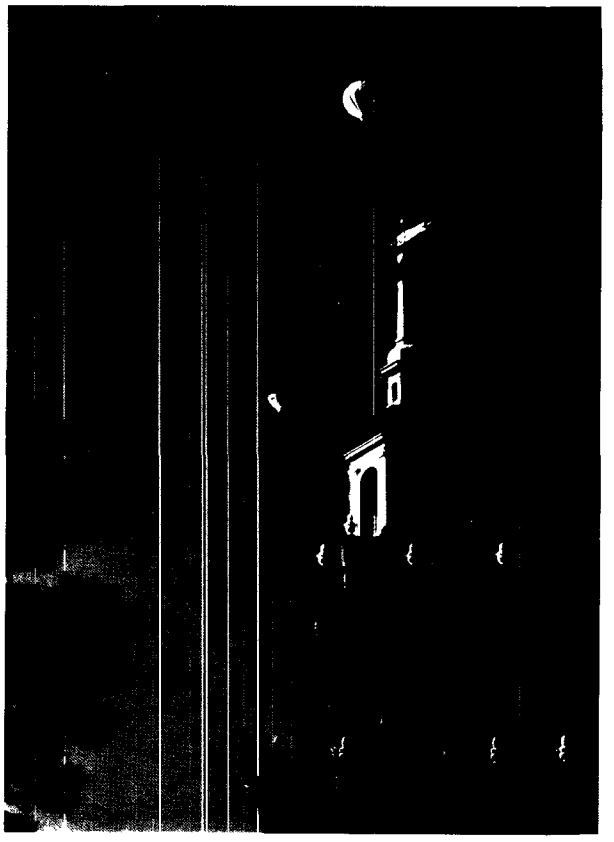

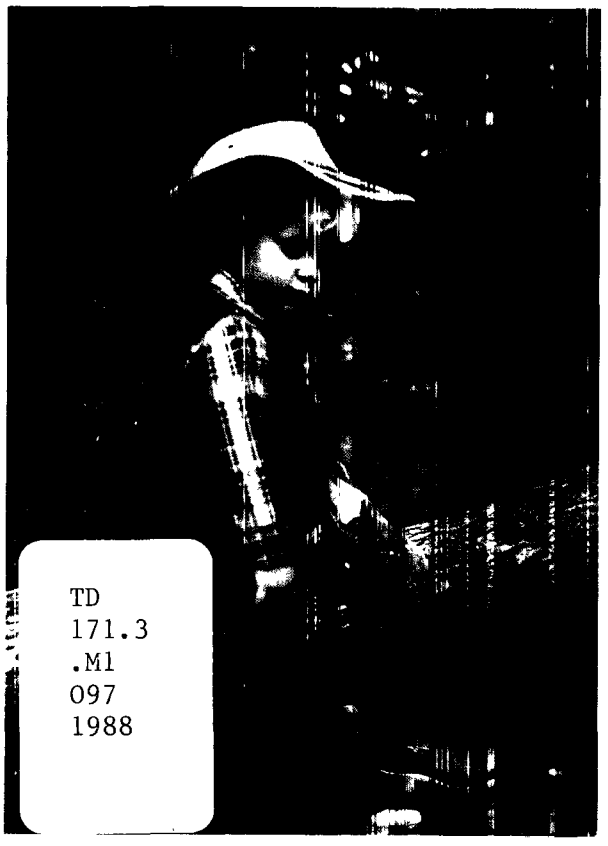

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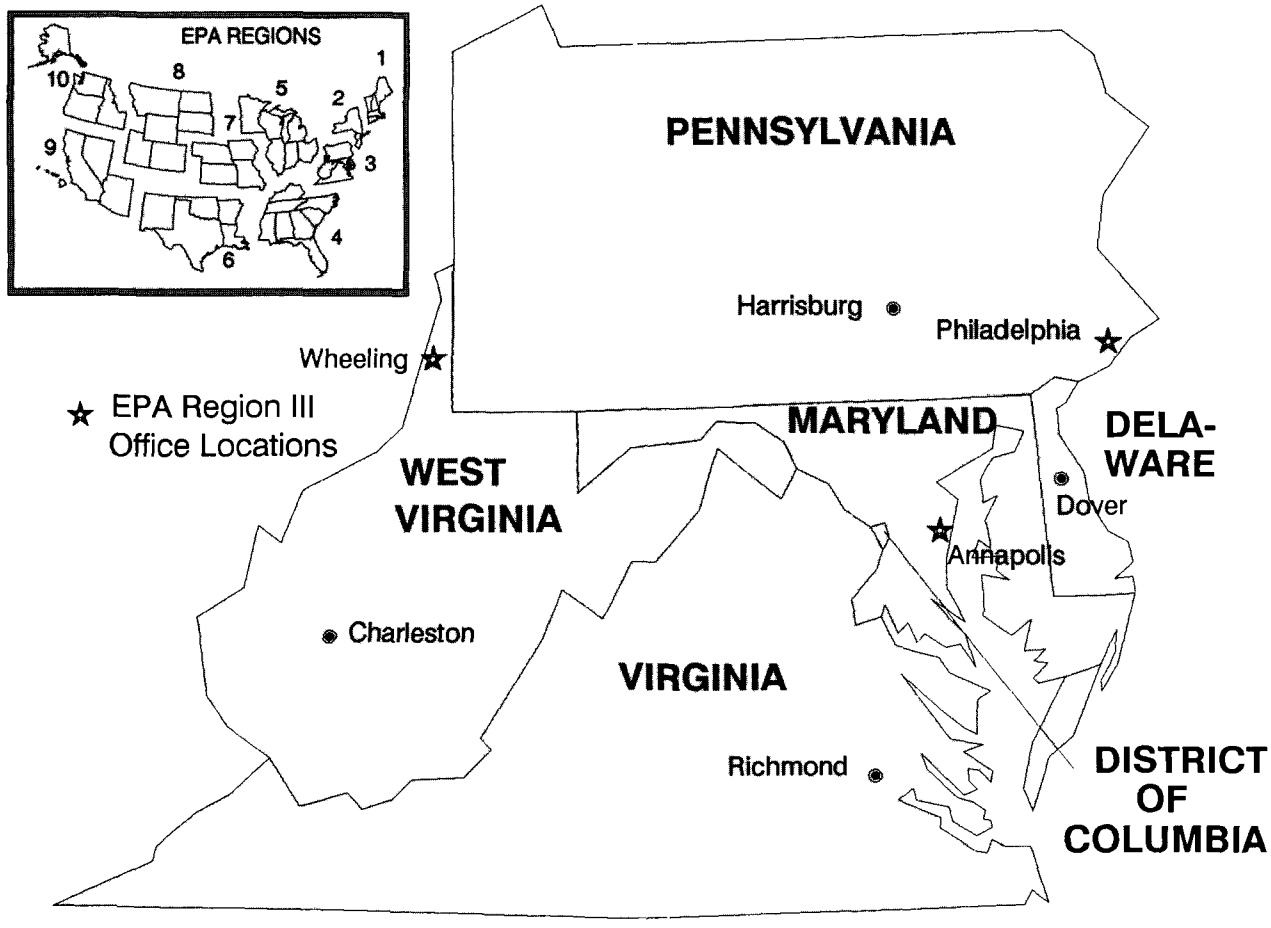
OUR REGION



REGION III PROFILE										
		LAND AREA				WATER AREA				
STATE	POPU-LATION	TOTAL (SQ.MI.)	AGRI-CULTURE (SQ.MI.)	FOREST (SQ.MI.)	URBAN (SQ.MI.)	RIVERS (MILES)	LAKES (SQ.MI.)	WETLANDS (SQ.MI.)	ESTU-ARIES (SQ.MI.)	OCEAN COAST (MILES)
DELAWARE	616,643	1,981	866	543	200	500	7	347	357	25
DISTRICT OF COLUMBIA	627,400	69	0	0	69	36	0.6	>0.1	6	0
MARYLAND	4,216,975	9,869	3,638	3,790	1,193	9,300	51	685	1,981	32
PENNSYLVANIA	11,864,751	45,333	13,264	23,907	3,240	50,000	234	778	0	0
VIRGINIA	5,346,818	40,817	10,608	21,290	1,905	27,240	252	333	2,382	112
WEST VIRGINIA	1,949,644	24,282	4,628	16,285	488	28,361	37	159	0	0
TOTAL	24,622,231	122,351	33,004	65,815	7,095	115,437	582	2,302	4,726	169

Source: 1988 State Water Quality Assessment (305(b)) Reports
USDA, SCS Statistical Bulletin 756, Basic Statistics - 1982 National Resources Inventory

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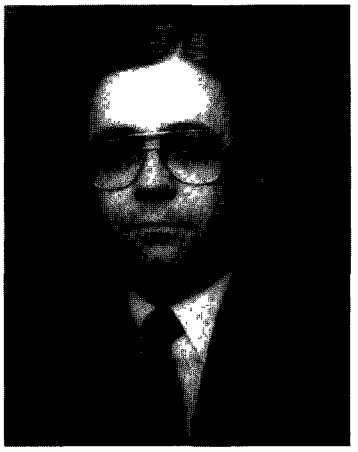
5. http://cave.epa.gov/cgi/nph-bwcgis/BASIS/ncat/pub/ncat/SBC
6. http://www.epa.gov/natlibra/olshelp.htm

"When I look back and think about my time at EPA, where we are today and what the environmental issues are, I think we have made tremendous progress in the United States. We can be very proud about that, and we ought to talk about it."



Honorable Lee M. Thomas
Administrator
U.S. Environmental Protection Agency

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U.S. Environmental Protection Agency
Region III Information Resource
Center (3PM52)
841 Chestnut Street
Philadelphia, PA 19107

OUR MISSION

Regional Administrator's Perspective

The awareness of the damage that our modern industrial society was doing to the earth -- fostered by Rachel Carson's *Silent Spring* and other works in the 1960s -- became part of our national consciousness on Earth Day, April 22, 1970. That public concern for protecting the environment was the inspiration for the creation of the Environmental Protection Agency in December 1970.

As employees of EPA, we are the inheritors of that spirit. More so than at almost any other government agency or private enterprise, we at EPA are here because we believe in the spirit of our mission -- to protect our nation's air, water and land from the pollution risks inherent in our society.

In the 18 years since 1970, many of the most visible pollution problems have been addressed. Our streams and rivers are cleaner -- the Potomac River was an open sewer in our nation's capital, but now supports restored recreational opportunities. Our air is cleaner -- the smoke over industrial cities like Pittsburgh is a thing of the past. Our land is cleaner -- the Superfund program is remedying the problems that we dumped, buried, or ignored in the past.

Now we are crafting solutions to problems we weren't even aware of on Earth Day. Ozone, global warming, indoor radon, and PCBs are today's equivalents of the smog and DDT of the 1960s. The science of environmental protection has advanced dramatically and now gives us the ability to detect many pollutants down to the vanishing point. This presents us with previously unimagined choices on acceptable levels of risk and tolerable costs of eliminating them, and provides previously undreamed of opportunities for innovative solutions to environmental problems.

In the 18 years since 1970, many of the most visible pollution problems have been addressed...Now we are crafting solutions to problems we weren't even aware of on Earth Day.

Fortunately, we have many more allies going into the 1990s than we did going into the 1970s. Our state partners are stronger and better organized. Industry, though probably never enthusiastic about regulation, now more clearly accepts the strong public mandate for environmental responsibility -- a mandate the general public speaks of more clearly and knowledgeably than ever.

We offer this report to the public with great pride. Given the legal, programmatic, scientific, and economic complexities of our mission, our involvement in problems that have taken many decades to evolve, and the certainty that controversy is never far away, it would be easy to become discouraged. We are not discouraged, and this report will show the reasons. We are proud of our specific environmental achievements, our innovative management style and, most of all, the fact that we are engaged in a mission important to each of us personally and to all humanity.

James M. Seif
Regional Administrator

OUR ENVIRONMENT

Deputy Regional Administrator's Perspective

The Middle Atlantic States -- Delaware, Maryland, Pennsylvania, Virginia, and West Virginia -- are blessed with a magnificently diverse environment ranging from the Atlantic Ocean shoreline and the popular Chesapeake Bay on the east to the rugged mountains and woodlands to the west and north. These states are home to over 24 million people, numerous species of flora and fauna, and thousands of industries and farms. The combination of a fragile environment and the needs of our society creates a tremendous challenge for all those concerned with pollution control. In EPA Region III, we have a dedicated group of public servants working to protect the public health and the environment to make the Middle Atlantic States a better place to live.

Our environmental problems are the by-products of our industrial society, our personal lifestyles, and even nature itself. The Middle Atlantic States have some of the most important chemical, steel, coal, and other manufacturing facilities in the world. During the 1970s, environmental controls focused on pollution from the smokestacks and discharge pipes from these industries. In the 1980s, the challenge has shifted, in part, to pollution caused by many small, diverse and difficult-to-control sources. Often farms, urban areas, and abandoned mines individually produce relatively small amounts of pollution; yet cumulatively, they cause extensive water pollution problems that are difficult to control. In EPA Region III, we are on the cutting edge of finding effective solutions to these problems in our Chesapeake Bay Program and our ocean initiatives. The high level of ozone found in urban areas is also caused by a large number of small sources (e.g., automobiles, small industrial sources) and solutions to this problem will require the regulation of many more sources of pollution.

... we are challenged to find innovative ways to protect the public health and the environment we share with diverse species of flora and fauna. This is a challenge we gladly accept.

With the realization that individual lifestyles also contribute to our environmental problems, the need for public education is paramount. Radon testing, home air ventilation, pesticide usage, recycling at home, and driving habits are some of the activities where intelligent personal decisions can help improve our environment.

In contrast to our concern about small localized pollution problems, we also face the issue of widespread pollution transport beyond state, regional, and even national boundaries. Hazardous waste transportation, acid rain, depletion of the ozone layer, urban ozone transport, and ocean pollution are examples of this transport problem. Continued interstate and international cooperation and environmental education are imperative if these problems are to be resolved.

Within EPA, an abundance of information on the relative risks from various pollution sources has resulted in discussion on where regulatory agencies and society should expend its finite resources. We are beginning to focus on many difficult questions in establishing priorities. Should any additional funds for environmental control be spent on hazardous waste cleanup, radon, acid rain, sludge management, or wetlands protection? Such questions are difficult to answer and will be the subjects of debate for many years to come. In Region III, we are challenged to find innovative ways to protect the public health and the environment we share with diverse species of flora and fauna. This is a challenge we gladly accept.

Stanley L. Laskowski
Deputy Regional Administrator

OUR PEOPLE

Assistant Regional Administrator's Perspective

More than a building or a geographic area, Region III is 805 people. We are managers, scientists, attorneys, administrative specialists and support staff. Our average age is 36 years. Many of us are new in the Agency inasmuch as 169 people were hired in fiscal year 1987 and 38 in fiscal year 1988. Fifty-one percent of us are women. In terms of race, one out of four of us is from a minority group. We are well-educated -- 37% of us have Bachelor's degrees, and another 27% have Master's degrees or more.

While these numbers help to describe us, we are better known by our *spirit*. We are marked by a keen sense of competition and zeal to excel at our mission. Our environmental ethic runs deep and strong -- we are here at EPA because our work is meaningful and important to us. Our own self-assessments and an independent study of our organizational culture show that we respect each other and our leaders and value the strong feeling of family that has evolved since our founding eigtheen years ago.

...our human resources are the most important component in the operation of our organization

In the spring of 1985, Region III leadership committed itself to the belief that our human resources are the most important component in the operation of our organization. From there we shaped a human resources program that has become the model for the Agency and the entire public sector. While the program has many facets, it focuses on the following basic tenets:

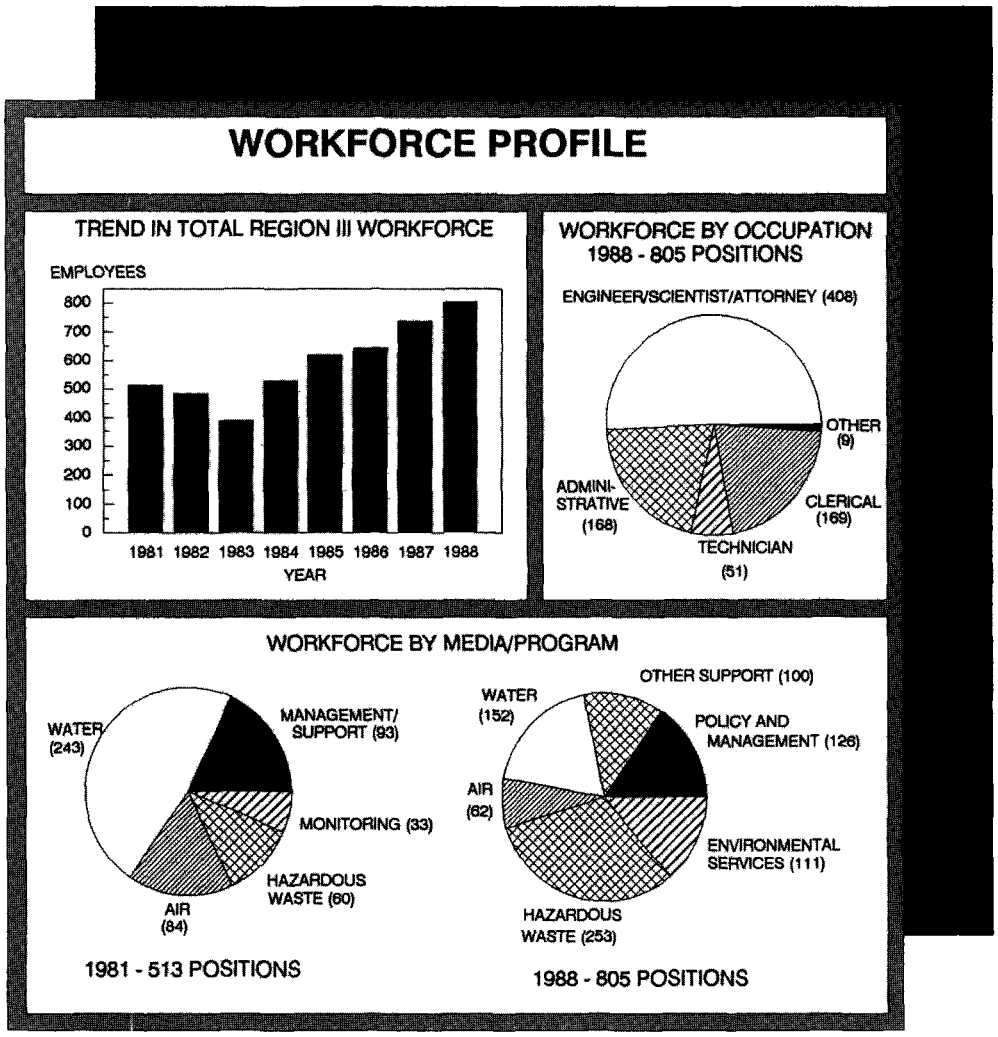
Develop the Best Work Environment Possible. To create this environment, it is essential to provide a modern and healthy physical setting with efficient working tools. A good employer-employee relationship is a broader, though less tangible, aspect of this goal which is accomplished through sound communications and good personnel policies, procedures and programs such as Compressed Work Week and Flextime.

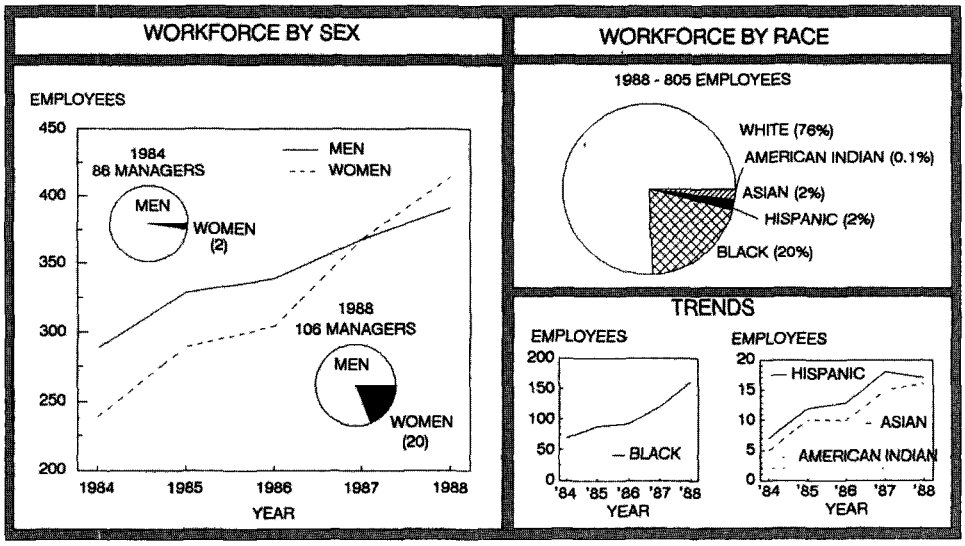
Encourage Employee Participation. Our formal groups build our spirit and provide counsel and information to our leadership. We gratefully acknowledge our many employee groups including the Employees Association, the Federal Women's Program, AFGE Local 3631, Human Resources Council, Women in Science & Engineering (WISE), Black Employment Program Advisory Council (BEPAC), and the Hispanic Employment Council.

Provide a Comprehensive Training & Employee Development Program. This effort has grown to include the EPA Institute, Temple University's Environmental Management Program, Rotational Assignments, Developmental Details, and IPA Assignments to states and municipalities.

Our challenge for the future is to build on the strong foundation estblished by our people and our human resources program. We must grow through positive recruitment efforts, sustained and improved training opportunities, open communications, continued employee involvement and additional innovative personnel programs.

William T. Wisniewski
Assistant Regional Administrator for Policy and Management

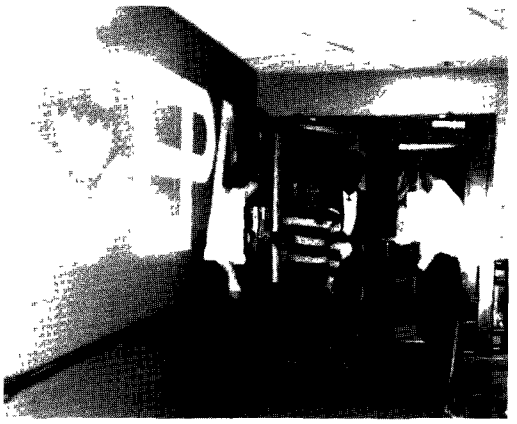


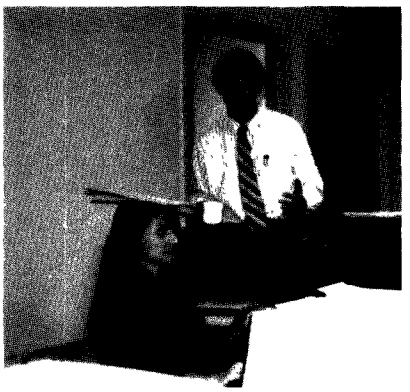


Equal Employment and Affirmative Action

The Equal Employment Opportunity (EEO) Program provides advice and assistance in the implementation and administration of Region III's civil rights and equal opportunity programs and ensures that an equal opportunity is aforded to all employees. In cooperation with the Director of Civil Rights and the Regional Administrator, the program is committed to the enforcement of all Civil Rights Laws bearing on the Agency's operations including furthering the goals of equal opportunity for all employees and for all prospective employees.

EEO and Affirmative Action activities are mandated by a series of statutes, laws, regulations and Executive Orders. The primary law is Title VII of the 1964 Civil Rights Act that bans discriminatory employment practices based on race, sex, color, religion or national origin. Amendments to the law have been added to include handicap and age. Additionally, Presidential initiatives have been issued resulting in major Executive Orders that give investigatory powers to the Equal Employment Opportunity Commission. This Commission acts as a "watchdog" for federal agencies' compliance with EEO laws and affirmative action mandates.





Employee Development

Employee development and recognition programs are the signs of an organization's commitment to its people. Region III is proud of its accomplishments yet cognizant that continued effort is needed to maintain and enhance these critical components of human resources management.

Employee training has benefited from an increase in training funds -- an increase accomplished despite constant demands on EPA's budget. Utilization of training funds has been effective in creating a training program highlighted by the number of courses approved and diversity of course offerings. In addition to courses approved for individuals, Region III has been successful in the design and implementation of several group training initiatives:

- A partnership has been reached with Temple University to bring an "Education in the Environment" program to the Region III office for after-hours college level instruction for secretaries and other support personnel.

- Region III managers completed a two-year Zenger-Miller supervisory program and a comparable program is inplace to provide senior staff with this training to help them determine if they wish to pursue supervisory positions.

- A comprehensive Building Excellence through Secretarial Training was developed, providing basic instruction for new employees and career development for experienced workers.

Even with increased training funds, the Region recognized that innovations would be necessary to meet an ever-increasing demand for training. The Region III Institute has proven to be a cost-effective means of training employees and also provides an opportunity for career enhancement for employees serving as instructors.

Dedicated EPA employees have spent many hours after work increasing their understanding of environmental issues through college-level courses taught by Temple University instructors.

Region III Institute

Through the dedication of Region III employees, the old adage "Those who can, do; those who can't, teach" has been changed to "Those who can, do and teach!"

