

United States
Environmental Protection
Agency

Office of
Public Affairs (A-107)
Washington DC 20460

Volume 9
Number 1
Jan-Feb 1982



EPA JOURNAL

A Look Ahead





Snow blankets the rolling hills in Highland County, Va., part of America's scenic legacy.

Goals and Accomplishments

In this issue of the Journal, we take a look at future directions for EPA and the Federal environmental programs.

A significant portion of the future will be shaped by a new act signed by President Reagan to turn the massive federal grant program for sewage treatment construction "away from public works for the sake of public works" and rededicate it to environmental goals.

The fate of bipartisan legislation now being considered by Congress on ways to improve the Clean Air Act could also have a major impact on the country's environment.

EPA Administrator Anne M. Gorsuch reviews the progress made by EPA since its

inception and emphasizes the need for new directions to meet the environmental goals of the 1980s.

"We are nearing the end of a period in the United States in which legislative responses to environmental problems proliferated rapidly," Administrator Gorsuch comments in her article. "The laws are now in place, and the administrative structure now must catch up both scientifically and organically to assure that these programs are carried out with care and frugality."

This issue of the Journal also carries an interview with Dr. John P. Horton, Assistant Administrator for Administration. He explains how his office is working to make the operations of the agency more effective.

Another article reviews accomplishments

by EPA during the past year and reports gains in both environmental protection and cost savings.

The burning of huge amounts of PCB wastes in an incinerator ship in the Gulf of Mexico is the subject of another article.

Also in this issue is information on major new appointments and the reorganization of the Agency's enforcement program, including the establishment of a new Criminal Enforcement Unit.

Actions by EPA to protect the drinking water for Atlantic City, N.J., and to ease procedures for individuals importing foreign cars are also reported. □

EPA JOURNAL

Anne McGill Gorsuch, Administrator
Byron Nelson III, Director, Office of Public Affairs
Charles D. Pierce, Editor
Truman Temple, Associate Editor

Articles

EPA is charged by Congress to protect the Nation's land, air and water systems. Under a mandate of national environmental laws, the Agency strives to formulate and implement actions which lead to a compatible balance between human activities and the ability of natural systems to support and nurture life.

The EPA Journal is published bi-monthly by the U.S. Environmental Protection Agency. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget. Views expressed by authors do not necessarily reflect EPA policy. Contributions and inquiries should be addressed to the Editor (A-107), Waterside Mall, 401 M St., S.W., Washington, D.C. 20460. No permission necessary to reproduce contents except copyrighted photos and other materials.

New Clean Air Bill Wins Administration Support
Administrator Gorsuch backs bipartisan legislation

The 1980's—A Decade of Challenge
EPA Administrator discusses goals for the future

Reagan Commitment to Environment Fulfilled in EPA's '81 Success
A review of management and operation improvements

Achieving Better Management
An interview with Assistant Administrator Horton

Grants Program Refocused on Environment
President signs legislation authorizing grants for treatment plants

EPA Acts to Protect Atlantic City Water
Agency allocates \$500,000 to help stem contamination threat

EPA Paves Way for PCB Burning
Agency monitors incineration on the ship Vulcanus

New Criminal Enforcement Unit Established at EPA
Agency Enforcement Office reorganized and strengthened

Key Appointments Move Forward
Two new Assistant Administrators, Science Advisory Board chairman

Private Cleanup Sought
Private parties warned must act

Waste-to-Steam Plant Slated for New York
Modern refuse burning facility to be built in Brooklyn

Paperwork Cut for Car Imports
Paperwork to be reduced for foreign cars

Front Cover. A new day begins as the sun rises behind the Washington Monument and the U.S. Capitol.

Photo Credits: Steve Delaney, Photri, Rollins Environmental Services, Inc., Frank Aleksandrowicz, Charles O'Rear, PPG Industries, Gene Daniels, Rolls-Royce.

Design Credits: Robert Flanagan and Ron Farrah

EPA Journal Subscriptions

Name-First, Last		Please Print	
Company Name or Additional Address Line			
Street Address			
City	State	Zip Code	

Payment enclosed
 Charge to my Deposit Account No.

The annual subscription rate for EPA Journal has been changed because of an across-the-board increase by the Government Printing Office for all publications it prints. The new annual rate for subscribers in the U.S. for the bi-monthly EPA Journal is \$9.50, an increase of \$1 over the previous rate. The charge to subscribers in foreign countries will increase from \$10.65 to \$11.90 a year. The price of a single copy of the Journal will be \$2.75 in this country and \$3.45 if sent to a foreign country. All these prices include mailing costs. Subscriptions to EPA Journal, as well as to other Federal Government magazines, are handled only by the U.S. Government Printing Office. Anyone wishing to subscribe to the Journal should fill in the form at left and enclose a check or money order payable to the Superintendent of Documents. The request should be mailed to: Superintendent of Documents, GPO, Washington, D.C., 20402.

0266 078

New Clean Air Bill Wins Administration Support

The Administration is "very pleased" with new bipartisan legislation designed to improve the Clean Air Act. Anne M. Gorsuch, EPA Administrator, recently told a national industry-labor group meeting in Washington.

The legislation, H. R. 5252, was introduced by Congressman Thomas A. Luken (D.-Ohio), Bob Traxler (D.-Mich.) and Elwood Hillis (R.-Ind.).

In his state of the union message, President Reagan declared:

"We look forward to the enactment of a responsible Clean Air Act to increase jobs while continuing to improve the quality of our air. We are encouraged by the bipartisan initiative of the House and are hopeful of further progress as the Senate continues its deliberation."

Mrs. Gorsuch indicated support for the new measure at a meeting of the National Environmental Development Association.

The EPA Administrator has said that "the introduction of H. R. 5252 represents excellent progress, and we hope House markup will begin as soon as possible. This proposed legislation appears to comport generally with the Administration's principles announced in August and to address most of the major concerns voiced to the Administration by the governors, labor unions, industry and other groups. We look forward to working with members of the Committee after we have had a chance to study the bill in detail."

Congressman Luken described the bill as "bipartisan legislation to focus attention on certain practical and necessary legislative reforms . . ." which should be acted on early this year.

The Ohio Congressman predicted that the bill would "help us move toward forceful effective air pollution control by the federal government, the states, industry, interested citizens and affected employees.

"With appropriate refinements and modification of the Clean Air Act by H. R. 5252, the nation will continue its progress in the control of air pollution. These revisions will help remove the uncertainty and complexity of the law. At the same time, they will serve to strengthen the national economy, protect jobs and provide further employment opportunities."

Luken said that "we anticipate substantial labor and industry support for this bill. We

hope that this bill will alleviate the serious concerns of our friends in environmental organizations who have expressed fears that changes Congress may make to the law would be too extensive."

John Brown, Legislative Director of the International Union of Operating Engineers, warned that "many problems of economic slippage and unemployment can be traced directly to the Clean Air Act."

Brown declared that Congressional action is needed to remove "some of the confusion and complexities from the Clean Air Act without compromising the clean air goals. We need to get moving on settling the legislative questions which will assure air-pollution control, jobs and a stronger economy. The Luken bill is, I believe, the proper approach, and our union is 100 percent behind it."

John Quarles, former EPA Deputy Administrator who is now serving as chairman of the National Environmental Development Association's Clean Air Project, stated:

"The Luken bill appears to be the right approach at the right time with regard to the Clean Air Act. It is aimed at those provisions in the law which represent obstacles to needed energy production and industrial growth but produce little or no improvement in air quality. Our organization favors this practical, thoughtful approach."

The National Environmental Development Association is a coalition of more than 35 industrial companies and 17 building and construction trade unions.

The National Environmental Development Association described the Luken bill as "a moderate approach" designed to "streamline many of the procedural requirements and to provide extremely limited relief from certain substantive requirements where the actual air quality benefits are remote.

While "providing important relief from the unnecessary and largely unproductive regulatory burdens," the association said the measure would "simplify and expedite the approval of permits to allow industrial expansion and the creation of new jobs.

"In short, while continuing the progress of the national air pollution control effort, the Luken bill would also make a welcome con-



EPA scientists use a helicopter and air samplers to check on pollution conditions.

tribution to the vitality of our nation's economy."

The statement noted that "the national effort launched under the 1970 Clean Air Act has had a major impact on both industrial operations and air quality. It has caused a redesign of industrial facilities and an installation of pollution-control equipment at industrial plants across the country to cut emissions of air contaminants. It has forced new construction to incorporate top-of-the-line pollution control equipment. It has brought about a reduction in pollutants from automobiles of up to 96 percent as compared to uncontrolled vehicles. It has generated a variety of other efforts by industry, motorists, and other segments of the general public to reduce air pollution.

"The aggregate effect of all these efforts has been profound. The national trends toward ever-increasing air pollution have been reversed. In most areas and for most pollutants, it is clear that the air is getting cleaner. Generally throughout the country current air quality levels are normally far better than the air quality standards require, and in other areas the frequency and severity of any violations of the air quality standards are being steadily reduced.

"As current efforts continue, as clean new cars replace older vehicles, and as obsolete plants which cause heavy emissions are replaced by clean modern industrial facilities, the current improvements in air quality will grow. The national goal is that air quality standards which assure protection of public health with a margin of safety be achieved in every area of the country all of the time. With

the limited exception of a few areas where extremely severe problems exist the country is rapidly closing in on that goal.

"The Clean Air Act program has been costly. Current estimates indicate that national expenditures for air pollution control alone approximate \$20-22 billion per year. Those levels of expenditure are expected to grow to approximately \$35 billion per year by the end of the 1980s, at which time the country will have spent a cumulative total of roughly \$350-400 billion in the national air quality effort. An additional hidden cost caused by this ambitious regulatory program results from the complexity of its requirements which in many cases confuses and delays any company planning new capital investment. The Act exerts a drag on economic growth and the creation of additional jobs."

However, the Natural Resources Defense Council and the National Audubon Society defended the present Clean Air Act and contended that H. R. 5252 represents a continuation of earlier extreme industrial proposals.

Their statement charged, in part, that the measure would:

"Extend the deadline for achieving healthful air quality to as late as 1993, eliminate most of the Act's specific State implementation plan requirements that assure progress towards healthful air quality and eliminate virtually all of the sanctions presently available for failure to submit or carry out a state plan."

Major provisions in the measure H. R. 5252, according to the National Environmental Development Association, include:

Standards—The bill would make no change in the National Ambient Air Quality Standards which would continue to provide the

foundation for the overall program. Both the existing air quality standards and the procedures for setting further standards would remain unaltered.

Implementation Plans—The bill would make no significant change in the substantive requirements which must be satisfied by the state implementation plans, but it would eliminate the necessity for federal approval of routine, inconsequential changes to these plans and would set a six-month deadline to complete federal action on all other state implementation plan provisions.

New Source Review—The bill would provide major regulatory reform in the processing of permits for industrial construction projects, retaining federal requirements that all projects include Best Available Control Technology to limit air emissions but significantly reducing other technical complexities which now slow down the approval of permits and encumber beneficial economic growth.

Auto Requirements—The bill would ease requirements to control emissions from new cars of carbon monoxide and oxides of nitrogen, but retain requirements sufficiently stringent to assure that total emissions of those two pollutants will continue to be reduced. Practically all areas of the country are already in full compliance with the air quality standards for these two pollutants. The bill would make no change, however, with standards applicable to the primary auto pollutants associated with ozone, or "smog," the principal air pollution problem related to autos.

