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Decisions for DELAWARE



Sea Grant Looks At
Legal Aspects Of
OCS Development

October 1975

DECISIONS FOR DELAWARE:

Sea Grant Looks At Legal Aspects Of OCS Development

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Foreword

Decisions for Delaware: Sea Grant Looks at:

OCS Development

Joel Goodman

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Legal Aspects of OCS Development

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IN PREPARATION

Environmental Zoning

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Deepwater Ports

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Water Quality and Shellfish

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Beach Erosion Control

Robert A. Dalrymple

Productive Tidal Wetlands

Franklin Daiber

Oil Spills

Robert Biggs/Hsiang Wang

The Small Bays

Paul Jensen

Man Versus the Marsh

Edward Garbisch

Tidal Marsh Nutrients

G. Fred Somers

Economics of Storm Protection

Lee Anderson/Christopher Kellogg

This report is one of a University of Delaware Sea Grant series, *Decisions for Delaware*. Each report addresses a major marine resource problem or opportunity facing the state and the region. Topics were identified by the Sea Grant Advisory Council as being of high priority interest to decisionmakers and the public.

Twelve reports will be published to interpret and summarize the state of knowledge on specific topics (see margin for titles and authors). Each author was asked to: (1) define the problem clearly and concisely; (2) describe what work has been done to solve or illuminate the problem; (3) explain the implications of existing information; (4) assess the risks of relying only on available information; (5) describe the research still needed to reduce these risks or unknowns; and (6) provide the decisionmaker with an assessment of what can be concluded reliably from available information.

Before publication, each report has been reviewed to be sure that it treats important topics clearly and understandably and contains accurate information.

The *Decisions for Delaware* series is designed to provide the legislators (and the people they represent) with alternatives and factual information on which to base their decisions.

William S. Gaither
Sea Grant Program Director

Delaware Sea Grant includes a broad spectrum of research, education and training, and advisory services related to wise development and use of marine resources. The program is a federal/state/university partnership, supported by an institutional grant from the National Oceanic and Atmospheric Administration's Office of Sea Grant; by an appropriation in 1974 and 1975 from the Delaware General Assembly; and by the University of Delaware. Total Delaware Sea Grant investment this year is almost \$1.3 million.

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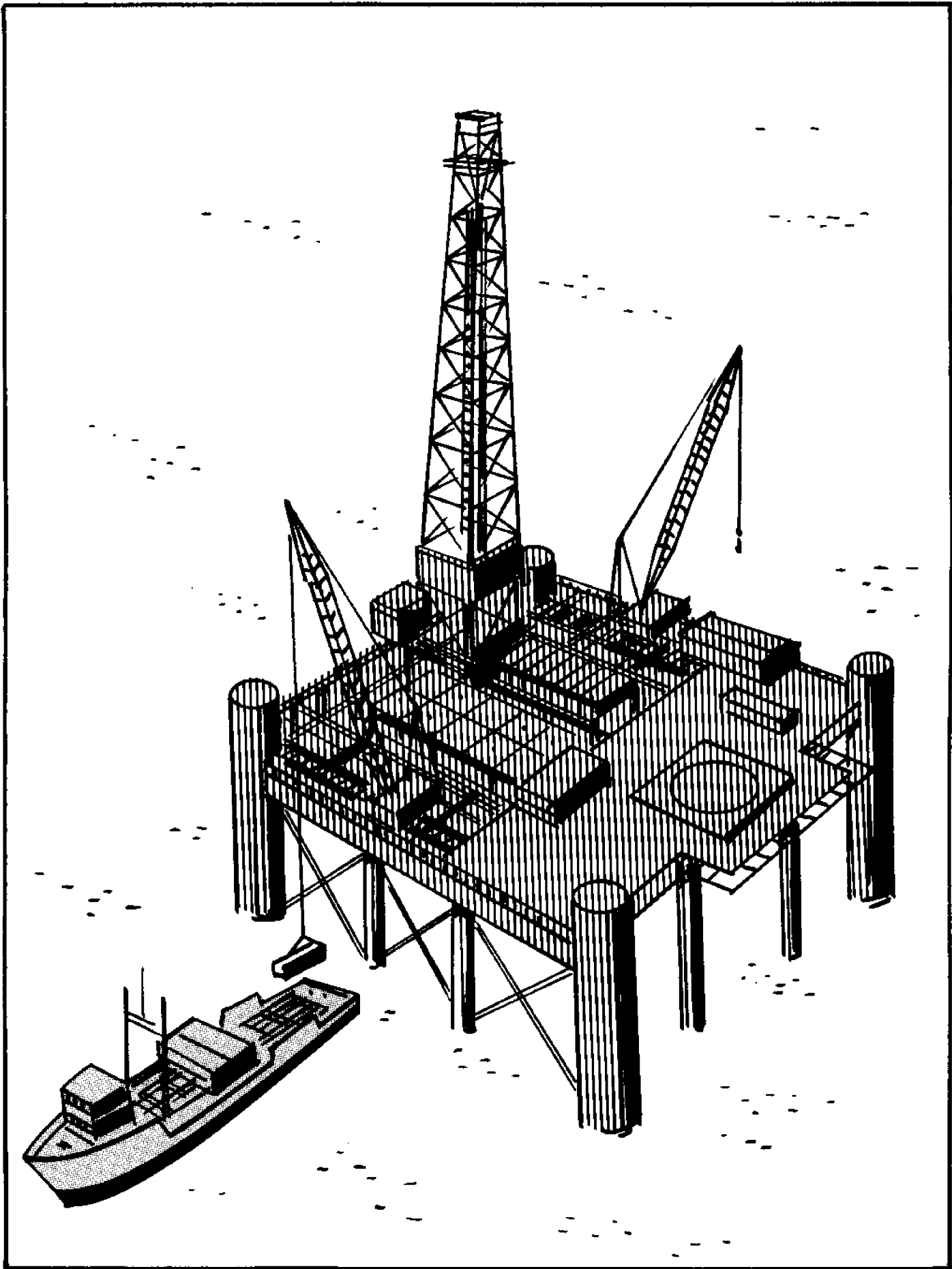
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Summary