From an initial group in 1984 of five instructors, the Region III EPA Institute has become an integral part of the Region's training program with over 50 employees participating as instructors for nearly 80 course offerings. Coming at a time of increased training demands, the Institute is an extremely cost-effective means of fulfilling training needs while also providing self-development for the instructors.

The Institute training program runs the gamut from wellness courses to microcomputer training to Environmental Science. Comprehensive courses on "Basic Environmental Toxicology" and "Mechanisms of Carcinogens" have been offered. One-day sessions have provided information on topics including radon, acid rain, lead in drinking water, implications of air toxics on the ozone layer, and understanding Congressional activities.

Registrations for Institute courses have exceeded 1000 a year indicating the tremendous acceptance of the in-house training program. The growth of the Region III Institute has provided the impetus for the creation of a new training center in the Region III office. The new space will accommodate up to 60 people in a modular setting. Computer training, self-development, and career development centers will be part of the new training area. The expanded computer training facilities are especially needed to meet the growing demand in this popular subject area.

Keeping current in one's field, acquiring a new skill, or learning about emerging issues are all essential for career development and personal growth. EPA Region III is fortunate to have a large group of employees willing to extend themselves to help their co-workers become better informed and more proficient employees.

Employee Recognition

Recognition of a job well done is essential to create a positive work environment. The number of Region III recipients of honor awards, performance awards, and other means of recognition is a testimony not just to the quality of Region III employees but also to management's understanding of the importance of a program to formally acknowledge that quality.

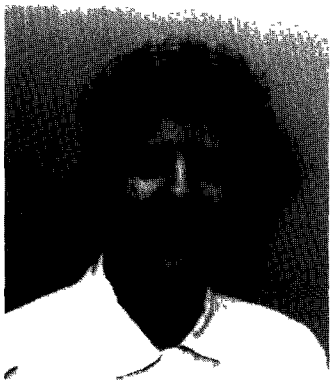
Immediate recognition was the impetus behind the establishment of a monthly awards program for special efforts by employees. The monthly awards program is designed to provide a quick "thank you" for these small but significant accomplishments.

Region III also recognizes outstanding employees through numerous annual awards. The Region held its 10th Annual Awards Ceremony on March 8, 1988. Awards presented included: Gold, Silver, and Bronze Awards, Combined Federal Campaign Awards, MERIT Author Awards, Student Aide Awards, EEO Award, Safety Award, Communicator Award, Adult Literacy Program Awards, and Lenth of Service Awards. The following annual honor awards representing Region III's highest forms of recognition were also presented:

- The Glen Witmer Award is given for service distinguished by concern for the environment, enthusiasm for environmental programs, a logical approach to problem-solving, a concern for detail that considers overall program objectives, resourcefulness and initiative, and an ability to deal with people in a manner that fosters cooperation, understanding, and resolution of environmental problems. This awared is given in memory of Glen Witmer, a Region III employee who died of cancer in 1977 at age 27.
- The Human Resources Manager of the Year Award is given to the manager who has significantly enhanced employee growth opportunities, positive working relationships and better human relations in Region III.
- The Secretarial Excellence Award is given in recognition of demonstrated excellence in achieving the highest possible standards for secretarial excellence.

The Region also annually selects a nominee for the EPA Administrator's Excellence In Management Award based on the manager's accomplishments in one or more of the following areas:

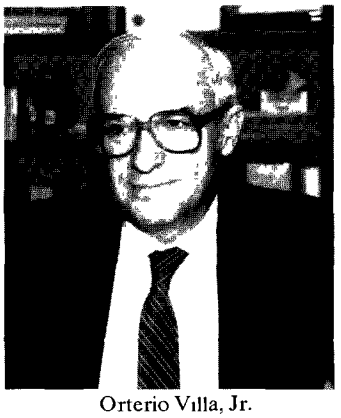
- Human resources management, including unusual skill in supervising others
- Management leading to major accomplishments in support of the Agency's mission
- Management resulting in actual and significant savings to the government
- Leadership in taking professional risks in order to advance the state-of-the-art in scientific, technological or management areas.



Patti Kay Wisniewski
Glen Witmer Award

Robert J. Mitkus
Human Resources Manager
of the Year

Helen T. McCue
Secretarial Excellence Award



Orterio Villa, Jr.
Region III Excellence in
Management Award Nominee

REGION III AWARD WINNERS

Gold Medal Award - DR. ALVIN MORRIS
In recognition of outstanding scientific and managerial leadership of the Chesapeake Bay Program.

Silver Medal Group Award - WILLIAM T. WISNIEWSKI, ANDREW P. CARLIN, MICHAEL H. KULIK, CHERYL A. TALBOT
In recognition of outstanding leadership and innovation in the management of Agency human resources.

Bronze Medal Award - THERESA VIOLA
For outstanding performance and initiative in the development of the Data Screen Entry Program for the Grants Information Control System.

Bronze Medal Award - ROLAND W. SCHRECONGOST
For leadership in the development and implementation of a Superfund file protocol.

Bronze Medal Award - A. JOSEPH HAMILTON
In recognition for accomplishments in advancing the information resources management program in Region III to national prominence.

Bronze Medal Group Awards:

Hazardous Waste Management Division Mentor Group - FRANCISCO N. BARBA, SALLY W. BLOCK, TERRI DIFIORE, ELINOR ELISHEWITZ, JOAN M. HENRY
For the development and institution of a highly successful Mentor Program for the Hazardous Waste Management Division of Region III.

Steel Support Team - JAMES M. BAKER, MARGARET M. CARDAMONE, JAMES W. HAGEDORN, REGINA C. THOMPSON
In recognition of outstanding performance in the enforcement of Clean Air Act regulations for the iron and steel industry through a cooperative partnership between federal, state and local control programs.

Cost Recovery Group - DARLENE F. KELLY, LESLIE A. VASSALLO
In recognition of superior service in the area of Superfund Cost Recovery, resulting in the recovery of millions of dollars.

Tyson's Negotiation Team - DOMINIC DIGIULIO, JOSEPH J.C. DONOVAN, CINDY GILES, JEFFREY PIKE, TIMOTHY T. TRAVERS
For outstanding achievement in negotiating a significant and complex Superfund settlement under extremely arduous circumstances.

Regional Air Modeling Group - ALAN J. CIMORELLI, MARK E. GARRISON
For outstanding contribution in the area of mathematical diffusion modeling to the identification of National air issues, the initiation of their solution, and the development of national policy.

Hazardous Waste Management Division Field Citation Group - LARRY S. MILLER, CHRISTOPHER B. PILLA
For the development of a field citation program, on a pilot basis, for TSCA compliance inspections which can be instituted in all other Agency field enforcement inspection programs.

CFC Awards - KEVIN A. MAGERR, JAMES McCREARY, BERNICE PASQUINI, ALFRED STURNIOLO
In recognition of commendable service in the 1987 Combined Federal Campaign.

Student Aide Awards- CHRISTINA C. BROWN, DORLEATHA JOHNSON, ELYN VELAZQUEZ
In recognition of work that has displayed initiative, efficiency, courtesy, helpfulness, availability and a willingness to learn.

EEO Award - BARBARA BROWN
For special efforts in improving employee harmony, promoting Affirmative Action and Equal Employment Opportunity principles, and assisting the career development of others.

U.S. Department of Labor Safety Award - JAMES W. MARKS
For valuable contributions to the promotion of occupational health and safety programs within federal government.

EPA Communicator Award - JANET VINISKI, PATRICIA BONNER
Exceptional service award for excellence in communications.

OUR PARTNERSHIPS

The primary responsibility of EPA's Regional Offices is to work with our colleagues in state (and increasingly, local) government to effectively manage and enforce our nation's environmental laws. The Office of Congressional and Intergovernmental Liaison is responsible to the Regional Administrator for EPA Region III's relationships with many important segments of the environmental community:

- Congress
- Governors and other state and local elected officials
- State environmental secretaries and directors
- environmental interest groups
- the business community, with special emphasis on small business
- environmental educators.

The relationship that EPA and the states continually strive to develop is a partnership in which each agency recognizes and accommodates the other's special capabilities and environmental focus. As a Federal agency with a national perspective, EPA is responsible for conducting research, developing effective and equitable policies, and providing technical and funding assistance so that state environmental agencies are better equipped to carry out their mandate to protect and enhance their citizens' health and the natural environment.

We have learned that frequent, open communication between EPA and state environmental agencies is a fundamental ingredient in the partnerships which have developed. This communication occurs at all levels of the Agency. Senior managers from EPA headquarters, EPA Region III and state agencies meet in various forums to confer about the broad direction of national environmental policy and resource management as well as the detailed aspects of program implementation. EPA and state agency staffs interact daily concerning the myriad of grant, enforcement and implementation issues which merge to determine the mutual aims and effectiveness of the environmental programs.

... frequent, open communication between EPA and state environmental agencies is a fundamental ingredient in the partnerships which have developed

The quality of the State/EPA partnerships and, more importantly, the quality of the environmental protection programs delivered by EPA and our state partners, depends on the willingness of all to openly engage in this multi-layered communication process. The Office of Congressional and Intergovernmental Liaison is devoted to assisting the Region's operating divisions as they interact with their colleagues in state and local government.

EPA Region III has recognized the importance of fruitful State/EPA communication by making an unusually strong staff commitment to intergovernmental affairs. State liaison officers representing and advising the Regional Administrator have been appointed for each of our states: Evelyn MacKnight for Delaware and Maryland, Ray George for West Virginia and the western portion of Pennsylvania, Rich Kampf for Virginia (Rich also serves as the Region's Small Business Ombudsman), Dan Ryan for Pennsylvania, and Larry Teller for the District of Columbia. The Center for Environmental Learning is also located in this office to take advantage of the broad outreach responsibilities of the Region's state liaison officers.

Current intergovernmental management initiatives being carried out at the national and regional levels are aimed at providing greater opportunities for regional and state priorities to be recognized and accommodated by EPA's budgeting, planning and performance evaluation processes. Greater progress in this area is increasingly recognized to be of key importance to the combined efforts of EPA and our state partners.

Lawrence A. Teller, Director
Office of Congressional and Intergovernmental Liaison

Center For Environmental Learning

The objectives of the Center for Environmental Learning (CEL) are to promote environmental education, to improve the public's understanding of current and emerging policy issues and to increase opportunities for the public to communicate with the Agency.

To that end, the Center has sponsored an environmental lecture series featuring prominent environmental speakers and has co-presented forums and seminars. These sessions, held both in-house at EPA and throughout the Region, focus on issues including: waste minimization, air toxics, risk analysis and risk communication, indoor air pollution, environmental education trends, and dispute resolution. Video tapes of some sessions are available.

To support and promote environmental education efforts within the Region through official EPA recognition, the Center for Environmental Learning, with assistance and guidance from its Advisory Board, selects and presents Environmental Education Awards to exemplary programs.

In 1987, the CEL presented its first award from 57 nominations to Ms. Marjorie Crofts, coordinator of Delaware's Inland Bays Environmental Education Program. In 1988, 74 persons and programs were nominated for the annual CEL Award, from which seven were chosen.

In the coming year, the CEL plans to accomplish its goals (1) by supporting environmental education through informal meetings, conferences, and forums with educators, non-profit organizations, industry and other constituencies, (2) by promoting outstanding educational contributions through CEL's Annual Awards, (3) by supporting all efforts to improve the public's understanding of environmental issues and related public policy developments, and (4) by stimulating others to provide environmental education.

Working in partnership with leaders of non-profit organizations, local and state government agencies, industry, and academia is key to the success and long-term effectiveness of the Center for Environmental Learning. *Bonnie Smith, the CEL Director,* actively seeks these partnerships and also welcomes requests for CEL assistance and involvement at 215-597-9076.

1988 CENTER FOR ENVIRONMENTAL LEARNING AWARDS

Classroom teacher TERRY THOMPSON for her devotion and professional accomplishments in developing numerous outstanding environmental education programs in Accomack and Northampton Counties, Virginia

THE MATHEMATICS AND SCIENCE CENTER in Richmond, Virginia for developing The River Times Environmental Education Curriculum to teach Virginia's students about the ecological and historical significance of the James River

THE CENTER FOR HAZARDOUS MATERIALS RESEARCH of The University of Pittsburgh for developing a Hazardous Waste Minimization Manual for Small Businesses

In industry, PENNSYLVANIA POWER AND LIGHT COMPANY for the accomplishments of its field education programs in Central Pennsylvania

PATRICIA HADDON of Anne Arundel County's Office of Planning and Zoning for their program to deter "casual" pollution in a "Don't Dump - Chesapeake Bay Drainage" campaign marked on storm sewers countywide

THE NATIONAL WILDLIFE FEDERATION for its Backyard Wildlife Habitat Program which encourages and educates individuals and groups to preserve and improve wildlife habitat where we live, work, and go to school

DR. WILLIAM RITTER AND RUTH ALMOND for inspiring Environmental Education programs which involve participation from the entire community at Robbins Park Environmental Study Center in Upper Dublin Township, PA; and Eagle Scout, DAVID MOFFATT for following their lead

DELAWARE

Delaware is the smallest state in Region III, covering 2,057 square miles with a population slightly over 600,000. Situated on the Delmarva peninsula, the State lies primarily in the Atlantic coastal plain with a small area in the northeast corner of the State in the Piedmont plateau. Delaware's sandy soils, large quantity of wetlands (18% of its land surface), dependence on ground water as its principal source of drinking water, and diverse industry (e.g,, chemicals, agriculture, poultry, shellfish, tourism, automobile assembly) present significant environmental challenges to the State and EPA.

The principal environmental agency in Delaware is the Department of Natural Resources and Environmental Control (DNREC). Although the drinking water compliance program is handled by the Department of Health, DNREC is responsible for all other EPA delegated programs in air, water, and hazardous waste management. In spite of its size, Delaware has major environmental concerns. Their wastewater discharge control program deals with about 100 dischargers of which 36 are classified as major. There are 16 hazardous waste facilities in the State, and 21 Superfund sites (second only to Pennsylvania in number in Region III). Recent air quality data have required Delaware to expand its current air pollution State Implementation Plan (SIP) to further reduce sources of ozone and carbon monoxide.

In addition to these delegated programs, EPA and DNREC have recently begun a process to protect and enhance water quality and living resources within the Delaware Bay and the State's Inland Bays through EPA's National Estuary Program. This program assists states in developing and carrying out basin-wide programs intended to conserve these resources. Initial formal commitments by EPA and the states for these programs are being developed at this time.

Secretary Jack Wilson ably represented his Region III colleagues on the State/EPA Committee which meets quarterly to advise the EPA Administrator on planning and policy direction. EPA was also fortunate in 1987-88 to have Phil Retallick, DNREC's Air and Waste Division Director, participate in a pilot process involving a senior state environmental official in evalutation of EPA's national operating guidance and cross-media project.

Another point of note is Delaware's recently completed Environmental Legacy Program. This program was initiated in 1986 by Governor Michael Castle to develop a long-range plan to ensure that Delaware's environment would be protected and enhanced into the next century. By executive order, Governor Castle created a steering committee of 27 individuals from the public and private sectors to make recommendations on how best to produce this report. A total of 122 individuals from across the State served on ad hoc committees which produced the key findings and recommendations on ways to preserve environmental quality and educate the State's citizens on how they need to contribute to the effort. It is, indeed, a uni-

Honorable John E. Wilson, III
Secretary
Delaware Department of Natural Resources and Environmental Control

"Managing our natural resources and regulating facilities which impact the environment are increasingly complicated tasks. In Delaware, we've been able to strike a balance between growth and maintaining the quality of life we've come to appreciate. We haven't always seen eye to eye with EPA officials, but with their continued support and cooperation, we've been able to develop some of the best environmental programs of their kind in the Nation. The relationship between the states and EPA will play a more important role as we begin to tackle tough issues at the regional level."

DISTRICT OF COLUMBIA

The District of Columbia has succeeded in substantially improving the water quality of the Potomac River primarily through operation of the Blue Plains Wastewater Treatment Plant -- one of the largest and most advanced treatment plants in the world. Sewer service has been provided to a major portion of the Washington metropolitan area since 1938 with over a billion dollars spent to expand and upgrade the facility. The plant now provides 98% removal of the biochemical oxygen demand, 98% removal of total phosphorus and 46% removal of total nitrogen. The disposal of sewage sludge generated from the plant is an issue currently under study.

With achievement of improved water quality in the Potomac River, the District is now focusing its attention on the long-neglected Anacostia River. The real commitment to clean up the Anacostia began with Mayor Barry's participation in the signing of the multi-state and Federal Chesapeake Bay Agreement in 1983. The District, in cooperation with the Soil Conservation Service, has begun work on the Watts Branch to reduce stream bank erosion. Other projects are planned or under way which will reduce pollutant and sediment loadings to the Anacostia.

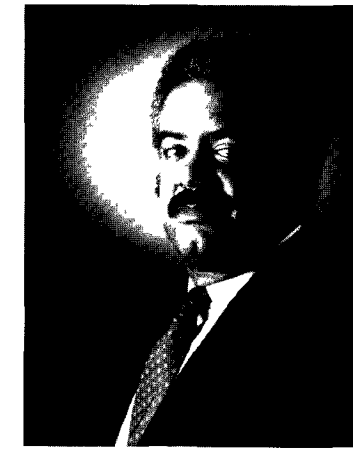
The District's Storm Water Management Program will also help in the cleanup of the Anacostia River and other District waters by minimizing the transport of pollutant and soil-laden runoff. This program was the first completely urban storm water management program in the country. Response by the developers has been very encouraging and compliance with the regulations promulgated on January 1, 1988 is high. A Storm Water Management Guidebook was published to familiarize developers with required Best Management Practices for erosion control. A citizens' brochure, entitled "You Can Improve Your Natural Environment," was published to educate the District's residents on the importance of storm water management practices for homeowners.

The District's water quality programs have been supported in large part by grants from EPA. The water quality improvements that have resulted can be seen in both the Potomac River and the Chesapeake Bay with the return of significant numbers of game fish, including striped bass and American shad, to the District's waters. The District's fisheries management program became fully operational in 1985 and includes resource management, research, and educational components. Fishing clinics are conducted at the annual Riverfest celebration and a summertime Aquatic Resource Education Program has been established for children ages 4-16. The program teaches conservation ethics, aquatic ecology, biology, fishing techniques and safety, and emphasizes close-to-home fishing opportunities. Expansion of the program to the winter months will be possible when the Aquatic Education Center is completed in cooperation with the National Park Service in Anacostia Park. A boat ramp is also being constructed.

In addition to improving water quality, the District has been actively involved in a number of initiatives to address other environmental concerns. The District's pending underground storage tank statute contains provisions to fully regulate the installation, operation and removal of all petroleum and hazardous material storage tanks. An agreement between the District and EPA includes a Federal grant of $475,000 to develop a program to take corrective actions needed to remedy current problems with existing leaking underground storage tanks.

"The District of Columbia, in partnership with the United States Environmental Protection Agency, is working to improve the quality of our environment for all people now and for generations to come."

Honorable Donald G. Murray
Director
Department of Consumer and Regulatory Affairs



The District of Columbia is the only jurisdiction east of the Mississippi River with regulations which require gasoline stations to install specially constructed fill nozzles to prevent the discharge of gasoline vapors that increase the ozone level. Despite the initial opposition from service station owners, the District has achieved a compliance rate in excess of 95% and a reduction in volatile organic compound (VOC) emissions of approximately two tons per day. The District has a vigorous inspection and enforcement program where fines of $50 to $500 are imposed on the spot for each violation.

MARYLAND

"I can't imagine a better working relationship between any state and its supporting region than between Maryland and EPA Region III. On all environmental fronts and at all levels of our two organizations, we have excellent communication and cooperation."

Honorable Martin W. Walsh, Jr.
Secretary
Maryland Department of the Environment

After his election as Governor of Maryland, one of the first acts of William D. Schaefer was to create the Department of the Environment to centralize the management and enforcement of environmental laws. Martin W. Walsh, Jr., the former District Engineer for the Baltimore District of the U.S. Army Corps of Engineers, was selected to be the first secretary of the new department in July 1987.

There are four major program administrations in the new department: Air Management Administration, Water Management Administration, Hazardous and Solid Waste Management Administration, and Storm Water Management Administration. There are two major program support units: the Toxics Environmental Science and Health Group, and the Planning, Inspection and Compliance Program. The Department is also responsible for programs controlling radiation, nuclear, and noise pollution, and the resource protection program for soil erosion and sediment control.

The Maryland Department of the Environment (MDE) is responsible for all major environmental programs in the State. Its stated purpose is to "protect and restore Maryland's environment by working to reduce the uncontrolled release or disposal of toxic, hazardous, or undesirable substances or emissions."

The dominant natural resource and environmental concern in Maryland is the Chesapeake Bay and its tributaries. The Bay is at the center of Maryland geographically, as well as politically and economicly. It goes without saying that the Bay's environmental rehabilitation is a major focus of the Department of the Environment. Although each of the MDE programs has its own performance goals, their efficacy is often measured against how the particular problem will impact upon the Chesapeake Bay's water quality, flora or fauna. EPA has demonstrated its involvement and commitment to this ecosystem through the creation of the Chesapeake Bay Program Office in Annapolis. This office is dedicated to assisting Maryland and the other states in the Bay's watershed with implementation of the 1987 Bay Agreement.

General areas where EPA and the Department of the Environment are working toward mutual solutions include:

- Nutrient reduction from waste water facilities (including advanced treatment requirements)
- State revolving loan fund for municipal waste water facilities
- Sludge management
- Modification of Maryland's State Implementation Plan (SIP) for Ozone
- Community Right-To-Know reporting and emergency preparedness
- Superfund waste site cleanup
- Waste minimization efforts
- Radon identification and mitigation.

In addition to these areas, EPA and Maryland are discussing innovative programs in environmental education both in the area of the Chesapeake Bay and with general environmental curricula for schools.

It should also be noted that EPA and the MDE have other partners in Maryland for achieving environmental goals. Included among the organizations are the Maryland Departments of Agriculture, Natural Resources, Health and Mental Hygiene, and the Critical Areas Commission, as well as the county health departments which help provide a local contact for Maryland's citizens.

In mid-1988, Secretary Walsh succeeded Delaware Secretary Jack Wilson as Region III's representative on the State/EPA Committee which meets quarterly to advise the EPA Administrator on planning and policy direction.

PENNSYLVANIA

"The pressing environmental needs confronting Pennsylvania have required effective action on the part of both EPA and DER. Only through a Federal and State partnership can we be fully successful discharging our responsibilities to safeguard public health and safety."

Honorable Arthur A. Davis
Secretary
Pennsylvania Department of Environmental Resources

Pennsylvania is Region III's leading state not only in physical size, but also in the size of the environmental challenges facing its Department of Environmental Resources (DER). Pennsylvania has more wastewater dischargers, more community drinking water supplies, and more hazardous waste sites than any other Region III state. Pennsylvania has a strong agricultural economy -- much of it located in the Chesapeake Bay drainage area. Mining and heavy industry have played a major role in the State's economic development. Pennsylvania's environmental success has resulted, in part, from the passage of strong environmental laws, some of which have served as models for the rest of the Nation. This has been a banner year for environmental legislation in Pennsylvania, with the passage of the following:

Superfund Law
Governor Casey signed Pennsylvania's Superfund law in October 1988. The law establishes a State-operated and State-funded program to evaluate and clean up hazardous waste sites that are not addressed by the Federal Superfund program.

Solid Waste Disposal/Recycling Law
This legislation imposes mandatory recycling of solid waste for all communities of more than 10,000 people by 1990; smaller communities must comply by 1991. It also requires the counties to control of all waste within their borders and establishes strict siting criteria for new waste disposal facilities.

PENNVEST Water Systems Aid
This law provides low interest loans and occasional grants to smaller communities to improve water and sewer systems. Over the next 25 years, the State projects $2.5 billion could ultimately be made available for these projects.

Medical Wastes
A law signed in July 1988 requires medical waste transporters to be licensed and all waste shipments manifested.

Radon Certification Program
Pennsylvania adopted a new law establishing a radon certification program for all persons who test and repair buildings for radon contamination. The regulations address fees, qualifications including minimum experience requirements, proficiency testing, certification measures, and truth in advertising.

Low-Level Radioactive Waste Disposal Law
This act mandates the licensing and construction of a plant to handle radioactive waste from four states. This facility is to be completed by 1994 and prescribes strong State control over the site selection, construction, and its regulation.

Scenic Rivers
An act was passed designating additional sections of the Schuylkill River as a scenic river this past spring. Two other rivers are also in the process of being designated. There are now 301 miles of streams in the State's scenic river system.

The General Assembly also enacted a bill that would increase the number of hearing officers on the Environmental Hearing Board. The passage of this bill will decrease the backlog of 600 appeals and result in more timely hearings on appeals, primarily concerning wastewater discharge permits. Also pending before the General Assembly is a bill to regulate below- and above-ground petroleum storage tanks.

In view of the many legislative mandates facing Pennsylvania's environmental program managers, the Department of Environmental Resources, in cooperation with EPA, is developing a process that will integrate health risk information and the potential for risk reduction into the State's planning process for setting management priorities. These environmental priorities will help guide the allocations of program resources and enhance the accountability of these resources to ensure that those problems posing the greatest threat to the State's citizens and environment receive appropriate attention.

VIRGINIA

Honorable John W. Daniel, II
Secretary
Virginia Secretariat of Natural Resources

"The continued cooperation shown by EPA has been an important component in our efforts to protect and preserve Virginia's natural resources. Much of the success that we have had, and particularly with regard to the recent multi-jurisdictional agreement to clean up the Chesapeake Bay, has been accomplished with EPA's support and participation."