"The aggregate effect of all changes proposed by the Luken bill would be to permit an extremely limited increase in air emissions . . ." the organization commented. However, the organization adds that it is possible that these emissions might be offset by improved effectiveness in the administration of air pollution control programs and stimulation of industrial capital investment to replace obsolete polluting facilities. □



The 1980's— A Decade of Challenge

By EPA Administrator Anne M. Gorsuch

Ten years ago, the year of the United Nations Conference on the Human Environment, only 11 developing countries had environmental ministries or similar high-level agencies concerned with this subject. Today more than one hundred such countries have them. The People's Republic of China recently established an Office of Environmental Protection. In Brazil, the Ministry for the Environment, established a decade ago with a staff of three people, now has 200.

And so it goes. Around the world, environmental protection has become an institutionalized part of government, accepted and supported much like agencies dealing with health, industry, and public works.

Since its inception December 2, 1970, the U.S. Environmental Protection Agency has been at the center of the global environmental movement. It has provided leadership to many countries in its initiatives and research in environmental problems. Environmental legislation adopted by the U.S. Congress in the past decade has been far-reaching in its scope. The laws include the Clean Air Act, Federal Water Pollution Control Act; Federal Insecticide, Fungicide and Rodenticide Act; Resource Conservation and Recovery Act; Marine Protection, Research and Sanctuaries Act; Toxic Substances Control Act; Safe Drinking Water Act, and most recently, the Environmental Response, Compensation, and Comprehensive Liability Act, popularly known as "Superfund."

As a result of its efforts, the United States can point to a remarkable series of achievements in environmental cleanup. An example is the record in air pollution. Between 1940 and 1970 emissions of air pollutants increased by 40 percent. In that period, little was known about the effects of air pollution, or even how to define clean air. Regulatory schemes, where they existed, were largely inconsistent from state to state.

Today the situation is markedly improved. Spurred by new legislation and technological advances by industry, the United States overall has experienced a 50 percent reduction in the past decade in soot and dust emissions, known as particulates, and a 20 percent improvement in particulate air quality levels. Most industrial sources have installed control technology that captures more than 90 percent of their particulate emissions, and many capture over 99 percent.

In addition, ambient concentrations in urban areas of carbon monoxide and sulfur dioxide, two important pollutants, have decreased about 40 percent. The number of days rated unhealthy in major metropolitan areas has fallen 18 percent. Levels of ozone, commonly known as smog, have held steady despite a 30 percent increase in vehicle miles travelled from 1970 to 1978.

In commenting on this progress, the National Commission on Air Quality, an independent body established by the U.S. Congress to oversee air pollution control measures, declared in 1981:

"More significant than the level of absolute reductions . . . is the difference between current pollution levels and those that would have occurred if major control efforts had not been required during the 1970s. While it is impossible to state precisely what pollution levels would be if the Clean Air Act had not been passed, it is clear that for a number of pollutants the level of emissions would now be several times as great in many areas."

The financial effort to clean up the Nation's waterways has been prodigious—\$30 billion in the past decade in Federal funds. Unfortunately, somewhere along the line the program lost its focus. What started out as an effort to cleanse waterways was broadened into the largest non-defense public works program in the U.S. The Federal government became responsible for 75% of the cost of sewer pipes being laid. Delays were endemic and costly. Of more than 19,000 sewage treatment projects only about 2,700 actually have been completed.

Fortunately this program is now back under control and on track. Reforms signed by President Reagan Dec. 29 not only reduce the Federal long-term commitment from \$90

billion to \$36 billion but will reduce the Federal share of projects from 75% to 55%. The legislation also gives more discretion and control to States and cities on growth needs.

As our knowledge of pollutants and the ramifications of their effects on the environment has increased, our efforts have broadened. One area is the control of hazardous wastes. Spurred by legislation and public concern, more than 57,000 generators of hazardous wastes are now properly identifying these substances, ensuring that they are sent to legitimate facilities for managing them. More than 14,000 transporters of such wastes are complying with a manifest system to ensure that shipments are sent to and received by legitimate hazardous waste facilities rather than being indiscriminately dumped. Over 14,000 hazardous waste storage, treatment and disposal facilities are now registered with EPA, have applied for appropriate permits, and are obliged to comply with interim standards until permits are processed.

Congress also has enacted the "Superfund" Act to deal with threats to public health and the environment from uncontrolled hazardous wastes. Under this the government can respond quickly in emergencies, financed by an unprecedented \$1.6 billion five-year trust fund primarily built up from taxes on industrial chemicals.

However, the cost of environmental protection increasingly had begun to concern lawmakers, government administrators, industry, and the public as the 1970s wore on. While few doubted the need for some pollution controls, many began questioning the "blank check" approach. Having achieved major reductions in environmental contamination, was it wise or prudent to pour additional billions of dollars in cleaning up a final few percentage points of pollutants? While the public was willing to pay a price for a clean, healthy environment, would this willingness be jeopardized if the public believed that the costs were larger than they needed to be, and that the benefits were not worth those costs?

The President's Council on Environmental Quality has estimated in its 1981 annual report, for example, that by 1989 total government and industry expenditures required by Federal environmental measures would reach approximately \$68 billion annually. Air and water pollution control would be taking the greatest share of this, but other programs also would make their mark.

In fact, CEQ estimated that in the ten years stretching from 1980 to 1989, spending in response to Federal environmental quality regulations would total more than \$523 billion. That exceeds half a trillion dollars, or about half the Gross National Product for the United States today. And if one adds spending to meet requirements by State and local environmental statutes, CEQ noted, the estimated total would nearly reach \$758 billion during that decade.

There were other concerns about the way the Nation was managing its programs in environmental protection. Although Congress had clearly intended a Federal-State partnership in carrying out the numerous environmental laws enacted in the 1970s, the flow of power with its layers of managers and program analysts and regulation specialists gravitated to Washington. Too often rules were promulgated and imposed without due consideration for local conditions. The result was that friction between local and Federal authorities left a legacy of ill-will and distrust.

The proliferation of Federal regulations from Washington brought other problems. Cumbersome procedures grew like vines in the bureaucracy. An army of specialists came into being to administer the labyrinth of procedures. Costly, burdensome delays resulted from the multiple steps that each change in local clean air plans encountered. The delays created more friction as some industries and State governments perceived Washington as remote and insensitive to local conditions and needs.

Along with redundant and burdensome regulations came other costly problems. The magnitude of the multi-billion dollar construction grants program, where the Federal

government picked up 75 percent of the cost of building wastewater treatment plants, encouraged communities to order facilities that they ordinarily could not have afforded. A number of localities spent beyond their means, and saddled homeowners with heavy operating and maintenance costs of elaborate sewage treatment systems, since the program enticed planners into ordering exotic hardware where simpler systems would have been adequate. Politically, the program was attractive, since it funnelled vast quantities of money and jobs into local districts.

These, then, were some of the problems that had resulted from the unprecedented effort by the United States in the 1970s to attack pollution on a broad front. The excessive regulations, burdensome paperwork for industry and government, Federal-State friction, and huge costs at a time of increasing economic stringency—all were clear signs that change was needed in the 1980s.

The Reagan Administration goals

President Ronald Reagan has campaigned on a number of broad themes directed at reforming the way the Federal government was being operated. These included controlling inflation, expanding the economy, creating new jobs, increasing domestic energy production, protecting the nation's natural resources and the environment, and easing the burden of government regulations.

Part of our responsibilities at EPA is to keep the Agency in step with this philosophy of the Reagan Administration. That means carrying out our environmental responsibilities while simultaneously enhancing progress toward these other objectives. Decisions by EPA do not function in a vacuum; they affect not only the environment but because of their size and scope they may also affect inflation, industry, economic and energy development, jobs, and certainly the regulatory load. So it is important that we at EPA achieve a balance in our policies and decisions to protect public health and welfare but at the same time move in harmony with other Administration initiatives.

If we had to summarize our philosophy as we move into the 1980s, I would say we are going to do more with less. This does not mean EPA is going to disappear. What it does mean is that this Administration will do a better job than its predecessors with fewer resources and find more efficient ways of operating, just as other government agencies are in these times of budget stringencies. The changes will include these:

- Where EPA has had an adversarial relationship with the States, it has impeded progress in environmental cleanup. We are changing this climate and will be working in closer cooperation, a move that will enhance our national opportunity to reach environmental objectives.

- We are moving forward with regulatory reform. In the past, our programs too often have been developed in isolation from one another. This can lead to serious errors in environmental management, where a narrow concern solely with one area such as land can lead to degradation of water. We have regulations now on the books, and it will be a genuine challenge to rationalize them in a total environmental concept.

- EPA needs better management. Our studies have shown that there is approximately one manager for every three employees performing EPA work. In Research and Development, the ratio is about one supervisor for every two people. We need to change this top-heavy pattern. We also have found that EPA has more on-line computer capability than any civilian agency in the Federal government. We can and will remedy this situation.

When we mention the need for doing more with less, one thing that springs to mind is the need for fewer and simpler regulations. One does not have to look far at EPA to find areas where this aspect of pollution control can be improved. Under the present Clean Air Act in the United States, the agency must approve virtually all details of



Saucer dome of a storage tank and missile like distillation columns give a "space center appearance in this night photo of a modern chemical plant built by PPG Industries at Lake Charles, La., to manufacture vinyl chloride monomer.

State and local air pollution control plans. Any subsequent changes in individual emission limits must be reviewed and approved by EPA before they can take effect. This process requires States to submit each year thousands of individual actions. All in all, from start to finish, Federal approval requires 24 separate steps, requiring more than 10 months.

We have taken a number of steps to streamline this and other procedures. Without encumbering the reader with details, I will simply say that we are eliminating red tape and delays in many noncontroversial, routine matters. And the same applies to programs in wastewater clean-up, hazardous waste management, and other areas, where we are re-writing, simplifying or abolishing unnecessary regulations. This promises to save both time and taxpayers' money.

EPA also is encouraging the "bubble" concept, where a plant's total emissions are considered as if the plant were under a giant dome or bubble, rather than seeking controls strictly on an emission point basis. The advantage of this to a company is that it can reduce its overall cost of controlling emissions at whichever emission point it desires, so long as the net effect of a trade does not exacerbate air quality, and thus often can use a more cost-effective approach.

We look with favor on a greater application of the bubble policy, which takes EPA out of the area of controlling techniques in attaining clean air. It's important to look at results. The bubble policy lets industry, not government, make the decision on how to reach the goal, an approach that can be far cheaper and can use better control techniques.

Too often in the past EPA has pursued a confrontational course with industry. This Administration believes that rather than devote endless time and effort to litigation, government and industry often can reach reasonable accords over environmental clean-up through negotiations. We anticipate that more emphasis on this philosophy will prevail in the 1980s.

Another of President Reagan's priorities has been to shift control of public programs to State governments whenever possible. Not only will this help to reduce the need for funds and personnel at the Federal level, but will delegate responsibility and control to administrators who are closer to the problems and needs of the public. Many environmental decisions require weighing of factors that are more effectively and democratically decided at a local level.

State and local governments have undergone a remarkable maturing in their ability to manage a wide range of problems. The fastest expansion in government work forces has been under way for some time not in Washington, D.C. but at the State and local level. Since 1960, the number of employees in the latter categories has more than doubled, from six to thirteen million. They now outnumber their Federal counterparts by more than four to one. In air pollution control, the shift has been even more dramatic; in the past decade the number of State and local personnel in this specialty has risen so fast that there are now nine for every one at the Federal level. It makes sense that the nation

should take advantage of this situation by giving more responsibility to areas where staffing has been so heavily increased. Congress always intended that the States play a major role in environmental enhancement, and we are now moving to give them more control in this respect.