Three major uses of the United States' outer continental shelf (OCS) on the Atlantic seaboard are considered in this report – the exploration and exploitation of petroleum; the development of deep-water ports; and the use of the shelf as a dumping site.

Petroleum Exploration and Exploitation. *On 17 March 1975 the Supreme Court cleared the way for the federal government to coordinate exploration and exploitation of petroleum resources on the outer continental shelf. The court decided that title to the seabed was vested in the Atlantic states (including Delaware) only to a line three miles seaward from their shores. Under the Outer Continental Shelf Lands Act, the Secretary of the Interior has the authority to issue leases for such resource development. State agencies have an opportunity, in some situations, to give advice on the selection of tract sites, but the decision rests with the Secretary. Oil and gas leases may be issued for areas as large as 5,760 acres. Revenue is deposited in the U.S. treasury. The Interior Department may suspend any operation that threatens immediate or irreparable damage.*

Up to 1975, only 2 to 3% of the nation's offshore lands had been leased, primarily in the Gulf of Mexico. In 1974, offshore wells accounted for approximately 541,487,000 barrels of oil annually, representing about 9% of U.S. domestic use. A massive increase in the leasing program was proposed by the Administration. In 1974, about six million acres of federally owned outer shelf lands were under lease for oil and gas development, but the new leasing goals announced that year called for ten million more acres per year. During July 1975, the annual acreage target was abandoned as unrealistic, but six lease sales per year (including "frontier areas") were proposed through 1978. Leasing in the Atlantic could begin soon, with actual production expected two to ten years thereafter. The seabed adjacent to mid-Atlantic states will be the first area developed.

The leasing policies of the Department of Interior, however, have been criticized (notably by the General Accounting Office and some members of Congress) and consequently may be overhauled. It has been argued that the oil industry cannot accommodate Administration production goals; that bidding practices discourage competition; that they eliminate participation from all but the largest corporations; and that environmental risks are uncertain, but substantial. Some critics believe that major spills are inevitable. Finally, the Interior Department has been flailed for depending on private sources with vested interests for information basic to its decision-making process. Bills have been introduced in Congress to separate the exploration of OCS tracts from their exploitation, requiring the United States to obtain its own data for evaluation of the tracts and relocating in the federal government some functions of the Interior Department with regard to offshore development.

Recent studies indicate that state coastal zone management plans, adopted pursuant to the Coastal Zone Management Act of 1972, promise the best means of planning for changes brought about by outer continental shelf development. The National Environmental Policy Act of 1969 may be the best short-range planning mechanism to coordinate fragmented responsibilities for development. Greater state participation in the leasing program has been recognized as a desirable goal, but to date there has been no corresponding allocation of authority. Legislative bills to alter leasing practices also have included provisions that would require state sharing of revenues as well as state approval for leases.

Development of Deepwater Ports. *The Deepwater Port Act of 1974 cleared the way for construction and operation of deepwater ports capable of handling huge oil tankers in waters beyond the territorial limits of the United States. Each adjacent coastal state must approve such a port. If a state chooses not to approve, a written denial may be required to avoid acquiescence. Moreover, the legislation bars port licenses where states that would be directly connected by pipeline to the port have not made "reasonable progress" toward developing an approved coastal zone management program. State agencies are entitled to preference for licenses, providing they are otherwise equally competitive with other license applicants.*

The laws of the nearest adjacent coastal state administered by federal officers and courts will apply to deepwater ports. Marine environmental protection and navigational safety regulations will be issued and enforced by the Secretary of Transportation. Substantial penalties have been fixed for violations. The Act also established absolute liability for oil spills arising in connection with the use of the port, again with fixed limitations. State liability law is not pre-empted, but double recovery is precluded.

In Delaware, the Deepwater Oil Terminal Commission is studying the legal status of a deepwater port that might be constructed in the Delaware Bay.

Ocean Dumping. *The Marine Protection, Research and Sanctuaries Act of 1972 regulates the dumping of materials in the ocean through a comprehensive permit system. In essence, a ban is placed on the transportation and dumping of all waste materials, unless authorized by a permit issued by the Administrator of the Environmental Protection Agency (EPA) or, in the case of dredge spoil, the Secretary of the Army. A complete ban is in effect on the transportation and dumping of radioactive wastes and chemicals or biological warfare agents.*