In 1986, the General Assembly established a Secretariat of Natural Resources. For the first time, Virginia's environment was represented by a single voice within the Governor's cabinet. Within this Secretariat, a Department of Waste Management was created to carry out the many new solid and hazardous waste laws passed within this General Assembly. The advisory role of the Council on the Environment was also expanded to address long-term environmental issues which do not clearly fall within the purview of the six other resource agencies. A fine example of the leadership of the Secretariat of Natural Resources is the efforts of Virginia to clean up the Chesapeake Bay and to commit itself to other environmental projects.

Chesapeake Bay

The Chesapeake Bay is one of the finest natural resources in North America. In 1983, the Commonwealth of Virginia joined with EPA, the States of Maryland and Pennsylvania and the District of Columbia to establish goals and objectives to improve and protect the Bay. These goals were outlined in the first Chesapeake Bay Agreement. In 1986, EPA Region III transferred the Chairmanship of the Chesapeake Bay Executive Council to Gerald Baliles, Governor of Virginia. In 1987, Governor Baliles developed, along with his colleagues in the three other Bay states, the Second Chesapeake Bay Agreement. The new agreement has many ambitious commitments, including a 40% reduction of nutrients being discharged into the Bay.

Revolving Loan Fund

The Commonwealth of Virginia was one of the first states to have an approved State Revolving Fund Capitalization Grant. The revolving loan fund established by the General Assembly in 1984 is dedicated solely to wastewater treatment improvement at publicly owned facilities. Upcoming water quality priorities in the State include meeting the requirements of the National Municipal Policy, developing new water quality standards, reducing toxic discharges, and reducing nutrient discharges.

Wetlands/Water Resource Symposium

Over the past 50 years, the Nation has lost valuable wetlands. Much of these wetland losses are attributed to fill material being placed in low-lying areas so that development can occur. Other significant wetland losses are caused by flooding for private and public drinking water impoundments. EPA, the U.S. Army Corps of Engineers, and the Commonwealth of Virginia recognized that many local communities were planning for the future population demand and proposing dams along streams thus inundating vast acres of wetlands. On June 20, 1988, a joint water resource symposium was hosted in an attempt to involve local government and the General Assembly to balance the water supply needs against environmental impacts. The 150 participants in the conference evaluated this balance and guidance is expected to emerge from the General Assembly on this important resource management issue.

Comprehensive Data Management

During 1987, Region III began a pilot effort with the Commonwealth of Virginia to develop a Comprehensive Data Management Plan. The intent of their joint planning effort is to address the State's data management activities to improve information system compatibilities between the two agencies. After a one-year pilot effort, the roles and responsibilities of our agencies have been refined to a full-scale operational mode.

WEST VIRGINIA

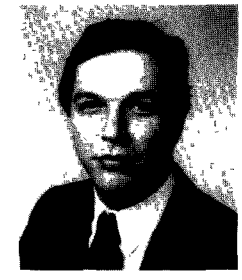
West Virginia is regulated by a number of environmental resource agencies. Its environmental problems are a challenge to the several State and Federal partnerships that have grown in recent years. Since the late 1970s, West Virginia has been in the forefront in developing an annual executive agreement with EPA to identify the major environmental problems in the State and to assign implementation responsibilities among EPA and the State agencies.

West Virginia is characterized by a vast reserve of energy resources, a mountainous topography, and limited commercial and industrial properties usually found in the river valleys. This combination of physical and economic attributes has made compliance with environmental laws difficult for the regulated community and enforcement of these laws equally challenging for the regulatory agencies. Local government agencies have shared in these compliance challenges in areas such as air toxics, hazardous material spills, power and steel facility air emissions, municipal sewage treatment plant operation, and coal mine wastewater discharge control.

As a group, West Virginia's environmental regulatory agencies have responded admirably to many of these challenges in the past year. The Department of Natural Resources (DNR) has begun a comprehensive implementation of a major statewide litter control law. Significant progress has also been made in the pending transfer of energy-related wastewater discharge permitting from DNR to the Department of Energy. EPA Region III has been working with the Departments of Natural Resources and Health to improve the State's environmental laboratories. The Health Department, with EPA's assistance, continues to develop a risk assessment protocol and is beginning asbestos, radon, and wellhead protection programs.

Problems such as sludge management and pesticide management continue to receive significant attention from the Department of Agriculture. Voluntary industry reductions of toxic air emissions worked out by the Air Pollution Control Commission, industry and the National Institute for Chemical Studies may prove to be a model for the Nation.

"The role of the environmental regulator has become more complex. Not only must pollution be controlled at the discharge point, but new and better ways must be found to reduce the amount of waste generated."

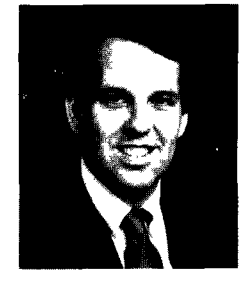


Honorable Ronald R. Potesta
Director
Department of Natural Resources

"EPA's support has aided our Environmental Health program to serve our citizens more effectively."

Honorable David K. Heydinger, M.D.
Director
Department of Health

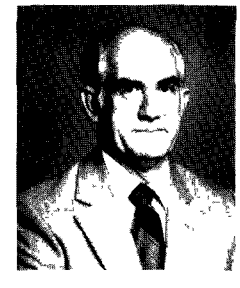
"As the State energy regulatory agency, we will continue to support the concept of primacy and the direction of the current administration for State control and cooperative efforts to reduce duplication in governmental regulations and enforcement."



Honorable Kenneth R. Faerber
Commissioner
Department of Energy

"After 40 years of effort, I feel safe swimming in and eating the fish from the Kanawha River again."

Honorable Gus R. Douglass
Commissioner
Department of Agriculture



Carl Beard, a true pioneer in the air pollution control field, has announced his retirement at the end of 1988. Carl's shoes will be hard to fill.

Honorable Carl G. Beard, II
Executive Director
Air Pollution Control Commission

Communicating With the Public

"EPA is committed to a strong information outreach program to ensure public knowledge and involvement in environmental decisions that affect the quality of drinking water, the air we breathe and the ground beneath our feet."

Janet Viniski
Director
Office of Public Affairs

The environmental news story of the year occurred in January 1988, when a four-million-gallon tank of oil collapsed sending over 500,000 gallons of oil into the Monongahela River near Pittsburgh, Pennsylvania. Region III's Office of Public Affairs handled hundreds of inquiries concerning the spill, its impact on drinking water supplies from southwest Pennsylvania to Kentucky, and Agency regulations. For ten straight days, a public affairs representative provided information through daily press conferences and responded to calls from dawn until midnight.

In addition to on-scene work at this site and many others, the Office of Public Affairs writes news releases and other materials to inform the public of Region III activities. Over half of the 297 news releases issued in the past year concerned specific enforcement actions taken by EPA to protect the environment. This year, news releases on all penalties against facilities with PCB violations helped increase industry attention to EPA's concerns about PCB handling.

Public Affairs staff also worked on several consumer information programs. Some of these included developing public service announcements on radon in the home, distributing TV spots on lead in drinking water, and holding a press conference on the removal of a commonly used termiticide from the market. This year, education efforts began on the Emergency Planning and Community Right to Know Law, a law which makes it easier for the public to learn about chemicals in their communities.

Thousands of calls come to Region III from the news media and the public. Many of the calls are for more information on EPA activities but some calls are the Agency's first alert to a potential environmental problem or community concern. Public Affairs has a toll-free line to enable people from across the Region to call in information, to request brochures and to ask questions. The number is 1-800-438-2474

Over 2,000 written requests for EPA documents were sent to Region III over the past year. Under the Freedom of Information Act, the public affairs staff must ensure that EPA responds within ten working days. The staff also responds to many informal letters from the public.

Public Information Coordination

Many individuals outside EPA share in providing information to the public on environmental issues -- elected officials, news media, state environmental agencies, local governments, environmental groups, industries, and others. Each year EPA develops an External Affairs Plan to ensure that we provide and exchange information with these groups. This networking increases the number of people who can help inform the public about environmental issues and involves a wide variety of people in the discussions on solutions to pollution problems.

During the past year, this plan has facilitated the coordination of efforts to inform the public about the progress achieved under the Chesapeake Bay Agreement, the problem of naturally occurring radon in homes, the danger of lead in drinking water, the value of wetlands, and the efforts to clean up Superfund sites.

In all instances, the communication principles guiding the coordination activities in the External Affairs Plan are honesty, openness to suggestions, courtesy, and professionalism.

Superfund Community Outreach

Region III Community Relations Coordinators arranged over 60 meetings in the past year to inform the public about Superfund sites in their communities. Additional efforts included about 100 news releases, hundreds of door-to-door visits to homes closest to the sites, thousands of phone calls and many briefings for local officials. The purpose is to inform the public so that they can have input into cleanup decisions. The Regional Administrator personally visited about 20 sites.

A major challenge in 1988 has been ensuring that the public has an equal opportunity to become involved in decisions at sites where the responsible parties are funding Superfund Site cleanups rather than EPA. Public Affairs representatives have met with EPA enforcement personnel as well as company representatives to discuss legal public participation requirements and to sensitize them to the public's concerns at specific sites.

Efforts also began this year to inform local citizen groups about grants available to them under Superfund for hiring independent experts.

Communicating With Our Youth

In Region III, providing information to the public is regarded as part of everyone's job. The public wants and needs to know what EPA is doing to protect the environment. Region III is especially pleased with the interest and enthusiasm shown by students. During the past year, activities continued with the Region's adopted school -- Abraham Lincoln High School, the Philadelphia magnet school for environmental and horticultural programs. Region III also sent Presidential Youth Award Certificates to approximately 875 students throughout the Region who completed environmental projects. The Region III winner of the National Youth Awards Competition was Debbie Combs, 10, of Ceres Elementary School in Bluefield, WV. She gave her presentation entitled "Four-Foot-High Private Eye" to over 25 civic groups, organizations and businesses. The presentation covered environmental problems such as litter and water pollution.

The Region III Chapter of Women In Science and Engineering (WISE) held a poem and poster contest for elementary school children in the five-county area surrounding Philadelphia. Approximately 200 entries were received. Winners were selected for each grade and certificates were awarded at a ceremony held at the Academy of Natural Sciences Museum in Philadelphia.

OUR PROGRESS

Is the quality of our environment improving? Are the existing pollution control programs protecting our resources and our quality of life? Are the most serious environmental problems receiving appropriate attention? These are questions we at EPA Region III struggle to answer daily. We are confident that we have made progress in protecting our environment. Billions of dollars have been spent constructing wastewater treatment facilities to control the quantity and quality of industrial and municipal effluents entering our streams. Millions of automobiles are inspected annually reducing the emissions of carbon monoxide and volatile organic compounds into the air. Thousands of hazardous wastes sites have been assessed to identify those posing the greatest public threat. Hundreds of these sites are undergoing cleanup action. These are but a few of the pollution control efforts that have made a difference in the quality of the environment in Region III.

Even with this progress, however, the answer to the question -- Is the quality of our environment improving? -- remains elusive. Water and air quality monitoring results often show progress being made on one front as new, perplexing problems emerge on another. We have significantly reduced the ambient lead concentration in the air, but ozone levels have increased. We regulate seven hazardous air pollutants, but there are thousands of unregulated chemicals on the market with potential for release into the atmosphere. We have reduced the levels of biochemical oxygen demand, nitrogen, phosphorus, and suspended solids entering our streams from municipal and industiral wastewater discharges, but contributions from nonpoint sources (e.g. agricultural, mining, and urban runoff) mask many point source control efforts. We issue permits to those generating, transporting, storing, disposing of or incinerating hazardous wastes to ensure a safer environment, but we are faced with many health risks from unsafe hazardous waste disposal practices of the past.

Often the challenges of the future have had a tendency to overshadow our progress. Both the challenges and the progress are important to recognize. Many health threats of the past challenged people then in the same way today's problems challenge us. Air pollution disasters and widespread outbreaks of water-borne disease presented life-threatening problems -- problems which today have largely been solved. These successful solutions are important to remember as we face future challenges. With continued support from the public and our Federal, state, and local environmental partners, we at EPA Region III are confident that our current progress will be the foundation for future success.

EPA REGION III ENVIRONMENTAL SUCCESSES

SAFE DRINKING WATER - Of the almost 23 million people in EPA Region III served by community public water supplies, 99.2% are drinking water that meets the requirements of the Safe Drinking Water Act.

AIR QUALITY IMPROVED - Inspection and maintenance programs operating in urban areas throughout Region III have been responsible for a 34% decrease in carbon monoxide emissions, and a 35% decrease in volatile organic compound emissions from motor vehicles since 1977. Ambient lead concentrations have decreased 87% during this same period as a result of using unleaded gasoline.

HAZARDOUS WASTE CLEANUP SUCCESS - To date, proper treatment or disposal of hazardous substances in Region III has removed public health threats associated with:

- *53,201 tons of contaminated soils and sludges*
- *1,404,660 gallons of hazardous substances*
- *16,676 full 55-gallon drums of hazardous substances*
- *3,866 gas cylinders.*

In addition, 722,388 cubic yards of contaminated material has been stabilized on site.

CLEANUP FIRST - The Taylor Borough Site in Lackawanna County, Pennsylvania was the first hazardous waste site in the Nation where cleanup was totally completed by the responsible parties.

RADON SUCCESS - An extensive radon program has been developed in Region III. A home-testing database is used to identify high-risk areas; and an extensive risk communication effort has been made to inform the public of the problem. The Maryland and Pennsylvania programs developed in cooperation with Region III are among the best in the Nation.

SUPERFUND ENFORCEMENT SUCCESS - Region III's Superfund enforcement program is among the most successful in the Nation and has attained national recognition for the number and quality of its settlements. More than $200 million of Superfund money has been conserved or recovered through settlements with responsible parties.

CONSTRUCTION GRANT PROGRAM FIRST - In June 1988, Virginia became one of the first states to be awarded a grant from EPA to capitalize a loan program for the construction of wastewater treatment works.

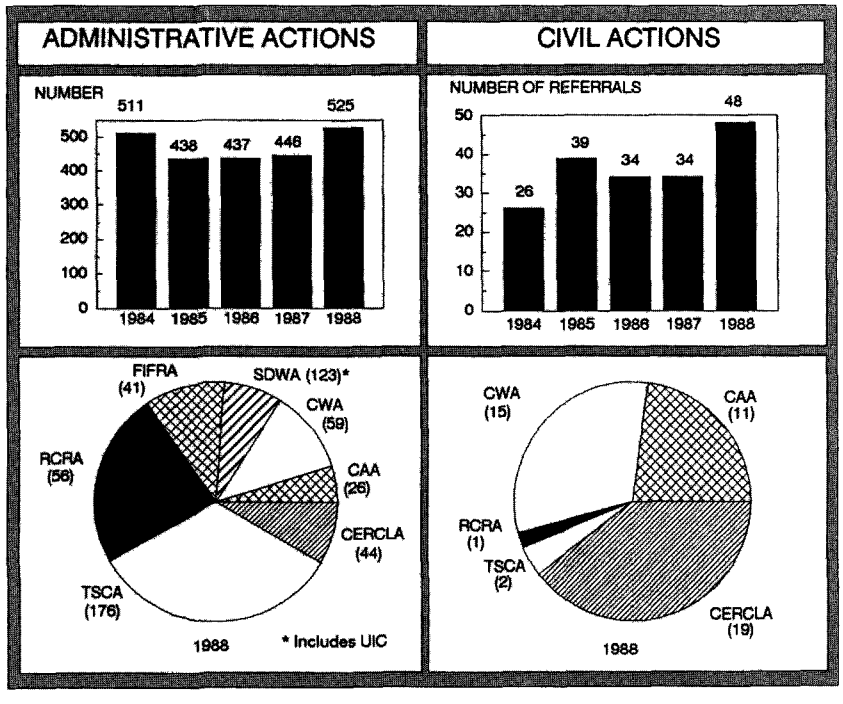
NONPOINT SOURCE PROGRAM FIRST - In September 1988, Delaware was awarded the Nation's first nonpoint source grant from EPA to implement four projects demonstrating control techniques.

WATER QUALITY IMPROVED - More than 8,000 wastewater treatment projects have been funded in Region III since 1972 at a cost of almost $6 billion. Recreational activities including fishing, boating, and swimming are enjoyed on many streams and rivers previously unsuitable for these uses.

Enforcement Profile

"In order for environmental statutes and regulations to have their intended effect, they must be complied with by a wide range of industries and individuals. In many instances, regulated entities are law-abiding. The goal of enforcement is to assure that all others also comply. To pursue this goal, EPA and the Department of Justice bring civil or criminal cases designed to require specific companies or individuals to pay penalties or even to serve prison terms for their failure to comply voluntarily. The intended message is that compliance pays -- a message EPA hopes will spread throughout the regulated community. EPA tries to prosecute its filed cases vigorously, to bring cases under all laws and against all types of violators, to use penalty policies designed to offset any economic benefits gained from violations, and to publicize enforcement activities. The goal of these enforcement actions is widespread, rapid, full voluntary compliance with environmental laws."

Marcia E. Mulkey
Office of Regional Counsel



EPA's authority to protect the environment is rooted in many separate pieces of legislation -- the Clean Air Act (CAA); the Clean Water Act (CWA); the Safe Drinking Water Act (SDWA); the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Toxic Substances Control Act (TSCA); and the Resource Conservation and Recovery Act (RCRA). These laws and their amendments dictate the level of environmental protection to be achieved and provide EPA with specific enforcement authorities to ensure these levels are met. EPA Region III is committed to an aggressive enforcement program designed to bring violators into compliance through timely and appropritate enforcement actions. Although the number of enforcement actions and penalties collected is the primary indicator of the success of the enforcement program, the Region is also focusing on actions that effectively reduce health risks and address emerging environmental concerns.

Administrative Actions

Because each environmental law provides EPA with different enforcement authorities, the complexity of the overall enforcement program is ever increasing. In general, enforcement actions can be divided into two categories -- administrative and judicial. Administrative actions can be issued directly from EPA to the violator while judicial actions must be referred to the Department of Justice and filed in court. The types of administrative actions routinely taken by EPA include notices of violation or non-compliance, administrative orders, and administrative complaints. A notice of violation or non-compliance, as the name implies, puts the violator on notice that EPA is aware of the violation and planning to take enforcement action. An administrative order goes

one step further by actually requiring the violator to take a specific action to correct the problem. In some cases, EPA also has the authority to issue administrative complaints which can result in civil penalties for violations and, in the case of RCRA, may also result in injunctive relief.

Judicial Actions

Two types of judicial actions can be referred to the Department of Justice -- civil and criminal. Under the civil referral process, a complaint seeking corrective action and penalties is filed in court. Usually a settlement is then negotiated with the violator and the agreed upon terms are formalized in a final consent decree. This is a legal document binding the violator to the terms specified and will ordinarily set forth an expeditious schedule for compliance with the applicable laws and stipulate penalties to assure the schedule is met. Consent decrees also usually set a settlement penalty amount for the violations involved. If a case cannot be settled, it is litigated on issues involving compliance and/or penalties.

In instances where a violator has knowingly and willfully disregarded an environmental law, the criminal referral process is initiated. Because of the strong stigma attached to criminal prosecution and the potential for imprisonment, criminal sanctions are EPA's strongest enforcement tool. The criminal action begins with an initial allegation arising from any source including the EPA program office, a citizen complaint, a referral from another agency or from an investigation by an EPA criminal investigator. If a preliminary evaluation of the allegation indicates that further action is warranted, a formal investigation is initiated by EPA's Office of Criminal Investigation. When fact gathering activities including surveillance, search warrants, and witness interviews generate enough evidence for prosecution, the case is referred to the Department of Justice and a grand jury indictment is sought. Violators indicted by the grand jury can enter into plea negotiation or go to trial. Sentences usually include fines and/or imprisonment.

The success of EPA Region III's enforcement program is a result of cooperation among the program offices, the Office of Regional Counsel, and the Office of Criminal Investigations as well as the Department of Justice and the State enforcement counterparts. Each plays a key role in a complex process that challenges everyone involved.

Region III Criminal Investigations

PUBLICKER CASE: *On November 5, 1987, a Federal grand jury indictment charged Cuyahoga Wrecking Corporation, Overland Corporation, Samuel Runfola, Virgil Cummings, and Ernest Ray Martin with conspiracy, illegal transportation of hazardous wastes, and illegal storage and disposal of hazardous wastes under the Resource Conservation and Recovery Act. A criminal felony information against Publicker Industries, Inc. of Greenwich, CT and the company's agreement to enter a guilty plea were also filed simultaneously.*

After pleading guilty, the Publicker Corp. was fined $50,000; the Overland Corporation of Pennsylvania was fined $100,000; the Cuyahoga Wrecking Corporation of America was fined $100,000; Ernest Martin was sentenced to three years probation, a $3,000 fine, and 100 hours of community service; and Samuel Runfola was sentenced to five years in prison -- total time suspended, 3 years probation, a $5,000 fine and 250 hours of community service. Virgil Cummings was sentenced to 4 years in prison with all but 60 days suspended, 4 years probation, and a $4,000 fine after being found guilty of four counts in a jury trial.

* * * * * * * * *

ASHLAND OIL CASE: *On September 15, 1988, a Federal grand jury returned an indictment charging Ashland Oil, Inc. with violating Federal environmental laws in the collapse last January of an Ashland storage tank that spilled an excess of 500,000 gallons of oil into the Monongahela River near Pittsburgh, Pennsylvania. Ashland Oil was charged with two misdemeanor counts each carrying a maximum penalty of $200,000 or double the monetary loss suffered as a result of criminal conduct. These counts were the most stringent that could be brought under Federal criminal laws. The spill is said to have affected drinking water supplies and plant and animal life for at least 100 miles downstream. The investigation is continuing and the government will determine if Ashland Oil employees or officials may have been responsible for violations of the law.*

In a separate civil action in July, the Justice Department filed a proposed consent decree requiring Ashland Oil to complete the cleanup of the spill and to reimburse the government $680,000 for emergency response work by Federal agencies. Ashland agreed to the decree's terms.

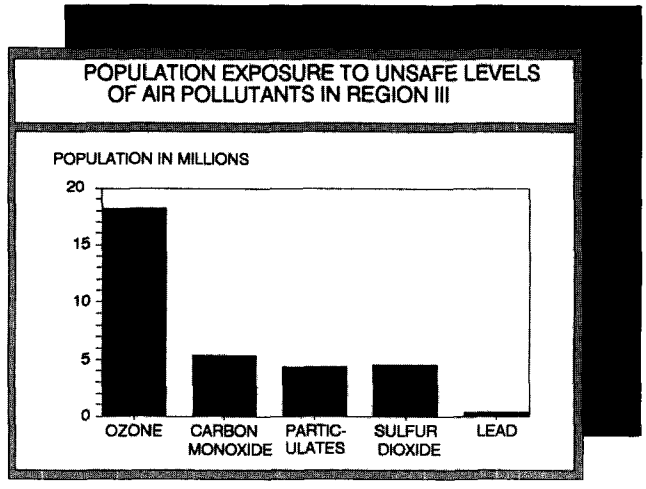
Air Quality

The Changing Air Challenge

It is easy to lose sight of the job that must still be done in controlling air pollution. After all, we have cleaned up the visible smoke stack problems of the 1970's that polluted the air around the industrialized areas, and the air appears cleaner than it has for years. Today's challenge involves cleaning the air of what we often cannot see, e.g., air toxics. We must begin to address emerging air pollution issues including the long-range transport of pollutants, and the daily impact of millions of people doing simple activities such as using household cleaners or driving their cars. These challenges will require a cooperative effort by industry, civic leaders, local officials and planners, control agencies, as well as the general population.

... the air appears cleaner than it has for years. Today's challenge involves cleaning the air of what we often cannot see...

The answers will not be easy. We must be willing to pay more for the goods produced by the chemical and manufacturing industry, many of which we take for granted in our current lifestyle. We need to better integrate our environmental programs to ensure that the cleanup of one environmental media such as air or water does not adversely affect another. The great American pastime of driving our cars everywhere without consideration for its effect on the environment will have to be reevaluated. Each community must be concerned not only with the local effects of its air pollution control efforts, but also with the impact of these actions on nearby and even distant communities located downwind. The academic community, industry, and the government must continue to look for new solutions to reduce the harmful by-products associated with producing goods. Improvements must be made in the communication and understanding between control officials, elected officials, regulated industries, and the citizens of each community.



Global warming, the hole in the ozone layer over the Antarctic, the deposition of toxic pollutants in remote areas, and the acidification of lakes are indicators of the impact of man's activities on the delicate balance in the natural environment. We must be willing to work together to improve our environment if we are to leave the legacy of a healthy world for our children and their children.

Thomas J. Maslany
Director
Air Management Division

PEOPLE MAKE A PROGRAM WORK

Laws, money to purchase equipment, and a satisfactory working environment are important to a program, but people are what make it work. The Clean Air Act is considered one of the most challenging pieces of environmental legislation, both technically and legally. But, the people in the air and radiation programs are up to the challenge. Many of them have been with the program since the passage of the major change in the Clean Air Act in the early 1970's. Others have joined more recently, often right after college. The common thread between these engineers, scientists, and others is their dedication to the understanding and control of air pollution. This dedication is reflected in the attitude and enthusiasm that the people of the program bring to their everyday performance.

