EPA JOURNAL

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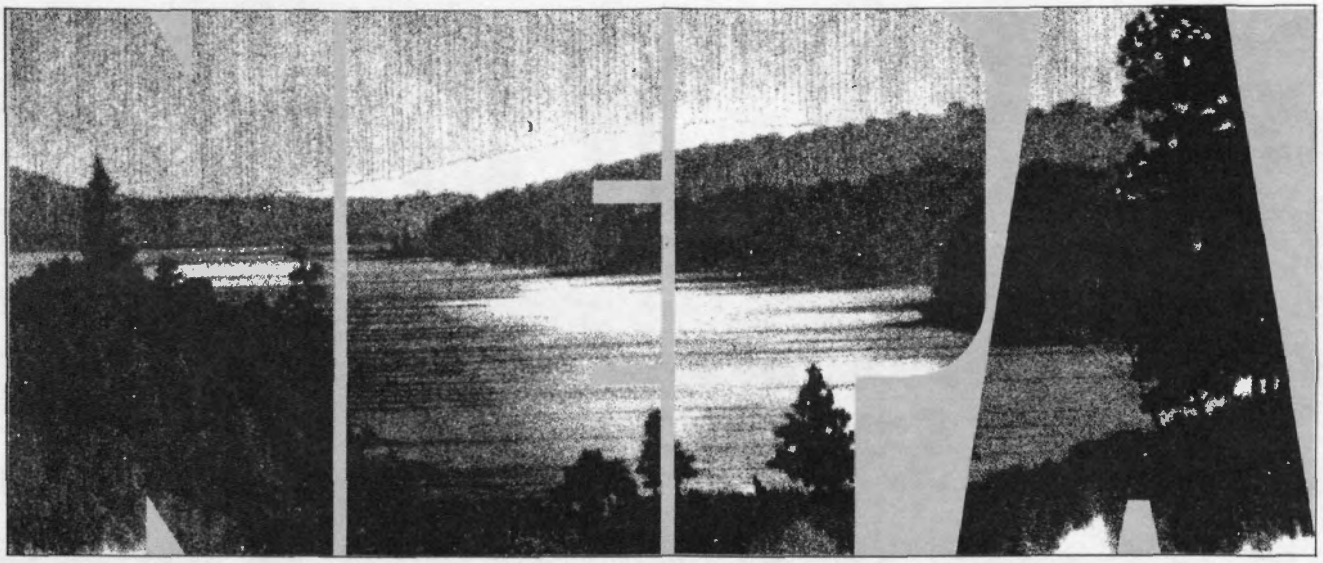
THE ALASKA PIPELINE

U.S. ENVIRONMENTAL PROTECTION AGENCY



ENVIRONMENTAL IMPACT

Six years ago the National Environmental Policy Act, often described as one of the most significant laws of this century, was signed.

This act imposes a number of requirements, including one which has achieved wide fame and some notoriety, preparation of environmental impact statements.

Essentially this last provision states that whenever a Federal agency proposes to take a major action having a significant effect on the quality of the human environment, it must prepare a detailed statement on the environmental effects.

This law is regarded by some as an extraordinarily effective environmental measure which has revolutionized Federal decision-making. Others view it as a tool for obstruction and a giant paperwork machine.

Several thousand environmental impact statements have been prepared. Both the draft statement, the stage where review and comment by appropriate Federal, State and local environmental agencies as well as the public begins, and the final statement are filed with the Council on Environmental Quality and made available to the public.

The statement's primary purpose is to disclose the environmental consequences of a proposed action, and assess alternative courses of action. This process helps ensure that the agency's programs are consistent with national environmental goals and alerts the public to environmental risks involved.

As a result of environmental impact statements, some projects have been stopped or substantially altered for the better. The Corps of Engineers, for example, dropped plans for a pier to conduct ocean research at Assateague Island National Seashore after analyzing the adverse effects on the park and reviewing possible alternative plans.

An example of action that was improved by the environmental impact statement process is the Trans Alaska Pipeline. Articles in this issue report on the role EPA, as the principal Federal regulator of pollution control matters, has played in reviewing proposed actions and seeking to reduce environmental damage from these projects.

The group within EPA responsible for coordinating the key function of evaluating environmental impact statements is the Office of Federal Activities. EPA's regions and program offices all play a role in the review process.

Also reviewed in this issue are some of the other responsibilities of this Office, such as helping to ensure that Federal facilities curb their own pollution, aiding America's Indians in their efforts to protect their environment and helping with a training program which finds jobs in the environmental area for welfare clients.

As part of the Agency's observance of the Nation's Bicentennial, the Journal is beginning in this issue A Parade of the Regions. Each issue of the magazine in 1976 will have a section devoted to one region. We begin with "Region I On Parade." In these articles we hope to cover not only what EPA is doing in each region to protect the environment but also to take a look at some of the environmental treasures in each sector of the Nation's marvelously diverse and exciting natural landscape.

We also have articles on "Clean Rivers for Whom?" and a report on the Agency's Fifth Anniversary and Honor Awards Ceremony in Washington.

With this issue, EPA Journal begins its second year. Our mission remains as we described it a year ago: to keep employees better informed about EPA's many activities, stimulate a greater sense of esprit de corps in belonging to the EPA family and foster pride and enthusiasm for our role in the enormously difficult, complex and vital task of protecting the environment.□

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U.S.
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PROTECTION
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Cover: Alyeska pipeline workers drilling for blasting operations atop Dietrich Pass in Alaska's Brooks Mountain Range.

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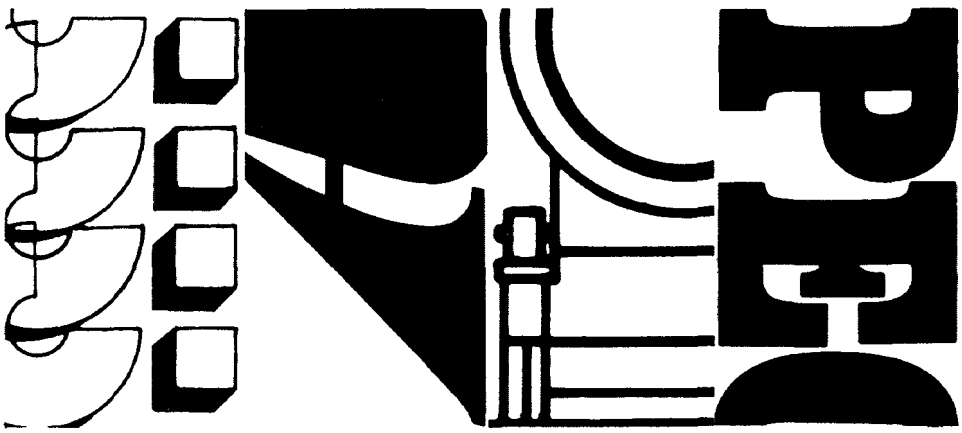


DEPARTMENTS

The appearance of the magazine paper has changed because we have finally succeeded in obtaining a printing contract requiring use of recycled paper, a step consistent with the overall emphasis at EPA Headquarters on using this type of paper.

ENVIRONMENTAL WATCHDOGS

"I have some good news and some bad news for you," God told Moses. "The good news is that I will part The Red Sea so that you can lead your people to the Promised Land."
"And what is the bad news?" asked Moses.
"You will have to write the environmental impact statement."

This joke that has been going around the business banquet circuit illustrates an important fact of American life. No major action of a Federal agency, no major project involving Federal money or Federal permission can be undertaken until the environmental effects have been fully considered.

Although the impact statement contains no veto power in itself, it is a potent weapon for environmental betterment, according to Rebecca Hanmer, Acting Director of the Office of Federal Activities, which oversees EPA comments on impact statements.

The public impact statement has proven to be a powerful tool for guarding air and water quality and enhancing the environment. Some examples:

- The Cross-Florida Barge Canal, already begun, was halted because of strong environmental concerns, and an impact statement is currently being prepared as the major document for the President and Congress to use in deciding on the future of the project.
- Many stream-channel straightening projects were changed or abandoned after impact studies revealed that frequent local flooding along winding streams helped to conserve water and wildlife habitats and was preferable to ditch-type drainage.
- The John F. Kennedy Memorial Library will not be located in the busiest part of Cambridge, Mass. After the General Services Administration was persuaded to make an impact study it became clear that the planned location was entirely unsuitable from the standpoint of traffic congestion and air pollution.
- Many shoreland "developments" requiring the dredging of shallow bays and the filling of wetlands have been halted or drastically revised to conserve natural areas.
- A $500-million irrigation project in North Dakota is in abeyance after environmental studies showed that saline drainage from the project might damage Canadian rivers and lakes. An international commission is restudying the plan to see if this and other hazards can be avoided.

In none of these examples was the impact statement the only factor in identifying environmental problems. Court suits brought by States or citizens' groups or both, public hearings, and even new legislation have helped to bring about actions that enhance the environment.

The impact statement serves as a catalyst, Ms. Hanmer pointed out. It brings out facts and opinions, scientific data and differing points of view, so that the whole decision process can be carried out under public scrutiny.

Moreover, she said, the mere prospect of having to file an impact statement is causing Federal agencies to alter many projects in the planning stage to make them more environmentally acceptable.

"Although there's no way to prove it, it's probable that impact statements that never were formally filed have had as many beneficial effects as those that were," she said.

2,000 Reviews a Year

EPA reviews about 2,000 impact statements each year. About 95 percent of them are handled in the Regions. Each Regional Office has an impact statement coordinator, with a staff ranging from about two to six persons. They depend heavily, of course, on the cooperation of experts in the program offices for help in reviewing and commenting.

When the statement involves national policy considerations or when the action or project involves two or more EPA Regions, it is reviewed by the Office of Federal Activities, in conjunction with other EPA offices. Each of the Office of Federal Activities' reviews is coordinated by one of its 12 liaison officers, who are assigned to work with all of the major Federal agencies.

The impact statement process has roots that are older than EPA. In the National Environmental Policy Act of 1969 (NEPA), Congress set the policy that all Federal agencies should consider environmental effects "to the fullest extent possible" *before* making decisions in any matter that could have an environmental effect. During consideration of the bill that was to become NEPA, Congress had recognized the need for an "action forcing mechanism" which would require that agencies integrate NEPA's goals within their decision-making processes. That mechanism eventually took the form of a requirement that agencies prepare impact statements in connection with every major action which significantly affects the environment. The President's Council on Environmental Quality oversees the Federal agencies' implementation of NEPA.

Issuance of impact statements exposes Federal decision-making to pub-

lic scrutiny. The law does not require the Federal agency to pick the most environmentally favorable course of action, but statements which attempt to cast poor environmental decisions as either neutral or favorable to the environment have caused several agencies to run afoul of NEPA's procedural requirements. An impact statement that does not fully or accurately recount all significant adverse environmental effects or examine feasible alternatives is likely to be rejected by the courts. If its impact statement is rejected, the Federal agency must go back and rework its analysis.

In the detailed regulations that the Council on Environmental Quality has prepared, review of impact statements by the public and other affected State and Federal agencies is an essential part of the NEPA process.

Not unexpectedly, Federal agencies did not rush to revamp their decision-making processes, Ms. Hanmer said. Many were at first unaware of the new requirements, or they thought that impact statements did not apply to them. Some merely went through the motions, filing superficial statements after their real decisions had been made.

"There used to be some cynicism about NEPA impact statements," said Ms. Hanmer. "An agency might fill a big book with straw-man environmental arguments and then knock them down to justify its project. Often very important environmental questions were not even brought up, much less resolved. The courts, however, have taken a strong stand on the impact statement process, and the quality of Federal impact statements and underlying environmental analyses has steadily improved."

Alaska Pipeline Case

A significant turning point occurred in the Trans-Alaska Pipeline case, where an inadequate impact statement held up a multi-billion-dollar project for more than a year. The pipeline was long planned and construction was ready to start along 800-odd miles from Prudhoe Bay on the Arctic Ocean, across Alaska's tundra, mountains, and forest to the ice-free port of Valdez.

The Department of the Interior had filed an impact statement but its adequacy was contested in court by environmental and conservation groups. EPA's comments on the draft statement and some of the Agency's technical studies were cited by the plaintiffs, although EPA was not a party to the suit.

The case finally reached the Supreme Court, which ruled that Interior had not fully met NEPA requirements for environmental study. A new and more complete impact statement was made, including many more safeguards for the construction and operation of the pipeline.

