Environmental Information

April 1975

The time has come to explore the possibility of enforcement machinery, such as an international coast guard, to deal with the exploitation of the seas, according to EPA Administrator Russell E. Train.

In a speech to the National Audubon Society in New Orleans, Louisiana on April 19, Mr. Train declared:

"We have seen in the case of strip mining what can happen to the land when technology outpaces legislation and environmental controls. The repercussions from undersea mining could resound throughout the world."

The EPA Administrator, noting that a second Law of Sea Conference was underway in Geneva to explore methods for control of seabed mining, said the UN must reach agreement before such mining becomes widespread.

"It seems to me," he said, "that the time has come to match our assumption of unlimited rights to the oceans with the assumption of duties and obligations also held in common and enforceable."

Mr. Train added that oil from the Outer Continental Shelf can be produced in an environmentally acceptable manner if done in the right places and under vigorous regulation. But he warned that the effort must be preceded by careful planning to avoid not only disruption of fishing but social and cultural patterns in coastal areas.

The speech is attached for your information and use.

Office of Public Affairs

REMARKS BY THE HONORABLE RUSSELL E. TRAIN
ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY
PREPARED FOR DELIVERY BEFORE THE
NATIONAL AUDUBON SOCIETY
THE FAIRMONT-ROOSEVELT HOTEL, NEW ORLEANS, LA.
SATURDAY, APRIL 19, 1975

THE ENDANGERED SEA

It is a pleasure to be once again with my friends in the National Audubon Society as we observe not only the beginning of Earth Week but also the 70th year since this distinguished organization was formed.

There is some kind of impression afoot that the environmental effort was born yesterday, that it sprang up overnight and out of nowhere some six or seven years ago. You and I know better. The Audubon Society very early in its history led successful battles to halt the killing of shorebirds for the restaurant trade and the slaughter of egrets to decorate women's hats. And it was five decades ago when T. Gilbert Pearson, a president of National Audubon, urged the creation of an international treaty to halt environmental damage from oil spills. Even the word "environmentalist" is scarcely new. Robert Frost used it to describe himself in the poem "New Hampshire" written 52 years ago.

It was Frost who once voiced this warning which has a very contemporary ring in our ears:

"How many times it thundered before Franklin took the hint! How many apples fell on Newton's head before he took the hint! Nature is always hinting at us. It hints over and over again. And suddenly we take the hint."

And nature does indeed have to hit us on the head over and over again before we begin to take the hint. It wasn't until the pollutants and poisons in our air and earth and water had piled up to the point where they posed a clear and present danger to human life and health that we began to take them seriously. And while, as you know, we have made real strides toward curbing and controlling these environmental hazards, the going has been a lot rougher than some, at least, had originally imagined. None of us here, I think, is terribly surprised at the fact that it has not proven possible within a few years to make up for decades — even centuries — of environmental damage and degradation or, what is even more difficult, to change the ingrained and accustomed patterns of behavior, public and private policies and processes, lifestyles and the like that are responsible for our environmental ills in the first place.

Here on the Gulf of Mexico we stand face to face with both the familiar problems of technology and an extraordinary opportunity to deal with those problems <u>before</u> they happen and <u>before</u> they get out of hand.

Here, at the juncture of ocean and land, lie those productive but delicately balanced estuaries upon which marine life is still so dependent. The elaborate system of marshes and shallow bays have made the Gulf an immensely important natural environment, an enormous nursery where fish grow to near maturity and where waterfowl find shelter and food during winter months.

Indeed, in a broader sense we stand at the edge of that vast domain where life itself first began. It was in the oceans and

the estuaries of the world that primitive one-celled life originated. It came from the sea, not -- like Aphrodite in Greek legend — at a single miraculous instant, but over aeons of time. As the earth cooled, traces of oxygen were produced. Then came the photosynthetic cells in water, creating more oxygen which built up a shield against the deadly ultraviolet radiation from outer space. That in turn made more life possible, until creatures were able to crawl out onto the land and evolution began its long upward course to the creation of man.

Knowing these things, we cannot help but feel a swirling sense of awe and anguish as we stand at the sea's edge. For this birthplace, this original nursery of us all is endangered. Dredging and development is destroying the marshes. Filling and dredging have wiped out some 200,000 acres of shallow coastal bays in the Gulf and south Atlantic areas over the past two decades. Chemicals and sewage and oil spills are slowly and steadily sapping the oceans' ability to serve as a well of life. The oceanographer Jacques Cousteau tells us that the floor of the Mediterranean is littered with the debris and waste of modern technology. Ecologists warn us that it is a dying sea and that unless nations act to protect it, it will soon be a dead one.