Technology is ever-changing, but we can only move forward by the skill of the individual.

Teamwork and a clear understanding of the issues are necessary for a sound solution.

The Pollution Transport Phenomenon

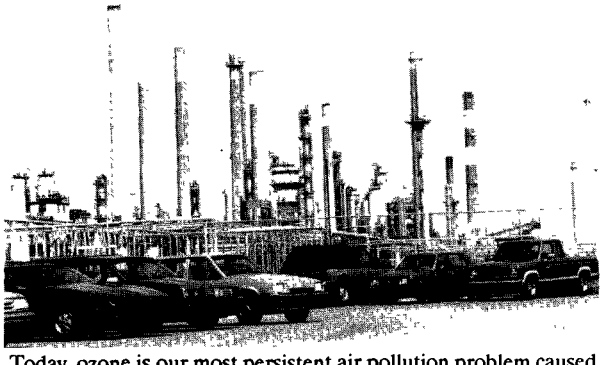
As our understanding of air pollution has changed over the years, we have come to realize that air pollution affects not only the local population around a given source, but that certain pollutants can be transported hundreds of miles to affect other cities, or even wilderness areas. In 1987, the entire Northeast was exposed to a graphic example of atmospheric transport, as smoke from large forest fires in Kentucky and West Virginia blanketed cities to the north as far away as Maine.

Ozone and air toxics, as well as sulfur dioxide and nitrogen oxides in the form of acid rain, are examples of pollutants which can be transported over long distances. Such transport dramatically increases the number of people exposed to a given pollutant, and increases the difficulty associated with solving the problem as well. Control strategies must consider emissions generated hundreds of miles away across political boundaries, where the state agency no longer has jurisdiction. The transportation phenomenon therefore demands that we work closely with air agencies and state legislatures throughout the Northeast as we move to improve air quality in the future.

Ozone: An Intractable Problem ?

Although great strides have been made toward cleaning our air, a serious problem has remained -- ozone, the principal component of smog. This colorless, odorless gas affects our lungs and immune systems, and inflicts damage on crops, forests, and building materials. Ozone forms when volatile organic compounds (VOCs) react in the presence of sunlight. As temperatures increase in the summer, ozone formation is triggered. This process was demonstrated dramatically during the summer of 1988 by the persistently high ozone levels. Even historically clean areas in Region III measured high ozone levels during this period.

Former air pollution control efforts centered on large industry.



Today, ozone is our most persistent air pollution problem caused largely by petroleum refineries, automobiles, and other small sources.

The pollutants which form ozone are emitted from many small sources, such as automobiles, dry cleaners, and gas stations. The challenge facing EPA and state agencies today is finding ways to control emissions from these small sources without completely disrupting the lifestyle we now enjoy.

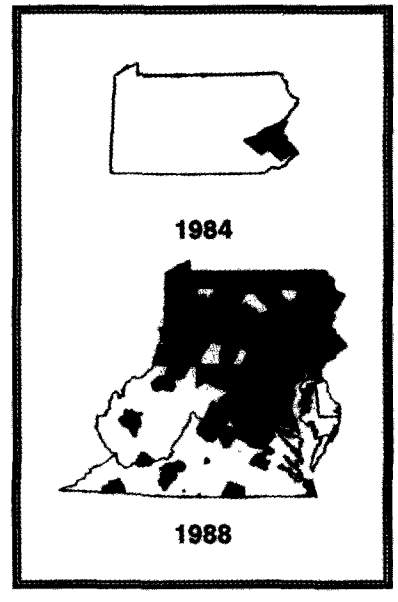
State inspection and maintenance programs for automobiles currently operating in most urban areas of the Region help control emissions of pollutants which lead to ozone formation. Pennsylvania is adopting regulations to control the volatility of gasoline which will, in turn, reduce emissions from automobiles, gas stations, and oil refineries. EPA has asked the states to review and modify their regulations governing pollutants leading to ozone formation. The goal is to eliminate deficiencies and bring all areas under the same level of control. EPA is looking at the effectiveness of the state regulations in an effort to improve the existing programs. While current initiatives will go a long way toward reducing ozone levels, they will not solve the problem entirely. The options we have for further reducing ozone will affect individuals as well as industry, so we must all be willing to make some personal sacrifices to clean up our air.

GOOD vs BAD OZONE

Ozone is considered a harmful pollutant when manmade emissions cause high concentrations of the compound to occur near the surface of the earth. Ozone, however, also occurs naturally in the stratosphere, about 30 miles above the earth's surface. This ozone layer screens out harmful ultra-violet (UV) radiation from the sun. A class of chemical compounds, called chlorofluorocarbons (CFCs), that were developed in the 1930s and widely used in industry, rise up to the stratosphere and deplete the ozone layer, allowing increased UV to reach the earth's surface. UV radiation causes cancer and cataracts in humans, and damages crops and marine life. Unfortunately, manmade ozone at the earth's surface cannot rise up and replace the depleted stratospheric ozone, due to the short lifetime of ozone molecules. EPA has therefore acted to protect the ozone layer by reducing CFC emissions, even as we struggle to reduce ground-level ozone.

RADON

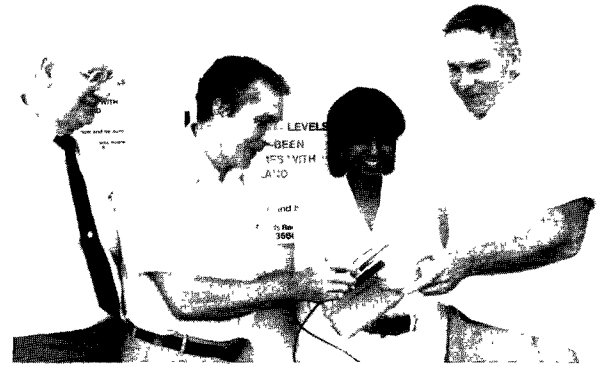
Radon is a naturally occurring radioactive gas which poses a health threat in a significant number of homes across the country. The Office of the U.S. Surgeon General recently issued a health advisory stating that indoor radon is second only to cigarette smoking as a leading cause of cancer. Due to the geology of Region III, radon is found here more often and in higher levels than in most of the United States. For this reason, Region III has aggressively pursued risk communication efforts to inform the public about testing and mitigation measures. Region III efforts have led to the development of comprehensive profiles detailing the extent of the radon problem in each of the Region III states. Their analysis has included compilation of measured house data, evaluations of uranium deposits, water data, and geology. The results from these analyses are then used to help develop and direct state programs. The Maryland and Pennsylvania programs demonstrate the efforts of state governments and Region III to produce radon programs that are among the best in the Nation. Region III is also an active participant at the national level.



The study of radon in schools began in Fairfax, Virginia, in 1988; Maryland, Virginia, and Pennsylvania are active members in the House Evaluation Program. By the end of 1990, Pennsylvania will have finished its participation in a second national survey in which testing is made available to homeowners on a voluntary basis. West Virginia is currently negotiating conditions for participation in the survey.

Homes located in areas where high levels of radon have been found should be tested. An informed homeowner will not only have a screening test conducted, but understands that if an elevated level of radon is found in the dwelling, corrective action should not be taken until a more detailed evaluation is completed. The follow-up testing will not only determine whether the radon poses an unacceptable health risk, but will also aid in determining which corrective actions are necessary.

Through our communication efforts, public awareness of radon has extended from the Reading Prong area of Pennsylvania to the rest of Region III.



Air Toxics

Historically, EPA has been concerned primarily with air pollutants such as ozone, sulfur dioxide, nitrogen oxides, carbon monoxide, lead and particulate matter. In the past twenty years, technological advances have introduced thousands of new chemicals to the market which have potential for release to the atmosphere during processing. Many of these chemicals are toxic to humans, causing cancer or other short and long-term effects.

...technological advances have introduced thousands of new chemicals to the market which have potential for release to the atmosphere...

EPA Region III's Air Management Division has worked with the regional states and local agencies to address the serious and expanding air toxics issue. Studies were conducted in Philadelphia and Baltimore on the causes, impacts, and alternative solutions to toxic problems present in all media. Philadelphia was among the first cities in the country to adopt regulations for toxic air pollutants. Maryland and Virginia are currently implementing adopted regulations. Maryland's regulations cover a wide range of pollutants and provide for a state-of-the-art health risk assessment for each pollutant.

EPA Region III is currently providing support to regional air agencies on identification of potentially high risk sources of air toxics through monitoring, analysis, and management of data, particularly from urban areas.

Hazardous Air Pollutant Program

Section 112 of the Clean Air Act requires EPA to regulate hazardous air pollutants by promulgating National Emission Standards for Hazardous Air Pollutants (NESHAPs). NESHAPs have been promulgated for arsenic, asbestos, benzene, beryllium, mercury, radionuclides, and vinyl chloride. Because of the toxic, hazardous, or carcinogenic nature of these air contaminants, EPA has given NESHAPs implementation and enforcement one of the highest air program priorities.

Currently, the Region has 97 active air pollution sources regulated under NESHAPs. Region III's air enforcement program issues waivers of compliance, alternate monitoring requests, and approvals to construct new sources, in addition to its administrative and civil enforcement activity. Since 1984, EPA Region III has referred 22 civil cases to the Department of Justice and issued 37 administrative orders for violations of the NESHAPs.

Some of the Region's enforcement activities include:

- filing four of the six civil suits for benzene violations
- settling the Agency's first benzene case
- entering into the first consent decree of its kind that required a facility to hire an independent consultant to conduct an environmental audit of its program.

Formosa Plastics in Delaware City, Delaware, settled vinyl chloride violations with the State by installing a containment system that would prevent relief-valve discharges of vinyl chloride to the atmosphere -- a first of its kind.

Region III has filed the first two suits in the Nation against glass manufacturing facilities covered by the arsenic NESHAP.

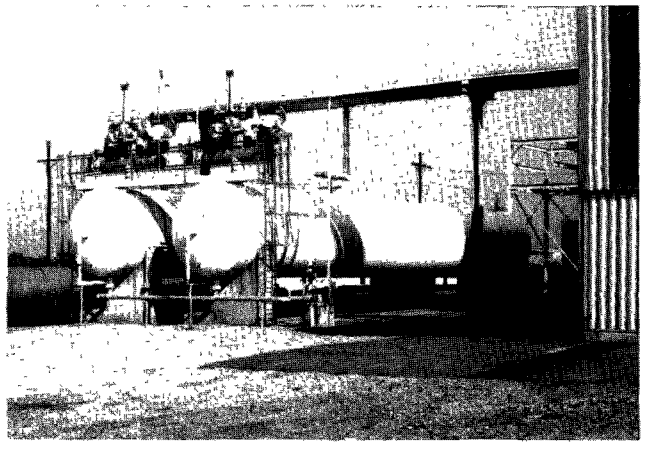
Region III's groundbreaking, precedent-setting enforcement program has put the Region in the forefront of NESHAP compliance. The Region is proud of this well-respected program.

Formosa Chemical

An Air Pollution Control Success Story

In late 1984, Region III began to address serious relief-valve discharge violations at Formosa Plastics Corporation's polyvinyl chloride facility in Delaware City, Delaware. Between 1981 and 1985, Formosa discharged over 90,000 pounds of vinyl chloride to the atmosphere from these relief valves. Vinyl chloride is a carcinogen, and EPA regulates vinyl chloride emissions under the Clean Air Act.

In November 1985, the State revoked all of Formosa's operating permits. Consequently, the plant closed down. As negotiations ensued among Federal, State and corporate representatives, the principal injunctive relief measure identified was a relief-valve, gas-containment system. This was considered to be the only reliable means of environmental control given the problems associated with production, maintenance and environmental control.



Part of Formosa's containment system

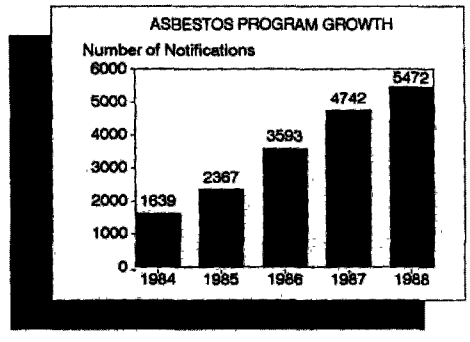
On the eve of an EPA filing of a civil suit against Formosa, the company settled the dispute signing a consent decree with the State of Delaware. The consent decree required Formosa to construct and operate a gas-containment system valued at $2 million. The system prevents any relief-valve discharge of vinyl chloride to the atmosphere.

In a June 1988 article in Chemical Processing, the Formosa plant manager, Larry Peyton, spoke of how this containment system has turned out a better product, has made the plant operate more smoothly and efficiently, and has made the plant profitable. As of August 1988, Formosa also marked its second year without a reportable emergency relief-valve discharge. All vinyl chloride that is discharged from the reactors travels through piping to the containment tanks. These tanks are capable of containing releases from the entire dispersion plant -- a capacity of 60,000 compressed, liquid gallons of vinyl chloride.

ASBESTOS

Because health studies of asbestos workers showed they had a high risk of contracting asbestosis (scarring of the lung tissues) from inhaling asbestos fibers, EPA listed asbestos as a hazardous air pollutant under Section 112 of the Clean Air Act. Asbestos exposure can lead to asbestosis, lung cancer, and mesothelioma (rare chest and abdominal cancer). EPA subsequently promulgated regulations to control asbestos emissions to the air during renovations and demolitions of buildings. For the past few years, EPA has considered the implementation and enforcement of the asbestos regulations as one the Agency's highest priorities.

The asbestos removal industry, and hence EPA's program, has grown exponentially. With this program growth, EPA and the states have continued to inspect more and more asbestos removal operations and enforce against noncomplying contractors.



Due to the hazards associated with asbestos, safety during removal and inspection activities are inherent in EPA's enforcement philosophy. Unsafe removal of asbestos material can create a much higher risk to the

public than leaving the asbestos in place. EPA inspectors must also take special safety precautions when obtaining asbestos samples during inspection.

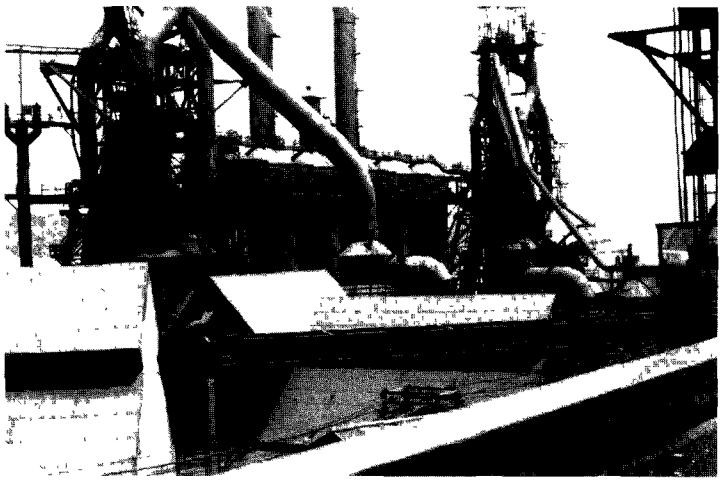
Since 1984, Region III has issued 252 Notices of Deficiencies, issued 26 Administrative Orders and filed 16 civil and 3 criminal lawsuits against asbestos abatement contractors. Through these inspections, enforcement efforts, and initiatives to identify nonnotifiers, EPA Region III has been a national leader in ensuring compliance with the asbestos NESHAP Standard.

Regulating the Steel Industry under the Clean Air Act

The history of enforcement of the Clean Air Act for the iron and steel industry in Region III has been long and arduous, yet highly successful in decreasing the amount of pollutants in the air. The Act required standards to be developed for ambient air quality for all regulated pollutants (e.g., particulate matter). Steel industry processes are, in general, very emissive because of the raw materials that are used to make steel. Steel production requires iron which, in turn, requires iron ore, limestone, coke, sinter, and other materials composed of particulate matter. The production of coke from coal is, in itself, a highly polluting process. The size of these facilities, combined with the potentially high emission rates makes them among the largest sources of air pollution subject to regulation.

Historically, the steel industry has had a very strong presence in Region III employing tens of thousands of people. Whole towns have been built in the shadow of these large mills and have depended on them for a livelihood. The industry has operated through many economic ups and downs, and often, Clean Air Act compliance has mirrored these production swings.

Through intense negotiations, and at times litigation, Region III has been able to obtain enforceable consent decrees with the steel companies to satisfy the regulations of the Clean Air Act. In the process, the companies have developed a good working relationship with Federal, state, and local regulatory agencies to maintain compliance with the consent decree stipulations. Costs of pollution control equipment have run in the millions of dollars.



Enforcement of Clean Air Act emission standards that apply to the steel industry is a challenge involving control technology considerations, as well as worker job performance in the operation and maintenance of implemented controls.

A constant struggle to maintain clean air conditions exists in the steel industry because of the cyclical nature of the industry and the high cost of maintaining control equipment. The challenge today, as it has been in the past, is to balance our need for good, secure employment with the need for a healthful environment. Region III will continue to enforce the Clean Air Act and work with the steel industry to meet this challenge.

Major Steel Facilities in Region III

USX Corporation
Clairton, PA
Braddock, PA
West Mifflin, PA
Fairless Hills, PA

Wheeling-Pittsburgh Steel Corporation
Follansbee, WV

Shenango Incorporated
Newville, PA

Bethlehem Steel Corporation
Bethlehem, PA
Johnstown, PA
Steelton, PA
Sparrows Point, MD

LTV Steel Corporation
Pittsburgh, PA
Aliquippa, PA

Weirton Steel Corporation
Weirton, WV

Sharon Steel Corporation
Farrell, PA
Monesson, PA

Armco Steel Corporation
Baltimore, MD
Butler, PA

Water Quality

"Safeguarding people and the environment by protecting all water resources under our stewardship in a manner that merits public trust and confidence is the purpose pursued by members of the Water Management Division.

In pursuit of that purpose, we treasure those who, despite the everyday diversions and frustrations, tenaciously strive to overcome barriers, create the pathways, and persist in the drive to make the world a bit better because they care enough to try to make it so."

Dr. Alvin R. Morris
Director
Water Management Division

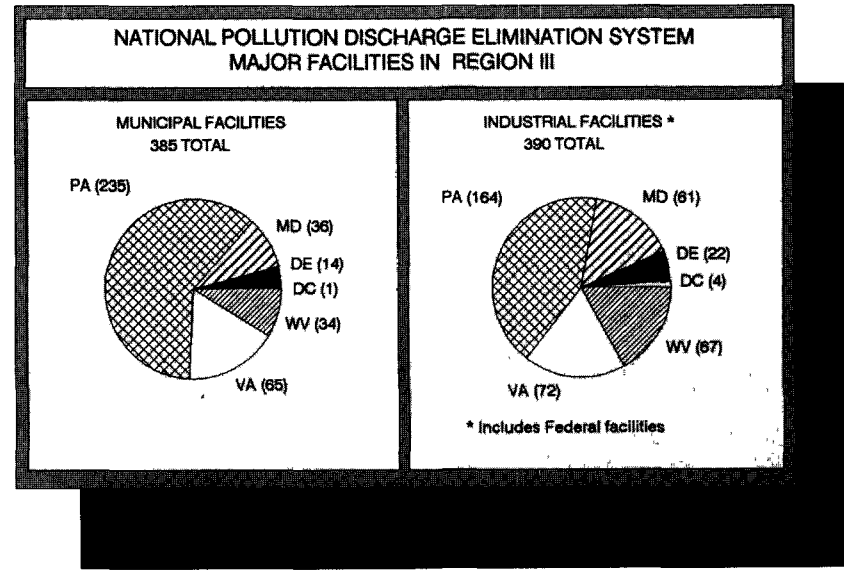
Water Quality Standards

Surface water protection in Region III is measured in large part through the use of state water quality standards. These standards designate protected uses for the waters of the state and establish acceptable water quality criteria for their intended uses. They serve as the regulatory basis for both state and EPA surface water pollution control efforts. In 1988 and continuing into 1989, EPA's efforts have centered on working with the states in revising their water quality standards with particular focus on the needs to adopt additional criteria and procedures for controlling toxic pollutants. State standards are reviewed every three years.

National Pollution Discharge Elimination System

The Clean Water Act of 1972 and its amendments authorize EPA to regulate the wastewater discharges from municipal and industrial facilities through the National Pollution Discharge Elimination System (NPDES) program. All facilities discharging into the surface waters of the United States are required to obtain NPDES permits. These permits establish the levels of contaminants allowed in each facility's effluent as established by either industry-wide "technology-based" criteria or stream-specific "water-quality-based" standards. The latter are established by the states to protect the uses which they have designated for their streams. If the treatment level established for a particular facility will not protect the uses designated for the stream receiving its discharge, the facility must provide additional treatment. Each facility has a separate permit which must be reissued every five years. The Region's municipal and industrial facilities are divided into two permitting categories -- major and minor -- based on the volume of their discharge. Major facilities are those that discharge more than one million gallons of effluent per day.

Region III has delegated the authority to issue NPDES permits and take enforcement actions to Delaware, Maryland, Pennsylvania, Virginia, and West Virginia. EPA maintains the authority to review and



Region III's NPDES program maintains permitting and compliance records on 775 major wastewater discharge facilities and 115 pretreatment programs.

Permit Compliance System (PCS) staff enter and maintain the compliance status of 2200 wastewater outfalls monthly.

comment on permits issued by these states and can take direct enforcement action when a state's response to a permit violation is not timely and appropriate. Formal enforcement options available to EPA include issuance of administrative orders, administrative complaints, and civil and criminal judicial actions. The Clean Water Act also gives citizens the right to bring actions in response to violations. Liability for noncompliance is up to $25,000 per day for each violation.

National Municipal Policy

The National Municipal Policy (NMP) was issued by the EPA Administrator during January 1984 in response to the high level of municipal facilities which were not complying with their NPDES permit limitations and conditions. The Policy required all Publicly Owned Treatment Works (POTWs) to comply with permit conditions as soon as possible, but no later than the statutory deadline contained in the Clean Water Act -- July 1, 1988. POTWs that needed construction of additional treatment facilities were required to fully comply with permit requirements regardless of the availability of Federal construction grant funding.

The initial phase of the Policy was the identification of all NMP-affected municipalities, and the submission of an NMP Strategy from each delegated state which outlines how the Policy would be implemented. In Region III, 122 POTWs were subject to the NMP initiative.

The second phase was the establishment of enforceable construction/compliance schedules for each NMP-affected facility. A key provision of the Policy was that each NMP-affected POTW be placed on an enforceable schedule to achieve compliance by a certain date. Where compliance could not be achieved by the statutory deadline, these enforceable schedules had to be contained in a judicial consent decree filed in state or Federal court. The status of the NMP-affected POTWs in Region III as of the statutory deadline of July 1, 1988 was as follows:

- 66 POTWs were in compliance
- 17 POTWs were in short-term noncompliance
- 29 POTWs were meeting compliance schedules established in enforcement actions
- 9 POTWs were unaddressed.

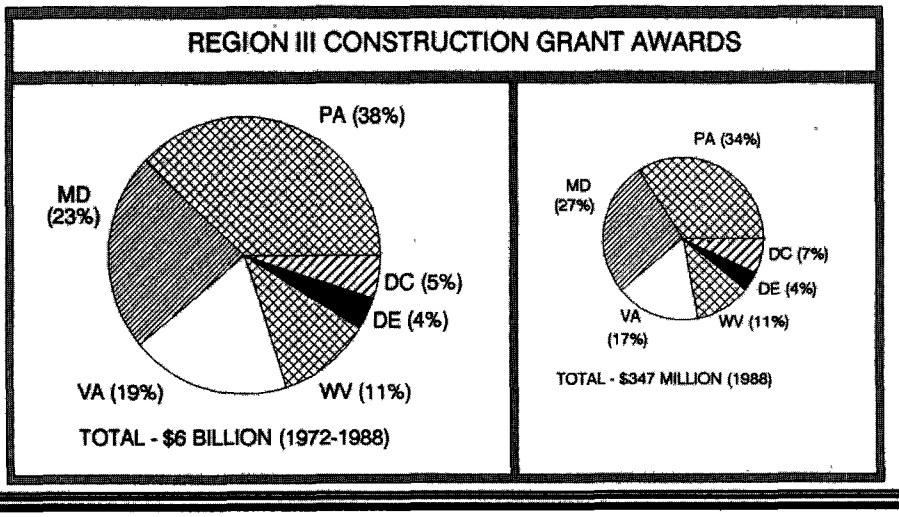
The third and final phase of the Policy has been to track compliance with the schedules, and to take follow-up enforcement action in response to schedule violations, as appropriate. As the initiative is winding to a close, we firmly believe that the Region's implementation of the NMP has been successful in addressing noncompliance with the requirements of the Clean Water Act.

Construction Grant Program

The Federal Water Pollution Control Act of 1956 was the first national statute to provide funds for municipal water pollution control. Through 1972, Region III states benefited from construction grants totaling $514 million. In 1972, the passage of the Clean Water Act provided a dramatic increase in the grant funds and a higher level of participation in the water pollution control programs. The Region III allocations since 1972 total almost $6 billion. These funds have gone towards construction of municipal wastewater treatment works, pumping stations and various types of sewers; literally the entire gamut of point-source pollution-control works. In Region III, 8000 projects have been funded, 1450 of which are still active.