In reviewing impact statements, EPA has no final say; indeed, it is only one of many reviewing agencies. But a large part of the public regards EPA as the Agency whose opinion counts the most, because EPA is expert in environmental matters and because it is the Federal Government's primary action arm in the setting and enforcement of pollution control standards. (There is also the similarity of initials: NEPA the law and EPA the Agency. Many people think the P in NEPA stands for "protection" instead of "policy.")

The Agency has a unique legal authority for environmental review in addition to that conferred by NEPA. In the 1970 Clean Air Amendments Congress empowered the EPA Administrator to "review and comment in writing on the environmental impact of any matter relating to his duties and responsibilities . . ." and to publicize his determination and, where the proposed action is unsatisfactory from the standpoint of public health, welfare, or environmental quality, refer the matter to the Council on Environmental Quality. This amendment, Section 309 of the Clean Air Act, gives EPA a "license to find out," to review and make public its opinion on many Federal actions, whether an impact statement is prepared or not. Federal actions subject to EPA's 309 authority include regulations and legislation, as well as projects for construction.

Both kinds of review—NEPA and Section 309—have been integrated into the environmental review program which the Office of Federal Activities manages for EPA.

Preparing EPA Statements

What of EPA's own compliance with NEPA? The Office of Federal Activities is responsible for developing EPA's own NEPA compliance regulations, and EPA's regions and several program offices have prepared impact statements.

From the beginning, the Agency instituted procedures for preparing and filing impact statements for its municipal sewage treatment construction grants; in addition, the 1972 Water Act amendments called for statements on significant discharge permits for new "point sources" of water pollution.

EPA has not regarded its standards-setting activities as being subject to impact statement requirements since EPA prepares the "functional equivalent" of an impact statement in the documentation supporting its actions, and several courts have upheld this view. Nevertheless, the Administrator announced in May 1974, that EPA would voluntarily prepare statements on certain of its regulatory actions, even though they are not legally mandated, in order to ensure careful consideration and public understanding of all environmental impacts of such proposed regulations.□

GUARDING OUR NORTHERN TREASURELAND

"It's frustrating when you make a tight landing on a frozen river and then are unable to get a water sample because the river is frozen solid," the director of EPA's Alaska Operations Office reports.

"Sometimes you work when the wind-chill factor is 70 degrees below zero drilling through as much as 12 feet of ice to find only gravel at the bottom of the river. You can't take the ice back because frozen water gives distorted readings for dissolved oxygen and other quality indicators."

Gene Dickason said that he and his staff of 12 from Region X have several extraordinary problems in their task of helping to keep to a minimum environmental damage from construction of the Alaska pipeline.

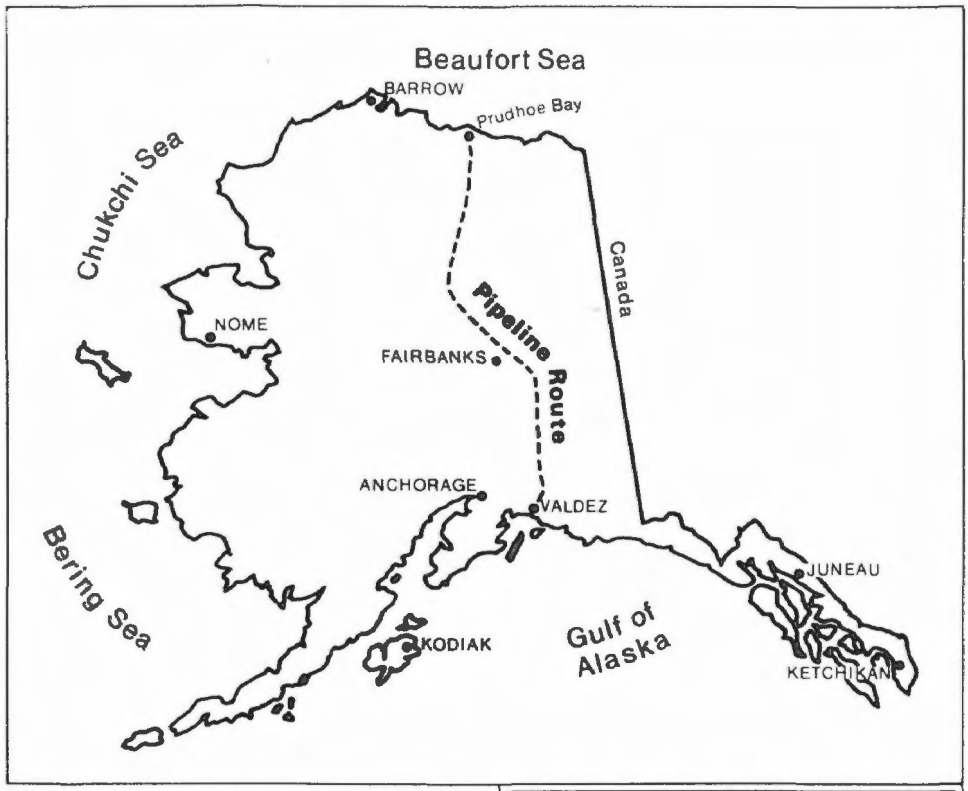
"Grizzly bears used to give us trouble because they used the huge rubber bladder tanks holding fuel for pipeline construction vehicles as trampolines and teething rings. We finally learned to build the proper fencing around the tanks to keep the bears out.

"It's our job to help control the environmental impact of the pipeline construction. There have been a number of fuel spills and some problems with construction camp waste treatment plants, but overall a damn good effort is being made to protect the environment."

Mr. Dickason said that he and his staff coordinate their surveillance activities with the Department of the Interior's Alaska Pipeline Office, which has the prime Federal monitoring responsibility, the Alaska State Pipeline Coordinator's Office and the Alaska Department of Environmental Conservation.

Establishment of the special Region X task force at Anchorage, was, in part, the result of a recommendation by the Office of Federal Activities.

Striving to reduce the environmental impact of construction of the monumental Alaska oil pipeline, the largest private construction job in the world, was one of the first major challenges confronting EPA and its Office of Federal Activities.



Safeguards

In March 1971, the Agency urged the Department of the Interior to delay start of construction of the pipeline until tighter environmental protection safeguards were assured.

Commenting on the Department of the Interior's environmental impact statement for the proposed pipeline, EPA warned that unless changes were made "construction and operation of the Trans-Alaska pipeline may cause avoidable degradation and pollution."

Among the points stressed by EPA was that fuller consideration should be given to the effect hot oil temperatures might have on the Alaska permafrost.

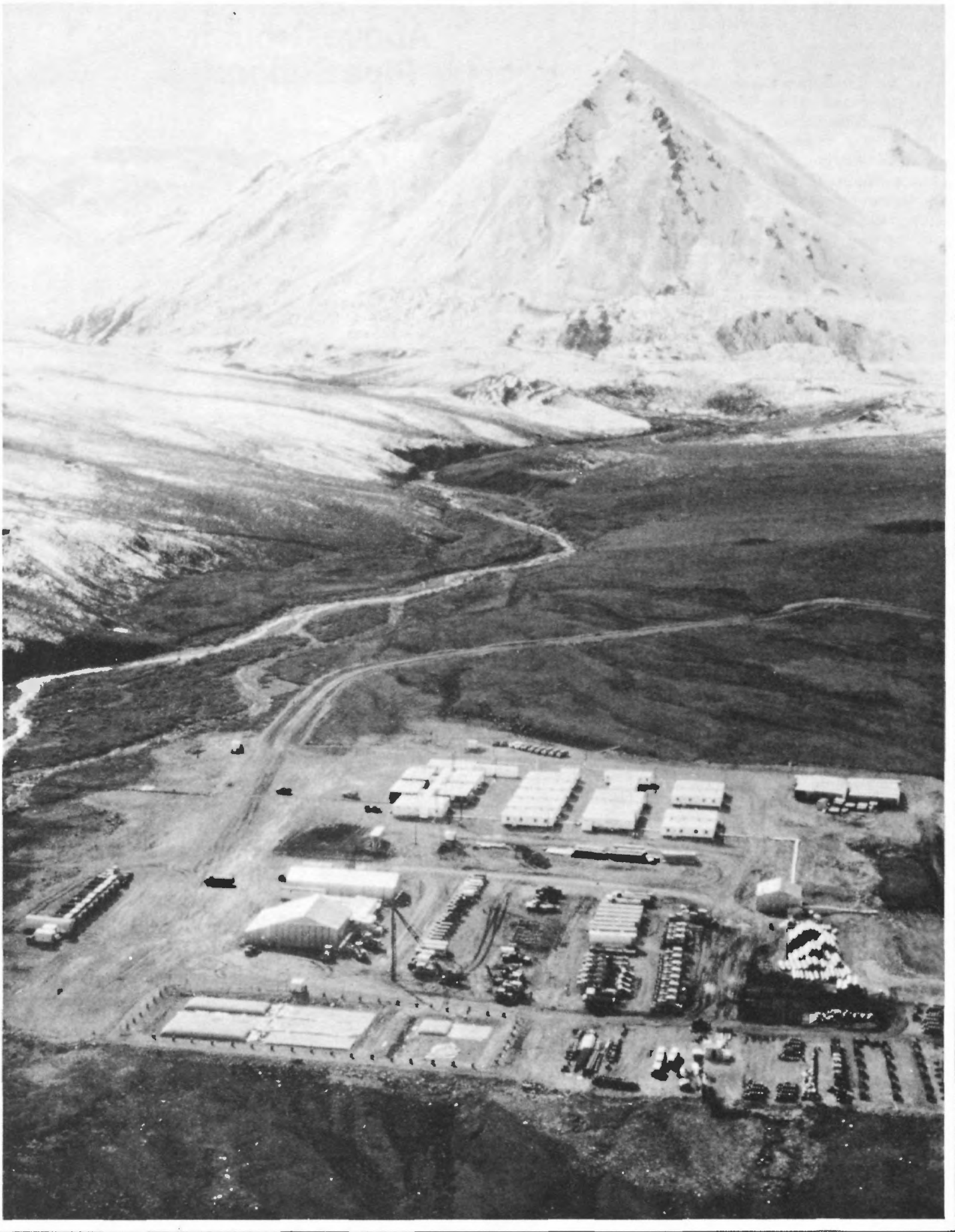
EPA also called for the development and testing of monitoring systems to alert pipeline operators to leaks caused by earthquakes or other natural disasters.

Many of these recommendations by EPA and conservation groups were finally incorporated in the pipeline design.

Two years ago, a Federal right-of-way permit for the pipeline was granted by the Department of the Interior after Congress acted to remove legal obstacles to building of the pipeline.

Continuing on page 6

Standing under an elevated portion of the Trans Alaska pipeline are representatives of the Technical Advisory Board making an inspection visit. They are (from left): Oscar E. "Gene" Dickason, Director of EPA's Region X Alaska Operations Office; James Mitts, Department of the Interior liaison representative for EPA; John Williams of the Department of the Interior's Geological Survey; Gene Lawhun of the Corps of Engineers and Sheldon Meyers, Deputy Assistant Administrator for Solid Waste Management and former Director of the Office of Federal Activities.



Galbraith Lake Camp in the Brooks Mountain Range.

However, the warnings and recommendations by EPA and the conservation groups had a definite impact. EPA played a significant role in negotiating the stipulations for environmental safeguards to be included in the pipeline construction.

EPA is also represented on the Technical Advisory Board which makes periodic inspections of the pipeline construction project. The board's function is to advise the Undersecretary of Interior on Alaskan oil problems generally. EPA representatives include Sheldon Meyers, Deputy Assistant Administrator for Solid Waste Management and former Director of the Office of Federal Activities; Thomas J. Charlton of the Oil and Special Materials Control Division, and James Mitts, who is assigned to EPA as the Department of the Interior's liaison representative.

Walter J. Hickel, former Secretary of the Department of the Interior, has been quoted as saying that the oilmen at first did not understand the real dangers of burying a hot oil pipeline in the permafrost.

"It wouldn't just have been an environmental disaster; it would have been an engineering disaster."

An estimated 9.6 billion barrels of oil can be produced from the Prudhoe Bay oil field, on Alaska's North Slope. To move the oil to where it is needed, the 48-inch-diameter, 800-mile long pipeline is being built from Prudhoe Bay to Valdez, the closest year-round ice-free port. From Valdez, the oil will be shipped in marine tankers to terminals on the U.S. West Coast.

The oil will come from the ground at Prudhoe Bay at a temperature of up to 180 degrees Fahrenheit and will enter the line at about 135 degrees.