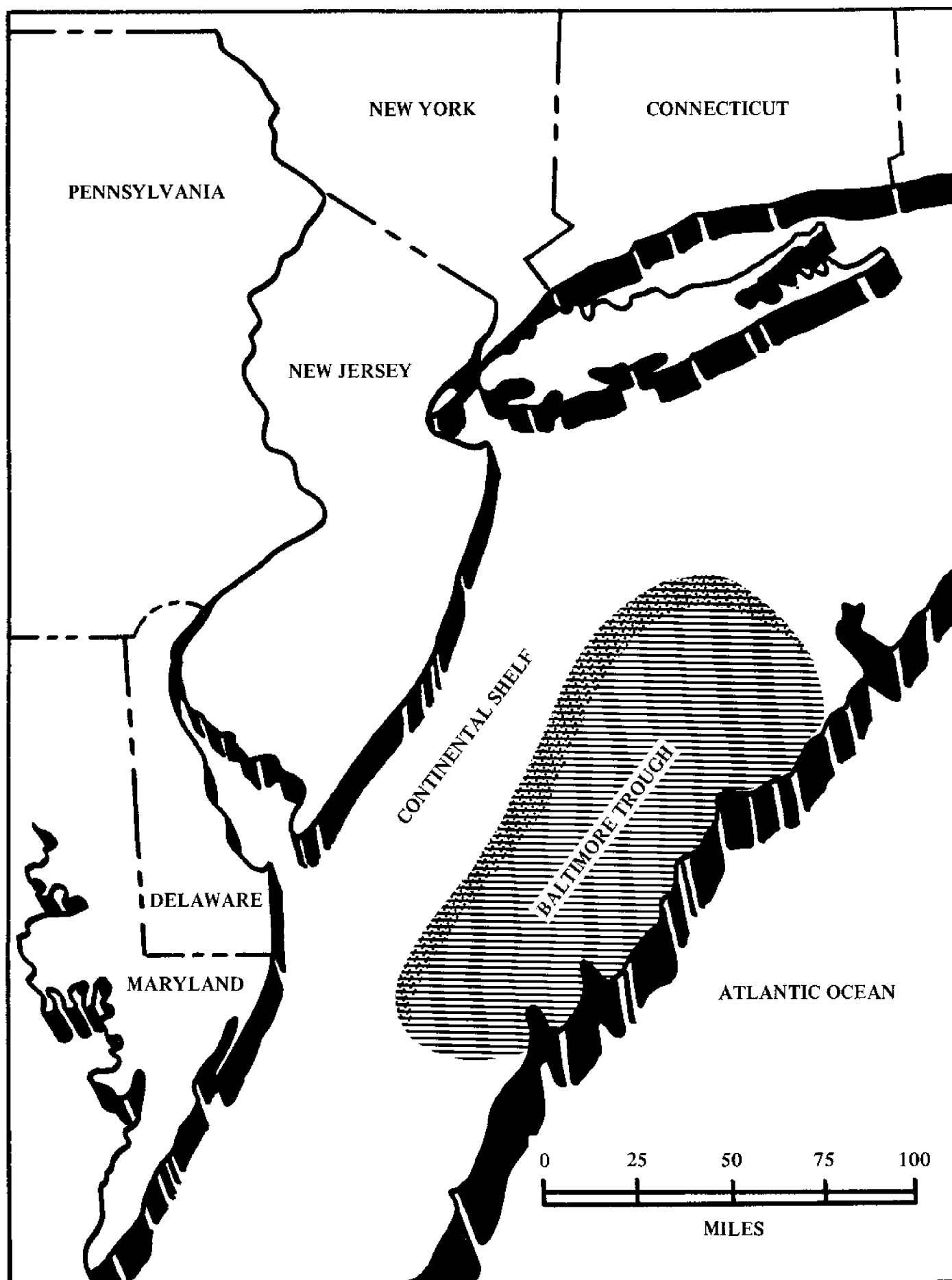
The EPA Administrator is authorized to issue permits for the dumping of materials if he concludes that it will not degrade or endanger human health or the marine environment. Penalties are provided for violation of the permit program.

The regulatory scheme applies to (a) dumping of waste material, whether generated in the United States or elsewhere, in waters under U.S. jurisdiction; (b) transporting of any material from the United States for the purpose of dumping anywhere at sea; and (c) transporting by federal agencies of waste material for the purpose of dumping at sea, regardless of the point of origin.

The U.S. Coast Guard conducts surveillance and other appropriate enforcement activity to prevent violations. States may propose criteria relating to dumping of materials into ocean waters within their jurisdiction, but are otherwise generally pre-empted from adopting or enforcing rules relating to activities regulated by the Act.

A program administered by the Secretary of Commerce authorizes research on the effects of ocean dumping on marine life, and the Secretary is obliged to render state governments financial and other assistance to promote such research. Finally, the Secretary may designate "marine sanctuaries" where needed to conserve recreational, ecological, or esthetic values. Consultation with and approval by state officials is required before such designation.

The majority of interim offshore dumping sites approved to date have been close to shore and for the disposal of dredged material. Dumping of sewage and sludge in the Atlantic off New York and New Jersey shores has been intense enough to stimulate new Congressional hearings. The EPA authorized the city of Philadelphia (in February 1975) to dump 150 million gallons a day of digested sewage sludge at a site 38 miles seaward of the Maryland-Delaware border in the period from June 1, 1975 to June 30, 1975. With respect to industrial wastes, EPA has moved hesitantly toward the use of interim permits, rather than granting special permits, pending more data and evaluation of pollution effects. In Delaware, for example, the duPont Corporation was required, contrary to the hearing officer's recommendation, to change its dumping site from 15 miles offshore to 106 miles offshore.