During Fiscal Year 1988, Region III awarded a total of $347 million for 51 new and 143 existing construction grants. These included grants to Kent County, Delaware for the purchase of land to apply treated sludge; to the District of Columbia to continue construction of the Blue Plains Plant; to Anne Arundel County, Maryland for the Mayo Peninsula project with a host of onsite treatment features to protect a highly sensitive area of flood-plains and wetlands; to Henrico County, Virginia for treatment works to serve the huge metro-politan area around Richmond; to Altoona, Pennsylvania to fund a treatment works cited as a special project in the 1987 Clean Water Act; and to Hurricane, West Virginia to fund a treatment plant which is the target of a Region III enforcement action.

Under the Water Quality Act of 1987, a transition has begun to supplant the grants program with a loan program capitalized with Federal funds. A grant awarded to Virginia in June 1988 was among the first in the United States under these new provisions.



Pretreatment

Many industrial facilities, rather than discharging process wastewater directly to surface waters, discharge instead to Publicly Owned Treatment Works (POTWs). The pretreatment program is the way that POTWs control the industrial discharges to their system to protect the treatment plant and its sludge, and to prevent pollutants from passing through the POTW untreated.

The pretreatment program, like the NPDES program, can be delegated to the States. Only Maryland and West Virginia have been delegated this program in Region III. Unlike the NPDES program, however, the permitting and enforcement activities relating to the pretreatment program are carried out by the POTW rather than than by the delegated State or EPA. Initially, any municipality where industrial discharge to the POTW is a concern is required to develop a pretreatment program. These programs must be approved by EPA or the delegated state. After approval, the municipality has the authority and responsibility to issue permits to its industrial dischargers requiring the development and enforcement of local limits. These limits are designed to protect the treatment facilities, the sludge, and the receiving stream. POTWs are also required to ensure that their industrial facilities are meeting any minimum treatment levels established for that industry.

The early emphasis of the Region's pretreatment efforts was to work with the POTWs to develop approvable programs, which would give the POTWs the legal authority to comply with the pretreatment regulations and assure that the POTWs have the technical capability, program plans and procedures, and adequate resources to run an effective program. With the approval of the local programs, the Region focused on providing technical assistance to the POTWs in the administration of their programs, including technical expertise on permitting of and enforcement against industrial users. We are now beginning to take enforcement action against POTWs that are showing an unwillingness to accept their responsibility for running an effective pretreatment program which complies with the requirements of the Clean Water Act and its associated regulations.

Control of Toxic Pollutants

One of the most urgent national environmental problems is the presence of harmful levels of toxic pollutants in the waters of the United States. EPA's goal is to work with the states to protect human health and aquatic resources by controlling the release of toxicants to surface water.

The Clean Water Act and its most recent amendments, the Water Quality Amendments of 1987, provide a strong statutory basis and additional deadlines for activities to address the discharge of toxic pollutants. Section 304(l) of the Act requires the states to develop lists of waters that have been impacted by the discharge of toxics, and to develop individual control strategies for the sources of the toxics.

In order to ensure that all states are equipped with the necessary tools to make significant progress in controlling toxics and to meet the requirements of the Act, Region III has conducted broad, comprehensive reviews of state programs for identifying and controlling toxic discharges. The Agency's objective in reviewing state toxic control programs is to identify areas of needed improvement or assistance, and to help ensure a degree of consistency among state approaches, while at the same time allowing sufficient room for innovation and flexibility in dealing with specific local problems.

As follow-up to the reviews, the Region will work with the states to develop detailed action plans to strengthen existing state toxic control programs. Plans will contain specific actions to be taken to ensure that the state is equipped to identify and control toxics problems related to point sources.

Innovative methods can be used to dispose of sludge made cleaner through effective pretreatment programs.

Drinking Water Protection

Most of us today would assume that the water we drink is safe, and usually we would be right. But some people are still drinking water that is improperly treated and may be contaminated by bacteria, toxic chemicals, or other pollutants. In Region III, we continue to see waterborne disease outbreaks such as giardiasis that are unacceptable in our modern society.

The 1986 Amendments to the Safe Drinking Water Act (SDWA) greatly increased the responsibilities of EPA and the states in protecting the Nation's drinking water. A total of 83 new or revised drinking water standards will be developed by 1989 along with three new treatment requirements for water systems. In 1988, the states began implementing the first of these new provisions with initial testing for eight volatile organic chemicals including trichloroethylene, vinyl chloride and benzene. In addition, many new state regulations were under development to prepare for changes in national drinking water regulations.

In August 1988, EPA proposed far-reaching revisions to the current drinking water standard testing procedures for lead in order to provide greater protective measures for tap water consumption. Although it has been used in numerous consumer products, lead is a toxic metal now known to be harmful to human health if inhaled or ingested. A major source of lead exposure is drinking water contminated by the corrosion of lead materials in plumbing. During 1988, five of the six Region III states had effectively banned leaded materials from use in new plumbing systems or repairs and Pennsylvania is working towards this end.

Community Public Water Supplies
Compliance with the Safe Drinking Water Act

State	Number of Supplies	Population Served	Supplies not in Compliance	Population Served	Percent %
DC	2	1,837,000	0	0	0
DE	229	594,000	0	0	0
MD	548	3,437,000	5	5,010	0.10
PA	2441	10,210,000	31	171,981	1.70
VA	1735	5,137,000	16	1,776	0.03
WV	804	1,674,000	16	2,140	0.13
REGION	5759	22,929,000	68	180,907	0.80

Public Water Supply Improvements

The level of enforcement activity by EPA and the states has risen markedly to meet the challenge of the amended Safe Drinking Water Act. Although most of these actions involved small water systems, many were quite successful in achieving improvements in these public water supplies.

WINONA, WV - In response to EPA enforcement actions, the owner of this small public water supply agreed to donate $10,000 for a new chlorinator, storage tank and a reconstructed spring house to rehabilitate the community water source. The water supply was then transferred to an Association of the local residents who are now being trained to operate the system and conduct compliance monitoring.

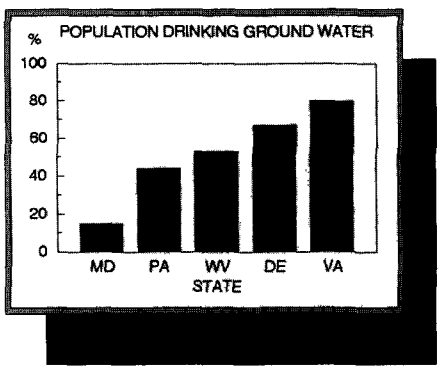
MEYERSDALE, PA - In response to EPA enforcement actions, this municipal public water supply worked with EPA to develop a long-term schedule for the construction of a filtration plant to eliminate future turbidity violations.

IROQUOIS and STEPHENSON, WV - The owner of these two small public water supplies failed to respond satisfactorily to initial EPA enforcement actions. Finally, when faced with Complaints for Penalty for $5000 for each of the two water supplies, he retained legal counsel and entered into negotiations with EPA. As a result, the owner agreed to install disinfection facilities at each supply, inform the public and the users about past violations, monitor water quality, report the results as required, and pay a small penalty.

REGION III ISSUED THE FIRST FOUR COMPLAINTS FOR PENALTY IN THE NATION UNDER THE NEWLY AUTHORIZED ADMINISTRATIVE ENFORCEMENT PROVISIONS OF THE SAFE DRINKING WATER ACT.

Ground Water Protection

Ground water resources are used extensively in Region III to provide drinking water and water for industrial purposes. Ground water also provides the base flow for the Region's surface waters and is vital to maintaining the quality of life we currently enjoy. EPA Region III is currently working with the states in the Region to protect our ground water resources through several programs and initiatives.



The use of the Geographic Information System will enable us to make better management decisions so that we can more effectively protect our ground water supplies.

Underground Injection Control Program

The Safe Drinking Water Act enacted in 1974 established several programs to protect both surface and underground sources of drinking water. One such program, the Underground Injection Control Program, establishes technical criteria and standards for the construction, operation, monitoring, and testing of wells to control underground injection practices. During 1988, regulatory control over injection operations centered on enforcement of oil and gas well-casing and cementing requirements and increased emphasis on control of shallow injection wells of various types. Significant enforcement actions were completed for 15 major oil facilities in northwest Penn-sylvania to ensure the proper closure or reworking of over 1400 injection wells which presented a risk to underground sources of drinking water.

Each state in the Region also began to escalate enforcement of regulatory requirements for agricultural drainage wells, service station dry wells, commercial septic systems, and other shallow injection wells which previously were subject to few controls. Precedent-setting enforcement actions were taken by EPA directly in Pennsylvania and Virginia to reduce the contamination risk from seven such facilities at selected sites where ground water was most vulnerable.

Other Ground Water Programs

All states in the Region have ground water protection policies and action plans which establish the framework for the development of classification systems, monitoring programs, improved date management systems, and other elements needed to form a comprehensive ground water protection strategy. With these strategies in place, the states are now focusing their efforts on implementation.

The 1986 Amendments to the Safe Drinking Water Act authorized assistance to states to develop a program to protect the wellhead area of all public water systems from ground water contaminants that may adversely affect human health. EPA Region III sponsored eight seminars across the Region and has provided considerable technical guidance to the states to move the wellhead protection program forward. Region III has also secured the lead for a Regional pilot project to demonstrate uses of the newly acquired Geographic Information System capability in the ground water protection area. This effort has helped to identify the wellheads in New Castle County, Delaware at greatest risk to contamination and demonstrate the use of various flow models to assist states in delineating protection areas. The success of this effort is leading to many new cooperative agreements with state and local governments interested in this technology as a management tool for wellhead protection.

Clean Lakes Program

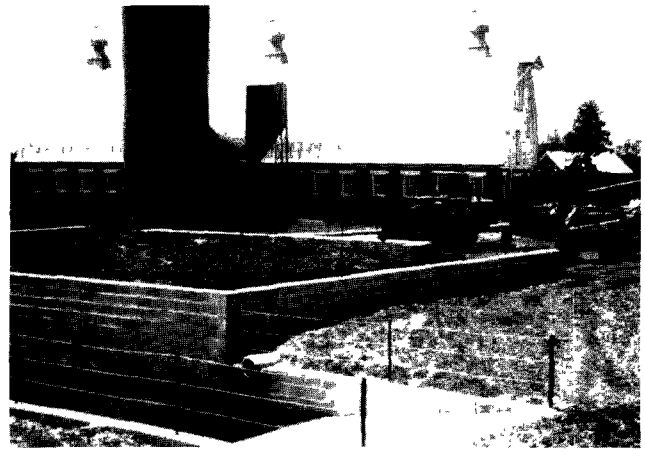
The Clean Lakes Program was established by the Clean Water Act of 1972 in order to demonstrate lake restoration and protection techniques with the goal of minimizing man's contribution to lake degradation. Region III has provided grants for performing lake assessments, feasibility studies, restoration/demonstration projects, and watershed management studies. In 1988, the Region was involved with projects on eleven lakes: North Park Lake, Lake Wallenpaupack, and Lake Nockamixon in Pennsylvania, Lock Raven Lake, Lock Raven Detention Basins, and Columbia Lakes in Maryland, Silver Lake in Dover, Delaware, and Lake Accotink, Rivanna Reservoir, Lake Chesdin, and Big Cherry Reservoir in Virginia. Some of the implemented watershed management techniques include surface water runoff control practices on agricultural land, streambank stabilization, erosion control on construction sites, stormwater management, waterfowl control, street sweeping, ordinance development, and public education.

Region III is working to slow the human-induced degradation of our lakes through the Clean Lakes Program.

Nonpoint Source Pollution Control

The Water Quality Act of 1987 authorized a major new initiative to address the growing concern over nonpoint sources of pollution. With financial assistance from EPA, all Region III states met the requirements of the Act to complete a statewide assessment of nonpoint source problems and a management plan to address those problems .

Delaware received EPA approval of its Nonpoint Source Assessment Report and portions of its Management Plan and was awarded the Nation's first nonpoint source implementation grant on September 30, 1988. This grant provides over $1.7 million in both Federal (60%) and state (40%) funds to support an aggressive two-year program. Four demonstration projects will be started with these funds. To be successful, these projects will need the assistance and expertise of the USDA Soil Conservation Service, the University of Delaware, Delaware's Conservation Districts, and many other state and local agencies. Key elements in each of the projects will be (1) to raise the level of public awareness about how nonpoint source pollution affects water quality and their daily lives, (2) to provide information on practical, feasible solutions to prevent or control nonpoint source pollution, (3) to examine the economic forces that create the behavior causing the problem, (4) to examine the effectiveness of state regulatory solutions, and (5) to further develop the necessary tools to better define nonpoint source pollution problems.



Chesapeake Bay Program

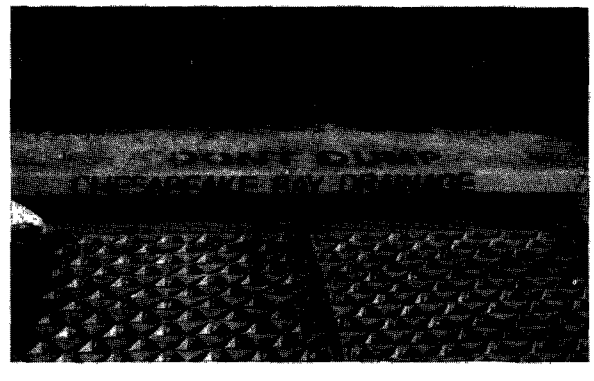
The Chesapeake Bay restoration and protection program is the "flagship" of EPA's national estuary initiative. A $27 million research study carried out by EPA at the direction of Congress laid the groundwork for the massive cleanup effort now under way. The study led to the signing of the 1983 Chesapeake Bay Agreement in which Maryland, Pennsylvania, Virginia, the District of Columbia, EPA and the Chesapeake Bay Commission pledged to join in a cooperative approach to deal with the pollution of the Bay. A new and more comprehensive Agreement signed in December 1987 commits these jurisdictions and the Federal Government to specific actions that will carry the program forward through the 1990s.

EPA Region III established a liaison office in Annapolis under the 1983 Agreement to help coordinate Bay restoration activities. The Agency's role became a statutory responsibility under amendments to the Clean Water Act enacted by Congress in 1987. Among other provisions, the amendments direct EPA to coordinate Federal and state efforts to improve the water quality of the Bay and authorize Federal grants to help states implement pollution reduction programs.

EPA, other participating Federal agencies, and Bay watershed jurisdictions teamed to develop a series of strategy documents during the first half of 1988 as stipulated in the 1987 Bay Agreement. Among them were plans to achieve a 40 percent reduction by the year 2000 in levels of phosphorus and nitrogen reaching the Bay. The control of nutrients is critically important because of their direct impact on the living resources of the Bay. Nutrient enrichment fuels the growth of algae and triggers physical and biological changes that deplete levels of dissolved oxygen vital to finfish and shellfish in the Bay. Steps to stem the flow of nutrients into the Bay range from improvements in treatment technology at sewage disposal plants to the implementation of "best management practices" to control runoff from farms and urban areas.

Other strategies developed to meet Agreement commitments for 1988 deal with issues such as the control of conventional and toxic pollutants, research, monitoring living resources of the Bay, reducing pollution from Federal facilities, the protection of wetlands, and the impact of population growth and development on the health of the Bay.

EPA is currently spending some $12 million a year in direct support of the Chesapeake Bay Program, and other Federal agencies contribute nearly $20 million more. This investment helps to generate more than $100 million in Bay-related programs carried out by the States.



Anne Arundel County, MD campaign to deter pollution by marking storm sewers countywide

Hazardous Waste Control

"Living without risk is no longer possible given today's technology and the demands of today's consumers for products that leave a trail of toxic wastes. Chemicals, pesticides and various other products offer us an extraordinarily high standard of living. At the same time, the inevitable risk from the production and misuse of chemicals and other products has resulted in a serious threat to our environment. Our goal is to control this threat by enforcing hazardous waste laws, providing remedies for Superfund sites and for asbestos in schools, and issuing permits for proper disposal of waste.

As individuals, we must learn new patterns of behavior to help reduce the production of waste. We can start by recognizing that our high standard of living is accompanied by environmental and human health risks. As Director of the Hazardous Waste Division, my goal is to ensure that both the government and the public work together to reduce the risks from hazardous wastes to acceptable levels."

Stephen R. Wassersug
Director
Hazardous Waste Management Division

Superfund Program

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, more commonly called "Superfund," authorized EPA to clean up those sites where hazardous substances have been disposed without proper regard for the consequences to the environment or public health. Congress has allocated $8.5 billion to fund the program. Most of this money goes to funding government-directed cleanup through emergency removal actions in acute emergencies, or long-term remedial actions for sites posing chronic risks to public health or the environment. There are also significant resources devoted to enforcing the provisions of the act which require that parties who were responsible for the improper disposal should either perform the cleanup or reimburse the government for the cost of the cleanup.

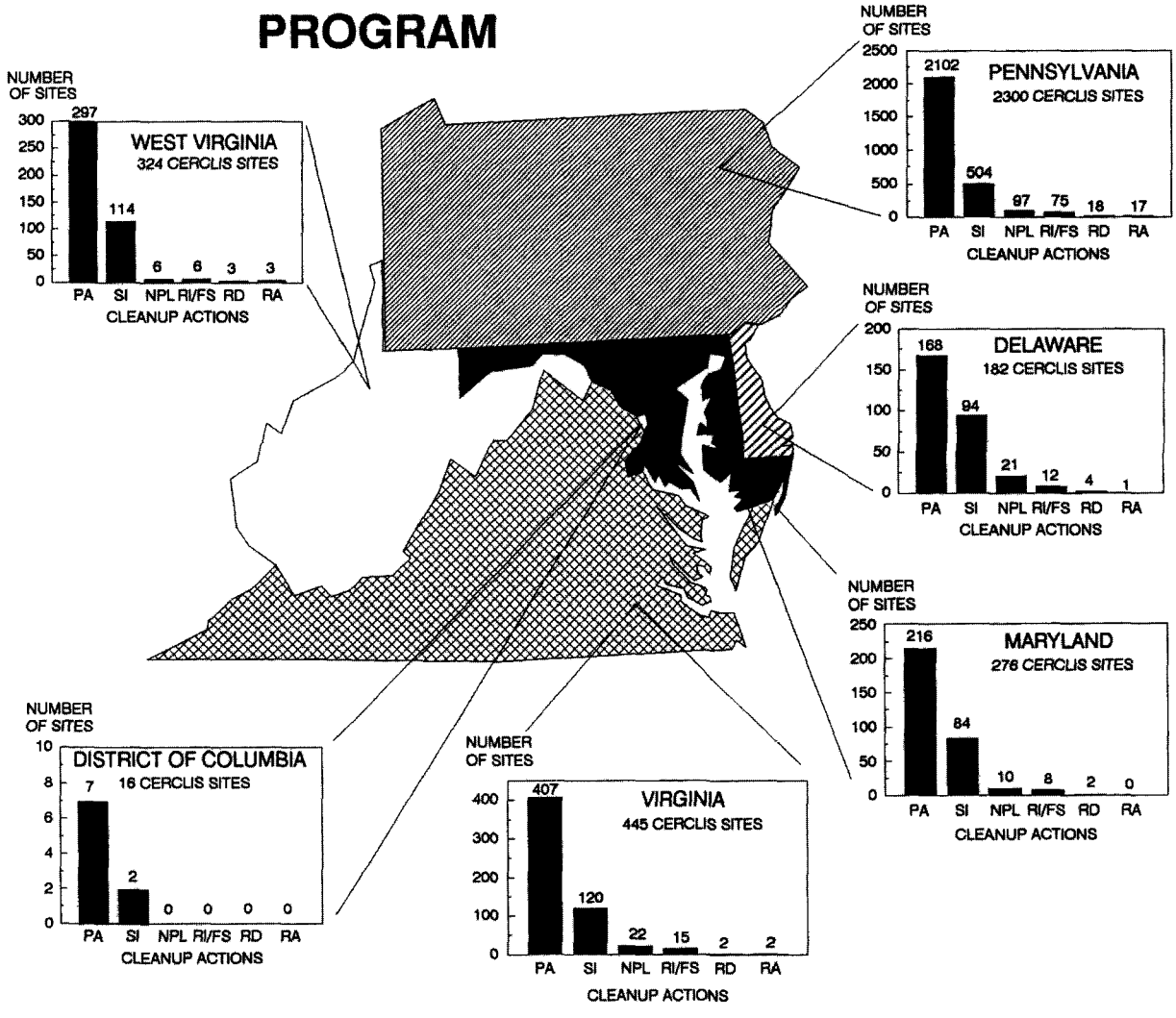
In Region III, there are currently 3,548 alleged, potential, or actual hazardous waste sites tracked through the CERCLIS database. Preliminary site assessments have been completed on 3,197 of these sites and further investigations were conducted on 918 sites. The information collected through these activities is used to determine if the sites qualify for inclusion on the National Priority List (NPL) and cleanup under Superfund. Sites on this list are those determined to have the greatest hazard based on the type, quantities, and toxicity of wastes present; the number of people potentially exposed; the likely pathways for exposure; the importance and vulnerability of the underlying aquifers; and other factors. Region III has 156 NPL sites, 95 of which are currently at one of the following stages in the remedial process:

- A remedial investigation of the entire site area is conducted to provide a comprehensive evaluation of the health and environmental risks present
- A feasibility study is developed that evaluates the merits of options available in cleaning up the site
- A cleanup alternative is chosen and formalized in a Record of Decision
- A remedial design is prepared for the planned cleanup action
- The remedial action is implemented to clean up the site.

Any time that a site is found to present an imminent hazard, EPA can initiate a removal action. This usually occurs following the site investigation. If a high hazard exists, the site is referred to the emergency response group for immediate action. Presently, Region III has performed 210 removal projects on 167 sites (both NPL and non-NPL) at a cost of $58 million.

Over $170 million has been spent to date in Region III to remove threats to the public health and the environment

SUPERFUND REMEDIAL PROGRAM



CERCLIS SITE -
Alleged, potential or actual hazardous waste site tracked on EPA's CERCLIS database

PRELIMINARY ASSESSMENT (PA) -
Initial review of background material and information obtained during a site visit

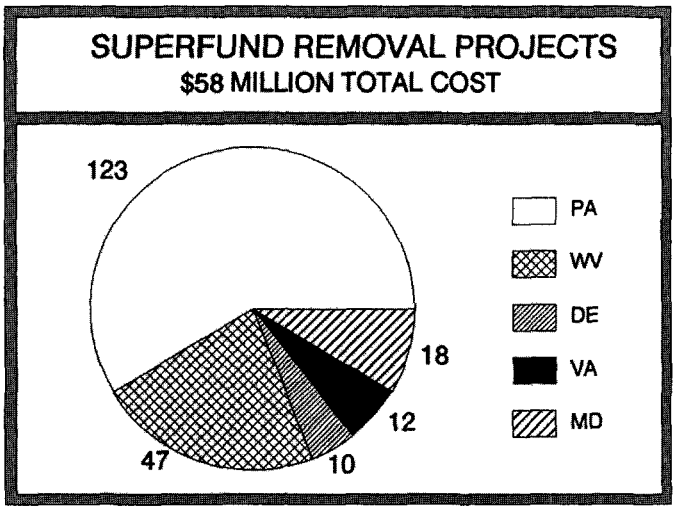
SITE INVESTIGATION (SI) -
More detailed investigation to determine environmental hazards of sites

NATIONAL PRIORITY LIST (NPL) -
Sites qualifying for cleanup under Superfund

REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) -
Comprehensive investigation of entire site to develop feasible alternatives for cleanup

REMEDIAL DESIGN (RD) -
Design of selected alternative for site cleanup

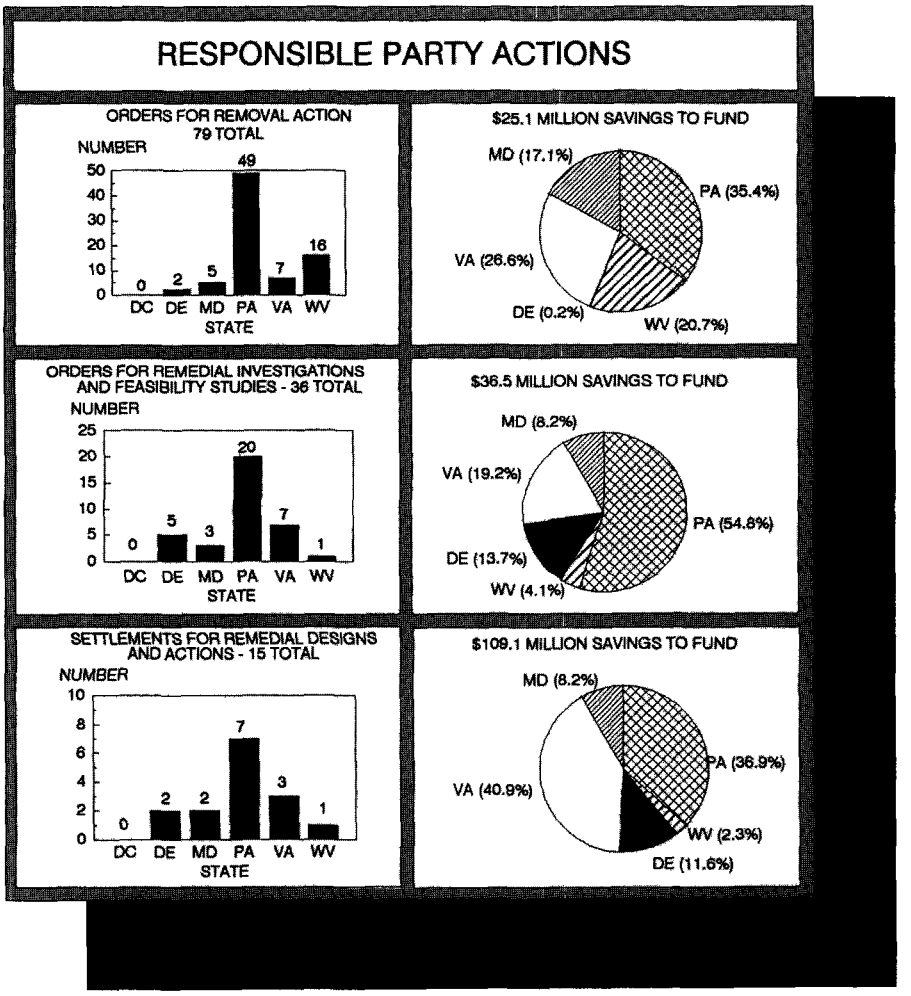
REMEDIAL ACTION (RA) -
Implementation of designed cleanup alternative



Assessment of more than 3,000 hazardous waste sites in Region III has resulted in placement of 156 sites on the National Priority List for Superfund cleanup.