Part of our efforts to improve performance at EPA include a reorganization of our Office of Research and Development. While the administrative details of this would not be of major interest in an article of this nature, its significance here is simply that it will mean a more efficient use of our science dollars and an upgrading of the quality of work through a peer review system.

We will need good science in the years ahead. There are many areas about which scientific uncertainties exist, including problems of an international nature. The United States is one of several nations studying the question of acid precipitation, for example. In 1980 Congress passed the Acid Precipitation Act establishing an interagency task force and authorizing a ten-year com-

prehensive research plan for this subject. EPA is the lead agency for three research areas, which are aquatic effects, control technology, and data assessments and analysis. EPA has committed more than \$9 million in the current fiscal year for research on this topic, and other Federal efforts will bring the total to more than \$18 million.

Another area we will continue to study is the effect of chlorofluorocarbons (CFCs). In the mid-1970s, scientists hypothesized that continued world CFC emissions might lead to depletion of stratospheric ozone. Since this layer of ozone helps to limit the amount of ultraviolet radiation reaching the earth from the sun, there was concern that damage to the layer might cause adverse health and environmental effects.

After receiving an assessment from the National Academy of Sciences and holding public hearings, EPA and the Food and Drug Administration prohibited nonessential aerosol uses of CFSs in the United States. In 1981 EPA funded a new assessment by the National Academy of Sciences of the most recent scientific information on stratospheric ozone changes. The final NAS report is ex-



pected to be completed soon. EPA also has participated with industry, environmental organizations, and other agencies in an assessment of the question by the Organization for Economic Cooperation and Development. The OECD work will contribute to future international deliberations and will help give direction to further study. EPA also has been participating in UNEP's Coordinating Committee on the Ozone Layer and will continue its current international program focused on sharing information, improving cooperation, and pursuing international understanding. EPA, the State Department, and other interested agencies are also participating in the drafting of an international framework convention on protection of the ozone layer. The first Ad Hoc meeting was held in Stockholm in January, 1982.

As our knowledge and understanding of environmental problems increases, EPA will be able in the 1980s to focus more clearly on these and other questions dealing with transboundary pollutants. One can rarely predict where research will lead, but we can be sure of one assumption: Action must be preceded by study. Our first task is to clarify and resolve the many uncertainties that still surround various global environmental questions.

The solution of these global problems obviously must be a cooperative venture. The United States cannot shoulder the task alone. We are therefore especially encouraged by the creation of environmental ministries and agencies in so many developing countries, which I mentioned at the outset of this article. Many of the world's environmental problems depend on Third World cooperation if we are to surmount them. And if we all face economic stringencies in the decade ahead,

Gulls flock to hunt for insects and other food as farmer tills his field



A toddler splashes in the waters of Lake Erie at Huntington Beach near Cleveland.

government, for it avoids the need for the added Federal regulation and earns extra income for business while preserving environmental values.

We are nearing the end of a period in the United States in which legislative responses to environmental problems proliferated rapidly. The laws are now in place, and the administrative structure now must catch up both scientifically and organically to assure that these programs are carried out with care and frugality. If we are to achieve our environmental goals in the 1980s, we at EPA must demonstrate that with the limited means now available, we will administer our environmental laws effectively and make more efficient use and allocation of our resources. It is important that we do this, as I have stressed, by regulatory reform, and by better management.

Applied correctly, these measures will enable us to concentrate on the most important aspects of environmental protection and to move away from regulation of industry for the sake of regulation, and to put aside confrontation for the sake of confrontation. □

we nevertheless have laid the foundations for better international coordination and joint action which can measurably help us stretch our limited resources.

The challenge of the 1980s for the U.S. Environmental Protection Agency may be summarized briefly. We must consolidate and fine-tune the programs we have established. This means simplifying and streamlining them wherever possible, for our achievements will not be measured by the quantity or intricacy of our regulations. We must protect the gains of the last decade, and preserve the clean air of pristine areas such as our national parks and wilderness areas. We should address new environmental questions such as acid deposition and CFCs as our knowledge increases. And we should press for further gains in environmental control wherever they are warranted and obtainable.

At the same time we need to encourage industry more in its creative efforts to control pollution and regulate itself. American industry has expended billions of dollars for pollution controls, and has achieved great progress in the technology of this field. In many cases, industries have redesigned entire processes so that by-products of production, once considered useless wastes, can be captured and recycled or marketed separately as valuable products. This is an advantageous approach for both industry and

Reagan Commitment to Environment Fulfilled in EPA's '81 Success

President Reagan came into office a little over a year ago firmly committed to the husbanding of this nation's natural resources and to the improvement and enhancement of the environment.

EPA Administrator Anne M. Gorsuch recently noted that the President "has not wavered in that commitment.

"As his administrator of the Environmental Protection Agency, I share the President's commitment to the preservation of our environmental heritage. And I have not wavered in my determination to make EPA a more efficient, more effective force in carrying out our environmental programs."

While it is true that EPA has not been exempt from the President's program to cut federal spending and federal employment, a smaller budget and fewer employees do not necessarily mean less environmental protection. Mrs. Gorsuch said.

And, Mrs. Gorsuch pointed out, easing the burden of government regulation is not synonymous with abandonment of progress toward cleaner air, cleaner water, the safer handling of toxic substances and other important environmental goals.

The challenge at EPA is to do an effective job of environmental protection through the more efficient use of limited resources. Some of the areas of progress by EPA and the Administration during the past year include:

Superfund

The Superfund program, which Congress enacted at the end of 1980 to provide authority and money to clean up abandoned

hazardous waste dumps, has been quickly implemented. For example:

- 115 dump sites across the nation have been identified as high priority targets for cleanup under Superfund.
- \$30 million has been approved for cleanup work at 30 sites.
- \$18 million has been allocated for emergency work at 64 other sites.

The Superfund program continues to be one of the Administration's highest environmental priorities. Because the program is new, a high degree of Federal involvement is necessary but states will assume more and more of the administrative responsibility as time goes on.

Hazardous Waste Disposal

A vigorous enforcement program is underway to assure safe disposal of hazardous wastes on an ongoing basis, and this effort will be expanded in the current fiscal year. EPA and the states have inspected more than 5,800 hazardous waste facilities. Compliance orders, with penalties where appropriate, were issued at 178 facilities. Two actions were filed in Federal court.

EPA is also pressing constantly for industry action to clean up abandoned sites

themselves to avoid expensive court action later seeking reimbursement for government cleanup programs. Major breakthrough agreements were reached in recent months with firms in California, Pennsylvania, Arkansas and Ohio.

Hazardous waste regulations, applicable to some 60,000 generators, transporters, and facility owners and operators, also are a prime target for regulatory reform. The regulations have been likened to the Internal Revenue Code in complexity. About 20 technical amendments were issued in 1981 to solve some of the major bugs. Another 20 to 40 amendments will be put forward in 1982.

Clean Water

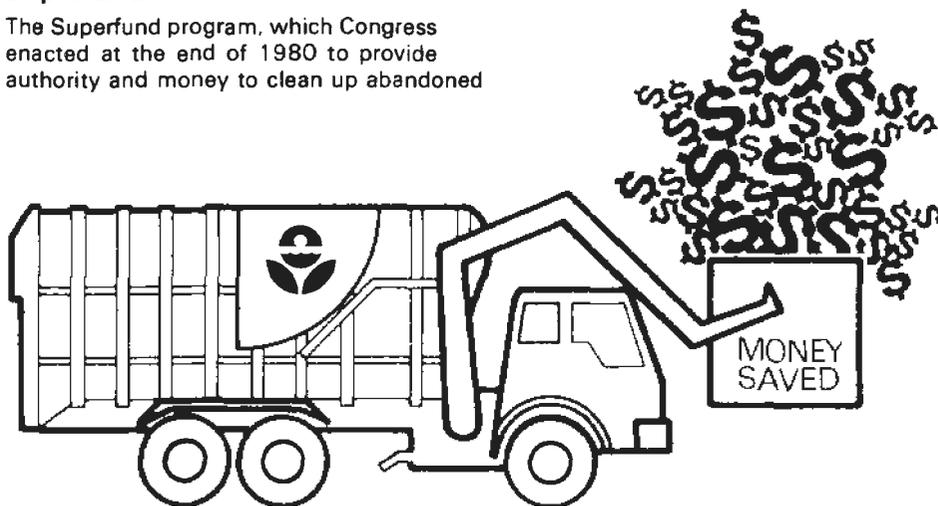
Congress has enacted into law major reforms sought by the Administration in the construction grants program for wastewater treatment facilities. The reforms will permit continued funding of projects that contribute to cleaner water, but get the federal government out of the business of financing sewer construction for future population growth. When the program started in 1970, it was estimated that federal assistance to upgrade wastewater treatment systems would cost \$18 billion. Ten years later, spending allocations had soared to \$30 billion, and they were expected to reach \$90 billion in the next decade.

The new legislation limits spending authority to \$2.4 billion in each of the next four years. And starting October 1, 1984, federal funding generally will be restricted to construction of treatment plants, main sewer lines, and the repair of lines. States will put up a greater share of construction costs.

The shift in emphasis from subsidizing development to the improvement of water quality was strongly supported by environmental groups as well as the administration.

Multi-billion Dollar Savings in Regulation Costs

Changes recently implemented by EPA to ease the burden of regulation should save industry and the public a total of \$350 million in capital costs and \$180 million in operating expenses. Future savings under regulation amendments proposed by EPA could total an





estimated \$5 billion in operating costs.

Some examples:

Amending the standards industry will be required to meet for pre-treatment of wastes alone could save up to \$1.8 billion in annual costs. The possibility of revising the pre-treatment standards has already been proposed by EPA and the Agency is now considering comments on possible revision strategy.

Changes under consideration in the treatment regulations for the pulp and paper industry could total an estimated \$1 billion.

Revisions of the 1984 carbon monoxide standards for heavy duty trucks which have been proposed could avoid the need for catalysts for these vehicles. These changes and certain assembly line testing modifications could save an estimated \$360 million in costs.

Amendments, deferrals and withdrawals of proposed noise regulations would result in an approximately \$600 million reduction in the cost burden of these rules.

Clean Air

Although Congress did not complete work last year on revisions of the Clean Air Act, EPA nevertheless was able to initiate several steps toward more cost effective pollution control. The time it takes to act on changes in state clean air implementation plans has been substantially reduced. The backlog of some 1,000 amendments awaiting action will be wiped out altogether by mid-year. Eliminating bureaucratic delays means faster progress toward clean air, and at lower cost.

While the Administration seeks revisions of the Clean Air Act, the goal is to build a more workable program, not to tear down the basic structure that served this nation well during the 1970's.

Enforcement

A major reorganization of the enforcement program has been started and a new criminal

enforcement unit is being established. Funds and manpower are being concentrated on cases involving substantial pollution problems. Minor cases, which absorbed a great deal of EPA time and money in the past, will be resolved whenever possible through out-of-court settlement. Nearly 50 cases which had been pending at the Justice Department were withdrawn because they were weak, old or of little substance. Meanwhile, 45 new stronger cases were referred to Justice since Mrs. Gorsuch took office. The agency is continuing its joint program with the Federal Bureau of Investigation in probing criminal violations that may occur in the handling of hazardous waste, such as "midnight dumping" or the surreptitious discharge of hazardous substances into waterways.

Paperwork Reduction

Substantial reductions have been made. For example, reporting requirements under the Resource Recovery and Conservation Act have been cut by an estimated three million hours. EPA is developing strategies for making significant paperwork reductions in a number of other areas this fiscal year, including water quality, groundwater monitoring, National Pollution Discharge Elimination System consolidated permits, pesticides registration and pre-manufacturing notices requirements.