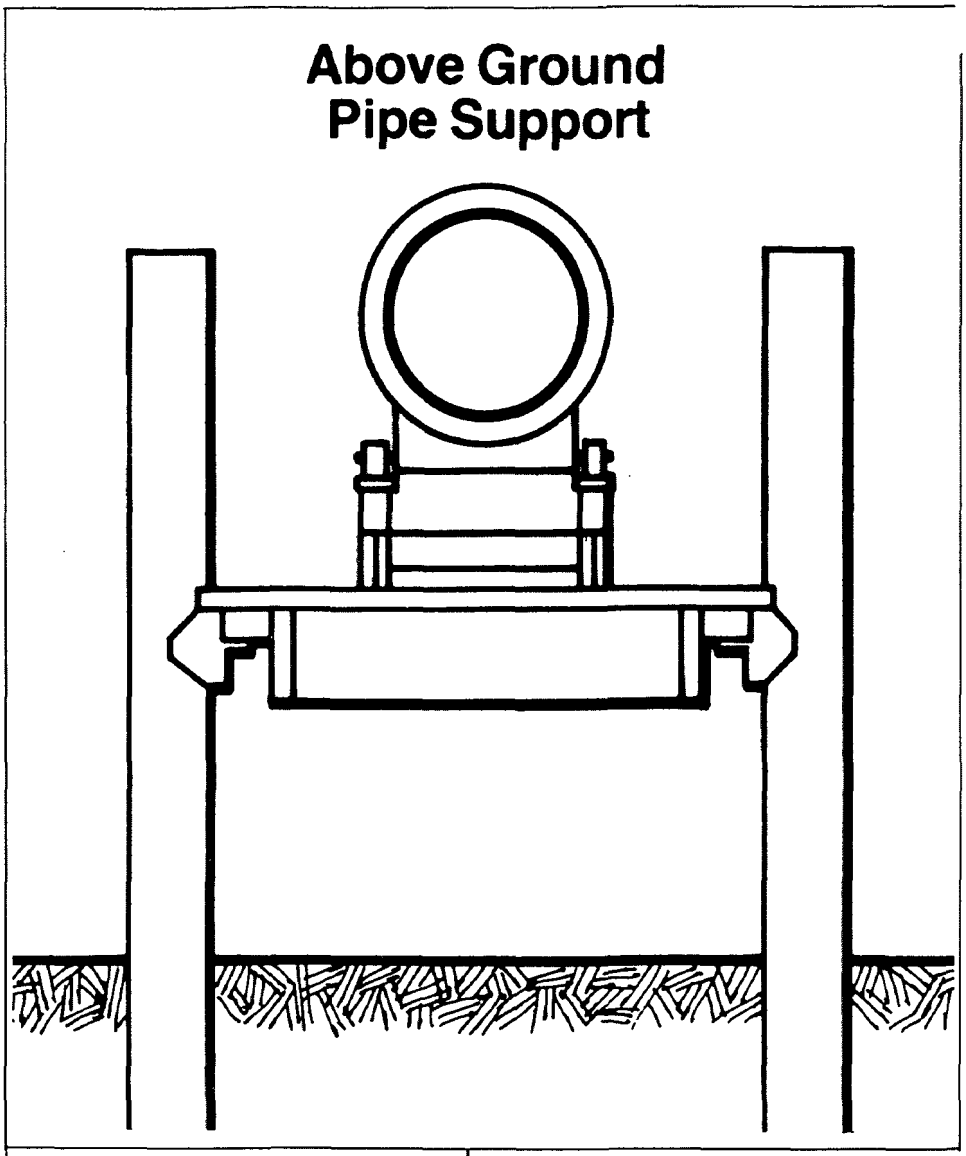
Some of the techniques being used to avoid damage to the fragile and unstable permafrost include:

All pipeline construction work is being carried out on a special protection pad of gravel built as much as five feet above the permafrost to avoid permanent damage to the land.

Some portions of the pipeline being constructed in unusually icy permafrost areas will be elevated.

The elevated portions will provide gateways to permit migrating caribou to pass through.

To compensate for the expansion of above-ground pipe caused by the warm oil, the line is being built in a flexible zigzag configuration which permits some sideways movement on the crossbeams of the elevated structures.



Approximately half of the Trans Alaska oil pipeline is being built above ground so that the 135-degree oil will not thaw the ice-rich perma-frost below the pipe. This insulated pipe is being installed on support platforms about 50 to 70 feet apart.

The pipeline is scheduled to start carrying oil in mid-1977. Initially it will carry 1.2 million barrels a day and this total will reach 2 million barrels a day at full capacity.

Meanwhile, EPA's Office of Federal Activities has been grappling with another major Alaska challenge—the Arctic Gas Project.

Buried beneath the North Slope along with the oil is a huge reservoir of natural gas. A consortium of American and Canadian firms called Arctic Gas wants to construct a natural gas pipeline from Northern Alaska, south across Canada along the MacKenzie River and then to energy-short markets throughout the U.S.

In commenting on the draft environmental impact statement prepared by the Department of the Interior for this gas pipeline, EPA's Office of Federal Activities concluded that the statement was "inadequate."

One of the causes of concern is that part of the pipeline would be built in the Arctic National Wildlife Range.

Meanwhile, another firm, El Paso Natural Gas Company, wants to build a natural gas pipeline across Alaska, alongside the oil pipeline. The gas would be liquified at Gravina Point and then shipped by tankers to California.

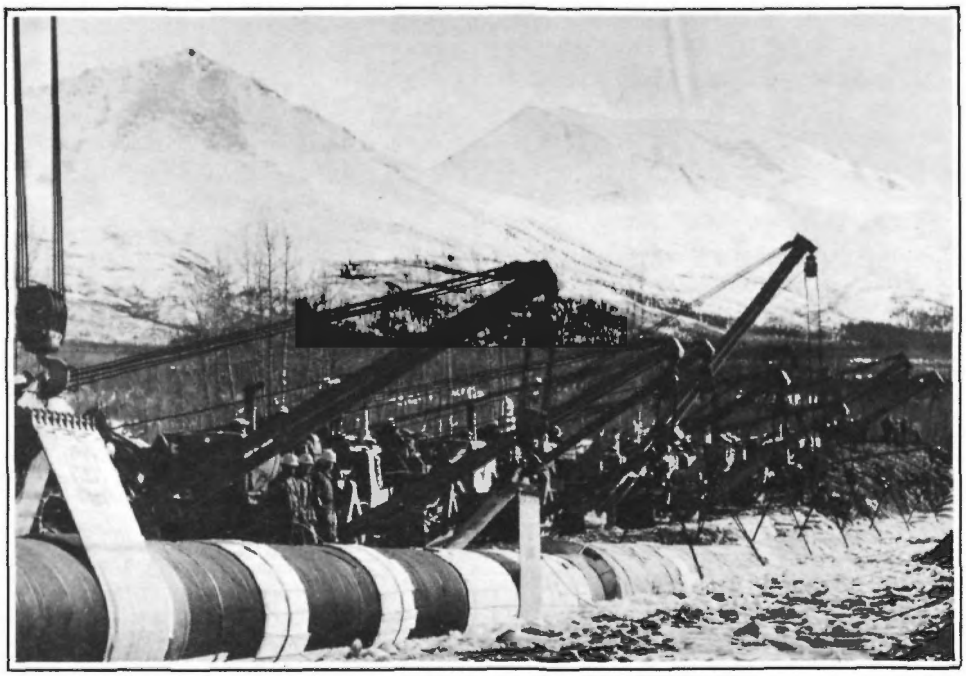
EPA will be called upon to comment on the environmental impact statement for this alternative gas pipeline route and also on plans for drilling for off-shore oil in the Gulf of Alaska.

Helping to protect the vast and awesome Alaskan empire has been and will continue to be one of the most significant challenges confronting EPA.□

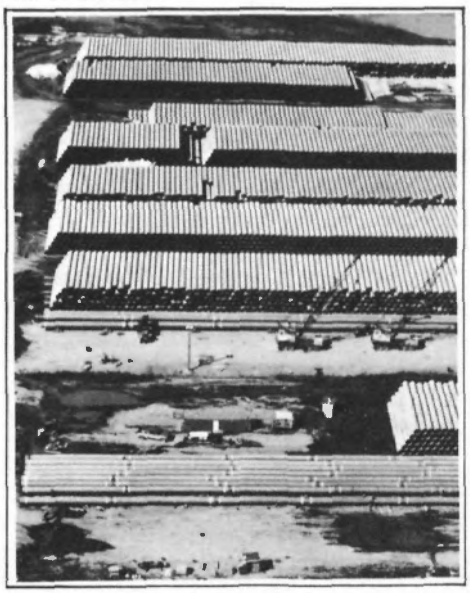
An 80-foot-long section of 48-inch-diameter pipe is unloaded from a truck trailer onto a railroad car at Valdez.

A Sikorsky Skycrane helicopter carries a 10-ton bulldozer to a work location atop the walls of Keystone Canyon, north of Valdez.

A barge loaded with sections of pipe is moored in Port Valdez awaiting high tide and a tug to tow it to Whittier, Alaska, where it will be unloaded.

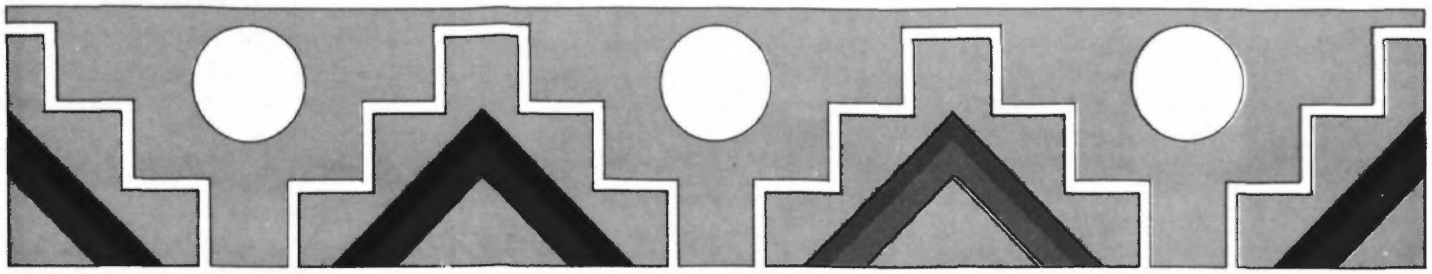


A section of the pipeline is lowered into the ground.



Much of the pipe seen at this storage location near Valdez has now been set in place along the pipeline route.

THE SACRED SOIL



An eloquent Indian leader, Chief Seattle of the Duwamish Tribe in the Northwest, said in a speech at a reception in 1854 for the first governor of the Washington Territory:

"Every part of this soil is sacred in the estimation of my people. Every hillside, every valley, every plain and grove has been hallowed by some sad or happy event in the days long vanished."

The love of the earth expressed by Chief Seattle in this moving statement is shared by many Indians today even though they may live on reservations.

Yet they are beset by environmental problems stemming from such sources as strip mines, power plants, sewage treatment works and irrigation farming.

Last March Administrator Russell E. Train launched an "Action Plan for Bettering EPA-Indian Cooperation" and designated the Office of Federal Activities to carry it out. A working group was named, representing all Headquarters operations, and liaison specialists were appointed in each of the 10 Regional Offices to improve communication and expedite action on Indian environmental projects.

David Schaller coordinates the work of these groups for the Office of Federal Activities. "This in-house network of communication," he said, "is a critical element in EPA's efforts to insure consistent and sensitive consideration of Indian interests."

A two-day conference with tribal representatives and Indian specialists in Denver last July was very valuable, Mr. Schaller said, in reviewing EPA-Indian relationships and identifying problem areas. Conferees included Ms. LaDonna Harris, a Comanche and active Indian leader; Charles Lohah, an Osage and attorney of Boulder, Colo.; and Leigh Price of the Institute for Development of Indian Law.

After the meeting Ms. Harris, who is president of Americans for Indian Opportunity, wrote Mr. Train: ". . . how great it is to have an agency . . . that says *how can* we do something rather than *why* we *can't* do it."

EPA, she wrote, "in taking seriously its trust responsibility to Indian people, can be of great value in helping the Indian community survive exploitations of resources, environment and, ultimately, culture."