All over the world, the seas are serving as a receptacle for wastes. They have become a sink for enormous quantities of chemicals from fertilizers, herbicides and pesticides used in agriculture far inland. It is this kind of disjointed activity in our society, this process of action in one area leading to ecological shock waves far from the original source of pollution, that now threatens

the sea. One of our major problems is that we don't really know what we're doing to our environment and, ultimately, to ourselves. Like children with a new toy, we have believed that just because a thing is technologically dazzling, it is good. We have worshiped at the altar of "cost efficiency" without knowing the true cost to society of dumping untreated pollutants into the air and water. We have followed a policy of plunder-now-and-pay-later whose price tag must all too often be paid by victims far from the scene of the crime.

Indeed, compared with our skill and sophistication in creating pollution, our ability and instruments for comprehending and controlling it must rank somewhere at the level of the Stone Age.

With each passing year the need to control the increasing quantity of toxic substances in our environment intensifies. An estimated 500 to 700 new chemicals enter commerce in significant quantities every year. Substances once considered safe for widespread use are suddenly suspect and pulled off the market. In too many cases, the public and the environment continue to serve as testing grounds for such products. The more we learn about the health effects of pollutants, the worse things look. Researchers at the National Cancer Institute are reported to have estimated that 60 to 90 percent of all human cancers are caused by environmental factors — from ultraviolet rays to plastics and pesticides. And while progress has been made in treating this disease, it is obvious that the most sensible course lies in prevention, in controlling carcinogens before they enter man's environment.

One of the things I find most alarming is that our attitude

toward the ocean is a carry-over from our earlier attitude toward the land. Increasingly the seas are regarded as a place to put unwanted things, a place where accidental or deliberate spillage doesn't matter because the ocean is vast and nobody is around to protest. Having polluted the land, we are now starting to lavish our attentions upon the last clean place on the globe, trusting that the self-cleansing powers of the oceans will somehow solve matters. But freedom of the seas does not mean freedom to pollute. The globe has become too small and too crowded for that.

The growing and serious problem of ocean spills and dumping has become a matter of special concern. Here, in the Gulf, the National Audubon Society has been a strong and effective fighting force for the reduction and control of dumping. Your continued vigilance is vitally needed. According to United States Coast Guard figures, the number of all types of polluting discharges into navigable waters rose from about 8,700 in 1971 to nearly 14,000 in 1973, and the total is expected to be higher for 1974. By one estimate the amount of oil moving around the world in lanes of commerce will double each decade. This means that by the year 2,000 we can expect six times as much traffic, with an obviously greater risk of oil spills and hazards to the environment. I need not tell this audience what an oil slick can do to a coastline, an estuarine system, or to waterfowl. Supertanker traffic is giving rise to increasing spills of oil in remote areas of the globe such as off the Cape of Good Hope and in the Straits of Magellan. Some of the spills have been catastrophic to important seabird populations. I believe that

international action is urgently needed to find ways to protect the valuable and highly vulnerable seabirds of the world from destruction by oil.

One of the most pressing matters with respect to the oceans still lies in the future. This is the exploitation of mineral resources on seabeds around the world.

Lying on the floors of many oceans are some rather odd, black, potato-shaped lumps known as manganese nodules. No one really knows how they were formed, but scientists have found them rich in useful metals such as copper, nickel and cobalt. Already several companies are trying to devise ways of mining them, and that's where the environmentalists have begun to worry.

Few companies have any real experience in deep water mining of this type, and we can anticipate problems. The pace of life at profound depths of the sea is exceedingly slow. The life cycles of creatures there do not occur at the same rate as on the surface, and it would require a long time to restore the ecology after it had been disturbed by mining. Very large quantities of seabed mud and debris would undoubtedly be churned up to the surface. This sediment could shut out sunlight and prevent it from reaching life at lower depths. It could threaten commercial fishing and recreation, for the sediment might be carried by currents to distant beaches. Whether refining is done at sea or at the coast, the mine tailings and waste chemicals could pose another environmental hazard.

We have seen in the case of strip mining what can happen

to the land when technology outpaces legislation and environmental controls. The repercussions from undersea mining could resound throughout the world.