OCS Petroleum Development

Development of petroleum resources on the outer continental shelf of the Atlantic Ocean is imminent. This report seeks to answer the following questions pertinent to such development:

- *Why has development been forestalled? Has the situation changed?*
- *What is the procedure for acquiring a lease for development of offshore lands?*
- *Who has responsibility for administering the program? For overseeing possible ecological impact?*
- *How has the leasing program been administered to date and what changes have been proposed?*
- *Why has the program been criticized and what legislative attempts have been made to alter it?*
- *How are productive leasehold revenues to be distributed?*
- *What are the tax consequences?*

On 17 March 1975, the Supreme Court decided in *United States v. Maine* that the federal government has sovereign rights over the seabed and subsoil of the continental shelf in the Atlantic Ocean beyond three miles from U. S. shores. The ruling, which denied the claim of the eastern seaboard states to the outer continental shelf resources, cleared the way for developing the Atlantic shelf in the same way as the submerged lands in the Gulf of Mexico and the Pacific Ocean. Under the Submerged Lands Act of 1953, the coastal states obtained title

to the submerged lands adjacent to their shores three miles seaward in the Atlantic and Pacific Oceans. The same rule applied to the Gulf of Mexico, except for Florida and Texas, which, by historical rights, obtained title to 10.25 miles in the Gulf.

The Outer Continental Shelf Lands Act of 1953 authorized the leasing of offshore lands by the federal government to extract oil, gas and other minerals beyond the three mile limit (10.25 in the Gulf adjacent to Florida and Texas).

The Secretary of the Interior administers the Act. The rules and regulations promulgated by the Secretary provide, among other things, for the assignment or relinquishment of leases; unitization, pooling, and drilling agreements; suspension of operations or production; reduction of rentals or royalties; subsurface storage of minerals in submerged lands; and granting of easements necessary for production.

The Bureau of Land Management in the Interior Department issues the leases. At such time as an area is initially considered for leasing, the Bureau director requests the Geological Survey (Interior Department) to prepare a summary report describing the geological potential and giving some evaluation of the tract value of the submerged lands to be leased.

The Bureau of Land Management prepares official leasing maps, announces tentative schedules of lease sales, and evaluates the potential effect of sales on the environment through advice of appropriate federal agencies. It may also hold public hearings and consult with state agencies, organizations, industries, and individuals.

The Secretary of Interior is authorized to grant oil and gas leases to the highest responsible, qualified bidder by competitive bidding under regulations developed in advance. Each bidder must submit with his bid one-fifth the amount

of the cash bonus provided for in the lease, and the sealed bids are opened at the place, date and hour specified in a notice previously published in the *Federal Register*. The United States reserves the right to reject any and all bids received for any tract, regardless of the amount offered.

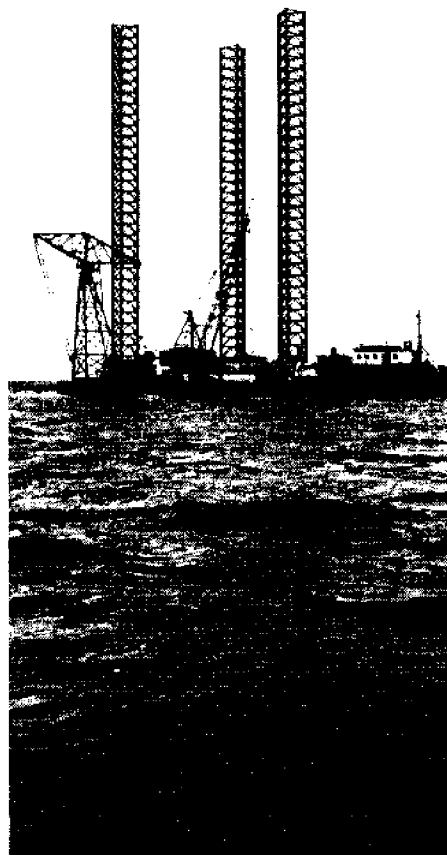
An oil and gas lease issued by the Secretary covers a compact area not exceeding 5,760 acres for a period of five years and as long thereafter as oil or gas may be produced from the area in paying quantities or as long as the Secretary approves well re-working operations. In addition to a cash bonus for the lease, the lessee must pay a royalty of not less than 12-1/2 per cent on the amount of the production saved, removed, or sold. The lease also may contain rental provisions and other terms as the Secretary may prescribe.

The Secretary also is authorized to grant leases by competitive bidding for any other minerals on the outer continental shelf.

In time of war, or when the President so prescribes, the United States has the right of first refusal to purchase at the market price all or any portion of any mineral produced from the outer continental shelf. Upon recommendation of the Secretary of Defense, during war or a national emergency declared by the President or Congress, the Secretary may suspend operations under any lease, and the Department of Defense and the President together may designate as areas restricted from exploration and operation those parts of the outer continental shelf needed for national defense. Uranium, thorium and other materials essential to the production of fissionable material are always reserved for the use of the United States. Helium is likewise reserved for United States ownership.

The Geological Survey is responsible for maximizing economic recovery while minimizing environmental damage. It may suspend an operation which in its judgment threatens immediate, serious, or irreparable harm or damage to life, including aquatic life, to property, to leased deposits, to other valuable mineral deposits, or to the environment.

The Bureau of Land Management grants pipeline rights-of-way for oil and gas transportation, while the Geological Survey grants easements to construct and maintain pipelines on areas maintained by the lessee. The Federal Power Commission, in the case of gas, or the Interstate



When leases expire, unused equipment must be removed within a year.

Commerce Commission, in the case of oil, determines whether the amounts transported by such pipelines are reasonable. While the Geological Survey in the Department of Interior approves the design and installation plans of fixed structures on the outer continental shelf, the Coast Guard in the Department of Transportation promulgates and enforces rules which promote safety in operations related to such structures.