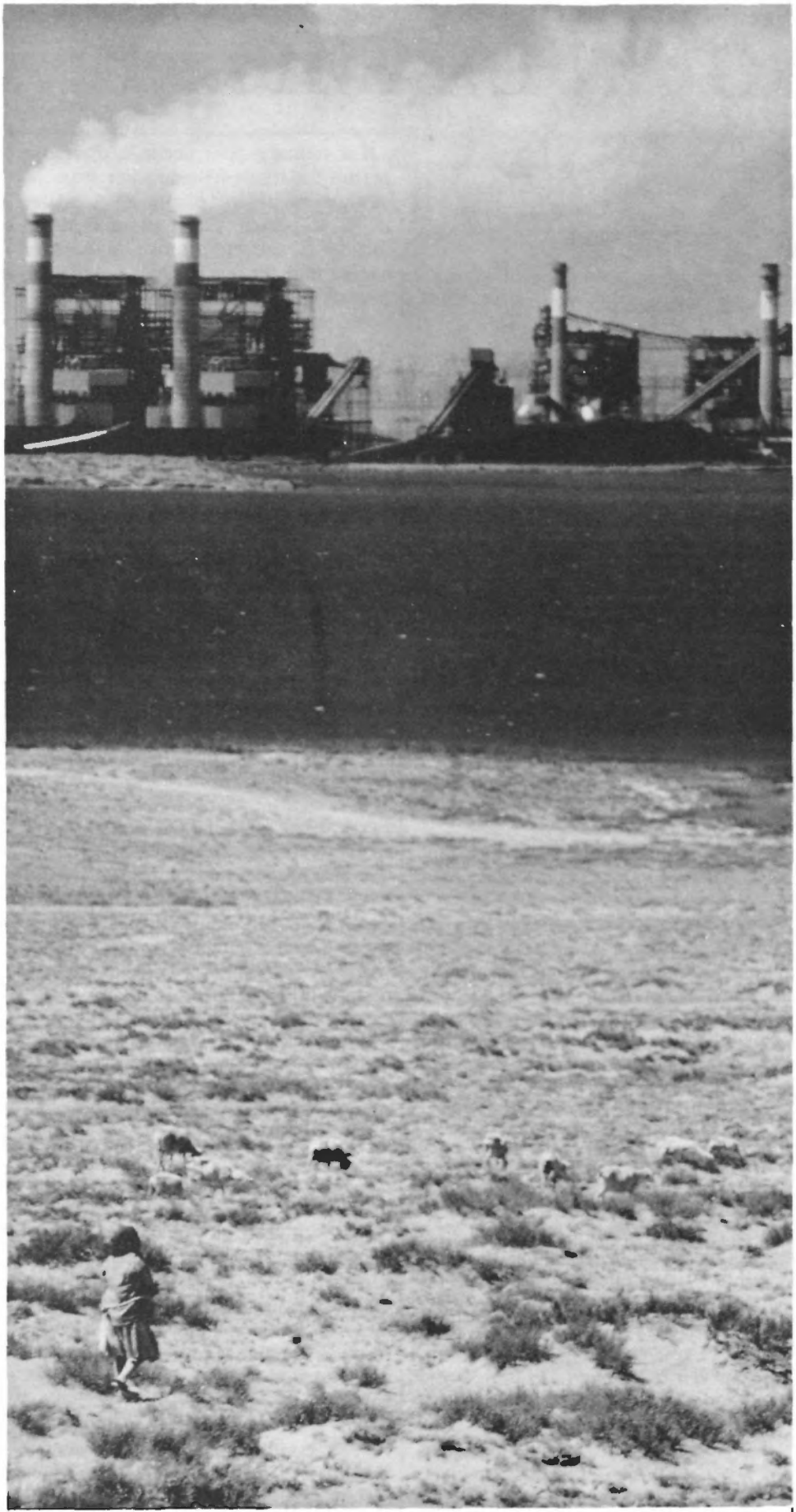
EPA Assistance

Indian tribes that have received EPA assistance range from the Penobscots in Maine to the Lummis in Washington State. More than $7 million in sewage treatment grants for 32 projects have been awarded to tribal organizations, the largest—$1.5 million—to the Navajo Tribal Utility Authority in Arizona in May last year.

The Navajos are the largest Indian group and they have environmental problems to match. Their lands cover three-quarters of the Four Corners area where Colorado, Utah, Arizona, and New Mexico meet (the Colorado sector belongs to the Utes). Navajo lands are being strip-mined for coal, which is burned in huge power plants also on Indian lands. The Navajo Environmental Protection Commission, headed by Dr. Harold Tso, a nuclear chemist, is concerned about controlling air pollution from the power plants and reclaiming and restoring the strip-mined soil.

The Navajo reservation lies in three States and three Federal regions. This has caused some confusion for tribal environmentalists.

Indians' concern over pollution has brought some ancient tribal rivals together, Mr. Schaller pointed out. The Crows and the Northern Cheyennes have united in their dealings with EPA's Region VIII. They are working together trying to renegotiate coal leases made as long as 20 years ago. The long dormant leases now being exercised yield the tribal land owners only pennies per ton, not nearly enough to provide environmental protection. The Crow-Cheyenne alliance also seeks to have the Clean Air Act amended to recognize Indian tribal governments as it does States.



Separated here only by a narrow strip of water, the Four Corners Power Plant and a Navajo sheepherder represent two different worlds.

Relationships

In addition to expediting financial and technical assistance to Indian tribes, EPA's working group and regional liaison specialists seek to untangle the complex relationships between Indian tribes and the States. There are more than 120 recognized tribes and tribal councils, many of which have special legal status, said Mr. Schaller. There are also hundreds of Federal laws regarding Indians, nearly 400 different treaties, and more than 2,000 court decisions.

Getting Federal assistance for environmental programs on Indian lands can sometimes pose special questions for EPA such as:

- Is an Indian tribe a "ward" of the Federal Government under the Interior Department's Bureau of Indian Affairs?
- Is it a separate, sovereign Nation, as many tribes claim, citing treaties dating to colonial times?
- Is a tribal group in a certain State obliged to follow that State's regulations and procedures?
- What about tribes whose lands lie in two or more States, or in more than one Federal region?

"EPA must take care to acknowledge these complex relationships in its regulations and policies," Mr. Schaller said. "This is especially important whenever the Agency proposes to allow the States to assume control over environmental programs previously administered by EPA."

In any case, the Indian presence will be difficult to forget. Chief Seattle in the same speech quoted at the beginning of this article asserted that the shadowy spirits of departed Indians will always be present:

"At night when the streets of your cities and villages are silent and you think them deserted, they will throng with the returning hosts that once filled them and still love this beautiful land. The white man will never be alone."□

SETTING AN EXAMPLE

"Our government is the potent, the omnipresent teacher. For good or ill, it teaches the whole people by its example."
—Justice Louis Brandeis

Eglin Air Force Base in northwestern Florida used to pour 1.8 million gallons of sewage effluent into Choctawhatchee Bay every day.

Now this discharge which was polluting the bay has been halted, the wastewater is given a high degree of treatment and then sprayed on woods and fields at the huge base.

In addition to reducing algal growth in the Bay, the spraying helps to replenish groundwater.

This project helped Eglin win a Defense Department annual award for the best environmental program at a military facility.

In Washington, D.C., the burning of dirty old money will soon no longer pollute the air because the Bureau of Engraving and Printing is installing a smoke-free incinerator for burning currency retired from circulation.

These are only two cases of Uncle Sam setting a good environmental example.

EPA's Office of Federal Activities, which is responsible for monitoring such things, estimates that U.S. facility compliance is keeping up with or is ahead of the private sector.

"Most of the major Federal pollution sources are either in full compliance with EPA air and water standards or they have agreed to definite timetables for achieving compliance," said Rebecca Hanmer, Acting Director of the Office of Federal Activities. "Our remaining problems are generally with the minor Federal sources."

As of June 30, 1975, 4,719 pollution control projects at Federal facilities had been completed in the past eight years at a cost of $842 million. This is divided into $593 million for 3,244 water projects and $249 million for 1,475 air projects.

There are more than 20,000 Federal facilities scattered throughout the country. They include electric power stations, industrial plants, military bases, naval ships and dockyards, aircraft and airfields, laboratories, hospitals, parks, and office buildings. One-third of the Nation's land area is federally owned. How all these properties are managed has a significant bearing on environmental quality.

Treated sewage is sprayed onto wooded area at Eglin Air Force Base to avoid polluting a nearby bay used for recreation.

The Federal facilities clean-up program is being carried out under Executive Order 11752. The Order reiterates the national policy that Federal agencies should lead the way in pollution abatement and directs EPA to oversee Federal compliance.

Under the Executive Order, EPA is responsible for:

- Issuing regulations and guidelines for Federal compliance,
- Reviewing compliance,
- Providing liaison and mediating conflicts between Federal agencies and State and local agencies, and
- Providing technical advice and assistance to Federal agencies.

Procedures are being developed by the various program offices in conjunction with the Office of Federal Activities to assess Federal facility compliance with solid waste disposal guidelines, regulations governing pesticides and radioactivity and noise standards.

Executive Order 11752 was designed to provide a means of assuring that Federal facilities comply fully with Federal environmental laws. This includes such environmental authorities as the Clean Air Act; the Federal Water Pollution Control Act; the Solid Waste Disposal Act; the Noise Control Act; the Marine Protection, Research, and Sanctuaries Act and the Federal Insecticide, Fungicide, and Rodenticide Act.

The Order requires all U.S. agencies to give EPA the information needed to determine compliance and to cooperate with State and local agencies. EPA sets the guidelines for monitoring and reporting.

If a military post needs a discharge permit for treated wastewater from its sewage treatment plant, EPA issues it. If a power plant at a Federal facility is spewing smoke and sulfur oxides into the air, EPA has power to inspect the plant, determine the violations, and negotiate abatement agreements to bring it into compliance.

The Agency has another tool to help bring Federal agencies into compliance: the budget process. Each year it reviews and evaluates all spending proposals for pollution control and advises the Office of Management and Budget as to which ones should have priority. The Agency also recommends the inclusion of necessary projects that have been omitted from the first budget requests. Such projects are identified by Regional Office inspection visits, review of discharge permit applications, or contacts with State and local environmental agencies.

A number of jurisdictional issues have recently been raised in the courts and Congress. Many have argued that Federal agencies should comply with all State requirements, both substantive and procedural. Under the Executive Order, EPA establishes the procedural requirements through which the Federal agencies must comply with Federal, State, and local substantive pollution control standards. Several States have challenged in court this interpretation of substantive versus procedural compliance.

But the legal questions are still not settled. Three recent Court of Appeal cases have reached differing conclusions on jurisdictional disputes between Federal and State Governments.

The Supreme Court has agreed to hear appeals in two of these cases. Meanwhile, Congress may make moot any decision on air pollution enforcement by amending the Clean Air Act to make clear that Federal sources are to be treated like any others and must conform to State procedures.

This issue has not detracted from EPA's continuing efforts to oversee Federal facilities' compliance with pollution abatement requirements and most Federal agencies are moving forward with good environmental programs.□

EPA OPENS NEW DOORS

Together with the Department of Labor, EPA is sponsoring a novel pilot project that trains welfare clients for employment in environmental services.

Prime beneficiaries of the program so far have been mothers with dependent children, who are on welfare and enrolled in the federal Work Incentive Program. After training, these people many of whom have never worked outside their homes before, are employed by State, local, quasi-public and non-profit agencies in pollution control and abatement facilities.

The project is directed by EPA's Education and Manpower Planning Staff, Office of Federal Activities. They are responsible for finding environmental job opportunities, providing training, both in the class-room and on-the-job, placing people in jobs and then checking on their progress. Funding—about $1 million annually—is provided by the Labor Department.

Ms. Gladys Harris, EPA's national coordinator for the program, said that the project has been successful in upgrading employment for women, particularly black women in the South.

In South Carolina, she reported, 116 black women now are employed in environmental jobs, many of them in fields traditionally dominated by men.

In Anderson, S.C., for example, two three-women teams have been employed as trash collection crews; the towns of Cayce and Sumter now have their first women water meter readers and in Florence a woman drives a city sanitation truck.

Encouraging results have been reported from the Connecticut program as well. Five training classes have been given there, and all 76 trainees, 64 women and 12 men, have been placed in environmental service jobs.

In other parts of the country, Ms. Harris said, women are being recruited, trained and placed in jobs in park and recreational area maintenance, pesticide application, vehicle operation, fish hatcheries, laboratories and waste water treatment plant operations. All workers under the program are paid at least at the Federal minimum wage level and in some instances considerably more.

Carol Turc, graduated from an EPA/WIN program as an apprentice wastewater/water plant operator in May, 1974, and went to the Anne Arundel County, Md., plant for work and further training. She is now a certified wastewater plant operator, and soon will be in charge of the water testing laboratory at the Maryland House of Corrections in Jessup, Md. In the photograph above she is preparing a water sample. Ms. Turc is 30 and the mother of three children.