Under the auspices of the United Nations, a second Law of the Sea Conference is now underway in Geneva to explore methods for controls over seabed mining. There is widespread support among nations for establishment of an International Seabed Resources Authority to deal with such matters. The UN must move forward and reach agreement in this area before such mining becomes widespread, for time is growing short.

Speaking more generally, the oceans represent not only a critical environmental problem area but a major opportunity for more effective international cooperation in the management of common resources. Beyond the disputed limits of national jurisdiction, the oceans are not subject to national sovereignty but are, indeed, part of the common heritage of all mankind. This has meant, in practice, that the open seas are open to unlimited exploitation on a first come — first serve basis. It seems to me that the time has come to match our assumption of unlimited rights to the oceans with the assumption of duties and obligations also held in common and enforceable.

The need for improved international cooperation to protect the oceans is increasingly recognized, as evidenced by the ocean dumping convention adopted at London in 1972, and the 1973 London convention for the prevention of pollution of the seas by ships, among other such efforts. At the same time, the mechanisms for

enforcing such agreements are limited, to say the least, dependent in the usual case on the voluntary cooperation of individual nations.

We have seen how ineffectual such agreements can be as in the case of the international protection of whales. At a time when the principle of national sovereignty seems stronger than ever — among great and small nations alike — it may be unrealistic to propose limitations on that principle. But in the face of growing frustration with existing procedures and the growing likelihood that freely competitive exploitation is simply going to lead to the ultimate exhaustion of the ocean resource, it seems to me that the time has come to explore the possibility of international enforcement machinery, such as could be represented by an international coast guard or similar capability. I know this is a radical suggestion, but the times and the problems call for fresh and, if you will, radical initiatives.

Last year the President directed the Secretary of Interior to undertake a major expansion of leasing on the Outer Continental Shelf to help increase oil supplies because of the energy problem. This policy involves a number of important environmental considerations.

As we move to improve the country's energy situation, it is important that we act effectively to reduce our energy demand. A recent study by the National Industrial Conference Board showed that the Nation could make sizeable cutbacks in the growth rate of energy use without impairing economic expansion. In this connection, it is instructive to note that both West Germany and

Sweden have per capita energy consumption rates about half that of the United States and both countries maintain high standards of living. The introduction of new plants and equipment in the U.S. already has reduced energy use and has achieved new economies. However, a sustained reduction in the energy growth rate will require a concentrated, long-term movement to more recycling, more fuel-efficient autos, more mass transit, and less waste across-the-board. Indeed, we need nothing less than a national War on Waste.

At the same time, we must move with determination to improve our energy supply, with scrupulous regard for environmental factors. There must be a parallel effort to develop clean, renewable sources of energy such as solar power that do not exhaust finite fuel supplies.

I believe that oil from the Outer Continental Shelf can be produced in an environmentally acceptable manner if done in the right places and under vigorous regulation.

One cause for environmental concern is the very magnitude of the new OCS development effort. It would more than double the total offshore acreage leased since the program began 22 years ago. Since drilling rigs necessary for exploration are already in short supply, it makes sense to me that we focus on areas where the resource potential is high and where the adverse environmental effects would be low. The State and local governments should be informed well in advance about coastal facilities likely to be needed. Without careful planning, new shipyards, platform

construction sites, refineries and other developments at the coast could disrupt local fishing, recreation and agriculture; make massive changes in regional, social, economic and cultural patterns; and overwhelm the capacity of impacted areas to provide essential services such as housing, transportation, education, waste treatment, health and police protection. Comprehensive land use planning — with the necessary authority to implement and enforce land use controls and carried out in advance of development activity — is critically important to the wise development of coastal energy resources.

I have spoken at length about various environmental dangers with respect to the oceans and coastal areas because here we still have time to act. But I do not wish to devote all my time to a jeremiad, for the Nation has made a beginning in dealing with the problem, and I would like to describe briefly some positive steps.

We are making progress in cleaning up our waterways. The Federal government is putting massive amounts of money into this. Compared with the $1 million in Federal funds earmarked back in 1948 for construction loans, a total of nearly $18 billion is now being spent by the Federal government for wastewater treatment plants under the 1972 Water Pollution Control Act, and will be almost entirely obligated by the end of fiscal 1977.