The lessee may be required to make tests at his expense to determine the amounts and locations of mineral re-

sources on his tract. Geological and geophysical interpretations, as well as maps and data, required to be submitted by the lessee, however, are not made available to the public until the lease expires or until the Geological Survey determines that such information is required and necessary for development of the area.

Pollution of water, land, or aquatic life is prohibited. The Geological Survey determines what constitutes such pollution and may have the material removed at the lessee's expense, although all orders are subject to judicial review.

The issuance and continuance in effect of any lease, or of any extension, renewal, or replacement of any lease under the provisions of the Act, depend on compliance with regulations. Generally, whenever the owner of a *nonproducing* lease fails to comply with the Act, the lease, or the regulations, such lease may be canceled by the Secretary of Interior, subject to the right of judicial review. Whenever compliance is absent in the case of a *producing* lease, such lease may be forfeited and canceled by an appropriate proceeding in any United States district court having jurisdiction under the Act.

Upon expiration of any lease, the lessee has one year to remove all structures, machinery, equipment and materials other than improvements needed for producing wells or other property permitted to be maintained.

The leasing of outer continental shelf land in the Gulf of Mexico, the Pacific Ocean, and off the Alaskan coast has been conducted so far at a moderate pace. Interior Department figures (U. S. 93d Cong., Committee on Commerce, National Ocean Policy Study Hearing) present the following pattern:

1962	—	1,924,504 acres
1963	—	312,945
1964	—	613,526
1965	—	Zero
1966	—	141,768
1967	—	744,456
1968	—	934,164
1969	—	108,657
1970	—	596,040
1971	—	37,222
1972	—	826,195
1973	—	1,032,570

Only 2 to 3% of the United States outer continental shelf has been leased. In 20 years, more than 12,000 wells have been drilled on the federal outer continental shelf lands, yielding 3.3 billion barrels of oil and 20.7 trillion cubic feet of gas. In 1973, about 1,081,000 barrels of oil were produced daily by United

OFFSHORE OIL PRODUCTION

Total Number Wells (20 years)	12,000
Total Oil Production (20 years)	3.8 billion barrels
1974 Oil Production	541,487,000 barrels (9% 1974 U. S. Oil Consumption)
Estimated Offshore Oil Deposits Remaining	6-20 billion barrels

States offshore wells, most of it the Gulf of Mexico. This represented about 8% of the United States' daily domestic consumption. In the same year, the United States used 6 billion barrels of oil and 23 trillion cubic feet of gas. Faced with dwindling onshore domestic reserves and increasing dependence on foreign imports of oil, President Nixon in 1973 ordered a tripling of the offshore leasing program. In January 1974, as the energy situation was aggravated, a ten-fold increase was ordered.

Approximately 6 million acres of the federal outer shelf lands are now under lease for oil and gas development. Compliance with the Presidential request would mean the leasing of 10 million acres in a single year. However, the Secretary of Interior (then Rogers Morton) told coastal state governors in a November 1974 conference that the 10 million goal was not firm. In July 1975, the Interior Department abandoned the 10-million acre goal as unrealistic, calling instead for 6 lease sales (of unspecified acreage) yearly until 1978.

Atlantic Leasing Plans

Regardless of what the increase proves to be, it is clear that some of the stepped-up development is slated for the offshore lands on the Atlantic Ocean. Estimates of the oil and gas potential beneath the Atlantic Ocean have varied greatly. The Geological Survey estimated between 10 and 20 billion barrels of oil and from 55 to 110 trillion cubic feet of gas; the Mobil Oil Corporation estimated only 6 billion barrels and 31 trillion cubic feet. Whatever the correct figures may be, the leasing program for the Atlantic will soon be underway, although there is normally a 2-to 10-year lag before actual production begins.

There is some consensus as to where

production will begin, for the oil fields have been divided into three major promising areas: (1) the Georges Bank Trough, (2) the Baltimore Canyon Trough; and (3) the Southeast Georgia Embayment. A recent poll of oil companies selected the mid-Atlantic as the most choice region, presumably because the companies believe the most substantial deposits lie there. It is likely that the first commercial drilling for oil and gas in the Atlantic will take place off the New Jersey-Delaware-Maryland-Virginia coasts. The leasing policies, present and proposed, have been severely criticized and may be overhauled.

The National Ocean Policy Study, a Senate initiative under the Commerce Committee, was authorized to undertake a comprehensive analysis of national ocean policy and federal ocean programs. The Study submitted a report in November 1974 that reflected widespread doubt whether the oil industry could handle so much development in such a short period, warning that the pursuit of a 10 million acre goal may exacerbate serious problems already evident in current leasing and management practices. On 19 March 1975, the U.S. Controller General asked the Secretary of Interior to define clearly the oil leasing goal so that industry and government could make effective plans.

Whatever pace the leasing program assumes, the National Ocean Policy Study disapproved of the bidding procedures practiced under it. It felt that where promising geophysical data exist, competition will prevail and produce high bids, but in other areas there may be no bids at all. Competition is discouraged by eliminating all but the largest and richest corporations from participation — and even then competition is limited. Only 4 of 16 major oil companies own 50% or more of their offshore producing leases independently, while 10 of 16 companies own 80% or more of the properties jointly.