Small Business

EPA is making every effort to minimize the impact of new regulations on small businesses, which are particularly vulnerable to the financial burdens such regulations may impose. The Small Business Administration recently singled out EPA for the high quality of its economic analyses of regulatory effects on small business.

To further aid small businesses in complying with environmental requirements, EPA is establishing a small business ombudsman to alleviate problems resulting from regulations whenever possible. The ombudsman will investigate and resolve disputes arising from permitting, grants and procurement processes; track the development of standards and provide small businesses with information to encourage their participation in decision-making; answer questions regarding regulatory requirements; and refer small businesses to other technical assistance offices when appropriate.

EPA Internal Operations

Internal controls over expenditures have been tightened, audits have been increased, efforts to recover money owed to EPA have been greatly intensified, and stiff new contracting and fiscal policies have been adopted to slash expenses. □

Achieving Better Management

An interview with Dr. John P. Horton
EPA Assistant for Administration

Q What do you hope to achieve in your leadership position at EPA in the new year?

A I would hope to see this Agency moving in the direction to which the Administrator is pointing. We need a better awareness of our responsibilities to provide a proper cost/benefit ratio to the American taxpayers.

In the first 11 years at EPA, I don't think that we were particularly cognizant of cost effectiveness. Not only the cost in terms of money the Agency spends, but the cost to the affected publics. Now we're moving into a period when we're going to be concerned with the cost side as well as the benefit side.

It is within that context that the Office of Administration is moving to make the operations of the Agency more efficient. To the extent that we have control over regulations, we're trying to simplify these regulations. We are trying to make it less costly for the affected publics to deal with the Agency.

By the way, we're trying to make it less costly for the Agency to deal with itself. Sometimes we're our own worst enemies in that respect. We promulgate rules and regulations for conduct of business by ourselves that I think are sometimes very inhibitive. So I would hope to see a change coming around.

I would hope to develop, particularly within the Office of Administration, a different sort of feeling on the part of Agency staff. I think that one of the biggest differences between commercial and government employees is the unwillingness to take risk. It's an understandable unwillingness because the system mitigates against taking risk. If you take a risk and succeed, the rewards are relatively small. If you take a risk and fail, the penalties are very severe. I



would like to change the system so that the milieu in which our people work is more conducive to risk taking. That's where we get creativity, that's where we get new thinking, that's where we get the type of innovative approaches that are needed in government today. So I would hope, first, in the Office of Administration, and then throughout the Agency to develop and change the system so that we could encourage our employees to stretch themselves a bit more in those areas.

Q How do you think major economies can be achieved?

A I suspect that there are a number of areas where that could happen. One of the first things that we need to develop is a consciousness of the value of the dollar. Too often we are prone to spend money without really thinking about how that money got there. Somehow it's in the Treasury. And, if we have it in the budget, we just go ahead and spend it. We are trying in the Office of Administration to develop a point of view of asking ourselves "Well, if it were your \$1000, would you spend it for that item?"

Q Based on your extensive experience in the business world, do you think EPA can be operated more efficiently without sacrificing the quality of the Agency's efforts to protect the environment?

A I don't think there's any question about that! I've gone around to visit all the regions and talked to people throughout Headquarters. Almost everybody has said that the Agency in past has had almost more money than people know what to do with; that the objective and effort was really to make sure that all the money got spent. This is certainly not an objective in a business environment. This Administration wants to introduce some fiscal responsibility. Modifying a philosophical attitude as I describe does not mean shrinking the quality of our efforts to protect the environment.





Q I know you have visited a number of EPA laboratories and offices around the country. Is it your impression that these facilities are generally performing in an effective manner?

A I have visited all 10 regions. I have visited EPA facilities in Research Triangle Park, N.C.; Cincinnati; Las Vegas; Edison, N.J.; and a number of other places. I would say that the major problem is that in many cases we built more facilities than we really needed. The capital expended in some of our facilities for the results we get is so far out of line as to be almost unconscionable. I don't think this was necessarily the fault of any particular EPA employee, but rather of the perception that we needed to duplicate facilities all over. The result of this was the expenditure of large sums of money where the workload couldn't justify that sort of an expenditure.

I think that the individual employees, as I have seen them, in the regions and in the laboratories, have a good dedication to their job and an interest in achieving results. I really think the problem was of a system which created these large facilities and the numbers of people assigned to them without any assessment of the real cost/benefit ratio.

Of course, the other thing that's happening is that we're transferring more and more responsibility to the States. We may find, for example, that the regional offices no longer need as many people in order to achieve the new trends in operations.

Q Do you think there is a need of consolidation or closure of some of these field units?

A Yes, there's no question in my mind that, if we're going to operate effectively, we do need to do that sort of thing. The question is how you do that and still maintain the services that those facilities were providing. In the Office of Administration our goal is "Better services at lower cost." When we consider consolidation of these facilities, we're exploring the possibilities for lower costs. But that does not mean we can neglect better services. And the question is really how to trim expenses without hurting services. A particular area we have been studying is the Surveillance and Analysis Laboratories which provide a valuable service to the Regional Administrators. They allow the Regional Administrators to have a scientific authority in the region. The problem is if we take that laboratory out of the region, we need to replace it in some fashion so that we don't damage the reputation for scientific accuracy which the Regional Administrator has. And this is the problem we're wrestling with at the moment.

Q I understand that the zero base budgeting concept is no longer in vogue. What was the trouble with this approach?

A The zero base budget, like many ideas, is very good in concept—in theory. The problem is in the execution. The implementation generated enormous amounts of work. It was a great time-consumer in trying to prepare the budget. It was just simply unmanageable in EPA. And if it's unmanageable in EPA, it's likely to be unmanageable in any other government agency.

EPA, I think is willing to move into new areas more than other government agencies do. But the amount of time that was committed to committee meetings, wrestling with the basic needs for certain services, all of which were required for zero base budgeting, just could not justify the end result. Because of that, of course, we dropped the concept, and we moved over on to another type budgeting.

Our budget in EPA and in government generally has a much greater significance than it does in industry. In commerce and in industry the budget is a tool that allows managers to plan and manage their functions. In EPA the budget is a driving force that dictates what needs to be done. I'm not sure that that's necessarily good. Generally speaking, my practice in business has been to develop, first of all, a business plan. After developing a business plan, we would then translate the business plan into a budget. In other words the budget was a financial interpretation of the business plan. The budget was used then throughout the year to help answer a simple four-word question: Is the plan working? I would like to see us move more in that direction, toward understanding the budget as a management tool, rather than as a driving force. I'm not sure that's possible within the dictates of Congress and the White House. □

Grants Program Refocused on Environment

President Reagan has signed into law new legislation authorizing continued Federal grants to cities and towns to help build sewage treatment plants to curb water pollution.

President Reagan declared that this legislation "represents a rededication to environmental goals and a turn away from public works for the sake of public works."

The new amendments to the 1977 Clean Water Act authorized EPA to grant to the States up to \$2.4 billion per year during 1982-1985 to pay 75 percent of the cost of building sewage treatment plants, interceptor sewers, and certain other sewage cleanup projects. The percentage of Federal aid will drop to 55 percent in fiscal 1985.

EPA Administrator Anne M. Gorsuch has asked Congress to appropriate the full \$2.4 billion for fiscal year 1982 to carry out the revamped national sewage treatment program.

The amendments will also allow \$200 million per year during 1983-1985 to protect coastal bays and estuaries from the harmful effects of sewage.

EPA Deputy Administrator John W. Hernandez issued the following statement:

"By signing the Municipal Wastewater Treatment Construction Grants Amendments of 1981, the President has expressed his support for continued progress toward clean water through an efficient, affordable municipal sewage treatment program.

"The Congress is to be congratulated for incorporating the basic recommendations of the Administration into the new law, making it the most significant environmental legislation thus far enacted during this session. This law redirects Federal funds for municipal sewage treatment from a public works program to a targeted environmental program.

"The new amendments will help achieve the Administration's goals of enhanced water quality, greater cost-effectiveness, and more flexibility to States and localities in deciding sewage treatment priorities. EPA looks forward to working with the States to make the promise of the amendments a reality."

The new law includes Administration reforms intended to direct sewage treatment dollars to projects that will significantly improve water quality, to give local officials

greater flexibility in deciding sewage cleanup priorities and to reduce Federal involvement in the program from the \$3 to \$4 billion level that existed during the late 1970's.

No new Federal money for sewage treatment has been available to the States since October 1, 1981. Funding for the program under the new amendments will require enactment of a supplemental appropriation to provide the money authorized.

Under the previous construction grants law, EPA would have had to spend about \$90 billion by the year 2000 to satisfy the sewage treatment needs of the States. The new law, because it reduces the Federal share and limits construction eligible for Federal dollars, trims this figure to \$36 billion by the year 2000—a 60 percent reduction.

October 1, 1984, is a significant date in the new legislation. Until then, EPA's sewage treatment program remains much as it has been under the 1977 Clean Water Act. After this date, however, the program is designed to come closer to the Administration goal of a leaner, but more effective effort.

Since 1972, EPA has committed about \$33 billion in sewage treatment grants to help fund roughly 22,000 projects for planning, design and construction of sewage facilities. Only an estimated 3,700 of these have been completed because of the seven to 10 years it has taken in the past to complete a project after the initial funds were awarded. Streamlined procedures in the 1981 amendments are designed to reduce this lengthy time period.