This program will help to build treatment plants in the Gulf states, as in all coastal regions, and represents a major national investment in cleaner water with resulting benefits to

freshwater, estuarine, and marine ecosystems. It will also create hundreds of thousands of jobs at a time when our economy needs them.

At EPA we also have been active in the area of pesticide control. Last month I rejected a request by the State of Louisiana for emergency permission to use DDT on cotton crops. I also acted last fall to suspend the registrations of Aldrin and Dieldrin, which are in the same chemical family as DDT, based on evidence that the two cause cancer.

The Agency is now registering, re-registering and classifying all pesticide products, and we are involved in a large program to certify those who apply potentially hazardous pesticides, which will impose new controls on handling of these products. EPA also has joined with two other agenices in a $20 million research program to use natural enemies and biological controls of farm pests, which would lessen our dependence on use of chemical pesticides.

Finally, I have supported for several years a Toxic Substances Control Act now before Congress, which would require pre-market testing of new potentially hazardous chemicals before they are marketed, and would give EPA the authority to ban or otherwise restrict the use of substances found harmful to either human health or the environment. This would be the kind of preventive medicine that would help safeguard the environment against serving as a testing laboratory for such chemicals.

The EPA, and the environmental effort as a whole, continue to enjoy strong public support. A poll by Louis Harris last month

showed that three out of four Americans are unconvinced that a temporary slow-down of water and air pollution controls will help ease the energy shortage or ease unemployment. Americans rank water and air pollution as the Nation's third and fourth greatest problems, respectively, above the energy shortage and second only to inflation and unemployment.

Despite the talk about an environmental backlash, and the hand wringing about the loss of momentum, I find no evidence of any erosion in the environmental movement. Organizations such as yours and the Sierra Club and Wilderness Society report that their enrollments and donations are increasing. In a recent survey of middle-class attitudes, Business Week declared that a "new conservation ethic is taking hold," reflecting a changing public attitude toward economic growth. The magazine quoted another Harris poll which found that citizens' groups enjoyed the highest support in environmental matters. As Harris observed, people "want to be involved, and they want to be part of the solution."

Mankind has made enormous strides in science and technology in this century. We have made the dreams of science-fiction writers seem pale against the reality of our achievements — in space, in medicine, in the creation of labor-saving machinery. But our knowledge has also made us arrogant, and too often careless of the side-effects of this technology.

Before we degrade the seas with our pollutants, before we lay down any more new carcinogens or wipe out any more species,

we should remember that we are connected to all life. Man also is a fragile, endangered species, still dependent ultimately after millions of years for the very air he breathes on simple cellular plant life in the sea. We must keep in mind what Sir Francis Bacon said nearly four centries ago: "We cannot command nature except by obeying her."

The Gulf and the oceans beyond have enriched our lives by their abundance and their beauty. May we continue to respect these vast waters, this vibrant sea to which all life on earth is bound. With care and planning and foresight we can meet the needs of our society and still protect the web of life between sea and land. If nothing else, our instinct for self-preservation commands us to do so.

With the increasing understanding of environmental problems and with the very real progress we have made and are continuing to make in dealing with those problems, there is considerable room for optimism. Yet I would be less than honest if I did not admit to a very real sense of concern for the future. I see ahead continued population growth in the world, energy shortages and growing imbalances in the allocation of resources. Mankind's efforts to solve his resource problems -- whether of energy or food or otherwise -- will inevitably increase the stresses on the natural environment. Economic problems of unemployment and inflation add significantly to the difficulty of dealing with these problems. Moreover, the more critical our immediate needs appear to be, the greater the likelihood that decisions will emphasize short-

term benefits at the expense of long-term costs.

Thus, for the foreseeable future, the conflicts -- both real and apparent -- between environmental protection and economic benefits are going to worsen. In government, we need political leaders who are sensitive to the broad range of values -- economic, environmental and social -- which are implicit in resource management issues. Thus, increasingly it seems to me that, as we deal with issues such as surface mining, we must take into account not only the more obvious environmental and economic concerns but also the human concerns -- the impacts on people themselves -- their culture, their way of life, and the quality of that life. In the private sector, we need more than ever before informed, vigilant, and vigorous citizen involvement in planning and decision-making. In this 70th year of the National Audubon Society, it is good to be proud of what you have accomplished over the years. But just remember -- the next 30 years are going to be the most important and the toughest. And we are going to need, more than ever, all the wisdom and the skill and the vigor that, for 70 years, have kept you growing younger and stronger by the year.