Superfund Enforcement

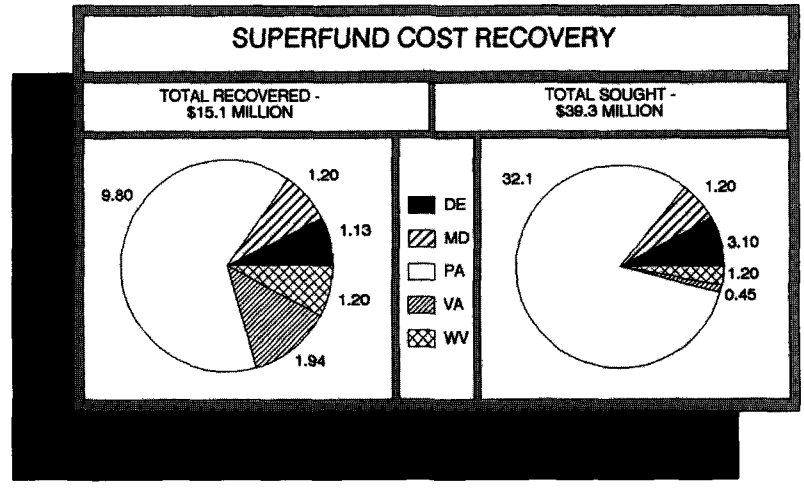
The reality behind the $8.5 billion Superfund is that it would be used up by 1990 unless there was private party funding of projects. Our challenge, therefore, is to encourage responsible party cleanup of hazardous waste sites to allow Superfund dollars to address more sites. Region III is among the most successful in the Nation in its Superfund enforcement program and has attained national recognition for the number and quality of its settlements. More than $200 million of Superfund money has been conserved or recovered through settlements with responsible parties that require them to perform the needed remedial and removal actions. The Region's aggressive enforcement program and willingness to negotiate have also avoided costly and protracted litigation.



In instances where the Region is not able to reach a settlement with the parties responsible for a hazardous waste site, cleanup action is carried out with Superfund dollars. However, Section 107 of the Comprehensive Environmental Response, Compensation and Liability Act enables EPA to recover the cost of cleanup from the responsible parties. Region III has maintained an aggressive Superfund Cost

Recovery Program for many years. To date, $14.9 million has been successfully recovered through cost recovery litigation.

Region III attributes its success to a team effort by the Office of Regional Counsel and the enforcement program staff. The Region is also a strong advocate of the streamlined negotiations process set forth in the Superfund Amendments and Reauthorization Act (SARA) of 1986 which imposes a 120-day deadline for remedial action settlements. These deadlines are necessary to avoid lengthy negotiations and to get cleanups started quickly.



Region III has also taken the lead in mixed funding settlements. These settlements occur when there are multiple responsible parties involved at a site and not all are willing to pay for the cost of cleanup. EPA reaches a settlement with some of the responsible parties for all of the clean up work and agrees to reimburse these parties from the fund for a portion of the cost they incur. EPA then initiates litigation against those potentially responsible parties unwilling to pay for the cleanup (non-settlers) to recover the fund dollars. If the Region cannot successfully recover its costs from the non-settlers, complete restitution is sought from the responsible parties who originally settled. Although this type of settlement is quite complex, it allows cleanup to proceed more quickly and minimizes the use of Superfund dollars in cases where responsible parties are known. Region III has two of EPA's three mixed funding settlements nationwide. In both of these cases, Region III has subsequently pursued non-settlers for the balance of costs incurred by the Agency.

Innovative settlements such as these and the certainty of aggressive follow-up enforcement provide a strong incentive for parties to come forward and settle with EPA, while sending out a warning to those who "hide in the weeds."

Overall, the success of Region III can be attributed to the hard work, long hours, flexibility, and creativity of the Region's managers, attorneys, and project officers.

Careful tracking of hazardous waste site investigations allows early identification of imminent hazards and timely response to emergency situations.

Taylor Borough Dump Site: A Superfund Success Story

The Taylor Borough Site, located in Lackawanna County, Pennsylvania, is an abandoned strip mine which was later used as a municipal landfill. During its use as a landfill, numerous barrels and drums were dumped in localized areas on the surface of the site. In October 1983, EPA conducted an emergency action to remove approximately 1,200 drums, containing benzene, toluene and other hazardous compounds. Immediately following this action, EPA initiated a Remedial Investigation/Feasibility Study which was completed in May 1985.

On June 28, 1985, James M. Seif, Regional Administrator, issued a Record of Decision requiring the excavation of contaminated soils and wastes, and the remediation of two ponds at the site. In addition, approximately 125 crushed and intact drums were to be removed and the former drum storage areas were to be properly backfilled and covered with a minimum 24-inch soil cover. A subsequent Decision issued on March 17, 1986, determined that there was no need for ground water remedial action since no release of contaminants to the ground water was observed. However, a monitoring program was warranted to verify that no release will be occurring in the future.

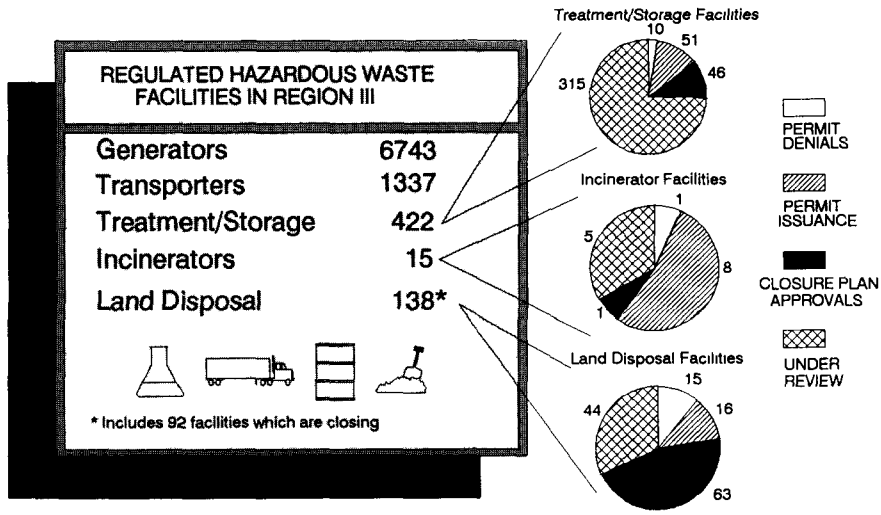
Once EPA signed the Decision, negotiations with the potentially responsible parties began for their implementation of the remedy. A Consent Decree, filed in U.S. District Court, enabled five of the ten named defendants to settle with EPA and to perform the work. The specific terms of this settlement included (1) preparation and implementation of a remedial design in accordance with the Records of Decision, (2) funding the continued operation and maintenance costs, and (3) funding EPA's response costs totaling $1.7 million. Total savings to the Fund was more than $5.2 million.

On July 13, 1988, the Regional Administrator visited the cleaned up Taylor Site with its newly growing grass and stated "It doesn't look like anything, it doesn't smell like anything, and that's what we want." On August 30, 1988, the final closeout public meeting was held and the residents and borough officials were satisfied with EPA's and the responsible parties' remediation efforts. This site is scheduled for deletion from the National Priority List of Superfund sites in early 1989. The Taylor Borough site is the first site in the Nation at which cleanup was undertaken and completed by responsible parties.

To initiate cleanup of hazardous waste site, a thorough understanding of the site conditions and a detailed review of the proposed project design are required.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was passed in 1976 to manage hazardous waste from its initial generation to its final disposal. The Act has been amended twice (1980, 1984) and each time its scope was expanded appreciably. The two primary areas of focus in RCRA are hazardous waste management (Subtitle C) and underground storage tank control (Subtitle I).



Hazardous Waste Management

The objective of Subtitle C of RCRA is to assure that hazardous waste is managed to protect human health and the environment. To accomplish this goal, regulations were established covering the generation, transportation, treatment, storage, and disposal of hazardous waste. These regulations established two sets of standards for treatment, storage, and disposal (TSD) facilities: interim status standards and permit requirement standards. Interim status standards are good management practices that must be followed in order to properly handle hazardous waste until a permit application is issued or denied. Permit standards are design and operating criteria for facility-specific permits.

In addition, the Hazardous and Solid Waste Amendments (HSWA) of 1984 gave EPA the authority to require corrective action for past releases of hazardous substances from waste management facilities. Region III has delegated the base RCRA program to its states but is currently responsible for the implementation of the corrective action provisions of HSWA.

Owner/operators of existing or new TSDs must obtain an operating permit or implement an approved closure plan if its permit application is denied. HSWA also established deadlines for issuing permits to operating facilities. The dates are November 8, 1988 for land disposal facilities; November 8, 1989 for incinerators; and November 8, 1992 for treatment/storage facilities. In the past year, Region III has made significant progress in meeting these deadlines. Likewise, the states within the Region have cooperated in fulfilling these goals.

Enforcement

Because the RCRA hazardous waste management program has been largely delegated to the states, the states also bear the principal responsibility for assuring compliance with the Act. EPA oversees state compliance monitoring and enforcement programs to:

- assure that enforcement actions undertaken by the states are responsive and timely
- support state enforcement actions, as appropriate and necessary
- retain enforcement responsibility for those portions of the Act which have not yet been delegated to the states (i.e., regulations governing land disposal of hazardous wastes, and corrective action to remediate contaminated sites).

Compliance with RCRA, corresponding state regulations, and permit requirements is ascertained through inspection of hazardous waste treatment, storage and disposal facilities, generators, and transporters. Inspections may be conducted separately or jointly by state agencies and EPA. When incidences of noncompliance are discovered, enforcement responses may be informal or formal, and may include administrative, civil, or criminal penalties, depending upon the seriousness of the violations.

Section 3008(h) of RCRA authorizes EPA to take enforcement action at hazardous waste facilities where there is evidence of environmental contamination. Enforcement actions issued pursuant to this section can require facility owner/operators to conduct extensive studies to determine the nature and extent of the contamination and propose and implement remedies for site cleanup.

Region III has recently placed increased emphasis on corrective action under Section 3008(h) by developing and implementing an aggressive strategy which focuses on entering into consent agreements with facility owner/operators, early negotiations, and a 60-day expedited schedule for

consent agreement signatures. Under this strategy, the Region has entered into three such consent agreements since June of this year. The Region is also negotiating similar agreements with eight additional facility owner/operators with the expectation that all eight agreements will be signed in the near future. The Region is also investigating an additional 25 potential corrective action cases.

Underground Storage Tanks

The objective of Subtitle I of RCRA is to assure that underground storage tanks (USTs) are designed, installed, and operated in a manner to prevent releases from occurring. If a release does occur, there are requirements for cleaning up the release. Owing to the large number of regulated units, EPA has adopted an approach that requires the majority of the workload to be handled by the States.

The first requirement of Subtitle I is known as the Interim Prohibition, which prohibits the installation of tanks that are not protected from corrosion. As of July 1988, more than 220 violations of this requirement have been identified. Of these violations, over 130 have been corrected. Approximately 50 of the violations have required enforcement action to achieve compliance. Corrective measures were voluntarily taken in the remaining cases. The second requirement of the UST program is identification of all tank owners. This process was designed to be implemented by the states. Approximately 80,000 facilities, representing 250,000 tanks, completed the notification information and the states have established computerized databases.

In 1986, the Superfund Amendments and Reauthorization Act (SARA) amended RCRA to create the Leaking Underground Storage Tank (LUST) Trust Fund. The states in Region III are currently working to establish programs to address the cleanup of sites with leaking underground storage tanks. Cooperative Agreements have been developed for all the states in the Region. Over 750 sites have been investigated resulting in 18 emergency responses and 60 enforcement actions. Cleanup has been initiated on 123 sites by the parties responsible for the contamination. Sixty-seven additional sites are presently under control and cleanup has been completed at 50 sites.

Federal Insecticide, Fungicide, and Rodenticide Act

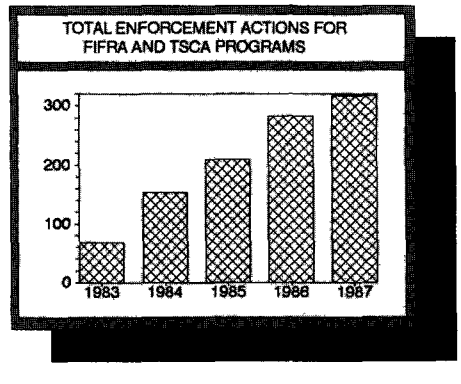
The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) charges EPA with regulating the manufacture, distribution and use of pesticides in the United States. Region III has taken an aggressive stand in enforcing FIFRA to ensure the continued safe use of pesticides while minimizing the risk to man and his environment. Region III has strengthened its enforcement activities which have reached an all-time high of 35 civil penalty actions assessed and six "Stop Sale" orders issued for FIFRA violations during Fiscal Year 1988. Major environmental issues including pesticides in ground water and pesticide impacts on endangered species are being addressed by Region III states through the preparation of management plans with EPA oversight. Region III continues to provide support and oversight for the states in their pesticide enforcement and pesticide applicator certification and training programs. Fiscal Year 1988 also saw Region III actively involved in farm worker protection and the cancellation of chlordane termiticides. Under the 1988 FIFRA amendment, there will be increased penalties and registration requirements. In Region III, this will mean improved enforcement of FIFRA.

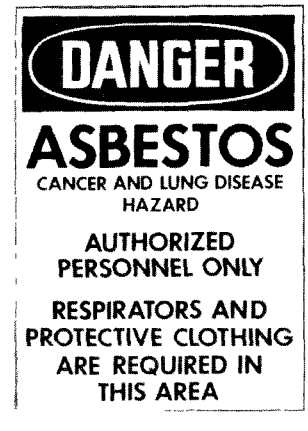
Toxic Substances Control Act

The Toxic Substances Control Act of 1976 (TSCA) protects human health and the environment by developing data on chemical substances and mixtures and regulating those substances which present an unreasonable risk.

Asbestos Program

Under TSCA, regulations cover the abatement of asbestos problems in schools and public buildings. Asbestos is an excellent insulating and fire-resistant material but its fibers are harmful to human health causing lung cancer and asbestosis. Abatement of asbestos problems may include sealing, enclosing or removing asbestos.





Secretarial and support staffs are instrumental in keeping daily operations moving forward in Region III so that we can achieve our environmental mission.

Region III has a technical assistance program which provides seminars for schools and other building owners. The 1982 Asbestos-in-Schools Rule required inspections of school buildings for friable or damaged asbestos-containing materials and notification of parents of students and employees if asbestos was present. Region III conducted inspections under this rule, covering most schools and many private schools.

The 1986 Asbestos Hazard Emergency Response Act (AHERA) now requires schools to inspect for non-friable as well as friable materials, to assess all asbestos-containing materials, to choose appropriate abatement actions and write an asbestos management plan. Parent and employee organizations must be notified about the availability of the management plan. Region III is preparing to carry out enforcement inspections under AHERA. Also under AHERA, 35 courses have been accredited in Region III for training abatement contractors and workers, building inspectors, and school management plan writers.

Public employees who are not covered by Federal or state occupational safety and health laws are covered under TSCA. Region III has been inspecting removals in public buildings under the Worker Protection Rule and has been issuing enforcement actions.

PCB Program

EPA Region III has achieved a measureable reduction in the level of polychlorinated biphenyls (PCBs) in the environment. PCBs are highly persistent, chlorinated hydrocarbons that bioaccumulate in the environment. They are a public concern because of their toxicity to humans and ecosystems. PCBs were manufactured for use as an electrical insulator and coolant in transformers and capacitors and as hydraulic fluid. However, all manufacture of PCBs was essentially banned in the late 1970s under the Toxic Substances Control Act.

Region III continues to operate a vigorous outreach and compliance monitoring program to prevent and to clean up spills and leaks of PCBs from thousands of electrical devices still in use. In addition, the Region performs inspections and aggressive outreach to ensure compliance with the PCB Transformer Fires Rule. This Rule was promulgated in 1985 to eliminate the hazards of PCB transformer fires which produce highly toxic combustion products including chlorinated dioxins and furans. These efforts will continue as more comprehensive PCB regulations become effective in 1988 and 1990 to prevent further releases of these substances into the environment.

Community-Right-To-Know Legislation

Title III, Section 313 of the Superfund Amendments and Reauthorization Act (SARA) required certain manufacturers to submit annual reports on July 1, 1988, documented the amounts of toxic chemicals their facility releases into the environment either routinely or as a result of accidents. Region III held 17 one-day workshops to help industry fill out the reports correctly and has spoken to 2,700 people in numerous organizations about the reporting requirements.

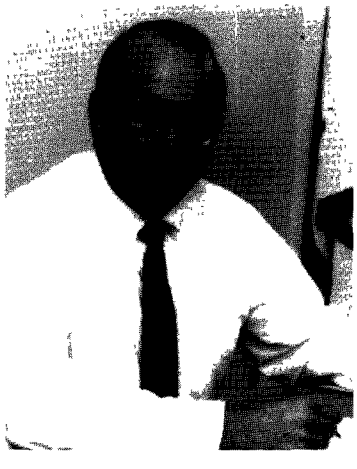
EPA Headquarters will input the data from the reports into a database that will then be made available in the Spring of 1989 to the public and government officials for the purposes of data analysis through the National Library of Medicine. To ensure data quality, compliance inspections and phone calls to facilities are being made. Finally, public outreach will be performed to show the public how to access and interpret the data.

Environmental Monitoring and Assessment

"The issues facing today's environmental managers are infinitely more complex than those of 25 years ago. Although we have made tremendous progress on cleaning our water and air, the problems that remain, e.g., ground water contamination, acid deposition, global warming, habitat modification, and estuarine and ocean pollution, will tax our ability to formulate meaningful solutions. The solutions we devise will not only affect the quality of our life but that of generations to come.

It is the goal of the Environmental Services Division to ensure that environmental managers have the most up-to-date, accurate scientific information upon which to base sound and lasting solutions to these challenging environmental problems."

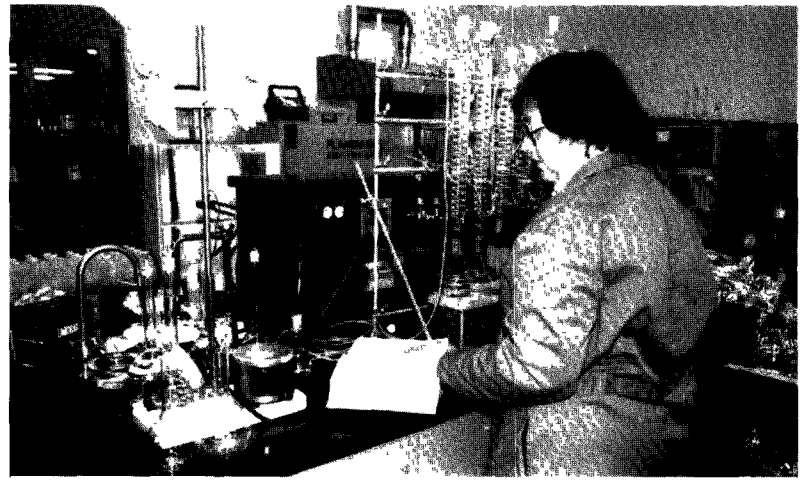
Greene A. Jones
Director
Environmental Services Division



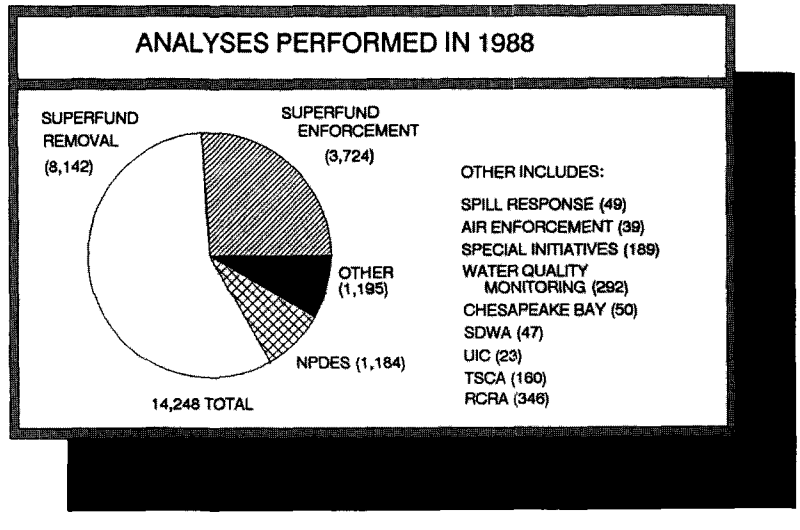
Laboratory Support

In Region III, the Central Regional Laboratory (CRL) in Annapolis, MD provides analytical services and quality assurance support to all regional programs. The lab has the capability to analyze water, soil, fish tissue and plant samples for key parameters relating to Agency programs. Analyses for organic and inorganic chemicals, dioxin, pesticides, volatile organic compounds, PCBs, and nutrients were performed in the laboratory during the past year. CRL also provides a host of other services to the Region including:

- administering contracts for Special Analytical Services to other labs to meet the needs of Regional programs
- providing expert testimony in support of ongoing litigation
- conducting onsite inspection of other laboratories in support of Agency programs



Region III employees at the Central Regional Laboratory ensure that environmental decisions are based on quality data.



- providing technical analytical assistance to states, contractors, permittees, grantees, and the general public
- holding training sessions for state and industry analysts.

In order to provide data which are legally defensible and of consistently high quality, the CRL has an extensive quality assurance program in place. This program requires thoughtful planning to identify data needs and planned uses prior to sample collection, careful adherence to established procedures and protocols during collection and analysis, and thorough documentation and review throughout the process. This approach maximizes data quality while considering cost, resources, and data needs of the decisionmaker.

In addition to the analytical capabilities of CRL, Region III also performs biological analyses at its field office in Wheeling, West Virginia. Biologists perform bioassays on effluent and ambient water samples and assist the states in these activities.

Compliance Inspections

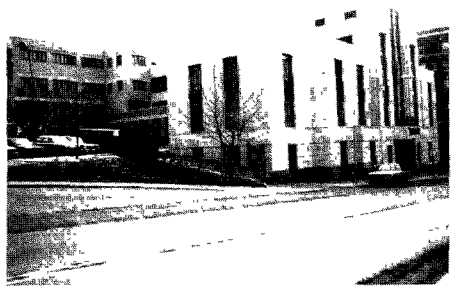
The success of EPA's compliance program depends not only on its laws but on how well those laws are enforced. Compliance inspections serve as the primary method by which EPA discovers violations. The presence of a compliance inspection field force provides a strong incentive for facilities to operate in accordance with the law. As laws are amended and new laws are passed, the knowledge and skills needed to enforce these complex changes have required all field investigators to constantly expand their capabilities. EPA Region III has field investigators located in offices in Philadelphia, Pennsylvania, Annapolis, Maryland, and Wheeling, West Virginia. These investigators have and will continue to meet the challenge before them.

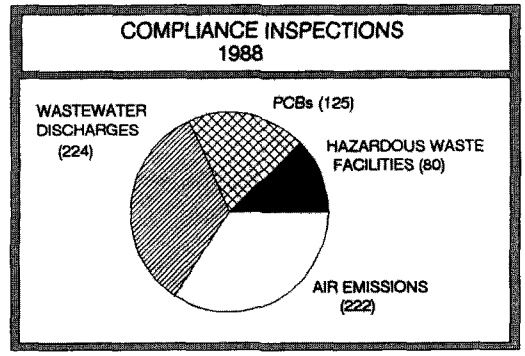
Judy Burke, PPG Industries, Inc.

Field inspectors perform an important role in the enforcement of our environmental laws and are often the first to identify compliance problems.

25TH ANNIVERSARY CELEBRATED IN WHEELING FIELD OFFICE

EPA Region III's Wheeling Office celebrated its 25th anniversary of providing field, laboratory and emergency response assistance to the citizens of the Ohio Valley. In September 1988, festivities were hosted by the Regional Administrator, who joined with the current and alumni staff and environmental officals from West Virginia, Pennsylvania and Ohio in saluting the Office's accomplishments and future promise.