Some comments from participants in the program follow:

Marilyn Preston, training to be an operator at the Broadneck Wastewater Plant in Anne Arundel County, Md., and who plans to take further licensing tests to qualify for advancement:

"I found something I think I am capable of doing and enjoy it. I want to send my three children to college. You may not be a supervisor for 20 years, but you can keep on advancing. If you take the tests and pass them, your salary increases."

Lynda Morrison, a pesticides applicator in the Fort Worth/Dallas area:

"I like the independence the job provides and I like the pay. I like meeting people and talking to them."

Sergio Zampa, wastewater treatment operator at Pautuxent, Md., whose long-range goal is to become a Senior Plant Operator:

"I like the outside work and more important it means security. When I see something to be done, I go out and do it myself."

Although training in specific skills is the core of the program, the Work Incentive Program recognizes that special services are needed for people who are leaving the welfare rolls for the first time.

Caseworkers provide personal counseling and help in providing services such as funding transportation and day care for children.

The program is underway in seven States with these State agencies:

Colorado—Denver Regional Council of Governments.

Connecticut—State Department of Environmental Protection.

Louisiana—State Department of Education.

Maryland—State Department of Natural Resources.

Montana—State Department of Health and Environmental Sciences.

South Carolina—State Board for Technical and Comprehensive Education.

Texas—North Central Texas Council of Governments.

As of the end of October, a total of 717 people had been placed in environmentally related jobs and an additional 800 job openings were located. Ms. Patricia Powers, national training officer for the program, says that she is optimistic about the future and believes an increasing number of States will use the program as an answer to the critical need for trained workers in the environmental services field. □

CLEAN RIVERS FOR WHOM?

The massive cleanup of America's waterways now underway must be accompanied by prompt planning to ensure that the recreational benefits of clean waters are available to the working man and his family.

Administrator Russell E. Train made this point at a recent Conference on Water Cleanup and the Land held in Boston.

The conference launched a joint effort by EPA and the Department of the Interior to assist State and local Governments and private citizens in obtaining a good return from the nearly $18 billion being invested by the Federal Government in wastewater treatment plants.

Mr. Train told the conference that this massive Federal program "will raise property values along those shorelines downstream from treatment plants. When a polluted river becomes clean enough for fishing and boating and swimming, it attracts people and land development."

The Administrator emphasized that "the public has a right to share more fully in these enhanced values, particularly in the case of cleaner rivers, since it has been tax dollars—public dollars—that made possible the transformation of a body of water from an environmental liability to a source of recreation and aesthetic beauty.

"This conference is particularly concerned with assuring public access and public use of shorelands along cleaned-up waterways, either downstream from the treatment plant or even right at the plant itself."

Mr. Train predicted that unless sound planning precedes the development of cleaned-up shorelines, the result will be a zoning disaster.

"I am sure that you all have seen the kind of problem I am talking about: the shabby hot dog stand here and the gas station there, the noisy and littered and commercialized beaches, the landscape disfigured by billboards, the monopolized stretches of shorelines with their 'No Trespassing' signs and the whole region a victim of the speculator's quick-profit, build-it-and-get-out philosophy.

"We have seen all too often that rural slums can emerge like a cancer around artificial lakes when developers lack the foresight or the public spirit to set aside open spaces and build proper access roads. As Thoreau once said 'What is the use of a house if you haven't got a tolerable planet to put it on?' "

One of the activities for those attending the Water Cleaup and the Land Conference in Boston was a field trip to see river site conditions. Observing a Nashua River setting from a mill embankment are two EPA officials (right foreground) Shelley M. Mark, Director of the Office of Land Use Coordination, and Patricia L. Cahn, Director of the Public Affairs Office.

Action to ensure public access to the restored waterways is essential not for "a handful of special interest groups, but (for) the ordinary working man and his family who want and need recreation areas, particularly recreation areas that are close to home, and whose tax dollars already are invested in clean rivers."

Mr. Train recalled that in a celebrated court decision, Supreme Court Justice Oliver Wendell Holmes once wrote, "A river is more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it."

Mr. Train told the conference that there are several sections of the Federal Water Pollution Control Act of 1972 which can be used to help secure full value on funds invested in water cleanup.

"First," he said, "is Section 201 which states that the EPA Administrator 'shall encourage waste treatment management which combines open space and recreation considerations with such management.'

"Next is Section 208 which authorizes the Administrator to provide technical assistance in development of areawide waste treatment management plans. And Section 303 also provides authority for intergovernmental cooperation with respect to the planning process."

The Administrator said that studies and recommendations on water-related recreation opportunities may be carried on under both Section 201 and 208. Section 201, he noted, provides opportunities, in a series of steps, for coordinating the project layout, engineering design, and construction scheduling of a treatment plant with considerations for recreation and open space.

Sixteen regional planning agencies or councils of government in New Eng-

Swinging out on a rope over the Squannacook River, this boy is about to plunge into one of the favorite swimming spots on this scenic Massachusetts river near Boston.

THE PROMISE OF AMERICA'S RIVERS

The delights of swimming and fishing in clean river waters are seen in these photographs. With the aid of a $18 billion Federal investment in wastewater treatment, many waterways are being transformed from an environmental liability to a source of recreation and beauty. Efforts are now being made to protect the public's right to share more fully in the benefits of the cleaner rivers provided by tax dollars.

land have now initiated Section 208 areawide plans, and these plans should identify specific recreation use opportunities and coordinate access and shoreland protection needed to support proposed water uses, he said.

"Within the Bureau of Outdoor Recreation, the Land and Water Conservation Fund finances acquisition of lands for Federally administered recreation areas and provides matching grants to States for recreation planning, acquisition and development.

"The Bureau assists States in developing comprehensive outdoor recreation plans required for States or localities to participate in the Fund grant program, and also provides technical assistance to State and local agencies for their outdoor recreational programs."

In addition, Mr. Train noted, the U.S. Department of Housing and Urban Development under Section 701 of the Housing and Community Act of 1974 provides comprehensive planning grants to States for regional and local activities.

"These planning grants," he said, "are concerned with the pattern and intensity of land use. As I announced earlier this year, EPA has an agreement with HUD on coordination of the land use-related provisions of our Section 208 and the HUD 701 grant programs."

So, Mr. Train emphasized, there is legal authority available for Federal participation with State and local agencies in the planning process to ensure public benefit from cleaner rivers.□

Fishing in the Androscoggin River, in Maine.

Fishing boats dot the Willamette River south of Portland, Oreg. Massive pollution control efforts have helped to restore this waterway for recreation.

These youngsters are floating on inner tubes down the Chattahoochee River near Helen, Ga.

HONORS CEREMONY HELD ON FIFTH ANNIVERSARY

Regional Administrators awarded special fifth anniversary plaques by Administrator Train are (from left): John A. S. McGlennon, Region I; Gerald M. Hansler, Region II; Daniel J. Snyder, III; Jack E. Ravan, Region IV; Deputy Regional Administrator Valdas V. Adamkus, Region V; Administrator Train, John C. White, Region VI; Jerome H. Svore, Region VII; John A. Green, Region VIII; Paul DeFalco Jr., Region IX; and Clifford V. Smith Jr., Region X.

"We celebrate our anniversary with every reason for pride in our accomplishments, our own ability, and the importance of our work," Administrator Russell E. Train told a convocation of EPA employees in Washington on Dec. 2, exactly five years after the founding of the Agency.

"At the same time we know that the greatest challenges still lie before us. The job of environmental protection has just begun."

About 800 employees and members of their families met in the Departmental Auditorium on Constitution Avenue for EPA's Fifth Annual Awards ceremony, at which 22 individuals and five groups including 51 persons were honored for their outstanding work during 1975. (Award winners' names were published in last month's issue of the EPA Journal.)

The people of EPA, Mr. Train said, "can take great pride in the fact that we are—with all our faults and failings—what we have always said we were: a government of laws and not of men and women merely.

"Yet . . . the essential worth and workability of our laws . . . are determined . . . by the character and competence of the men and women who administer those laws. Because each of you has given so much . . . commitment and plain hard work, there has been steady and solid progress . . ." toward the goal of "creating a cleaner and healthier environment for all Americans."

Mr. Train acknowledged hearing the suggestion that the Agency's greatest recent accomplishment has been to survive, with its environmental programs, "at a time of serious economic and energy difficulties."

"This may have an element of truth in it," he said, "but the fact is that, despite strong counterforces at work, EPA has not merely survived but has survived with strength. We have displayed continuing and growing vitality as an institution, while at the same time achieving very real progress in meeting environmental goals."

He said EPA will continue the efforts already under way to improve its effectiveness by:

- Seeking to minimize the social and economic impacts of regulations and enforcement. "We have the most open and rigorous process of economic impact analysis in the entire Federal Government."
- Simplifying and streamlining EPA regulations. "Our success will be measured by how clean the air and water become, not by the quantity and complexity of our regulations, and we are therefore committed to a continuing program of regulatory review."
- Setting standards and deadlines that force polluters to take action and force the development of new control technology. "The disadvantages of a certain amount of non-attainment on schedule . . . are far outweighed by the advantages (of forced development)."
- Strengthening the participation of States, local governments, and other public groups in developing and carrying out EPA regulations.

"We need to strengthen the role of our regions . . . and this means de-emphasizing the role of EPA headquarters where we can."

Special guest at the convocation was William D. Ruckelshaus, the first Administrator of EPA, who received a standing ovation when he was introduced by Mr. Train.

The two-and-a-half years as head of EPA were the most exciting years of his life, Mr. Ruckelshaus said. He congratulated EPA employees on their good work. "Now, as a private citizen," he concluded, "I want to say 'Thank you.' "

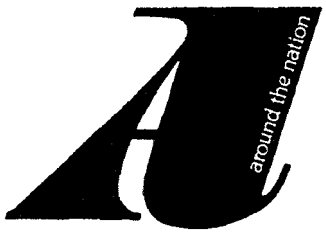
Mr. Train presented the Gold Medals for Exceptional Service and Silver Medals for Superior Service to the various recipients. Their names were called and citations read by their superiors in Headquarters offices or by Regional Administrators. These officials included Alvin L. Alm, Assistant Administrator for Planning and Management; Dr. Andrew Breidenbach, Acting Assistant Administrator for Water and Hazardous Materials; Patricia Cahn, Director, Office of Public Affairs; Carl Gerber, Associate Assistant Administrator for Research and Development; Rebecca Hanmer, Acting Director, Office of Federal Activities; Fitzhugh Green, Associate Administrator, Office of International Activities; Roger Strelow, Assistant Administrator for Air and Waste Management; and five Regional Administrators: John A. S. McGlennon, Region I; Gerald M. Hansler, Region II; Jerome H. Svore, Region VII; John A. Green, Region VIII; and Clifford V. Smith, Region X.

William D. Ruckelshaus, EPA's first Administrator, addresses Agency employees after receiving a standing ovation.

Deputy Administrator John R. Quarles Jr. assisted in the presentation of the Youth Awards. Rupert Moray, Executive Officer of the U.S. Public Health Service, made the presentations of PHS Meritorious Service Medals to three officers assigned to EPA.

At the conclusion of the ceremony, fifth anniversary plaques were given by Mr. Train to each of the 10 Regional Administrators in recognition of regional employees' contributions to the Agency's work during the last five years.

Mr. Alm announced that all employees who have been with EPA since its founding—about 3,500 persons—will be given personal certificates of appreciation, suitable for framing and signed by Mr. Ruckelshaus and Mr. Train.□



paper mills cited

Two paper mills in Maine have been ordered by EPA to reduce their air pollution. Great Northern Paper Co., Millinocket, and International Paper Co., Jay, were found to be operating in violation of emissions regulations for particulates. Both companies had been granted variances by the Maine Board of Environmental Protection. However, this variance does not protect the company from Federal enforcement action.
Regional Administrator John McGlennon said that the two orders place the companies under compliance schedules similar to those contained in the two State variances. The enforcement actions were taken in accordance with EPA's policy of initiating Federal action against major sources of air pollution which were not in compliance with all applicable State and Federal requirements by June 1, 1975.

birthday awards

Marking EPA's fifth anniversary, Region II recently presented special awards to 18 persons active in local government, civic groups, education, business, and journalism for their work in environmental causes. An additional 110 persons received certificates of appreciation.

permit authority

New York State has been granted authority to take over the issuance and enforcement of wastewater discharge permits, the 27th State to do so.

pesticide fines

Nearly $5,000 in fines for pesticide law violations have been paid by five Region II firms: American Cyanamid, Princeton, N.J., $3,080; Hollowick, Inc., Manlius, N.Y., $950; Long Island Paint and Chemical Co., Glen Cove, N.Y., $720; and Brewer Chemical, Trenton, N.J., $200.

philadelphia sewage

Region III has ordered the City of Philadelphia to prepare detailed schedules for expanding and upgrading three big sewage treatment plants. The work is expected to cost $400 million (with 75 percent Federal funds) and boost treatment plant efficiencies to 85 percent removal. The city must submit completed plans for the Southwest plant Dec. 31, 1975, and for the Northeast and Southeast plants at three-month intervals thereafter.

scrubber agreement

The Louisville Gas and Electric Co., Louisville, Ky., has agreed to install "scrubbers" on five large electric power generating plants, Regional Administrator Jack E. Ravan announced recently.
It is the first contractual agreement by an electric utility with EPA to install such equipment on an essentially systemwide basis, Mr. Ravan said. It indicated the growing acceptance of flue gas desulfurization systems by the industry.
These systems, commonly called scrubbers, remove sulfur oxides from the stack gases of power plants to reduce air pollution.
Mr. Ravan said the agreement includes a timetable for putting the scrubbers in operation, with the last one to be installed and working by July 1979.

states take over

Three southeastern States—Georgia, South Carolina, and Mississippi—have won EPA approval for certifying private and commercial applicators of restricted-use pesticides.
Regional Administrator Jack E. Ravan said he expected that Florida and North Carolina would also win such sanction before the end of 1975.
"These actions give me great satisfaction," Mr. Ravan said. "Certification is a positive benefit to farmers, ranchers, consumers, and others, because it insures the competence of persons using the more hazardous pesticides." After Oct. 21 of this year only certified applicators will be legally entitled to buy or handle pesticides not rated for general use.