Another area of concern of the leasing policy critics is the potential environmental danger. They argue that a major oil spill is inevitable and thousands of minor ones are likely wherever there is significant development on the shelf, citing a draft environmental impact statement on accelerated development released 21 October 1974 by the Interior Department. Moreover, the Council on Environmental Quality warns that the oil industry will face harsher conditions in the Atlantic than it has encountered in its nearly 20 years of offshore operations. Although the East Coast is generally considered free of hazardous earthquakes, other geological problems exist. Irregular topography, a relatively thick cover of unconsolidated sediments, occasional presence of boulders, shifting sediments caused by bottom currents, and severe storms will aggravate pollution risks.

Nevertheless, the impact of oil spills remains uncertain. On 25 March 1975 a national Conference on Prevention and Control of Oil Pollution found agreement by the scientific community and the oil industry on one fact — there exists a large area of ignorance in respect to long-range effects of maritime oil operations.

The National Ocean Policy Study also found evidence of inadequate environmental and safety regulations in outer continental shelf operations. The report accused the Geological Survey of not fully enforcing its orders and permitting the industry it regulates to comment on proposed regulations before they are published for public review. Finally, the report argued that the Geological Survey lacks the manpower and capital to analyze, interpret, and translate the substantial quantities of raw data in its possession. The government's lack of geophysical information, the study charged, has forced it to rely on private sources with vested interests, leading to gross errors, and in one case, the Geological Survey's evaluation of a tract was \$200 million less than the high bid.

In its study, released April 1974, of the effects of gas and oil development on the outer continental shelf, the Council on Environmental Quality (CEQ) found that outer shelf development will vitally affect important state interests. Since state regulatory authorities can significantly shape outer continental shelf development as well as related nearshore and onshore activities, federal-state coordination was urgently recommended. The Council also advised affected states to strengthen their coastal zone management agencies



The potential threat of additional oil spills is one concern of leasing policy critics.

and felt that federal-state cooperative efforts should focus on the development of state coastal zone plans before outer continental shelf development. The National Ocean Policy Study concluded that the development of coastal zone plans under the Coastal Zone Management Act of 1972 offered the best means of planning for changes brought on by outer continental shelf development. Once state plans have been approved by the Secretary of Commerce, offshore leasing programs will be required by the Act to adapt onshore impacts to conform with such plans. Currently all thirty coastal states are developing the plans, but none is expected to reach completion and approval before 1976.

CEQ believes the National Environmental Policy Act (NEPA) provides the best short-range planning mechanism to coordinate fragmented federal responsibilities for development. Under the Act,

all federal agencies proposing major outer continental shelf action must prepare pragmatic impact statements on a regional basis. With regard to outer continental shelf activities, the statements should discuss alternative uses of the affected shelf, nearshore and onshore areas.

CEQ also recommended that the Interior Department obtain the data necessary to assess environmental and safety factors at all stages of leasing and development and develop standards to govern public disclosure of such information. It likewise favored the development of Interior Department proposals for more stringent sanctions and the establishment of trained inspection teams to verify compliance to regulation. Finally, the CEQ urged new legislation to create a comprehensive federal liability system for outer shelf-related oil spill cleanup operations as well as incidental damages.

The National Ocean Policy Study group recommended a more moderate 1975 leasing goal than proposed by President Nixon, with offerings in new areas deferred until several improvements are made in current offshore leasing and management practices. It also recommended that the Interior Department include state and local representatives in any decisionmaking regarding outer continental shelf leasing; that the federal government take responsibility for exploring outer continental shelf oil and gas so proprietary rights over geological data will rest with the public; that the Council on Environmental Quality and the Office of Coastal Zone Management in the National Oceanic and Atmospheric Administration (NOAA) convene an interagency task force to assess environmental and coastal impacts of the leasing program; and that the Interior Department provide complete justification for its leasing program before appropriate congressional committees.

Proposed Legislation

Dissatisfaction with the offshore leasing program led to the introduction of several bills in Congress in 1974 and 1975. Bills before the Senate Interior and Insular Affairs Subcommittee would require the federal government to share outer continental shelf oil and gas revenues with coastal states affected by development of the resources, but no legislation has been offered that would grant states jurisdiction to tax oil corporations on income derived from offshore waters beyond state jurisdiction.

Among other proposals, Congressman Glenn M. Anderson (D.-Fla.) introduced two bills to amend the Coastal Zone Management Act of 1972. The first would require federal agencies to obtain state approval before issuing any permit or license for any activity seaward of a state-established marine or estuarine sanctuary. The second bill would establish authority for state review of federal outer continental shelf programs while states are still in the process of developing approved coastal zone management programs. Congressman Robert E. Bauman (R.-Md.) introduced a bill that would prohibit the Secretary of the Interior from granting leases for exploration and development of outer shelf oil and gas deposits before approval of the state coastal zone programs or 30 June 1976, whichever comes first. Bauman also introduced a resolution that no federal agency be permitted to conduct "oil leasing activities directly or indirectly affecting" the United

States coastal zone prior to development of an approved coastal zone plan.

The Departments of Interior and Commerce have opposed all the foregoing bills seeking to amend the Coastal Zone Management Act.

The Senate passed a bill that would require the Interior Department to conduct a complete survey of the oil and gas resources on the outer continental shelf before leasing. The bill also would provide for government access to information

gathered by the industry, with public disclosure required of much of the information. It also would call for environmental assessments beyond those dictated by the National Environmental Protection Act. The House, however, took no action on the bill, which was opposed by the Administration in 1974.