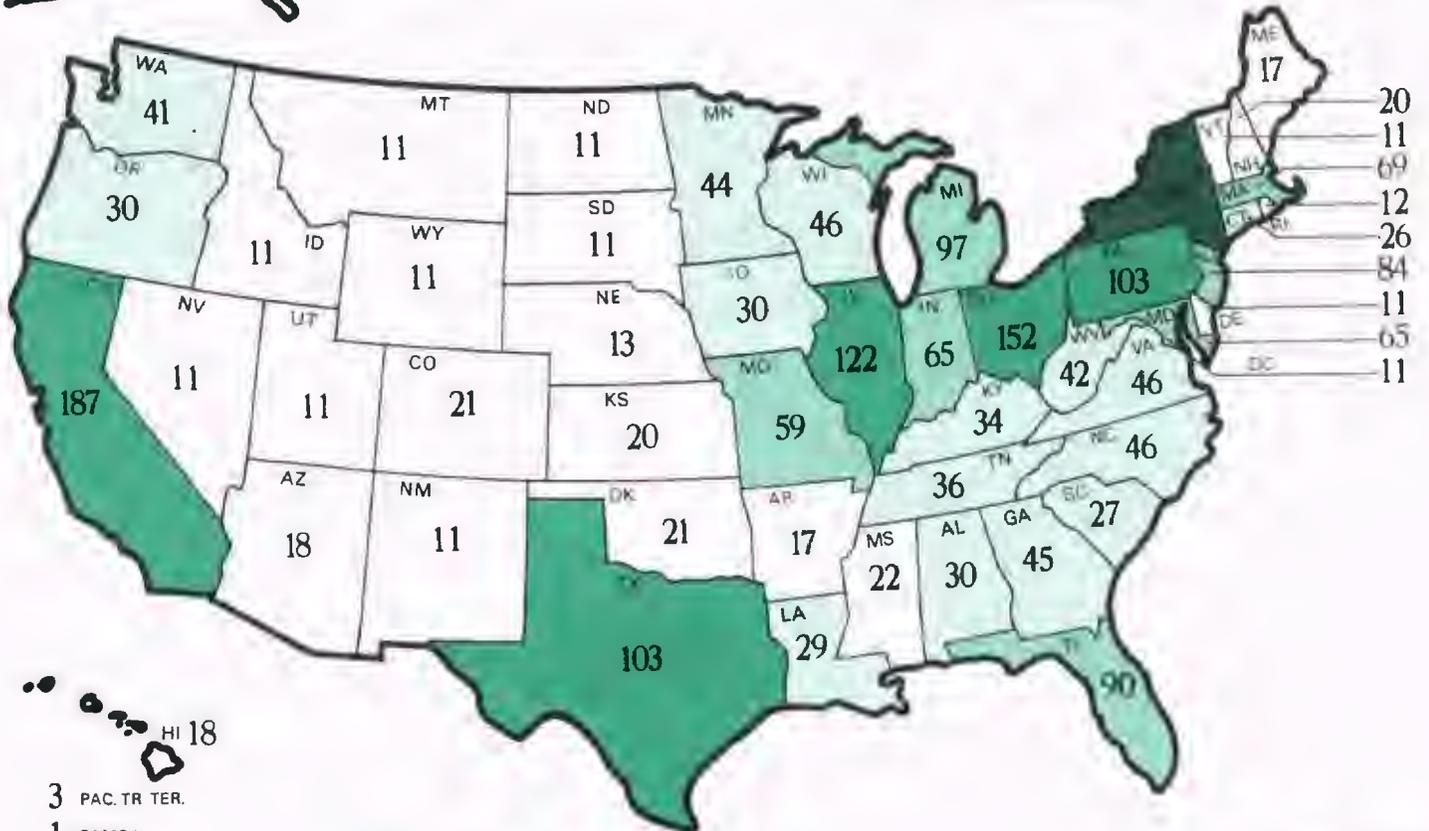
Other Highlights

Projects eligible for Federal funding

Under the old law, Federal grants paid for a variety of sewage construction including: treatment plants; "alternative/innovative" projects, such as land application of sewage liquids; collector sewers (which run under a residential street, for example); interceptor sewers (larger diameter sewers which tie collector lines to treatment plants); work to prevent rainwater or other seepage from entering sewer lines (known as the "infiltration-inflow" problem), and work to prevent

State Allotments for Fiscal 1982 in Millions of Dollars

ALABAMA	30	ILLINOIS	122	NEBRASKA	13	TENNESSEE	36
ALASKA	11	INDIANA	65	NEVADA	11	TEXAS	103
ARIZONA	18	IOWA	30	N. HAMPSHIRE	20	UTAH	11
ARKANSAS	17	KANSAS	20	NEW JERSEY	84	VERMONT	11
CALIFORNIA	187	KENTUCKY	34	NEW MEXICO	11	VIRGINIA	46
COLORADO	21	LOUISIANA	29	NEW YORK	251	WASHINGTON	41
CONNECTICUT	26	MAINE	17	NO. CAROLINA	46	W. VIRGINIA	42
DELAWARE	11	MARYLAND	65	NORTH DAKOTA	11	WISCONSIN	46
DISTRICT OF COLUMBIA	11	MASS.	69	OHIO	152	WYOMING	11
FLORIDA	90	MICHIGAN	97	OKLAHOMA	21	SAMOA	1
GEORGIA	45	MINNESOTA	44	OREGON	30	GUAM	1
HAWAII	18	MISSISSIPPI	22	PENNSYLVANIA	103	PUERTO RICO	27
IDAHO	11	MISSOURI	59	RHODE ISLAND	12	PAC. TR. TER.	3
		MONTANA	11	SO. CAROLINA	27		
				SOUTH DAKOTA	11		



3 PAC. TR. TER.

1 SAMOA

1 GUAM



PR 27

stormwater from flushing raw sewage into waterways (known as the "combined sewer overflow problem).

Under the new law, EPA can continue to make grants for all of this construction until October 1, 1984. Afterward, the Agency's grants will go primarily toward building treatment plants, alternative-innovative projects, and interceptor sewers. However, a governor may spend up to 20 percent of the State's Federal allocation for other sewage construction.

Federal share

The old share for eligible construction was 75 percent for conventional treatment works and 85 percent for alternative-innovative projects. This will remain true under the new amendments until October 1, 1984. Afterward, the Federal share will drop to 55 percent for conventional work and 75 percent for alternative-innovative projects.

Reserve capacity

Under the old law, EPA sometimes funded sewage treatment plants larger than immediately needed in order to provide extra treatment capacity for future community growth. This remains possible under the new law until October 1, 1984. Afterward, the Agency can fund construction only to serve the residential and industrial flows existing on the date of grant approval for construction.

Compliance deadline

The old law gave sewage treatment facilities until July 1, 1983, to meet a "secondary" treatment level (secondary generally means removal of 85 percent of the organic matter and suspended solids in sewage). The new law gives these facilities an additional five years, until July 1, 1988, to achieve secondary treatment.

Decentralization

The new amendments encourage all States to take over the actual operations of the construction grants program, with EPA to assume a monitoring and guidance role. Thus far, 44 States have signed agreements to undertake these new responsibilities. □



Another section is lowered for a massive interceptor sewer pipe built to take wastes from collector sewers to a sewage treatment plant.

EPA Acts to Protect Atlantic City Water

A six-month study has been launched under an EPA contract to determine the best method of protecting the public water supply of Atlantic City, N.J., from contamination by chemical wastes migrating out of Price's Pit, a nearby disposal site.

Anne M. Gorsuch, EPA Administrator, has approved the allocation of approximately \$500,000 for the study and additional field investigation activities.

Mrs. Gorsuch also approved funding for a standby supply of activated carbon to be used to treat the city's water if it should become tainted while the long-term program is being developed.

Estimated cost of the standby carbon supply is \$1 million.

"Price's Pit ranks among the top ten priority Superfund sites in the Nation," Mrs. Gorsuch said. "This action demonstrated EPA's determination to take effective action where a potential public health risk is involved."

A now inactive 26-acre landfill in the town of Pleasantville, N.J., Price's Pit is six miles northwest of Atlantic City. Chemical wastes were dumped at this location from 1968 to 1976.

Leachate from the landfill has contaminated nearby private drinking water wells serving 37 homes. Tests show that the contaminants are moving through the groundwater and have approached a well field serving Atlantic City.

On December 22, 1980, the U.S. Department of Justice filed suit at EPA's request against the former and present owners of the landfill. On September 23, 1981, the State of New Jersey issued an administrative order directing the New Jersey Water Company and the affected municipalities to extend water mains to supply the already affected houses. □



Huge crowds flock to Atlantic City on the New Jersey ocean beach.

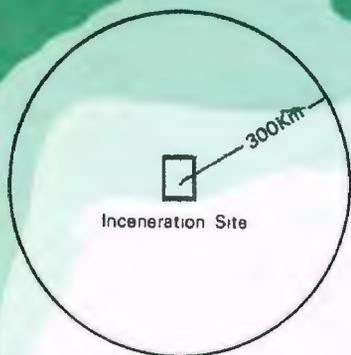
EPA Paves Way for PCB Burning



TEXAS

LOUISIANA

FLORIDA



Incineration Site

300Km

1000 Fathoms 100 Fathoms

CUBA

MEXICO

More than 700,000 gallons of waste containing polychlorinated biphenyls (PCBs) were burned in December aboard the incinerator ship Vulcanus in the Gulf of Mexico about 350 miles southwest of Mobile, Ala.

The Vulcanus, a 334-foot converted tanker, is one of only three incinerator ships in the world.

"EPA considers incineration at sea to be a safe and reliable method of disposing of PCBs," explained EPA Administrator Anne M. Gorsuch.

When the ship's incinerator reaches a combustion temperature exceeding 1,200 degrees centigrade, more than 99.9 percent of the PCBs are destroyed.

EPA previously monitored incineration of

The site where the Vulcanus is burning PCB wastes is located in deep water off the continental shelf and more than 300 kilometers from any coastal area.



The incinerator ship Vulcanus in port.

wastes aboard the Vulcanus in 1974 and 1977. Incineration at sea has been practiced successfully in Europe for a number of years.

Chemical Waste Management Inc. and its subsidiary, Ocean Combustion Service, have a permit from EPA to dispose of up to 3.6 million gallons of PCB wastes this year.

EPA is closely monitoring the incineration process. Automatic recording devices keep a record of the temperature of combustion and other data. A manual log keeps an hourly record of wind speed and direction, vessel position, course and speed.

An automatic shut-off device will be activated in case the incineration temperature falls below 1,200 degrees.

An EPA official aboard the Vulcanus has the authority to shut down the process if necessary. In addition, the Vulcanus remains in touch with the 8th District Coast Guard in New Orleans during the incineration of the wastes.

The burn site is in deep water off the continental shelf and far from land, commercial and sports fisheries, shipping lanes, and breeding, spawning and nursery areas for fish and other marine life.

EPA receives its authority to the disposal of PCBs from the Toxic Substances Control Act (1976) and the authority to issue permits for incineration at sea from the Marine

Protection, Research, and Sanctuaries Act (1972).

The PCB wastes being burned aboard the Vulcanus came from a landfill facility in Alabama, where they were temporarily stored after being gathered from various parts of the country.

PCBs are toxic and persistent chemicals primarily used as insulating fluids in heavy-duty electrical equipment in power plants, industries and large buildings.

The manufacture of PCBs was banned in 1979. EPA estimates that 750 million pounds of PCBs are still in use, with 290 million pounds located in landfills and an additional 150 million pounds dispersed throughout the environment. Last year EPA issued permits to two land-based incinerators, which are disposing of about 200,000 gallons of PCB wastes per month.

PCBs have caused birth defects and cancer in laboratory animals, and are a suspected cause of cancer and adverse skin and liver effects in humans.

During the last four years several EPA studies have concluded that incineration of hazardous wastes at incinerators on land can also be successful.

These studies have determined that in most cases incineration proved to be the best, if not the only environmentally acceptable, method of hazardous waste disposal.

Two EPA research and field-scale projects carried out in 1979 involved several types of commercial incinerators and 20 different chemical wastes, including nine pesticides. These wastes were almost totally detoxified and destroyed by incineration. The successful use of cement kilns to destroy the highly toxic, halogen-containing organic waste is one of the more important and well-publicized demonstration projects by EPA.

An EPA-sponsored trial burn, to demonstrate the destruction of PCBs in a high-efficiency boiler, was conducted in May 1980 at the General Motors Chevrolet plant located in Bay City, Mich. It showed that low levels (50 to 500 parts per million) of the toxic PCBs could be safely destroyed by burning them at approximately 2,000 degrees Fahrenheit.

Two benefits from this demonstration were that it laid to rest public fears about burning PCBs, and it encouraged other companies, especially utilities, to apply for permits to burn their low-concentration PCBs in a similar manner.

The Combustion Research Facility (CRF), which should be completed soon in Jefferson, Ark., is expected to provide valuable incineration data that may have great impact on regional incinerator permit programs. That facility will be the property of EPA, located on the grounds of the National Center for Toxicological Research, a facility operated jointly by EPA and the FDA (Food and Drug Administration). The CRF will be operated for EPA to conduct research into the safe incineration of hazardous materials.