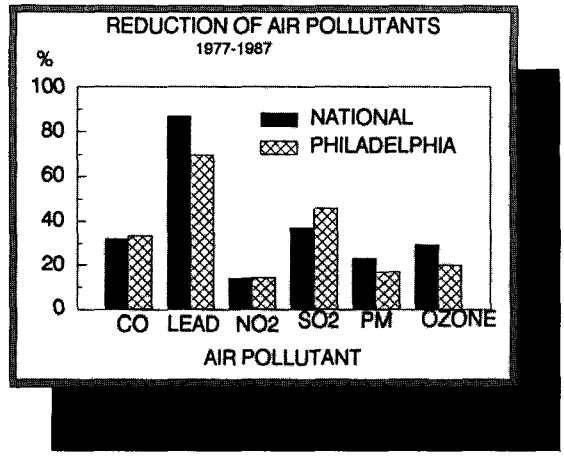




Air Monitoring

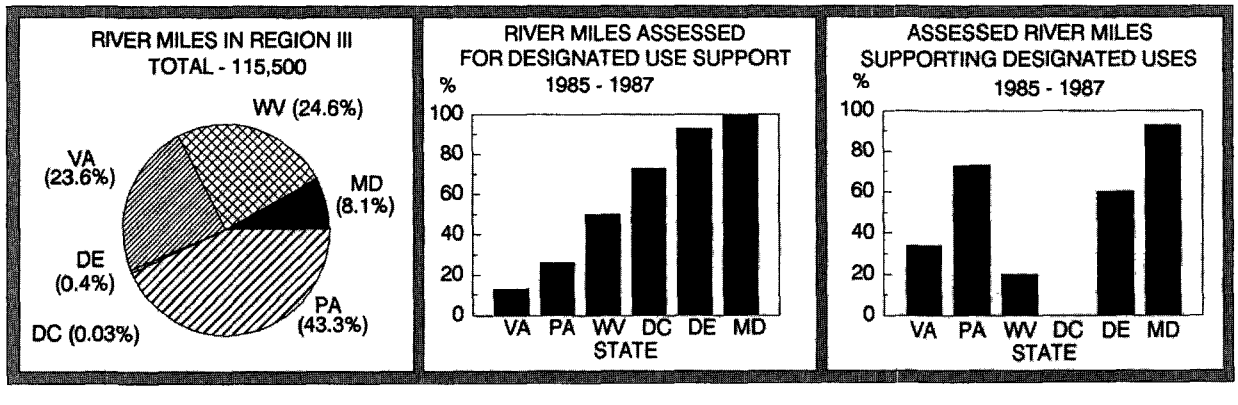
Current air monitoring efforts center on six pollutants for which National Ambient Air Quality Standards exist: carbon monoxide, elemental lead, nitrogen dioxide, sulfur dioxide, suspended particulate, and ozone. The overall air pollutant measurement program is a cooperative effort between the respective state and county agency and the EPA Regional Office. Each year EPA Region III works with each state and county agency on planning where measurements will be collected. The monitoring networks are designed based on guidance provided by EPA Headquarters with consideration of local conditions. Region III's Environmental Services Division works with these agencies throughout the year to assure that reliable measurements are collected when and where they are needed. The state and county agencies in Region III continuously operate about 600 monitors.

By following the national guidance on network design, comparable networks have been established across the country. Therefore, air pollutant levels in one metropolitan area can be compared with another, and the overall reduction in pollution levels across the country can be determined.



Water Quality Monitoring

The quality of the surface waters within Region III is monitored by a number of Federal, state, and local agencies to assess trends and identify emerging problems. Each state maintains a network of stations at fixed locations where water quality data are generated for trend analysis. These networks are complemented by studies on specific stream segments that provide an intensive assessment of local conditions. These studies are usually in response to a known or suspected problem and are used to initiate corrective action. EPA has initiated several projects in Region III to identify emerging water quality problems. A screening study to identify potential human health threats from drinking water and fish consumption is under way for six major river systems in the Region -- the Monongahela River, the Susquehanna River, the Roanoke River, the Schuylkill River, the Delaware River and the Ohio River. Region III also provides assistance to the states in assessing water quality, managing water quality data using EPA's STORET database, and preparing the state biennial water quality assessment reports required under Section 305(b) of the Clean Water Act.

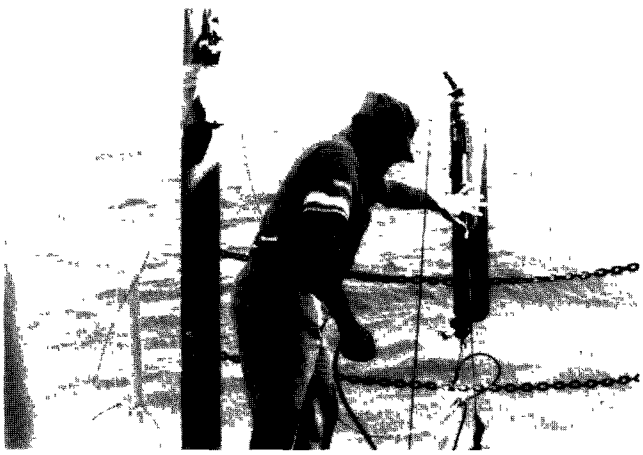


Near Coastal Waters

As the number of people living near our coasts continues to rise, our already threatened coastal ecosystems will be placed under increasing stress. Through the provisions of the Clean Water Act and the Marine Protection, Research and Sanctuaries Act, EPA Region III monitors the current conditions and assesses long-term trends in the near coastal waters of the Mid-Atlantic Bight which extends from New Jersey to North Carolina. Monitoring and assessment of marine water quality is accomplished through two complementary activities -- nautical and aerial surveillance.

Through use of the Ocean Survey Vessel, *Peter W. Anderson*, Region III conducts comprehensive sampling and evaluation of the status and trends in water quality during monthly survey cruises from June through September. Water samples are collected from one to ten miles off the coast and evaluated for both chemical and biological parameters. Bottom sediment samples are also collected near three ocean sewage outfalls and a dredge disposal site. In addition, sitings of dolphins, whales, and sea turtles are added to the National Marine Fisheries Service database to assist in long-term trend evaluation of near coastal water quality.

Along with the monthly cruises, Environmental Services Division staff also conduct weekly aerial surveillance of the coastal region to provide a quick and timely visual assessment of changing coastal conditions. The presence of a variety of marine animals is carefully monitored. Aerial surveyors watch for water discolorations possibly indicating algal blooms, floating plastics and garbage, and unusual occurrences such as oil slicks and illegal dumping. Unusual findings are reported to the appropriate state or Federal agency for investigation and appropriate action. Aerial survey information is also used as a guide in planning sampling activities on the monthly cruises.



The ocean survey crew for the September 26-29, 1988 cruise collected samples between Ocean City, New Jersey and Virginia Beach, Virginia.

Delaware's Inland Bays Pilot Project

In March 1988, EPA Headquarters' Office of Water funded three joint Federal and state Near Coastal Water pilot projects at a total of $950,000. These projects demonstrate innovative management actions for addressing identified environmental quality problems in selected bay, estuary, coastal wetland, and coastal ocean waters. The Region III project, "Decisionmaking Information System for Delaware's Inland Bays," was selected as one of the pilot projects based on criteria for innovation, action-orientation, applicability to other near coastal waters, likelihood of success, strong state and local commitment, strong public interest, and completion within two years.

EPA is providing the State of Delaware with $350,000 over two years to develop an integrated information system to help officials review proposed development plans for their potential impacts on the environment of Delaware's Inland Bays. This innovative system will improve the existing process of making permit decisions by providing an accessible, geographically formatted database of technical and ecological parameters for the entire area. It will be used primarily to help regulatory agencies decide permitting issues such as siting new housing developments and waterfront construction, promoting appropriate land use, and avoiding or mitigating wetlands alterations.

National Estuary Program

Two Region III estuaries valued for their natural and economic resources have come to national prominence in 1988 with their nomination and acceptance into EPA's National Estuary Program. On July 18, 1988, EPA Administrator Lee Thomas convened the Management Conferences for the Delaware Bay and the Delaware Inland Bays. A Management Conference is established to develop a Comprehensive Conservation and Management Plan (CCMP). Each plan will address the goals and objectives of the Management Conference and present the strategies for achieving improved water quality and cleaner, healthier estuaries. Region III's Environmental Services Division is responsible for coordinating the Management Conferences, working with the public and the the State of Delaware in the development of the Inland Bays' CCMP and with Region II, the public, and the States of Delaware, New Jersey and Pennsylvania in the development of the Delaware Bay's CCMP.

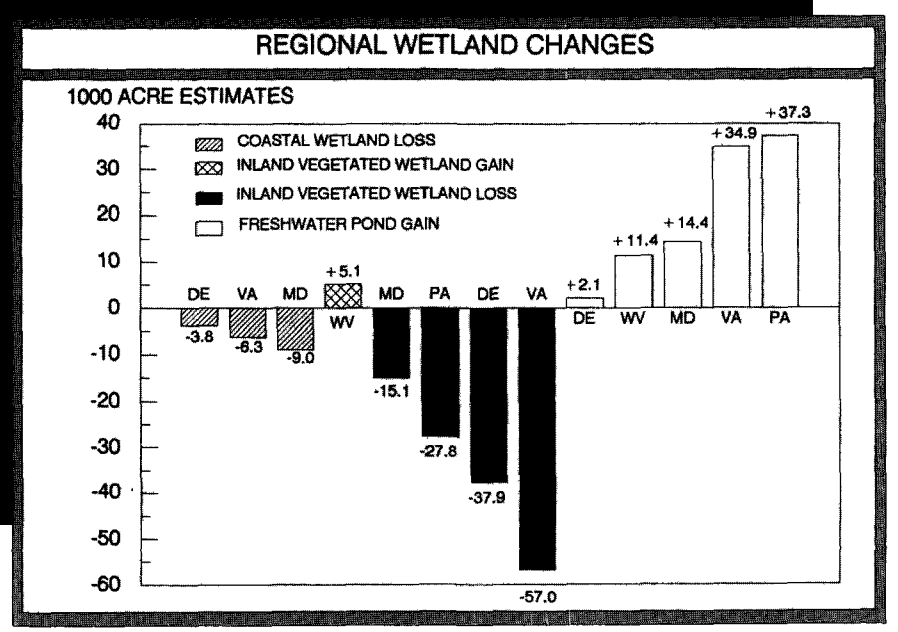
Wetlands

Wetlands in Region III are vital natural resources not only to local residents, but also to others who consume or utilize the products they yield. In their natural condition, wetlands provide many benefits including (1) fish and wildlife habitat, (2) aquatic productivity, (3) water quality improvement, (4) flood damage protection, (5) erosion control, (6) natural products for human use, and (7) opportunities for recreation and aesthetic appreciation. Each wetland is part of a complex, integrated system that delivers these benefits and others to society.

Over one-half of the native wetlands in Region III have been lost since colonial days. Between the mid-1950s and the late 1970s, the Region lost about 133,000 acres of inland vegetated wetlands, and 20,000 acres of coastal wetlands. Virginia experienced the greatest recent losses of inland vegetated wetlands, while coastal wetlands were most threatened in Maryland. Delaware lost 21 percent of its inland vegetated wetlands.

Most of the lost wetlands were covered with dredged or fill material and converted to another use. EPA's authority to protect wetlands from such activities rests with Section 404 of the Clean Water Act. The provisions of this section give EPA and the U.S. Army Corps of Engineers (COE) joint authority over any activity resulting in the deposition of dredged or fill material in the waters of the United States. While the COE is responsible for actual permit issuance, EPA is directed to issue environmental guidelines for these permits. EPA therefore reviews all permit requests going to the COE and provides comment on their compliance with these guidelines. On the average, Region III reviews 1200 Section 404 permit requests during the year and raises significant issues on approximately 20% of the requests. In the past year, Region III has issued two administrative complaints and 20 administrative orders against violators who illegally dispose of dredged or fill material. In addition, 15 cases have been resolved meaning restoration or mitigation has been successfully completed.

In a related area, Region III has been actively involved in advance identification activities where sites are designated to be either generally suitable or unsuitable for the future disposal of dredged or fill material. These projects are usually initiated at the request of a state or local agency. The public meetings held in conjunc-



tion with this activity have proven to be useful educational tools for informing the public of the value of their wetland resources. In the past year, advanced identification projects have been completed for Cedar Island in Virginia and for English Swamp, Twomile Run and Silkman's Swamp in the Pocono Region of Pennsylvania. Ongoing project areas include Sussex County, Delaware, Phillipsburg, Half Moon Lakes, and Lost Lakes in Pennsylvania, and Canaan Valley in West Virginia. Region III is currently working on an initiative to develop a manual describing advanced identification techniques so that in the future, state and local agencies can participate in this activity.

National Environmental Policy Act

In 1970, Congress enacted the National Environmental Policy Act (NEPA) to ensure that Federal agencies consider the environmental impacts of their activities and achieve a balance between society's needs and environmental protection. EPA Region III's role under the terms and conditions of NEPA has traditionally been to develop environmental documentation and mitigation plans for EPA projects that could adversely affect the environment. Historically, these projects have centered around the wastewater treatment construction grant program. Recent Environmental Services Division activity in this area has been the development of the environmental impact statement for the disposal of sludge at the Blue Plains wastewater treatment facility in the District of Columbia. This study, which is scheduled for release by the end of 1988, has evaluated the merits of various disposal techniques including incineration, composting, land application, landfilling, ocean dumping, and various combinations of the above.

As priorities have shifted away from the construction grant program, the Region has become increasingly involved with the review of activities associated with the cleanup of hazardous wastes. The environmental integrity of each project is evaluated through review of remedial investigations and feasibility studies. In cases where impacts are unavoidable, the Environmental Services Division staff provide recommendations on the most effective means for mitigation.

An additional EPA function under NEPA and Section 309 of the Clean Air Act is to review and provide comment on the environmental assessments and environmental impact statements for projects developed by other Federal agencies, e.g, construction projects for dams, highways, and power plants, dredging projects, resource extraction projects, and Federal land use projects. As an extension of this function, the Environmental Service Division provides technical support to these agencies by conducting special studies. Region III recently assisted the National Park Service in evaluating the condition of the Steamtown National Historic Site. The study revealed the presence of PCBs and asbestos which will require a cleanup effort by the Park Service. Region III also coordinated a study of the Folcroft Landfill at the Tinicum National Environmental Center in conjunction with the U.S. Fish and Wildlife Service. The purpose of this ongoing study is to evaluate the effects of the landfill on the ecology of the Center.

Federal Facilities

Federal facilities represent a significant component of the regulated community in Region III. More than 25% of the Federal workforce is employed in this Region at 2,314 Federal installations ranging from shipyards to post offices. Of these facilities, 23 require NPDES permits for wastewater discharges each exceeding one million gallons per day, 34 require RCRA permits for the transportation, storage, and disposal of hazardous wastes, two are on the National Priority List of Superfund sites, and five are proposed to be listed. Currently, 121 facilities are being regulated for their activities involving hazardous wastes. There are also 460 facilities (e.g., Frankford Arsenal, West Virginia Ordinance Works) that were formerly owned by the Federal government.

Region III's Federal Facilities Program provides the coordination and scrutiny necessary to ensure Federal facility compliance with EPA statutes. Environmental Services Division staff review and evaluate proposed and existing pollution abatement projects designed to control or eliminate the pollution generated by Federal facilities. Site visits and inspections are performed to ensure compliance with environmental standards, permits and/or regulations and tracked on a database developed in Region III. There are currently 702 pollution abatement projects under way in the Region at a total estimated cost upon completion of $628 million.

OUR CHALLENGE

How is a large, complex organization in an ever changing society to be managed? As the management team at EPA Region III, we take pride in our ability to anticipate changes, be innovative, and remain at the cutting edge of managerial development. We constantly assess the needs of our staff and respond to them. At the same time, we evaluate the needs of the public we serve and act to improve communication and responsiveness. We strive to identify technological changes that will help us to be more productive in our jobs. Our emphasis on participatory management has resulted in consensus building both inside and outside of the Agency, a focus on bottomline environmental results, and an increase in overall productivity.

Stanley L. Laskowski
Deputy Regional Administrator

New Initiatives for Environmental Success

Over the past several years, EPA has made significant progress in cleaning up traditional forms of pollution. However, the complexity of the problems we still face are very different from and will dwarf the problems of the past. We are developing a new appreciation for the interdependent nature of people and the components of their environment, and we must start addressing risks to those systems in a more holistic cross-media fashion. Also, as the public's demand for environmental protection grows while financial resources remain scarce, we are facing the biggest challenge ever to make decisions that yield the greatest possible environmental benefit. Region III has been a national leader in developing initiatives to deal more effectively with this challenge. We are making progress in analyzing environmental problems as they impact all media: air, land, and water; we are continuing to develop management initiatives that focus on achieving environmental results through greater risk reduction; and we are fostering efforts in cooperative problem-solving with other institutions concerned with our environment.

Greene A. Jones
Director
Environmental Services Division

Managing for Environmental Results Initiatives (MERITs)

Much of Region III's environmental protection agenda is set by program managers in Washington, D.C. to fulfill our part of national goals. While the great majority of nationwide environmental problems are also high-priority issues for the Region, the national agenda does not always include all issues of importance to our Region. In order to address these Regional problems, the Region has established the Managing for Environmental Results Initiatives (MERITs) process. This process allows flexibility in allocating resources to solve regional high-priority environmental and public health problems while still fulfilling our national commitments.

Each year, Region III staff (as well as our state counterparts) are invited to propose projects that would further enhance EPA's efforts to protect the environment. A Region-wide committee then evaluates the environmental benefit and feasibility of the proposals. Upon final approval, the Region has a set of results-oriented projects that supplement our nationally mandated responsibilities. Projects have ranged from air toxics work in Kanawha Valley and advanced identification of wetlands to a model radon awareness program. MERITs projects may also address cross-media problems or other issues that do not clearly fit into an established program area.

Region III's MERITs process has achieved real environmental results over the past several years, and has become a model for similar programs across the Nation.

Radon MERIT

Prior to the establishment of the EPA National radon program, Region III became concerned with the radon health threat. Through the MERITs process, the Region's senior managers learned about radon and approved a project aimed at (1) further investigation of the problem, (2) preparation of adequate responses to public inquiries, and (3) provision of radon mitigation training. As a result of the Radon MERIT, the Region provided states with maps showing the highest risk locations, a radon mitigation course was presented, and public outreach activities were initiated. Region III lead the Nation in addressing the health risk associated with radon.

Advanced Identification of Wetlands MERIT

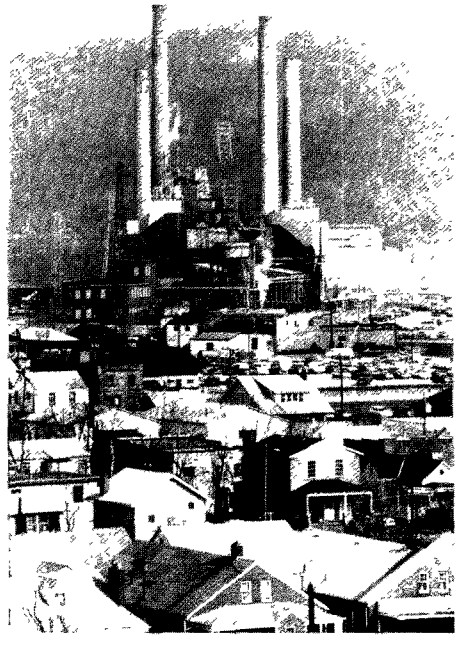
Each year Region III loses several thousand acres of wetlands largely as a result of development activities. The Region developed the Advanced Identification of Wetland MERIT in an effort to control this loss. Advanced identification provides protection to wetlands prior to any announcement of public or private intent to fill them. An assessment is made of the environmental and ecological attributes of a wetland to determine its suitability for use as a future disposal site for dredged or fill material. As a result of this MERIT, EPA headquarters developed a national program commitment for advanced identification of wetlands in all EPA Regions.

Hazardous Waste Impacts on the Chesapeake Bay MERIT

To enhance the ground and surface water quality in the Chesapeake Bay watershed, Region III developed a MERIT to investigate, map, and prioritize existing sources of hazardous waste, pesticides, and herbicides for appropriate remedial action. Activities focused on RCRA facilities and Superfund sites within close proximity to the Bay shoreline and major tributaries--a total area of 4,000 square miles-- to maximize the direct effect on Chesapeake waters. Facilities were evaluated and targeted for remedial action through the RCRA and Superfund programs to improve the environmental quality of this watershed.

Kanawha Valley Study

In late 1984, the tragic chemical poisoning of thousands of people in Bhopal, India propelled the Kanawha Valley of West Virginia into the national limelight because of the heavy concentration of chemical manufacturing facilities located there. Public concern and congressional scrutiny intensified over the potentially adverse health effects posed by both high short-term, and low continuous exposure to a variety of toxic pollutants known to be present.



Part of Region III's response to this concern was to undertake a study of the health risks (primarily cancer) associated with long-term exposure of local residents to several unregulated chemicals present in Kanawha Valley. In cooperation with West Virginia, EPA examined exposures through air, drinking water, fish consumption, and ground water pathways with air receiving the most attention. The study was the first in the Valley to look not only at the levels of pollutants present, but to link these levels with possible community health risks using improved methods of risk assessment.

The results showed that in several cases the potential risks were sufficiently high to suggest action be taken to reduce their levels. Study results have been used by area industries and the West Virginia Air Pollution Control Commission to target reductions in the amounts of several chemicals emitted into the air. These efforts have sharply reduced public risks.

This study has served as a model for addressing other environmental issues requiring an integrated approach to problem-solving and has provided Region III with an opportunity to communicate with the public about risk assessment concepts and results.

Risk Assessment

EPA Administrator Lee Thomas has described EPA as a risk reduction agency. He has further stated that to be effective, we must assess clearly and honestly the relative significance of various hazards.

Region III has been a leader in expanding and refining applications of risk assessment through activities including:

- Regional scientists helping state and local governments to analyze and interpret toxicological and exposure data
- Regional scientists and managers serving on various national EPA committees which have developed scientific guidance and policy
- Region III development of our own risk training course presented to 100 Regional staff members a year before Headquarters released a similar curriculum
- Regional scientists and managers frequently speaking about EPA's risk assessment methods to civic, industrial, and environmental groups
- Region III use of our Managing for Environmental Results Initiatives to fund important risk assessments not linked to any specific EPA programs
- Region III ranking of the environmental problems in the Region based on risk.

Comparative Risk Project

In a world of growing demand for environmental protection but finite resources, it is becoming an increasing challenge for EPA to set its priorities for reducing risk to human health and the environment. In addition, many of the statutes under which EPA operates, e.g., Clean Air Act, Clean Water Act, etc., have traditionally mandated that the Agency address environmental problems in a particular media. As we develop a growing understanding of the interconnected nature of our environment, several efforts are being made to look across air, water, and soil media to determine where and how the Agency has the greatest potential to reduce risk.

In 1986, EPA completed the National Comparative Risk Study which compared the risks of existing problems being addressed by national environmental programs as well as emerging issues. A year later, Region III became one of the first in the country to undertake the same exercise on a regional level. Several dozen regional staff experts were assigned the task of determining what problems still pose the greatest risks to human health and the environment in Region III given the programs and controls the Agency currently has in place. Data were collected, risk assessments and other analyses were performed, and a relative ranking of the eighteen issues was completed during the summer of 1988. The results are currently under review and will be released in the near future.

The challenge now facing the Region is to integrate these findings into our existing programs and management structures while maintaining the significant gains already accomplished. This will require:

- a creative problem-solving approach to both emerging issues and persistent existing ones
- efforts to modify budget, planning, and management systems
- communication with state agencies and outreach to the public.

Through comparative risk analysis and the development of initiatives to address the findings, Region III has taken another significant step towards managing for environmental results.

Technology Transfer

As state and local governments along with industries themselves assume more responsibility for environmental protection, one of the most vital functions the Federal government can perform is that of technology transfer. Frequently, it is not appropriate for the Federal government to mandate a solution to a local problem, but rather to provide assistance to the local decisionmakers as they devise their own solutions. These technology transfer activities include information dissemination, technical assistance, facilitation of networking, and development of training programs.

Region III works closely with EPA Headquarters on national technology transfer efforts. Emphasis is also placed on communications between Regional program offices and their state counterparts and on information exchange with interest groups, academia, and industry within the Region.

Institute for Cooperative Environmental Management

The technical complexity and challenge of managing environmental quality in the Mid-Atlantic Region greatly exceeds the resources and capabilities of any single government agency or organization concerned with this challenge. In addition, not all environmental problems can be solved by traditional means such as regulation or public works programs. The need for action by individual homeowners to mitigate radon is a good example.

To better meet this challenge, Region III has proposed the formation of a public/private association tentatively named the Institute for Cooperative Environmental Management (ICEM). As currently envisioned, the Institute would be supported and managed by organizations representing government, business and industry, academia, and a variety of public interests in the Mid-Atlantic area. By joining forces on a small scale, each participant in ICEM would benefit through the sharing of information resources and expertise.