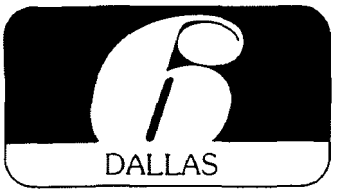
$80,000 in penalties

Two civil penalties totalling $80,000 were levied recently for violations of a water discharge permit at a chlorine-alkali plant in Ahstabula,Ohio. Under the settlements concluded in the U.S. District Court, Detrex Chemical Industries, Inc., former owner of the plant, paid $55,000 and Sobin Chemicals, Inc., the present owner paid $25,000. The fines were among the highest ever imposed for permit violations.
The suits charged that chlorine, suspended solids, and mercury in excess of amounts allowed in the permit were poured into a stream that flows into Lake Erie. The discharge also exceeded limits for acidity.
The Sobin firm has begun a construction program to achieve compliance with the permit.

fishing imperiled

Present limits on dissolved oxygen for wastewater discharge permits on the Fox River and Green Bay, Wisconsin, are inadequate to maintain fish and wildlife, according to a recent study by the Wisconsin Department of Natural Resources.
The most critical oxygen conditions occur in the River in the summer months, when stream flow is low, and in the Bay from January to early April, when ice cover prevents reaeration, the study said. The study proposed that discharge permits on the river be re-

duced by 37 percent from present levels of biological oxygen demand and suspended solids. "Best practicable treatment" standards were recommended for all discharge points near the Bay.



hearings, conferences

Region VI has been concentrating recently on public hearings and training conferences on environmental problems.

"Town meetings" were held in Houston Dec. 9 and Oklahoma City Dec. 11.

The Public Affairs Office enlisted two pro football stars, Cliff Harris of the Dallas Cowboys and Fred Hoaglin of the Houston Oilers, to spur public interest in a series of air pollution hearings in Texas. Their spot announcements were sent to all TV and radio stations in the Dallas-Ft. Worth and Houston areas.

A seminar on public participation in area-wide wastewater treatment planning was held in the Regional Office Nov. 25. A technical seminar on the same subject was held Nov. 6 and 7, cosponsored by the University of Texas at Dallas.

The first of five regional training sessions on the Safe Drinking Water Act was held Dec. 10 in Albuquerque, N.M., in conjunction with New Mexico State University.

Six regional training sessions on construction grants, environmental assessments, and infiltration—inflow surveys are scheduled to start this month in Dallas.

orientation workshops

More than 500 representatives of local governments attended two Federal Orientation Workshops for Public Officials held at Cornell College, Mount Vernon, Iowa, Nov. 21 and Simpson College, Indianola, Iowa, Nov. 22.

teachers visit lab

EPA's Region VII Laboratory at Kansas City, Kansas, was visited by more than 200 science teachers from the metropolitan Kansas City area during the first week in December. The EPA birthday week celebration ended with an open house at the Regional Office Dec. 5, when awards were presented to winners of a poem and essay contest and a poster contest for children of EPA employees.

joint planning

Environmental town meetings in Region VIII—about six in each State—are being planned jointly by EPA officials and regional municipal organizations.

Leaders of such groups from Colorado, Montana, North and South Dakota, and Wyoming met recently with Regional Administrator John Green and his staff. Planning and promotion of the meetings will fall largely to municipal leagues, with the Regional Office providing staff members to hear public suggestions and answer questions about EPA's programs.

The effect of energy development on the Region's many small cities and towns is expected to be the issue of greatest concern.

smelter emissions

Arizona's plans and regulations to control sulfur oxide emissions from copper smelters have been disapproved because they did not require permanent controls and were not specific as to how national standards would be met. Next step is proposal by EPA of regulations to meet both primary and secondary standards, and further public hearings.

california water

A U.S. District Court decision that California has "no right to impose conditions when answering Federal requests for water to serve reclamation needs" is creating quite a stir. State officials fear Federal control over California's water supply. However, the decision has strengthened intrastate opposition to the proposed "peripheral canal" for bringing water from northern to southern California. The canal, which would be built largely with Federal funds, would divert water from the Sacramento-San Joaquin Delta. Citizen concern has been expressed that the diversion could change the Delta into a salt marsh. The San Francisco Chronicle said: "In dry years, the canal would leave the life of the rich Delta in the hands of Federal officials who may not understand its problems, or even care."

common sense

Those who seek to conserve energy resources are not prophets of shortage but prophets of common sense, said Regional Administrator Clifford V. Smith in a recent speech at Vancouver, B.C. "What is pollution but a waste of natural resources," he said, calling it ". . . both environmental and economic sense to make conservation of energy and the reduction or recovery of waste a matter of highest priority."

sulfur limit set

The Bunker Hill Co. will have to cut sulfur oxide emissions at its lead and zinc smelters at Kellogg, Idaho, to no more than 680 tons in any seven-day period under new rules laid down by EPA. Idaho regulations had set the limit at 1,200 tons.

The company has until July 31, 1977, to comply.

EPA determined that techniques are available to meet the stricter limit, which would require the company to spend $830,000 in capital expense and $550,000 in annual operations in addition to the spending to meet the State-proposed level.

EPA estimates that Bunker Hill is responsible for 99.8 percent of all sulfur oxide emissions in the Kellogg area.

PEOPLEPEOPLEPEOPLE

Felisa M. Ruiz

Leslie Carothers

Felisa M. Ruiz, grants clerk in the Region VII office, recently received two awards for her volunteer work to improve the economic and social life of the Spanish-speaking community in Kansas City, Mo.:

A bronze medal and citation from the Heart of America Chapter, Federally Employed Women, Inc.

An award from EPA's International Women's Year Conference in Seattle, Wash.

Ms. Ruiz has been an active volunteer working to help the Spanish-speaking community in Kansas City, Mo., for the past nine years.

Leslie Carothers has been named Director of Region I's Enforcement Division by Regional Administrator John A. S. McGlennon and will assume her new duties in the Boston Office this month.

Ms. Carothers, 33, has been an attorney in the General Counsel's Office, Air Quality, Noise, and Radiation Division, for the last two years. She had previously served for two and a half years as a branch chief in the Mobile Source Enforcement Division. Before joining EPA in July, 1971, she had been a legislative assistant to Congressman Gilbert Gude of Maryland and clerk to Judge Henry Edgerton of the Federal Court of Appeals for the District of Columbia.

Ms. Carothers was graduated, summa cum laude, from Smith College in 1964 and from Harvard Law School in 1967.

A plan developed by **Louis A. Bevilacqua** and **Ernest J. Schmalz** of Region II's Pesticides Branch helped to alleviate an outbreak of typhus in Guatemala and saved the U.S. taxpayer money as well.

In mid-July 1975, a pesticide enforcement inspection found nearly 13 tons of DDT dusting powder in a New York City store. EPA issued a stop-sale-and-use-order.

The store agreed to surrender the DDT, which has been banned for most domestic uses, to EPA for safe disposal. Ordinarily, EPA would have shipped the banned chemical to a laboratory in Buffalo for high temperature incineration. Estimated cost of such disposal was $11,000.

Stanley Fenichel, Chief of the Region's Pesticides Branch credits his two colleagues, Bevilacqua and Schmalz, with the idea of shipping the confiscated DDT to Guatemala where it could be beneficially used to combat a typhus epidemic. According to Fenichel, "After many phone calls, we were finally able to arrange things with the Guatemalan Government through the Pan American Health Organization. DDT is perfectly legal in Guatemala, and they were happy to get it from us."

The DDT was sent to Guatemala at a shipping cost of about $1,500; a saving of almost $10,000 to this country. Regional Administrator Gerald M. Hansler has commended Bevilacqua and Schmalz and they have been nominated for special awards.

Mr. Hansler explained that while DDT has been banned by EPA for most uses, it can be used in emergency situations where there is no suitable substitute. DDT is considered by health authorities to be an effective and inexpensive insecticide for typhus control.

Vivian Malone Jones

Dave Hopkins

Vivian Malone Jones, Director of the Civil Rights and Urban Affairs Office in EPA's Atlanta regional office, has been interviewed by CBS-TV.

The interview by Dan Rather on the general area of progress in civil rights in the South is expected to be used sometime in January on the Sixty Minutes program.

Ms. Jones entered the University of Alabama in 1963 despite Gov. Wallace's "stand in the schoolhouse door," and became the university's first black graduate.

The EPA official, who joined the Agency in 1971, has received numerous awards and citations for her pioneering efforts in desegregating the university system in Alabama.

Dave Hopkins, an official in EPA's Region IV Office in Atlanta, has accepted a one-year assignment in Sao Paulo, Brazil, which was described in a recent national television documentary as "the world's most polluted city."

Mr. Hopkins will be leaving his present job as chief of the regional Environmental Impact Statement Office to go to the South American city under a loan agreement with the Pan American Health Association.

The 36-year-old EPA official has served with EPA since it was formed. His wife, Dora, is a native of Sao Paulo, a highly industrialized city with a population of seven million people.

REGION 1 ON PARADE

New England, a birthplace of the American Revolution and the site where industry first helped the Nation become a leading manufacturer, is placing increasing emphasis on protecting and enhancing its environment.

This concern for the Region's natural setting is prompted, in part, by booming tourism, a $3 billion-a-year industry in the six New England States which comprise EPA's Region I. The visitors are attracted to the Region's lovely river valleys, green mountains and ocean beaches.

New England has a population of 12 million in 63,000 square miles, or about six percent of the Nation's people in two percent of its land.

More than three-fourths of the people live in 26 metropolitan areas, so the Region is primarily urban, although large parts of Maine, New Hampshire, and Vermont are rural, dotted with forests, farms, and small towns.

The Region includes eight percent of the Nation's manufacturing plants (factory wages account for 40 percent of worker income, compared to the national 30 percent), and 10 percent of its metal working plants, with their complex waste treatment problems.

The first annual Regional Administrator's Report on Environmental Quality in New England, recently issued, describes the status of air and water quality, drinking water supply, and solid waste management in the six States.

Good News and Bad

The report tells the good news and the bad. It shows progress in abating pollution but also points out the shortcomings and the needs for further cleanup.

In air pollution, the good news is a significant drop in sulfur oxide levels throughout the Region. Both primary and secondary standards for sulfur oxides are being met, thanks to low-

sulfur fuel regulations generally adopted in this Region.

The bad news in air pollution is the growing problem of photochemical oxidants. The oxidant primary standard (160 micrograms per cubic meter for one hour) is being repeatedly violated at every one of the 30 monitoring stations in five States. Maine doesn't yet monitor for oxidants. Some stations have had levels six and seven times the standard, and in Fall River, Mass., there were 526 violations over an eight-month period.

Last summer a research study to determine if oxidants in New England's air came from outside the Region clearly showed there is a transport of this kind of pollution from one section of the country to another.

With this in mind Region I helped sponsor a meeting with officials from 24 States to discuss the problem. It appears that additional controls on automobiles and stationary sources will be necessary over wide regions of the country if there is to be a reduction of harmful levels of oxidants.