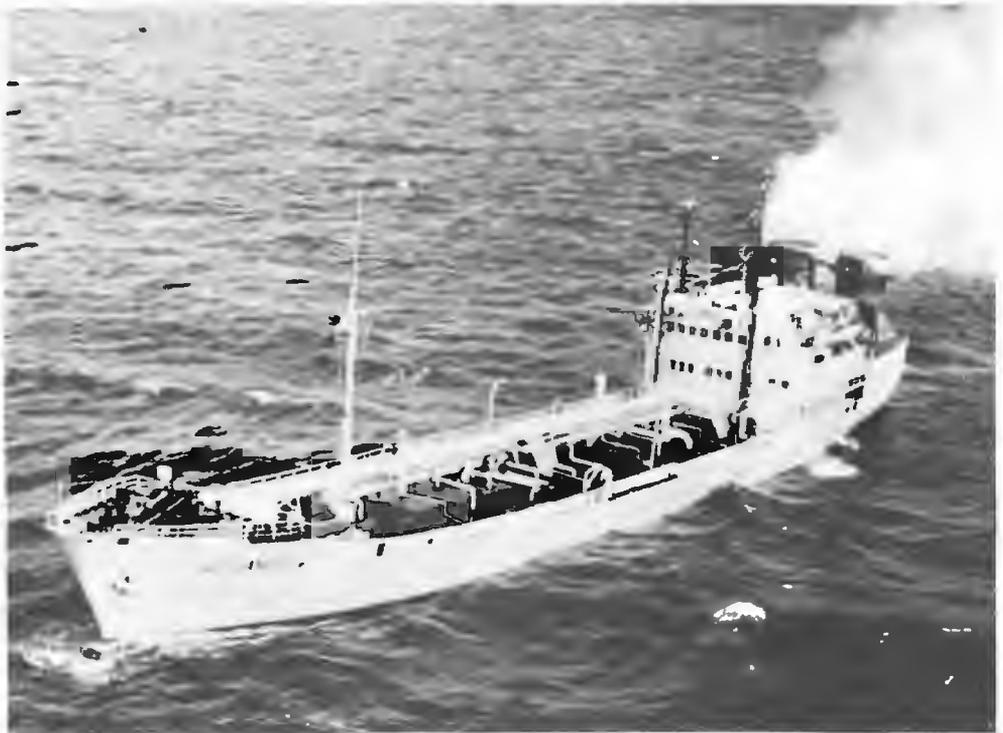
It will house two pilot-scale incinerators. One unit is a rotary kiln incinerator capable of handling a wide variety of material at the rate of 200 pounds per hour. The second unit is a liquid-injection incinerator that will test at least 10 different hazardous and toxic waste types from specific waste streams. Rotary kiln and liquid-injection incinerators account for 90 percent of all hazardous waste being incinerated today.

Last summer EPA also conducted full-scale testing of the municipally owned hazardous waste incinerator in Cincinnati. Nearly one hundred thousand gallons of hazardous waste were incinerated during the extensive, short-term test. Results were promising; a report on the project is being prepared.

EPA estimates that about 60 percent of all hazardous waste could be successfully incinerated, if incineration were widely used. The Agency's figures show that only six percent of all hazardous waste has been disposed of by controlled incineration.

Unfortunately, incineration is one of the more expensive methods of hazardous waste disposal. It costs anywhere from \$75 to \$2,000 to incinerate a ton of hazardous waste, depending on the type of waste. Furthermore, with the exception of a handful of industrial hazardous waste incinerators operated on company premises, very few commercial hazardous waste incinerators exist.

The Nation's first two commercial incinerators, which can destroy high concentrations of PCBs (above 500 parts per



The Vulcanus burning wastes at sea from the incinerator located at the rear of the ship.

High-temperature rotary kiln incinerator at Deer Park, Texas, used to destroy PCBs.



million), have been approved by EPA. One facility is in Deer Park, Tex., and the other is in El Dorado, Ark. Both can destroy more than 99 percent of the PCBs by burning them at high temperature (above 2,192 degrees Fahrenheit).

Regulations issued by EPA under the Toxic Substances Control Act require that high-level liquid wastes—containing PCBs above 500 parts per million—be disposed of only in EPA-approved incinerators. EPA ex-

pects to approve additional commercial incinerators in the future, although no such approvals are imminent.

Two important conditions for proper incineration are *temperature* and the time (called *residence time*) a waste must spend in the incinerator to be completely destroyed. These conditions vary with the waste's

chemical structure and physical form and type of incinerator. Temperatures can range from 750 to 3,000 degrees Fahrenheit; residence time can range from one-tenth of a second to several hours.

Other important considerations for burning of hazardous waste are oxygen availability and adequate mixing. Thorough mixing of air, wastes, and fuel (if required) is necessary for achieving complete combustion during the time available. Sufficient mixing is especially important for burning liquid wastes. Incinerators can handle solid, liquid or gaseous waste. Some are equipped to burn all three.

Incineration has several distinct advantages as a hazardous waste disposal method:

- Toxic components of hazardous waste can be converted to harmless compounds, or to much less harmful ones.
- Incineration provides for the ultimate disposal of hazardous waste, eliminating the possibility of future problems.
- Some of the energy produced by the combustion process can be recovered.

Because of these advantages, incineration is preferable to other means of hazardous waste disposal. Unlike land disposal methods, which can require 30 years of groundwater monitoring after closure of a facility, incinerators burn clean. This economic advantage enables incineration to compare favorably with other disposal methods, despite an incineration facility's initial high cost for construction.

Dow Chemical Company has been incinerating chemical wastes for about 40 years and is currently operating one rotary kiln incinerator and one tar burner at its Midland, Mich., plant. The rotary kiln, which was updated in 1974, burns solid waste and sludges. The tar burner incinerates only liquid wastes; it was a pioneering facility when it was built in 1968.

Another successful incineration facility in the Midwest has been operated since 1972

by the 3M company in Cottage Grove, Minn. Most wastes arrive in 55-gallon drums, but the incinerator can also accept wastes directly from a tank truck. Employees at the facility have received one of 3M's "Pollution Prevention Pays" awards for increasing operation efficiency, thereby saving the company \$150,000 a year in fuel costs and reducing pollution.

A rotary kiln is a brick-lined, cylindrical furnace, mounted horizontally at a slight incline, that turns slowly as heat is applied to liquid or solid hazardous waste inside the unit. Temperatures can range from 1,000 to 3,000 degrees Fahrenheit. The resulting ash can be considered harmless if disposed of properly.

Rotary kilns have been used to incinerate PCBs, chemical warfare agents, halogenated organics, and other chemical compounds. One of the kiln's disadvantages is the high cost of installation. The cost varies widely, depending on the design and size of the furnace.

Liquid injection incinerators can be used to dispose of virtually any combustible liquid waste. The key element of this type of incinerator is the nozzle, which atomizes the waste and mixes it with air. The burning of waste, at temperatures similar to those in the rotary kiln, takes place in the combustion chamber.

Hazardous wastes incinerated by this method can range from solvents and thinners to liquid PCBs and various organic compounds. One disadvantage of the liquid injection incinerator is that it accepts only fluid wastes that can be atomized through a burner nozzle.

Other processes for hazardous waste incineration include the fluidized-bed, the multiple-hearth, and the co-incineration methods. One of the emerging technologies is *pyrolysis*—the thermal destruction of solids and sludges in the absence of oxygen.

The improper incineration of hazardous waste may produce air pollutants as by-products of incomplete combustion. These are primarily carbon monoxide, organics, halogens, and acids. In well-designed and properly operated incinerators, these air pollutants are emitted in insignificant amounts. In addition, afterburners, which are

part of the incineration system, destroy gaseous hydrocarbons not consumed in the incinerator. Scrubbers and electrostatic precipitators are used to remove air pollutants from the stack gases.

Although shipboard incineration has not been used widely, it is considered promising. It can destroy hazardous waste as efficiently as land-based incineration, it has a minimal impact on the environment by removing the destruction site far from populated areas so that emissions are absorbed by the ocean, and, according to a 1978 EPA study, it is cheaper than land-based incineration or chemical detoxification. As EPA points out, a single incinerator ship could destroy up to 200,000 tons of hazardous waste per year.

In October 1980, EPA and the Maritime Administration published the results of a study on the building of specially equipped, high-temperature incinerator ships. EPA has also been reviewing incinerator specifications and cooperating with private firms interested in incinerator ships.

In addition, EPA's Office of Hazardous Emergency Response (the "Superfund" office) has been studying the possibility of incinerating hazardous waste on offshore ocean platforms. One such site has already been selected. It is located in the Gulf of Mexico, 60 miles from Mobile, Ala., and 40 miles from the coast of Louisiana. A draft environmental impact statement on the site was released in September 1981.

If approved, the Gulf platform will contain a rotary kiln with an afterburner and be able to burn liquid as well as solid hazardous waste. Land facilities will have a staging area where hazardous waste will arrive and leave in closed containers.

A platform incinerator, armed with an ocean disposal permit for its residual ash and spills and not handicapped by emission control requirements that apply to land-based units, could become one of the most cost-effective hazardous waste disposal methods of the future. □



New Criminal Enforcement Unit Established at EPA

Ten seasoned attorneys have been named to key posts, and 25 criminal investigators have been hired as part of a reorganization designed to beef up EPA's enforcement operations.

Anne M. Gorsuch, EPA Administrator, said that creation of a new Criminal Enforcement Unit will help the agency to crack down on such flagrant violations as the illegal discharge of wastes to waterways, midnight dumping of toxic substances and the deliberate destruction or falsification of vital environmental reports.

"With this new unit, we will choose our cases more carefully, move swiftly with the Justice Department in bringing them to trial, and increase our prospects for successfully prosecuting cases that merit this approach," Mrs. Gorsuch declared.

She said the criminal investigators being hired will be stationed in EPA's 10 regional offices and in the National Enforcement Investigation Center in Denver, Colo.

While still being assembled, EPA's new criminal enforcement unit conducted an investigation which led to the November sentencing of a Vermont firm, Corning Fibers, Inc., for violation of an environmental consent decree and resulted in a jail term for a corporate officer.

Explaining the overall reorganization of the enforcement office, William A. Sullivan, Jr., EPA's enforcement counsel, said that eight of the 10 lawyers named to fill the key positions are career civil servants who previously served in management positions with the agency. Some of the key appointments included the following selections:

—Peter Paul Broccoletti, deputy enforcement counsel, will exercise day-to-day operating responsibility for meeting Sullivan's charge to conclude cases swiftly and,

where possible, informally so that pollution is controlled quickly and economically. Broccoletti, whose hometown is Ft. Lauderdale, Fla., has served with the Civil Aeronautics Board, the Federal Trade Commission's Bureau of Consumer Protection, and the Federal Maritime Commission. He was supervising attorney for the Notre Dame Legal Aid and Defender Association from 1976 to 1978 and then became the first managing attorney for Legal Services of the Florida Keys in Key Largo.

—Michael S. Alushin, a native of Cleveland, Ohio, who has been named director of the Office of Special Projects, will direct activities pertaining to the Steel Industry Compliance Extension Act of 1981 and Superfund expenditures for hazardous waste sites. He also will coordinate other special activities on a project-by-project basis. Alushin gained extensive litigation experience with the Pennsylvania Department of Environmental Resources. As an assistant attorney general, from 1972 to 1977, he represented Pennsylvania as both plaintiff and defendant in numerous federal and state cases concerning air and water pollution. While director of the Bureau of Regulatory Counsel, from 1978 to 1980, he supervised a staff of attorneys who provided legal counsel on all state and federal environmental statutes and regulations to state officials.

—Peter G. Beeson will serve as director of the Office of Criminal Enforcement. Beeson is currently on special assignment from the Department of Justice's land and natural resources division. From 1975 to 1977, he was a trial attorney in the criminal division of the Justice Department. From 1977 to 1979, Beeson, a native of Atlanta, served in the positions of senior staff attorney and assistant deputy chief counsel of the select Committee on Assassinations in the U.S. House of Representatives.