In July 1975, the Senate passed one bill to amend the Coastal Zone Management Act of 1972 to establish a Coastal Energy Facilities Impact Fund and an-

other bill to amend the Outer Continental Shelf Lands Act. The latter would, like the 1974 bill, revise the regulations for development of the shelf, particularly giving the states more influence on federal decisions to lease and exploit the resources. As of September 1975, the House had not acted on these bills.

The following bills, introduced in the 94th Congress, indicate the scope of proposals relating to OCS resource development and exploitation:

EXAMPLES OF BILLS RELATED TO THE OCS INTRODUCED IN THE 94TH CONGRESS

S 81 Mathias et al: *To provide the governors of coastal states with a delay mechanism so as to protect coastal states from adverse environmental or economic impacts and other damages associated with the development of oil and gas deposits in the Outer Continental Shelf; and for other purposes.*

S 130 Stevens: *To authorize certain revenues from leases on the Outer Continental Shelf to be made available to coastal and other states.*

S 426 Hollings, Biden et al: *To establish a policy for the management of oil and natural gas in the Outer Continental Shelf; to protect the marine and coastal environment; to amend the Outer Continental Shelf Lands Act; and for other purposes.*

S 521 Jackson et al: *To increase the supply of energy in the United States from the Outer Continental Shelf; to amend the Outer Continental Shelf Lands Act; and for other purposes.*

H.R. 1363 Peyser: *To amend the Outer Continental Shelf Lands Act; to establish a National Mineral Reserves Trust; and for other purposes.*

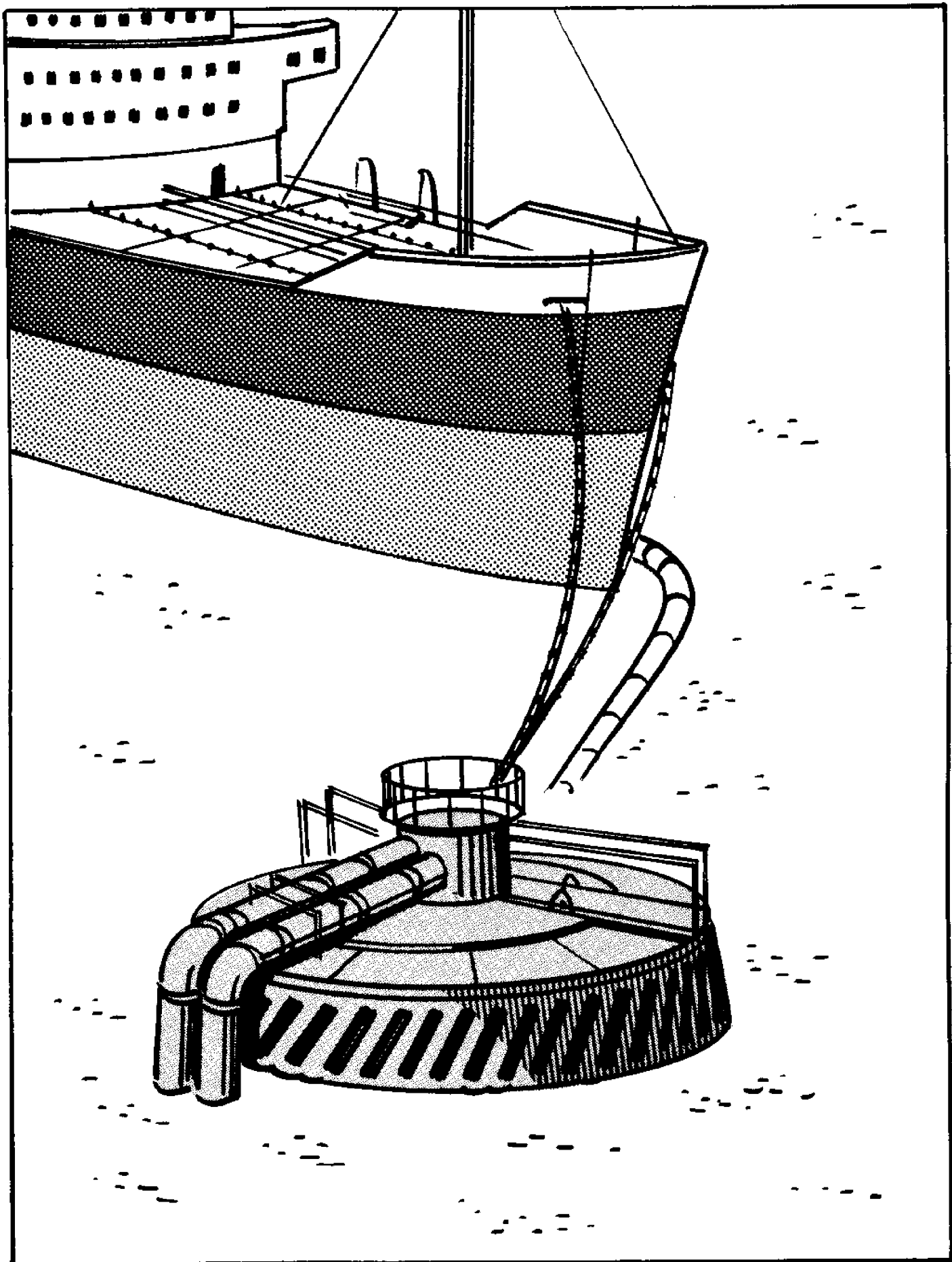
H.R. 776 Bauman: *To amend the Coastal Zone Management Act of 1972 to authorize financial assistance to coastal states to enable them to study, assess, and plan the effects of offshore energy-related facilities and activities in or on the Outer Continental Shelf on their coastal zones; to provide assistance to the coastal states for coordinating coastal zone planning, policies, and programs in contiguous interstate areas; and for other purposes.*