The Institute is expected to achieve improved environmental quality in the Mid-Atlantic area through public and private sector cooperation and implementation of initiatives which address specific concerns of its membership. Types of approaches could include education, technical training, personnel exchange, reciprocal use of facilities, public forums, and targeted information transfer.

From EPA's perspective, the Institute will complement its existing resources and help to support Regional priorities which are unable to be adequately addressed through current programs.

Innovations for Human Resources Development

Not a fad. Not "buzz-words" for the '80's. At EPA Region III, human resources development has been integrated within the fabric of the work environment. To maintain the technical success the Region has enjoyed requires an office atmosphere that subscribes to the theory that people are our most important resource. It is no coincidence that the program successes of the recent past occur at a time when the Region's human resources development program has achieved status as a leader in the Agency.

Region III's human resources program is evident in training and employee recognition, but these are basic elements that employees expect from management. Beyond the basics, Region III has sponsored many initiatives in a variety of human resources programs.

Corporate Culture Study: In October, 1986 a report was submitted by Dr. Gerald Zeitz, Associate Professor at Temple University, which summarized employee responses to a questionnaire designed to examine various elements of the EPA Region III "Corporate Culture." The questionnaire was modeled after a similar study conducted at a national level by the National Association of Public Administration. A follow-up study is currently being completed to assess changes in the past two years and also to specifically evaluate human resources programs.

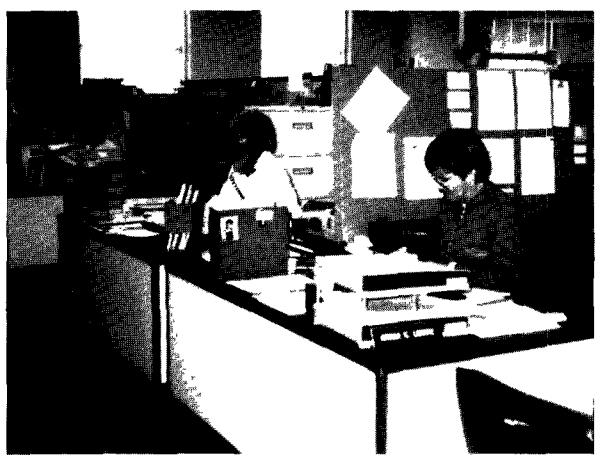
Health Unit/Fitness Center: Arrangements are being finalized for the opening during fiscal year 1989 of an on site Health Unit/Fitness Center for EPA employees in Philadelphia. In cooperation with other Federal Agencies occupying the 841 Chestnut Building, EPA has completed negotiations with General Services Administration and the building management. The new Health Unit/Fitness Center will offer space for Aerobics Classes, Nautilus Equipment, and will become a center for wellness programs and employee health evaluations.

Mentoring: In response to significant increases in employment, the Region's Hazardous Waste Management Division developed a formal mentoring program to assist with orientation of new employees. Developed in response to employee suggestions, the mentoring program begins prior to the actual entry date for an employee and continues for several months. Because of the successes of this program, a recommendation to adopt this program as a Regional endeavor is under consideration.

Employee Retreats: From the initial concept of a planning session for members of an individual work unit, the use of employee retreats has grown to various forums including all managers in a Division, all Regional managers, and all secretarial personnel within a Division. Secretarial retreats gained prominence in the past year following a successful pilot in the Air Division and support from the Human Resources Council. The secretarial retreats have been successful in fostering an interchange of ideas and providing feedback to management.

Career Development Month: In each of the past three years, a month-long program of activities has been scheduled to help employees focus on managing their careers. Guest lecturers, EPA employee panels, and video presentations have been used to offer career counseling, a discussion of private versus public sector employment, a review of anticipated changes in the workforce by the year 2000, and many other subjects.

With a commitment from senior management, effective advisory assistance from the Regional Human Resources Council and support from staff, the human resources development program in Region III will continue to build upon current initiatives and seek further actions to improve the work environment in Region III.



The rush of daily routines often limits opportunities to share new ideas and strenghthen working relationships. Secretarial retreats offer a relaxed atmosphere away from the job where people have time to listen to each other.

Avalon All-Managers Meeting

On November 12-13, 1987, all Region III supervisors and managers met in Avalon, NJ to discuss issues and develop an action plan in four areas:

- Expectations of Managers
- Human Relations
- Work Environment
- Recruitment/Development/Retention of Employees

For the first Region-wide meeting of supervisors in over ten years, a considerable amount of up-front planning helped design a successful and problem-free conference. Prior to the conference, supervisors were surveyed on problems in the office and discussion papers were prepared and distributed for each subject area. Senior staff employees were trained as facilitators to assist supervisors during discussions. A detailed meeting process was developed and logistics were carefully planned to ensure the the convening of over 100 conference participants and support personnel went as smoothly as possible.

Eight groups of approximately ten supervisors each met in separate sessions, two groups for each subject area. All groups followed a three-phase approach:

- identifying problems and concerns,
- envisioning success, and
- strategies and recommendations.

Group reports were presented after the envisioning success and strategies and recommendations sessions. Senior management presented their perspectives on the output of the group discussions at the close of the conference. Over 100 recommendations were identified during the two days.

A key component of the Avalon process was the commitment for follow-up action. Work groups were established to continue discussion of issues raised in each of the four subject areas and to refine the recommendations. Each group prepared an implementation plan that identified responsible parties to complete a task and a target completion date.

While the success of meetings such as Avalon can be measured on several levels, the status of the recommended action items less than a year after the conference indicates that the time and resources devoted to the conference were a sound investment. Of the 90 action items compiled by the follow-up work groups, 49 have been completed, 29 deferred, and 22 remain active. Through the improvements made in the Region, the increased awareness of supervisors to the issues discussed, and the communications and interrelationships achieved, Avalon ranks as a significant milestone for the Region's human resources program.

Human Resources Council

To help plan and implement human resources programs in Region III, a Human Resources Council composed of representatives from all employee groups was established in July, 1986. Council members assist human resources management by reviewing national and regional initiatives, suggesting additional initiatives, and serving as a liaison to respective offices and employee groups for the purpose of publicizing human resources programs.

Council membership is for two years. The initial Council recently completed its tenure which was highlighted by many accomplishments including:

- *development of charter for the Council*
- *review of the Region's Awards Program*
- *annual Career Development Programs*
- *recommendation for secretarial retreats*
- *assistance in the development of the Human Resources Manager of the Year and Secretarial Excellence Awards.*

New memberships were selected for the Council term beginning with the start of fiscal year 1989 and the Council membership was expanded to include four representatives (and one alternate) from managerial, technical, and secretarial/support staff. In addition, several human resources management staff positions also serve on the Council. Agenda items expected to be reviewed by the new Council include child care, senior workers, and career management.

Like its National Council counterpart, the Region's Human Resources Council has proven an effective voice in the development of human resources programs. By involving the target audience of these programs in the planning, the Region is better informed of the needs of employees and can better respond to those needs.

Managing Our Information Resources

Our ability to communicate with one another, share information, and make decisions is dependent largely upon our ability to manage our information resources. Information management in Region III has grown steadily from the "old days" of punch cards, three foot stacks of printouts, and general ADP support to a small staff. Today's world of on-line data system access, laser printers, and three and a half inch diskettes requires a full range of information management support. In Region III, an ever growing, more sophisticated user community is now serviced in the areas of software development, voice/data telecommunication, microcomputer support, geographic information systems, records management, and general library services. Other support such as "expert systems" using Artificial Intelligence provide for a continuing, exciting move toward the future.

State/EPA Data Management

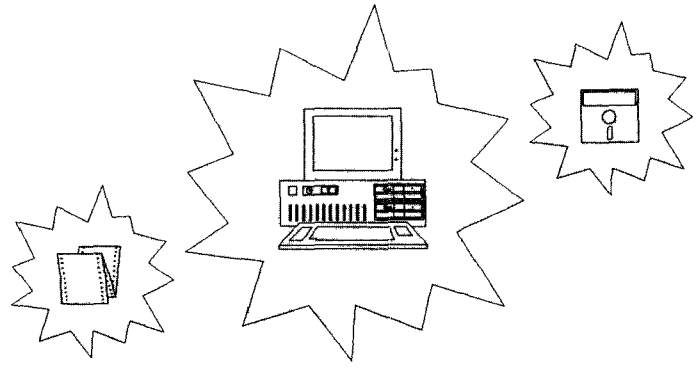
EPA's capacity to manage for environmental results depends on our ability to identify and examine environmental trends and to report on our performance as well as that of the States. To effectively perform these activities, it is essential that EPA have a timely and accurate data sharing program with the States. For this reason, EPA has launched a national State/EPA Data Management Program designed to achieve the following:

- To provide a direct communication link to the State and to the EPA data network
- To have direct access to the data in the national data systems
- To have a state policy statement on data integrity and protocols
- To implement data integration tools to pinpoint environmental problems
- To set priority on environmental problems on a risk-reduction basis
- To manage activities to maximize environmental results.

Four specific benefits envisioned for the program are:

- Efficiencies in data collection which will result in significant gains in data handling and routine program operations
- More accurate, timely and reliable data to guide programmatic decisions and support program oversight
- Improved data integration to more effectively target regulatory and compliance activities on risk reduction, and to enhance the capability to manage for environmental results
- A more productive working relationship between EPA and the States to focus on environmental management and minimize data disputes.

In Region III, formal agreements to implement State/EPA Data Management Plans are in place for Virginia, Delaware, and West Virginia. It is anticipated that Maryland and Pennsylvania will enter into formal agreements with EPA concerning data management during 1989. Direct telecommunications links have been established with all Region III States and the National Comupter Center. This allows any state user to communicate directly with EPA's major data systems at their respective work stations. All Region III States participated in the recent State/EPA Data Management Conference held in Raleigh, North Caroloina. Two productive region/state caucuses were held with conference representatives. These meetings centered on the need for continuing communication, and the involvement of senior level managers within EPA and the states.



Region III Information Resource Center

Basing decisions on sound science is a fundamental EPA goal. The purpose of the Region III Information Resource Center (IRC) is to keep Regional staff well-supplied with up-to-date, reliable scientific and legal information. The IRC houses an ever-growing collection of books, technical reports, microforms, Agency directives and journals. Now numbering about 95,000 items, the collection covers the gamut of environmental sciences such as biology, chemistry, toxicology, geology and pollution control technologies; environmental conditions within the Region III geographical area are emphasized. Special collections have been established for law, hazardous waste, and wetland ecology. A Self-Study Center has been added with the cooperation of the Training Office.

In addition to its collection of printed and audio-visual materials, the IRC has access to over 300 databases which assist the staff in identifying and obtaining pertinent information from non-EPA sources. For example, the National Library of Medicine's TOXNET is tapped frequently for toxicity data. A variety of online indexes makes it possible to produce a list of references on virtually any topic within minutes.

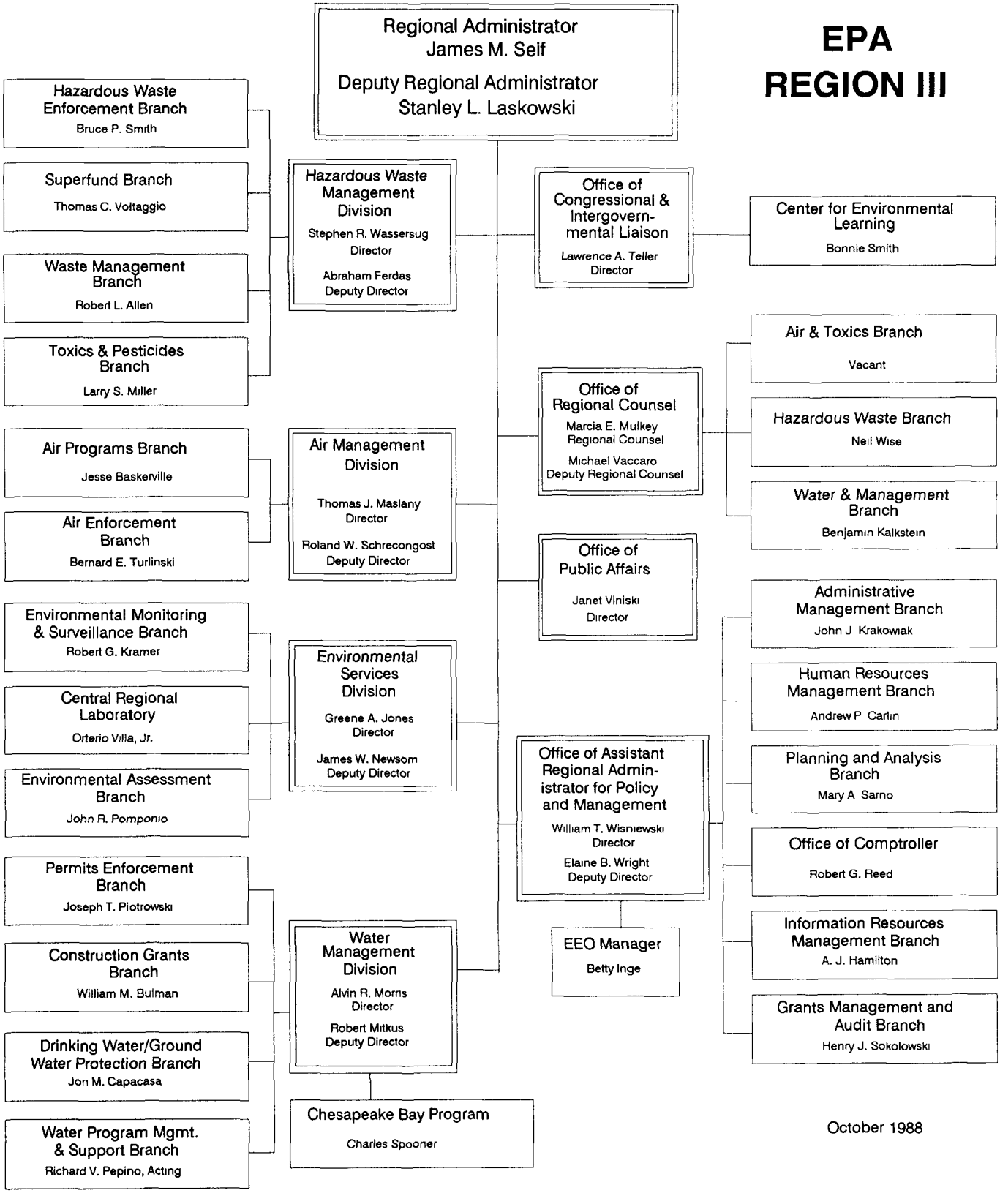
Although primarily geared to the information needs of EPA staff, the IRC serves the public as well. The facility is open for reference use on weekdays from 8:00 a.m. to 4:00 p.m. Review materials, such as the National Priority List Public Docket, are available for viewing. Loans are made to other libraries throughout the U.S. and occasionally elsewhere -- the IRC recently filled its first loan request from an African library!

Geographic Information Systems

A Geographic Information System (GIS) consists of integrated hardware and software systems that provide data entry, storage, manipulation, analysis and display capabilities for spatial data. Basically, this system allows the user to visually display on a map all the data available for a specific geographic area. For example, a series of overlays could be constructed that indicate permit issuance data, water quality data, drinking water data, ground water data, and existing Superfund sites on one composite map of a given geographic area.

Region III is one of four EPA pilot efforts related to GIS activity. As a result, the Region has acquired additional hardware and software specific to GIS support, and has formed a permanent GIS support group to service Regional staff. To date, this is the most sophisticated means of determining cross-media impact on a geographic area using automated technology. Two studies currently underway in the Region are a Radon Data Analysis Study in Maryland, and an Inland Bay Study in Delaware. Region III is continuing to expand its GIS capability and expects to have a state-of-the-art GIS support function in place in the near future. This function will serve as the center for all Regional cross-media data integration and analytical activities.

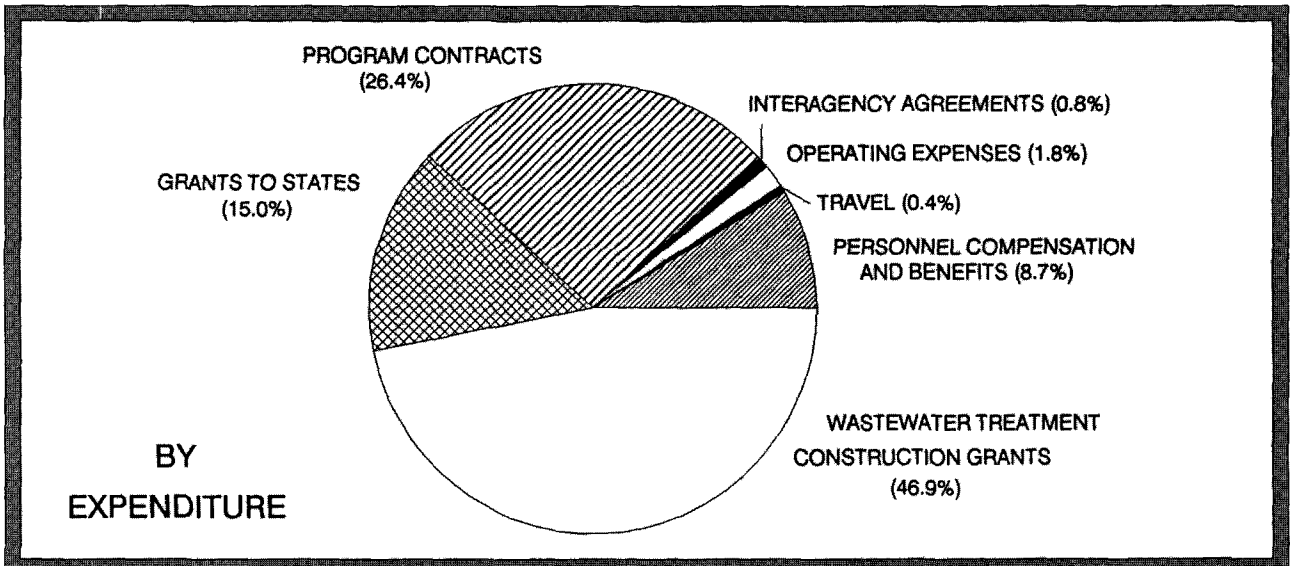
OUR ORGANIZATION

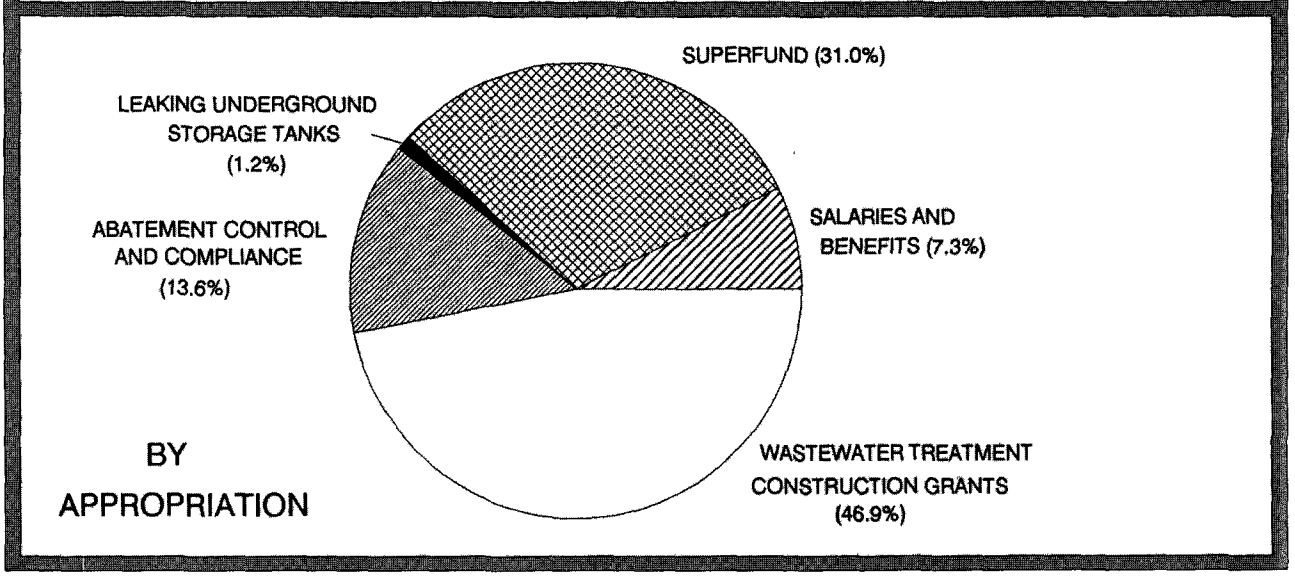


OUR FINANCES

Fiscal Year 1988

EXPENDITURE	APPROPRIATION					
	Salaries and Expenses	Superfund	Leaking Underground Storage Tank	Abatement Control and Compliance	Wastewater Treatment Construction Grants	Total EPA Region III
Personnel Compensation And Benefits	$19,961,500	$8,813,200	$219,500			$28,994,200
Travel	$823,000	$691,500	$18,000			$1,532,500
Operating Expenses	$3,416,300	$2,600,700	$60,900			$6,077,900
Interagency Agreements		$2,542,100				$2,542,100
Program Contracts		$82,758,700		$5,003,200		$87,761,900
Grants To States		$5936,000	$3,489,400	$40,385,000		$49,810,400
Wastewater Treatment Construction Grants					$156,275,413	$156,275,413
Total	$24,200,800	$103,342,200	$3,787,800	$45,388,200	$156,275,413	$332,994,413





FURTHER INFORMATION

If you would like further information on the subjects covered in this report, please feel free to contact any of the following individuals:

Area Codes: 215-597-xxxx
304-232-xxxx
301-266-xxxx

OUR PEOPLE

EEO	*Betty Inge*	597-3601
Training Programs	*Eileen Burrows*	597-8924
Awards	*Lillian Smith*	597-4127

OUR PARTNERSHIPS

Center for Environmental Learning	*Bonnie Smith*	597-9076
Delaware	*Evelyn MacKnight*	597-9807
Distict of Columbia	*Larry Teller*	597-9072
Maryland	*Evelyn MacKnight*	597-9807
Pennsylvania	*Dan Ryan*	597-9816
Virginia	*Rich Kampf*	597-9817
West Virginia	*Ray George*	232-5585
Public Information	*Janet Viniski*	597-9370

AIR QUALITY

Pollution Transport	*Eileen Glen*	597-8379
Ozone	*Rebecca Taggart*	597-9189
Radon	*Bill Belanger*	597-4084
Air Toxics	*Israel Milner*	597-9090
Air Enforcement	*Glenn Hanson*	597-6554
Asbestos	*Ron Patterson*	597-9393
Steel Industry Regulation	*Jim Hagedorn*	597-9858

WATER QUALITY

Water Quality Standards	*Bob Koroncai*	597-0133
NPDES	*Dale Wismer*	597-6539
National Municipal Policy	*Carol Amend*	597-9047
Contruction Grants	*Bill Bulman*	597-9460
Pretreatment	*John Lovell*	597-6279
Toxic Pollutants	*Tom Henry*	597-8243
Drinking Water	*Jeff Hass*	597-9873
Ground Water	*Stu Kerzner*	597-8826
Underground Injection	*George Hoessel*	597-9928
Clean Lakes Program	*Randy Waite*	597-3425
Nonpoint Source Program	*Hank Zygmont*	597-3429
Chesapeake Bay Program	*Charles Spooner*	922-2285

HAZARDOUS WASTE CONTROL

Superfund Program	*Tom Voltaggio*	597-8132
Superfund Enforcement	*Bruce Smith*	597-1720
RCRA	*Jim Webb*	597-3159
RCRA Enforcement	*Vicki Binetti*	597-3039
Underground Storage Tanks	*Wayne Naylor*	597-3177
FIFRA and TSCA	*Larry Miller*	597-8598
Asbestos Program	*Pauline Levin*	597-8683
PCB Program	*John Ruggero*	597-9937
SARA Title III	*Larry Miller*	597-8598

ENVIRONMENTAL MONITORING AND ASSESSMENT

Central Regional Lab	*Ort Villa*	266-9180
Bioassays	*Gary Bryant*	232-4055
Compliance Inspections	*Bob Kramer*	597-8330
Air Monitoring	*Ted Erdman*	597-1193
Water Quality Monitoring	*Chuck Kanetsky*	597-8176
Near Coastal Waters	*Brigitte Farren*	597-3361
National Estuary Program	*Marria O'Malley*	266-9180
Wetlands	*Barb D'Angelo*	597-9301
NEPA	*Jeff Alper*	597-9302
Federal Facilities	*Fran Mulhern*	597-1168

ENVIRONMENTAL INITIATIVES

MERITs	*Patricia Wilbur*	597-9857
Risk Assessment	*Diana Esher*	597-1196
Comparative Risk Project	*Patricia Wilbur*	597-9857
Technology Transfer & ICEM	*Tom Slenkamp*	597-9861

HUMAN RESOURCES INNOVATIONS

Corporate Culture Study	*Roger Devin*	597-9864
Health Unit/Fitness Center & Career Development Month	*Lillian Smith*	597-4127
Mentoring, Employee Retreats, All-Managers Meeting, and Human Resources Council	*Larry Merrill*	597-8925

INFORMATION RESOURCES

State/EPA Data Mgmt.	*Wendy Bartel*	597-3532
Information Resource Ctr.	*Diane McCreary*	597-7904
GIS	*Bob Braster*	597-4831

OUR FINANCES *Larry Whitson* 597-3603