Peter Paul Broccoliotti



Michael S. Aluanno



Peter G. Brennan



Five deputy associate enforcement counsels have also been named who will take on responsibility for directing enforcement of environmental laws relating to air, water, pesticides and toxics, and hazardous wastes:

Louise Jacobs, EPA's regional enforcement division director in Kansas City for the past three years, has been named the agency's deputy associate enforcement counsel for air enforcement. Jacobs, whose hometown is Pittsburgh, Pa., was senior staff attorney for the United States Court of Appeals, Third Circuit, in Philadelphia from 1976 to 1979. She was with the administrative offices of the New Jersey courts from 1971 to 1976, including two years as court administrator for Bergen County. She has also been in the general practice of law in Somerville, N.J.

Sanford Harvey, a native of Atlanta, has been appointed deputy associate counsel for toxics and pesticides enforcement. Harvey, 36, has been with the EPA for three years. He started in 1979 as the regional counsel of EPA Region 4 in Atlanta and later became the region's enforcement division director. In 1980 he moved to EPA Headquarters in Washington, D.C., to take the post of deputy assistant administrator for mobile sources, noise and radiation.

Edward A. Kurent, 35, an attorney with EPA since 1977, has been named the agency's deputy associate enforcement counsel for water enforcement. Kurent, a native of Cleveland, started working for EPA as an attorney with the Office of Water Enforcement, subsequently serving as special assistant to the agency's chief enforcement officer. He then became legal director of the hazardous waste enforcement task force. His

most recent position has been director of the enforcement division of the Office of Water Enforcement and Permits.

Julio Morales-Sanchez, a native of Puerto Rico, has been appointed deputy associate enforcement counsel for hazardous waste enforcement starting in July. Morales-Sanchez, 40, started his career with EPA in its Region 2 office in New York City in 1970 where he served as enforcement division director. From 1970 to 1979, he was the U.S. attorney for the Commonwealth of Puerto Rico. In 1965, upon graduation from law school, he became the assistant district attorney for Puerto Rico's Department of Justice and, subsequently, became general counsel for the Puerto Rico Communications Authority.

James Bunting, 36, a native of Silver Spring, Md., has been named interim deputy associate enforcement counsel of hazardous waste until Morales-Sanchez assumes this post. Bunting has been with EPA for the last five years, most recently as acting director of the legal division, office of waste programs enforcement. He had served four years as a trial attorney in the judge advocate division of the U.S. Marine Corps.

Two experimental teams of attorneys trained to handle cases in all types of pollution will be headed by Charles M. Hungerford and Frederick Stiehl. Hungerford's civil litigation team will be responsible for headquarters involvement in all cases originating in EPA's Region 9 (California, Hawaii, Nevada and Arizona). Stiehl's team will cover Region 5 (Illinois, Indiana, Ohio, Minnesota, Wisconsin, and Michigan).

Hungerford, 31, a native of Tucson, Ariz., began his career with EPA in 1976, working extensively on enforcement of the Clean Air Act. Most recently, he supervised 15 attorneys and paralegals as chief of the enforcement proceedings branch.

Stiehl, 36, a native of Bound Brook, N.J., joined EPA in 1979 and was assigned to the

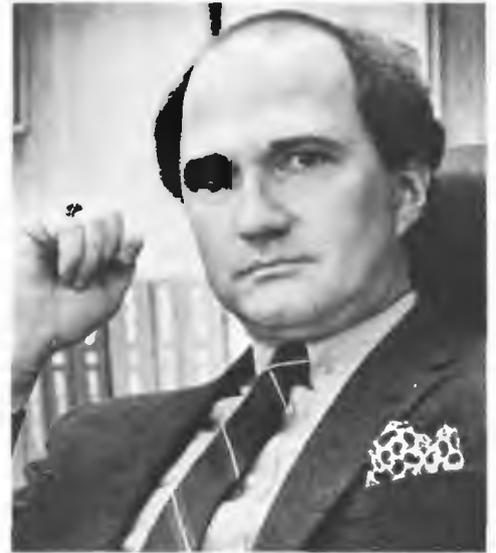
hazardous waste enforcement task force. Subsequently, he became litigation branch chief with the office of waste programs enforcement. Prior to that he worked for two years as an editor at U.S. Law Week. Stiehl brings to his new position eight years of litigation experience in federal and local courts with the District of Columbia's Office of Corporation Counsel.

Sullivan said that Region 5, headquartered in Chicago, was selected for the experimental team approach that will deal with all aspects of pollution because the region is the largest and most active in terms of enforcement activities.

Region 9, headquartered in San Francisco, was picked for this experimental program to compare the results with that of a larger regional area, Sullivan added.

"We think this approach might be the most effective way to deal with enforcement problems, but we won't know until we've had some test runs," Sullivan said.

In addition, two longtime career agency managers have been named to key positions. Geoffrey Grubbs has been named director of the Office of Enforcement Policy and Gerald Bryan will oversee all operational management and personnel matters as director of the Office of Legal Operations. □



Key Appointments Move Forward

President Ronald Reagan has publicly announced his intention to nominate James W. Sanderson, an attorney, and has nominated Frederick "Eric" A. Eidsness Jr., a civil engineer, for two top EPA posts.

Sanderson, who formerly served as the legal counsel for EPA's Regional Office in Denver, has been selected to be EPA's assistant administrator for Policy and Resource Management.

He will be responsible for policy analysis, regulatory reform, legislation, the budget, standards, regulations, and management systems and analysis.

Eidsness, also a former EPA employee, has been chosen for the post of EPA's Assistant Administrator for Water. In this job, Eidsness will be responsible for administering not only the Clean Water Act, which includes a multi-billion dollar sewage treatment program, but also the Safe Drinking Water Act, and the Marine Protection Act, which controls the dumping of wastes into the ocean.

Other appointments include the selection by Administrator Anne M. Gorsuch of Ernest F. Gloyna as chairman of the EPA Science Advisory Board, of Richard D. Wilson to be director of the Office of Mobile Source Air Pollution Control, and Samuel Schulhof as deputy assistant administrator for administration.

Commenting on the appointment of Sanderson, EPA Administrator Anne M. Gorsuch said:

"The majority of Jim Sanderson's professional experience has been in the executive and legislative areas of government, in Washington and at the regional level. Much of that experience, as well as his private sector experience, has been in the environmental area."

Sanderson has been an attorney with the firm of Saunders, Snyder, Ross and Dickson in Denver for the past four years, where he specialized in the legal aspects of air pollution, water pollution, solid waste, and natural resources. He is vice-chairman of the American Bar Association's air quality committee, natural resources section.

In 1973, Sanderson joined EPA as assistant regional counsel in the agency's Denver office and was promoted to regional counsel in 1975. He was involved in a broad range of federal, state and local government matters and gained substantial knowledge of the laws under which EPA operates. He went into private law practice in 1977.

Sanderson, 37, worked in the U.S. Congress as legislative assistant to Senator Gordon Allott (R-Colo.) from June 1970 to January 1973.

He worked as an attorney-advisor at the Internal Revenue Service in Washington from November 1969 to June 1970.

Frederick Eric A. Eidsness Jr.



Ernest F. Gloyna



Regarding the appointment of Eidsness, Mrs. Gorsuch said:

"Eric Eidsness knows the water cleanup field from several perspectives—as a former EPA employee, as a local planning official and as a consultant to government and industry on various water pollution control problems. This broad experience will be particularly valuable to the Agency as Congress considers reauthorization of the Clean Water Act this year."

Since September 1981, Eidsness, 37, a native of Jacksonville, Fla., has served as a consultant to the EPA Administrator on water issues. Prior to serving in this capacity he had since 1978 been a partner in the management consulting firm of BMML Inc., in Boulder, Colo. He specialized in advising state and local governments and industry on the institutional and financial requirements involved in carrying out the federal water laws.

From 1975 to 1978, Eidsness served as director of water and air quality planning of the Larimer-Weld Regional Council of Governments in Loveland, Colo. In this capacity, he directed development of an areawide plan for curbing wastewater discharges.

From 1973 to 1975, Eidsness was a staff consultant for the Biomedical and Environmental Systems section of Arthur D. Little, Inc. of Cambridge, Mass. He took part in major environmental impact studies for industrial and governmental clients. He also co-authored a study on the management and economic benefits of the New York State/EPA construction grants program for sewage treatment.

During 1970 to 1973, Eidsness worked in the construction grants program at EPA's regional office in Atlanta. He helped prepare one of the agency's first environmental impact statements (on a regional sewage treatment project in the metropolitan Atlanta

area). While working on another impact statement, Eidsness, a diver, made several ocean-bottom dives off Florida's Atlantic coast to supervise a survey of pipes discharging sewage into the ocean.

Eidsness served as a commissioned officer in the U.S. Navy from 1968 to 1970, 13 months of which were spent with an underwater salvage unit in South Vietnam.

In 1967, Eidsness received a bachelor's degree in civil engineering from Vanderbilt University, Nashville, Tenn. He has written articles and given speeches on numerous environmental subjects.

Eidsness is married and the father of two children. He and his family now reside in Washington, D.C., and also own an irrigated farm near Ft. Collins, Colo.

The appointment of Eidsness and Sanderson are both subject to approval by the U.S. Senate.

In naming Dr. Gloyna, dean of the College of Engineering at the University of Texas in Austin, as chairman of the Science Advisory Board, Mrs. Gorsuch said "it is advantageous in making judgments to have the leadership of someone like Dr. Gloyna, whose scientific advisory experience spans 35 years."

Deputy Administrator John W. Hernandez, former dean of the engineering school at New Mexico State University, said that "in my own professional and academic experiences, I have observed with great respect the water resource engineering abilities of Dr. Gloyna in environmental organizations, in the engineering profession and in higher education."

Dr. Gloyna, who received his doctor of engineering degree from Johns Hopkins University in Baltimore, has been a consultant to 100 cities, industries and consulting firms. He also has been a consultant to the Congress, nine different federal agencies, five foreign governments, the United Nations, World Health Organization and World Bank.

Author of numerous books and reports on the control of wastes, Dr. Gloyna is a member of the National Academy of Engineering, the National Academy of Sciences in Venezuela and a corresponding member of the National Academy of Engineering of Mexico. He is vice president of the Water Pollution Control Federation.

Richard D. Wilson



Samuel Schulhof



In announcing the appointment of Wilson as director of the Office of Mobile Source Air Pollution Control, Mrs. Gorsuch said that Wilson "has demonstrated outstanding leadership while serving in the enforcement and compliance areas."

Wilson, a career employee, joined EPA when the agency was established in 1970. He has primarily served in the enforcement program dealing with stationary air pollution and toxic substance enforcement program.

In his new post, Wilson will be responsible for such air pollution control activities in Washington and Ann Arbor, Mich., as emissions testing, automobile certification and standards development for vehicle emissions.

Wilson, who holds an electrical engineering degree from Lafayette College and an M.B.A. from the University of Pennsylvania's Wharton School, has been the recipient of numerous awards, including the Designation of Distinguished Executive and the EPA Gold and Silver medals.

Commenting on Schulhof's appointment as a deputy assistant administrator for administration, Dr. John Horton, EPA's assistant administrator for administration said:

"Sam brings a wealth of experience to this position from the business world and government. He will be of immeasurable assistance in instituting the sound management practices we need to make use of limited resources in a more effective and efficient way."

Prior to joining ACTION in April 1981, he was president and chief operating officer of Wander Sales Inc. in Pittsburgh, Pa., a chain of 10 retail stores, and its subsidiaries, a service company and a credit corporation. From 1975 to 1978 he was a principal in the Hay Group, one of the world's largest human resource consulting organizations.

Schulhof has been active in both the private and public sector. His responsibilities at ACTION included overseeing press and public awareness programs and the recruiting of volunteers for the Peace Corps and the agency's domestic volunteer programs.