Transport Strategies

One of the more controversial issues continues to be EPA's transportation control strategy for metropolitan Boston. Region I is moving to implement a plan to reduce harmful levels of carbon monoxide and hydrocarbons. Most elements of the plan will be put in place in 1976 and early 1977. The plan includes on-street parking bans in the downtown area, inspection and maintenance for automobile pollution control devices, stationary source controls, extensive car pooling, and requiring businesses to take steps to reduce the number of single passenger commuting vehicles that come to their plants each day. Similar plans are being developed for Springfield, Mass.; Hartford-New Haven, Conn.; and Providence, R.I.

In water pollution, highest priority is being given to construction grants. After a careful study of ways to expedite the handling of grant applications and the addition of some new personnel, regional officials expect to be able to allocate the $800 million available to this Region by the September 1977 deadline.

Another high priority project is areawide wastewater treatment planning, and $12 million has been awarded to 16 regional planning agencies. Most of the plans will not be completed until 1977.

Considerable progress has been made in abating water pollution. More treatment plants than ever before are under construction or coming on line. Millions of gallons of raw sewage previously dumped into New England waters are now being treated. Industry has shown a much greater willingness to fund water pollution control projects.

Of 4,870 miles of rivers and major tributaries, over half (2,670 stream-miles) are not yet in a "fishable-swimmable" condition. In the next two years a substantial improvement should occur as a result of major new wastewater treatment facilities being placed in operation. However, unless the problems of combined sewer over-

Youngsters play hockey on ice at the Boston Common.

flows and non-point sources of pollution are solved, there will still be rivers in New England that will not be suitable for swimming and fishing by 1983 (the deadline set by the Federal Water Pollution Control Act).

Drinking Water Safety

Safety of water supply has for years been one of the most neglected areas of environmental protection. The Safe Drinking Water Act of December 1974, extends Federal regulatory authority to cover practically all public water systems. Implementation of the new law will insure consistent quality and safety.

Tested during a nationwide EPA sampling, water supplies in Rhode Island, Connecticut, and Massachusetts showed traces of organic compounds suspected to be causes of cancer. A survey by State authorities last year showed 200 water supplies in Vermont failing bacteria tests, and 12 systems in Vermont are on notice to boil water before drinking it. In parts of Boston an EPA study found excessive lead in tap water, attributed to corrosion of old lead piping by the soft, slightly acidic surface water supply.

Regional authorities will oversee a corrosion control program by Boston's Metropolitan District Commission to reduce the lead-in-water hazard and will work closely with all States in implementing the new Federal drinking water standards, which go into effect this year.

Solid Waste Corporations

Some progress has been made in the area of solid waste. Connecticut and Rhode Island have established statewide solid waste management corporations. Two Massachusetts communities, Marblehead and Somerville, received EPA grants to initiate community-wide recycling projects on a two-year pilot basis. Last year 18 resource recovery facilities were proposed in the Region.

But much more remains to be done. A survey by the Regional Office found that only 30 percent of New England's population is served by disposal facilities that meet State requirements and thus can be considered to be environmentally acceptable. There is wide variation among the States in the portion of the population served by acceptable solid waste facilities: from 68 percent in Vermont to one percent in Maine. However, the regional over-all figure of 30 percent last year was three percentage points better than in 1974.

Refinery for Maine

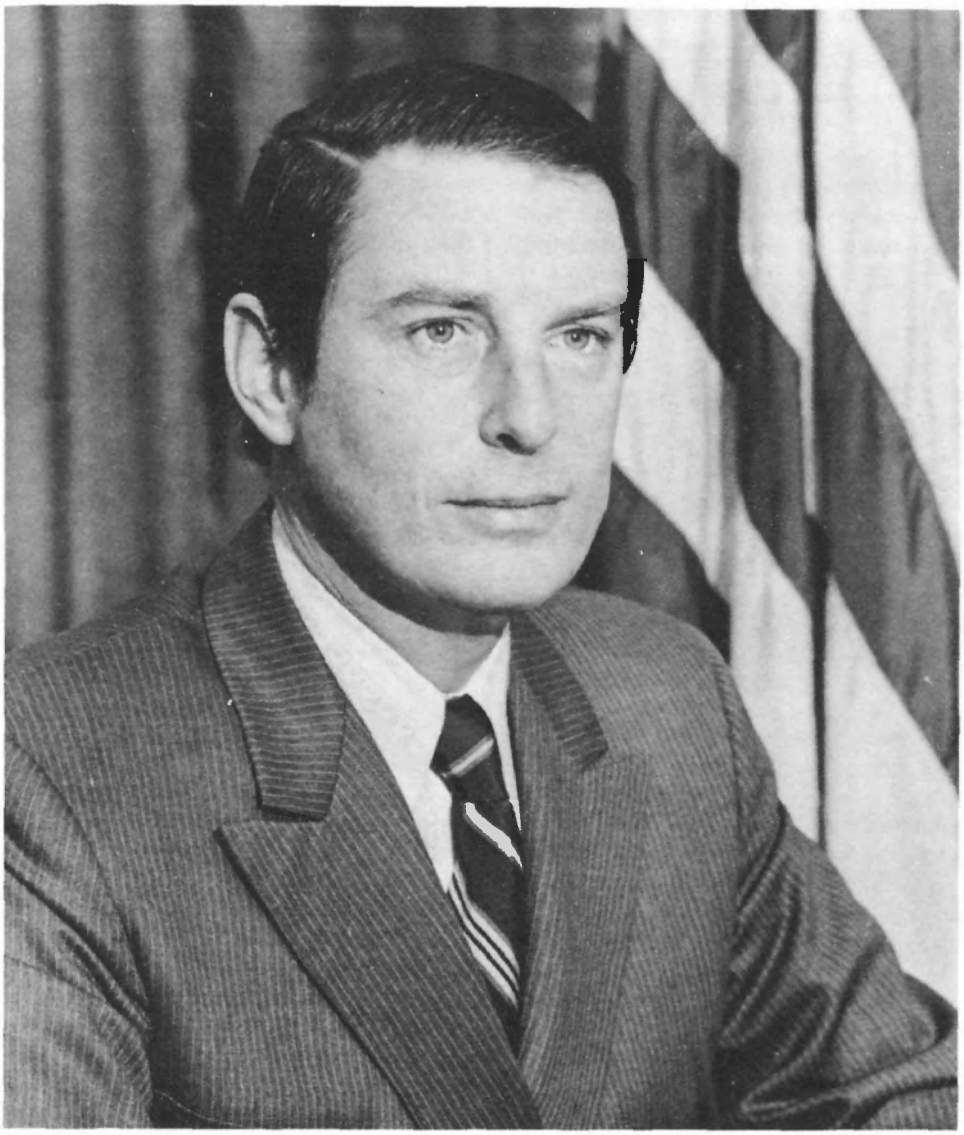
Finally, an area which is emerging as a key issue is energy development.

EPA has been designated as the lead agency for preparing the draft environmental impact statement for a proposed 250,000-barrel-a-day oil refinery to be built by the Pittston Oil Co., in Eastport, Maine. The draft statement will be completed in May or June of 1976. This is the first plan for an oil refinery in Region I, and there will probably be other refinery proposals. The Regional Office also expects to be involved more in such related issues as off-shore oil drilling and deep-water port construction.

To insure a coordinated approach with other Federal agencies who will have decision-making roles in energy matters, Region I has established an energy task force which meets regularly. Thus, the Office will be fully prepared to deal with these energy issues that do have an impact on the environment.

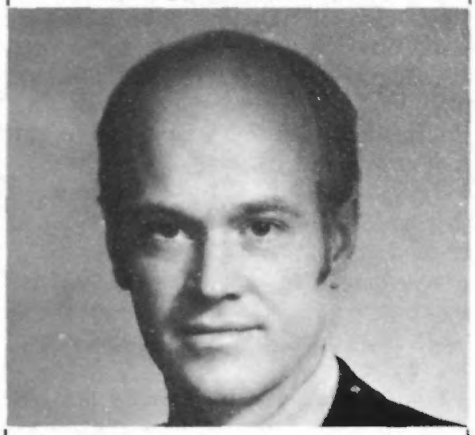
This is just a brief glance at New England's environment. The job of moving ahead with pollution abatement programs gets more and more difficult, particularly since energy and economic problems are severely impacting the New England States. But the Region has always been environmentally-oriented, and its elected officials and most of its industrial leaders recognize the importance of a sound environmental control program.□

REGION 1'S LEADERSHIP TEAM



John A. S. McGlennon
Regional Administrator

Jack Lackner
Director, Management Division



Robert C. Thompson
Acting Director, Enforcement Division

Edward V. Fitzpatrick
Director, Surveillance and Analysis Division

Kenneth L. Johnson
Deputy Regional Administrator

Lester A. Sutton
Director, Water Programs Division

Merrill S. Hohman
Director, Air and Hazardous Materials Division

MY NEW ENGLAND

By Elizabeth M. Strock
Region I *public information officer*

Some days you can stand in Government Center in Boston and smell the ocean. You can close your eyes and breathe in the sea air and listen to the gulls screeching overhead, and when you open your eyes, you are faintly surprised to find yourself surrounded by handsome buildings instead of sand crabs and beach plum.

This experience has always represented the quintessence of New England to me. Because underneath the urbanity of Beacon Hill, and the tweediness of Cambridge, the bond that New Englanders share is a love of the land.

For a newcomer, it is a hard land to love. It seems hostile, almost defying you to make it through that first grinding winter with your spirit unbroken. There is no spring to speak of; summer is unremarkable. But, if you stick it out that long, you have been tested, and you have passed, and you will be rewarded with fall. Fall is spectacular. There is nothing like walking through the New Hampshire woods on a crisp fall morning, with the brilliant red and gold leaves overhead, and the fallen ones crunchy and musty-smelling underneath.

"Peak weekend" is a New England tradition revered every bit as much as Paul Revere's ride and the shot heard round the world. Beginning in October, the newspaper and television weathermen begin a countdown to peak weekend—the weekend when the leaves are most colorful. When it arrives, the roads to the north woods look like the roads to the beach on Memorial Day weekend. Unlike the Memorial Day trek, however, when there is nothing to do but get irritated at the traffic jams until you reach your destination, on peak weekend, you don't really have a specific goal, and the trees are beautiful all along your route. You can wander aimlessly through the back roads all weekend. You can pick your own crisp apples or shop for antiques. When you get tired, you can always find a rambling clapboard inn, maintained just as it was one hundred years ago, with gleaming brass and dull pewter and hand-sewn quilts. Your host will most likely be a taciturn Yankee with a wise and weathered face, and plenty of good stories, if he chooses to tell you.

By the time winter rolls around again, you have learned to dress for the weather, and the cold doesn't seem as bitter as last year. In fact, it is invigorating, and there are any number of things you can do in a New England winter that you cannot do in a more temperate season. Downhill and cross-country skiing, snow shoeing, ice skating and ice hockey are the most popular winter activities, but there are a few hardy enthusiasts, including some in the Regional Office, who believe that winter was made for cold-weather camping. They dress in layers of clothing as the temperature dictates, pack their worldly goods on their backs, and set off in sub-freezing temperatures to make camp in three feet of snow on top of the nearest mountain. They say that nothing in the world can compare with the magnificence of the view from the top and the silence of being alone in a world muffled with snow. Bracing as this may be to some, it is not to everyone's taste. For those of us who die a little every time the temperature threatens to drop below freezing, there is summer.

Summer is beach weather in New England, as it is everywhere else in the country. These beaches are special, though. Anyone who has ever cast a horrified eye over Rehoboth Beach or Atlantic City will be grateful for the unspoiled beauty of Cape Cod. There is not a high-rise beach-front hotel or condominium to be seen anywhere on the Cape. The National Seashore has maintained the littoral areas, the dunes, and, in some cases, even the forests behind the dunes in their natural state, and has assured public access to all of these areas. There are provisions for off-road vehicles and bicycle paths that snake in and out around the dunes.

A few shacks are still in the dunes. Their inhabitants live only according to the dictates of the sun, moon, and tides, and they are passionately attached to their land. The National Seashore has acquired most of the shore area on the Lower Cape and has negotiated with private owners to assure that privately held land will remain relatively undeveloped. This represents something of a first in the acquisition of privately owned land for the public domain and the regulation of private lands for public benefit. It also presents a perplexing philosophical and social question. Should the government seize land for the public domain from private owners who love it so and who have lived their entire lives on it? On one hand, the dune dwellers seem to have a moral right to it, since they live on and from it; but on the other hand, the dunes belong to all of us, and they ought to be maintained in their natural state, not just for us, but for future generations of New Englanders as well. It is a hard question, and no one really knows the answer, but it will almost surely come up again. One of New England's most valuables resources is her land, and one of her most fiercely-held tenets is belief in individual freedoms. The two are bound to run head on someday. Hopefully, when that happens, the question will be resolved as peaceably and as satisfactorily as it has been on Cape Cod.