Schulhof served in both the Nixon and Ford administrations from 1973 to 1975, playing a key role in recruiting and staffing for non-career positions in government. From 1971 to 1973, he was assistant to the Secretary of the Department of Health, Education and Welfare.

Schulhof, 39, is listed in *Who's Who in American Business and Finance*, and is a member of the Young President's Organization, an international organization made up of corporate presidents.

He is a 1964 graduate of C. W. Post College, Long Island University, with a degree in business administration. Schulhof is a native of Pittsburgh, Pa. His wife, Katrina, is currently the assistant to the chancellor of the University of Pittsburgh. □

Private Cleanup Sought

A special task force has been established to speed up removal of pollutants by private parties at hazardous waste sites under the Superfund law. EPA Administrator Anne M. Gorsuch has announced.

Responsible private parties will be given the opportunity to cooperate in managing and financing cleanup, Mrs. Gorsuch said. However, she emphasized, where cooperation is not forthcoming, she will use the agency's legal authority to compel corrective action and recover costs of the corrective government action.

The task force, operating under the direction of EPA Enforcement Counsel William A. Sullivan Jr., is charged with contacting persons and firms which may have owned, operated or used the disposal sites or had wastes taken to the sites for disposal.

EPA's best estimate, based on investigations so far, is that more than 1,500 parties may be contacted. The task force will give these parties a deadline for responding to the

private cleanup request.

"This should permit the agency to identify sites at which the prospects for a private cleanup appear to be good, and those for which Superfund money will be required," Mrs. Gorsuch said.

Recovered costs from private parties will be used to supplement government funds or to reimburse government funds already spent.

Sullivan said that the agency hopes to notify those parties identified so far by regional investigations within 90 days. Similar notice will be given to new parties identified through future investigations.

"Responses will be tracked by computer so that follow-up action can be triggered if progress toward cleanup action is not forthcoming," he said.

He said the initial focus of the task force's efforts will be 115 sites placed on an interim priority list last October. Of these 115 sites, 20 were already the object of litigation when

listed. A total of 122 individuals of firms at 16 sites on the priority list have also been given notice that the site is a candidate for government cleanup under the Superfund program. Sullivan also noted that notices have been issued to another 20 parties at five sites not on the list of 115.

Sullivan said that some companies have taken it upon themselves to contact EPA about cleanup activities. "I believe there may be many more which have simply been waiting to be contacted and told how the agency wants to proceed," he noted.

Sullivan stated, however, that the Superfund law creates "powerful incentives" for firms to cooperate. Refusal to abide by government cleanup orders could cost them triple damages, he said.

Since May, Mrs. Gorsuch has approved more than \$30 million for cleanup at 30 sites. In addition, she has authorized more than \$18 million in emergency work at 64 sites. □

Superfund Sites—Enforcement Status



Waste-to- Steam Plant Slated for New York

A waste-to-steam plant is being planned for the old Brooklyn Navy Yard site to help New York City dispose of its massive garbage loads, New York Mayor Edward I. Koch announced recently.

"New York City is running out of landfill space for its garbage," Mayor Koch explained. "That is why we are committed to building waste-to-energy plants in all five boroughs."

The mayor said that UOP, Inc., based in Des Plaines, Ill., has been selected to design, build, and operate the proposed waste-to-steam plant in Brooklyn. UOP is the American license holder for the Martin incineration system, which is used in 92 other plants in operation or under construction around the world.

Richard T. Dewling, EPA's Region 2 Acting Administrator, said that "EPA has conducted extensive research and investigations into waste-to-energy systems operating in Europe, Asia, and the United States. These investigations have shown that the technology that New York City has proposed is a well-established, technically reliable, environmentally acceptable and economical solution to the problem of disposal of solid waste."

Norman Steisel, New York Commissioner of Sanitation, said that before the city can sign a contract with UOP "we have to demonstrate that the proposed facility will meet all applicable environmental regulations.

"Preparation of the Environmental Impact Statement is underway and with the technical design that UOP will give us, we can now complete our analysis."

The draft Environmental Impact Statement is expected to be completed in March.

Commissioner Steisel estimated that construction would require 39 months from the date of approval by the New York Board of Estimate. He said that if all goes according to schedule, full-scale operations could begin in 1986.

The Department of Sanitation estimates design and construction costs to be \$226 million. The city estimates its revenues will be \$40 million annually. The steam generated will be sold to Con Edison for use in the utility's Manhattan steam loop. UOP

will receive a share of the revenues from the sale of steam and of recovered materials such as ferrous metals and aluminum.

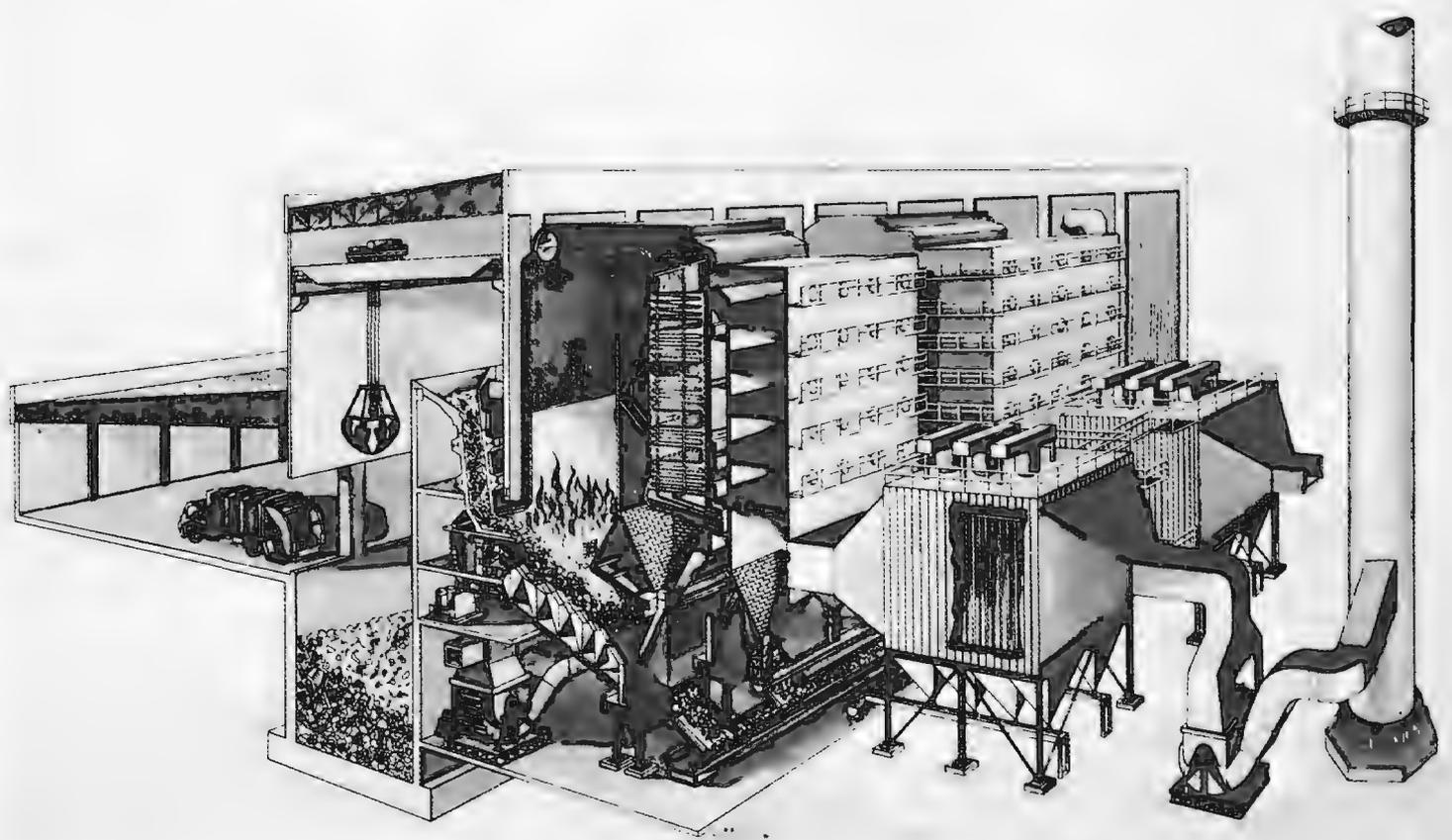
Financing for the construction of this project will be private equity, a combination of tax exempt industrial revenue bonds expected to be issued by the New York City Industrial Development Agency and a New York State Environmental Quality Bond Act grant.

The proposed facility would handle 3,000 tons per day of barge-delivered waste. No trucks will be used to deliver or remove waste. Commissioner Steisel said it would create between 200 and 250 construction jobs and employ about 95 operating personnel.

Mayor Koch stressed that the proposed Navy Yard plant is the first of a number of resource recovery facilities slated for development throughout the five boroughs. The State Power Authority and the Department of Sanitation have announced their intention to cooperate in the development of a similar facility in the Bronx with Hunts Point as the proposed site.

Mayor Koch said, "The question of siting is one of the most difficult issues involved in implementing the city's resource recovery plans. Neighborhoods tend to view resource recovery facilities negatively, but a rational city-wide policy demands that resource recovery plants be built on the sites that are best suited to such facilities, provided that proper safeguards can be assured. We will not build a plant that is not a good neighbor."

□



This is a cutaway of a typical UOP refuse burning plant designed to produce energy from steam. However, barges rather than trucks will take garbage to this one proposed for the old Brooklyn Navy Yard site in New York.

Paperwork Cut for Car Imports

Individuals importing cars will find that EPA has helped simplify the procedures for bringing foreign cars into this country.

Previously persons importing cars have been obliged to complete a form declaring that the autos conform with U.S. emission standards as required by the Clean Air Act.

At EPA's request, the U.S. Customs Service has suspended this declaration requirement, since the vast majority of imported cars conform to federal emission standards.

Customs inspectors are able to distinguish cars built to meet U.S. standards from those that do not by locating EPA emission labels in the vehicles, the agency said.

The change will eliminate some 113,000 declaration forms filed annually, therefore reducing the reporting procedures required for importing cars into this country.

Importers of autos that do not meet U.S. standards will still have to file declaration forms. There are approximately 3,000 such cars imported annually.

Persons importing the cars that do not meet emission or safety standards must post a cash bond equal to the value of the car or have the car bonded through a bonding company. Once the cars are modified to meet the standards or tested to show compliance, the bond is returned to the individual.

However, to ease the burdens on many first-time importers of cars in this category, who often claim a lack of knowledge of the importation requirements, the agency will not require modification or testing if the vehicle is five years old or older. The agency said that since there are fewer than 700 cars five years or older imported annually, air quality will not



Imported from England, this Rolls-Royce convertible, one of the world's most elegant cars, is being driven on a road overlooking the Golden Gate bridge in San Francisco.

be adversely affected by these automobiles. This waiver will apply if the individual has not imported a non-complying car since 1970.

Commercial importers of cars will not be allowed, however, to take advantage of this change.

These procedural changes are being undertaken on an interim basis. The agency is considering whether to adopt the changes permanently as part of a revision of its vehicle imports program. □



Amateur hockey players chase the puck on a frozen pond near Laurel, Md.

Back Cover: Snow geese explode into the air when alarmed at Pea Island Wildlife Refuge in North Carolina. Thousands of these geese, ducks and other water birds winter at this refuge which is located within the Cape Hatteras National Seashore.



United States
Environmental Protection
Agency
Washington D C 20460

Postage and
Fees Paid
Environmental
Protection
Agency
EPA 335



Official Business
Penalty for Private Use \$300

Third Class
Bulk