New England is rich, both in history and in contemporary cultural institutions. In Boston, you can take a walking tour of the Freedom Trail, marked by a red brick stripe in the sidewalk, and see the Granary Burying Ground with the graves of John Hancock, Samuel Adams, Paul Revere, and the victims of the Boston

OLD STATE HOUSE

The royal British lion and unicorn are still rampant on Boston's Old State House, one of the most beautiful and best preserved of the city's many historic structures. Built in 1713, while the colonies were still under the rule of an English King, it was the scene of the pre-Revolution Boston massacre and from its balcony was given the first reading of the Declaration of Independence in Massachusetts.

Massacre; Faneuil Hall, which John Adams called "The Cradle of Liberty"; the Old North Church, where on the night of April 18, 1775, two lanterns signaled the Redcoats' advance on Lexington and Concord and started Paul Revere on his famous ride; Old Ironsides; and Bunker Hill. In Concord, you can still see the rude bridge that spanned the flood, and in Sudbury, still stands the Wayside Inn. On Patriot's Day Eve, the men of Sudbury still don old militia uniforms and congregate at the Wayside Inn before marching to Concord.

There are bits of history in every corner of Boston you may care to investigate. In fact, if you are so inclined, you can take a yoga class in the old Blacksmith House where Longfellow's village smithy stood beneath the spreading chestnut tree.

Culturally, New England offers the Boston Symphony Orchestra, the Boston Pops with Arthur Fiedler, the Boston Ballet, the Museum of Fine Arts, and the Gardner Museum, where you can feast not only your eyes, but your ears at Sunday afternoon concerts. Boston is also a great city for amateur artists. Budding dancers, musicians, and painters find a knowledgeable and appreciative audience here.

New England has its drawbacks. It does not have the highest peak in the continental United States, and you cannot get a pastrami sandwich at 4:00 a.m., the area has no indigenous energy sources, and the unemployment rate is higher than the national average. However, people continue to flock to this area, and the only explanation can be the high quality of life New England offers. The pace is not as desperate as New York or Los Angeles, but it is not small town either. And even in downtown Boston, you can smell the sea, you always feel a part of the land. Come and visit us for the Bicentennial.□

HOW DO YOU SEE YOUR JOB IN THE NEW YEAR?

JoAnn Johnson, Chief, Library Services, Environmental Research Center, Cincinnati, Ohio:
"The first major challenge of the new year will be managing the move of the library to our new quarters in the Environmental Research Center on the University of Cincinnati campus.
"Also, I am in the process of working out an innovative and cooperative arrangement with the Library System of the University of Cincinnati, that will make our collection available to the University's teaching staff and graduate students, and the University's material accessible to our people.
"Our library here serves as the scientific and technical focal point for the whole EPA Library System.

Mary Jean O'Donnell, Environmental Impact Statement Specialist, Region VII, Kansas City, Mo.:
"I'm fortunate enough to be in a shop where exciting changes are going on in environmental considerations, and hopefully in 1976 more NEPA considerations will figure in early on the construction grant, 208 planning and permit processes.
"I hope that in 1976 we will have made environmental considerations a natural part of the planning-decision making process and oriented our thinking to ways to accomplish our overall Agency purposes and goals.

Robert Landers, Environmental Protection Technologist, Remote Sensing Branch, Environmental Monitoring and Support Laboratory, Las Vegas, Nev.:
"I see my job as being a very busy and exciting one in 1976. Our Branch currently is working on, or planning, aerial surveys of environmental conditions in nearly all of EPA's regions. We work for the regions in assessing air and water quality, land use, monitoring compliance—any surveillance that can be done by image-making equipment aboard aircraft.
"The coming months can be expected to produce a number of oil and hazardous materials spills. These accidents are aggravated and increased by harsh winter weather.

Virginia Snarski, Biologist, Environmental Research Laboratory, Duluth, Minn.:
"I've just returned to the laboratory here after a year spent at the University of Washington at Seattle, doing work in fish diseases. This was sponsored by EPA as part of its long-range training program.
"I look upon the new year with enthusiasm since I hope to set up a laboratory for the diagnosis and treatment of diseases that occur in our fish here. Also, I want to do research to study the effects of pollution on fishes' resistance to diseases."

Dr. Mostafa Shirazi, Acting Chief, Ecosystem Modeling and Analysis Branch, Environmental Research Laboratory, Corvallis, Ore.:
"I am optimistic about the coming year. Our Branch pursues a multimedia discipline that involves both long-range research and its application to immediate problems. I believe that good accomplishments will result when the reorganization of Research and Development is completed and approved.
"In a mission-oriented agency like EPA, balance must be achieved between pure research and the uses that such research serve in attacking real life problems. In order to strike such a balance, scientists from various fields of specialization must be brought together so they can interact and contribute to the same goal. I see that in Corvallis we are heading towards this kind of team work, and I intend to play an active role in whatever capacity I can do best."

James Weigold, Assistant Director, Strategies and Air Standards Division, Office of Air Quality, Planning and Standards, Durham, N.C.:
"I think my job will be as exciting or even more so than it has been in the three-and-a-half years I've been with the Agency. My Division looks at new problems as they emerge, and then devises strategies to deal with them. We are now getting into the fields of unconventional pollutants that pose hard challenges. For example, the carcinogens are a special problem because there may not be a known or knowable safe health threshold for them.
"The biggest problem is that we need more and better health effects data, and the accumulation and evaluation of this takes a long time. In some cases it may take years to acquire a sufficient health data base to permit the development of defensible standards."


JoAnn Johnson

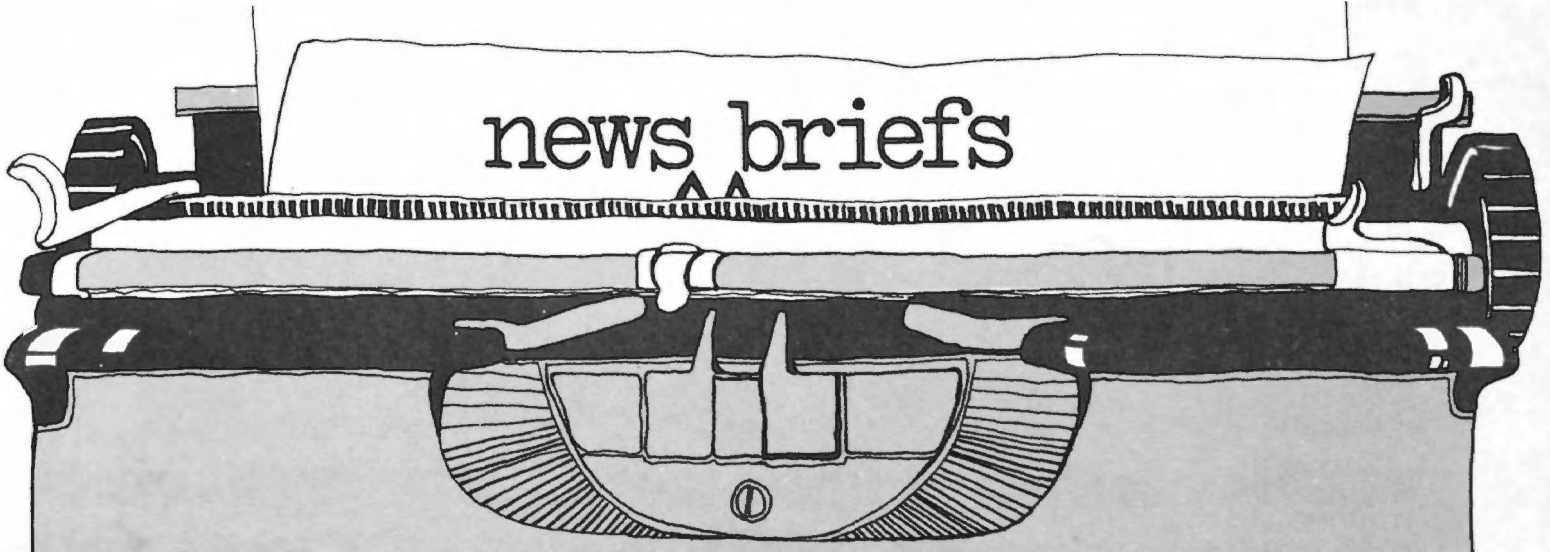

Mary Jean O'Donnell


Robert Landers


Virginia Snarski


Dr. Mostafa Shirazi


James Weigold



ACTION PLAN ANNOUNCED FOR PCBS

Administrator Russell E. Train has declared that the United States must move towards total elimination of the use of polychlorinated biphenyls and make every effort to assure that these PCBs do not enter the environment. Mr. Train announced an action plan to begin reducing the discharge of PCBs but warned that many years may pass before a significant decline occurs in the level of PCBs.

PROGRAM FOR CONTROL OF HAZARDOUS SUBSTANCE SPILLS

EPA has published proposed regulations designed to protect the Nation's waterways from spills of over 300 chemicals considered to be "hazardous substances" for man and the environment. The regulations list the 300 substances such as nitric and sulfuric acids, ammonia, and caustic soda which when discharged pose an imminent danger to public health and welfare. The regulations include a provision for fines of up to $5 million in spill cases involving gross negligence.

SAFE DRINKING WATER STANDARDS SET

EPA regulations designed to help safeguard the Nation's public drinking water supplies have been promulgated. These interim regulations will apply to about 240,000 public water systems when they become effective in June, 1977. Emphasizing the importance of these regulations, Administrator Russell E. Train said that "for the first time, drinking water supplies across the country will be subject to uniform minimum standards that will be effective in regulating harmful contaminants."

BREIDENBACH CONFIRMED

Dr. Andrew W. Breidenbach's appointment by the President as EPA's Assistant Administrator for Water and Hazardous Materials has been confirmed by the Senate. Dr. Breidenbach had been serving as Acting Assistant Administrator since September 1. A career environmental scientist, Dr. Breidenbach had served for four years as Director of the National Environmental Research Center in Cincinnati, Ohio, before assuming his present post.

U.S. ENVIRONMENTAL PROTECTION AGENCY
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THIRD CLASS BULK RATE

'Instant Dike' Developed

The tank (foreground) leaked liquid which was trapped by plastic foam instant dike. The material was then pumped into plastic container at left.

A portable "instant dike" and collapsible bags for collecting spill materials were recently demonstrated by the EPA contractor who developed them.

A foam resembling shaving cream can be squirted from a back pack to quickly form a stable dam structure to contain spills of hazardous materials.

The foam is generated from chemicals carried in the back pack. Each back pack can make about 50 cubic feet of instant dike, according to Ira Wilder of the Edison, N.J., facility of EPA's Industrial Environmental Research Laboratory, Cincinnati.

A folding plastic bag for collection and temporary storage of hazardous spills was also demonstrated for EPA and Coast Guard personnel at the MSA Research Corporation's plant at Evans City, Pa. The foam was used to dike a liquid spilling from a "ruptured" tank car. Six thousand gallons of the spilled liquid were pumped into the plastic bag in two hours.

"Relatively inexperienced workers operated the equipment, with no more than the usual confusion that takes place at accident sites," Mr. Wilder reported.

The bag is not meant for indefinite storage of the spilled liquid. After emergency containment and collection, the material would be pumped into a tanker truck and carried away for reprocessing or disposal. The emptied bag would be folded and carted away for cleaning and reuse.

Mr. Wilder and John Brugger are EPA's project officers for the system and equipment, which has been under development by MSA Research for more than two years.

Spills of hazardous materials, mostly oils, are estimated to occur more than 5,000 times each year in the United States. Many of them present substantial dangers to the public health and welfare and to the Nation's waterways. Although preventing spills has the top priority, the Agency recognizes that spills will occur and seeks to perfect methods for control and cleanup.

The diking units cost about $100 apiece. The collection bag and pump system costs about $5,000, one-third of which is for the bag itself. The cost of the bag will be significantly less when they are made in quantity.

Additional testing of the dike and bag will be conducted at Edison by the newly formed Environmental Emergency Response Unit, which is being supported jointly by the Cincinnati laboratory and by the Division of Oil and Special Materials Control at EPA Headquarters.

The diking foam quickly cures to form a rigid structure more sturdy than the molded styrofoam fillers used in many shipping containers. The foam pack units can easily be carried on a truck that hauls hazardous liquids or stowed in the caboose of a freight train.

The collection bag system can hold 7,000 gallons and is designed for emergency spills where tanker trucks and portable pumping equipment are not available. □