H.R. 3079 Bell: *To amend the Outer Continental Shelf Lands Act to provide for a procedure for congressional disapproval of offshore oil and gas leases.*

H.R. 4374 Eilberg: *To grant to each coastal state mineral rights in the subsoil and seabed of the Outer Continental Shelf extending to a line which is 12 miles from the coast of such states; and for other purposes.*

H.R. 5588 Hughes & Dodd: *To declare a moratorium on the sale of leases in frontier areas of the Outer Continental Shelf for the purpose of exploiting mineral reserves.*

H.R. 5917 Forsythe, Lent, and McCloskey: *To amend the Outer Continental Shelf Lands Act to provide for strict liability in the case of damage caused by oil spills; and for other purposes.*



Deepwater Ports

The Deepwater Port Act of 1974 created an entirely new law to govern ports to be built beyond the territorial sea of the United States, but under federal jurisdiction. This report seeks to answer the following questions:

- *Under the Act, must the adjacent coastal states approve construction and operation of ports in international waters beyond the territorial limits of the United States?*
- *What circumstances might preclude pipeline construction connecting a deepwater port with a coastal state?*
- *Is a state applying for a port license entitled to preference over other applicants?*
- *Who develops and enforces environmental protection and navigational safety regulations? What penalties are fixed for violations?*
- *Is state law preempted with regard to liability for oil spills arising in connection with the use of a deepwater port?*
- *What laws apply to deepwater ports?*
- *May states authorize construction and operation of such a port within their own waters?*

In the last days of its second session, the 93d Congress passed the Administration-supported Deepwater Port Act of 1974. The statute allows for the construction and operation of deepwater ports capable of handling huge oil tankers in waters beyond the territorial sea of the United States. Supporters of the legislation claimed that it would both bring substantial savings in oil transportation costs and reduce the risk of environmental damage from oil spills. Existing ports, like New York, Philadelphia, Houston, or Oakland, simply cannot accommodate deep-draft, very large crude oil (VLCC) carriers of 200,000 tons or more.

The Act authorizes the Secretary of Transportation to issue licenses to own, construct, and operate deepwater ports to be used for the transfer of oil to the United States. The U.S. Coast Guard, an agency of the Department of Transportation, has been assigned major responsibility for deepwater ports by the Secretary.

The Act requires the Secretary to consult with interested federal agencies and stipulates that a deepwater port license cannot be issued if the Environmental Protection Agency (EPA) finds the port would not conform to the provisions of the Clean Air Act, the Federal Water Pollution Control Act, or the Marine Protection, Research and Sanctuaries Act.

The legislation prohibits the Secretary from granting a license unless each adjacent coastal state either approves or, by its failure to act, is "presumed to approve" it. An 'adjacent coastal state' is any state that would be connected by a pipeline to or located within 15 miles of the port, or one that the Secretary determines would be as vulnerable to environmental damage from the port as states to which the port is directly linked by pipeline.

The Act bars issuance of the license unless the state that would be directly connected by pipeline to the port has

made "reasonable progress" toward developing an approved coastal zone management program under the Coastal Zone Management Act of 1972.

Any qualified United States citizen is eligible for a Deepwater Port license. The license would be effective for 20 years and could be renewed, transferred, suspended or revoked under certain circumstances. The Secretary, in considering relatively equal competing license applications within a geographic area, must give preference to: 1) an application from a state, interstate, or local government unit; 2) an applicant who is independent of the oil industry; or 3) "any other person."

The Act directs the Secretary to issue and enforce regulations for marine environmental protection and navigational safety. It sets maximum penalties for violation of the Act at \$25,000 for each day of violation and/or one year imprisonment. It also provides for citizen civil actions for alleged violations of the Act and for judicial review of licensing decisions.

Under the Act, owners and operators of vessels discharging oil while operating in a safety zone around a deepwater port (or after leaving such a port where it has received oil from another vessel) are liable, without regard to fault, for clean-

up costs and damages up to \$150 per gross ton of the vessel or \$20 million, whichever is less. The licensee is liable, without regard to fault, for cleaning costs and damages up to \$50 million for discharges emanating from its port or a vessel moored thereto. There is also a maximum penalty of \$10,000 in fines and/or one year imprisonment for failure to report oil spills. A \$100 million Deepwater Port Liability Fund, to be financed by user charges of \$.02 a barrel, will be established to pay cleanup costs and damages in excess of the liability limits. The Act does not preempt state law in the field of liability, but does preclude double recovery of damages. Finally, the statute authorizes the Attorney General to bring class action suits for damages and permits private parties to initiate class actions if the Attorney General fails to act.

The Constitution, laws, and treaties of the United States apply to the licensed deepwater port in the same way as to an area of exclusive federal jurisdiction located within a state. In practice, the law of the nearest adjacent coastal state, measured from its seaward boundaries beyond three miles, would be applied. But the laws would be admin-

istered and enforced by federal officers and courts, with original jurisdiction in a United States district court. Foreign states must recognize by agreement the jurisdiction of the United States over the foreign vessel and its personnel when in the safety zone of the port; otherwise, access must be denied by the licensee. Finally, the customs laws administered by the Secretary of Treasury do not apply to such deepwater ports, except for materials brought from foreign countries for the construction of the port.

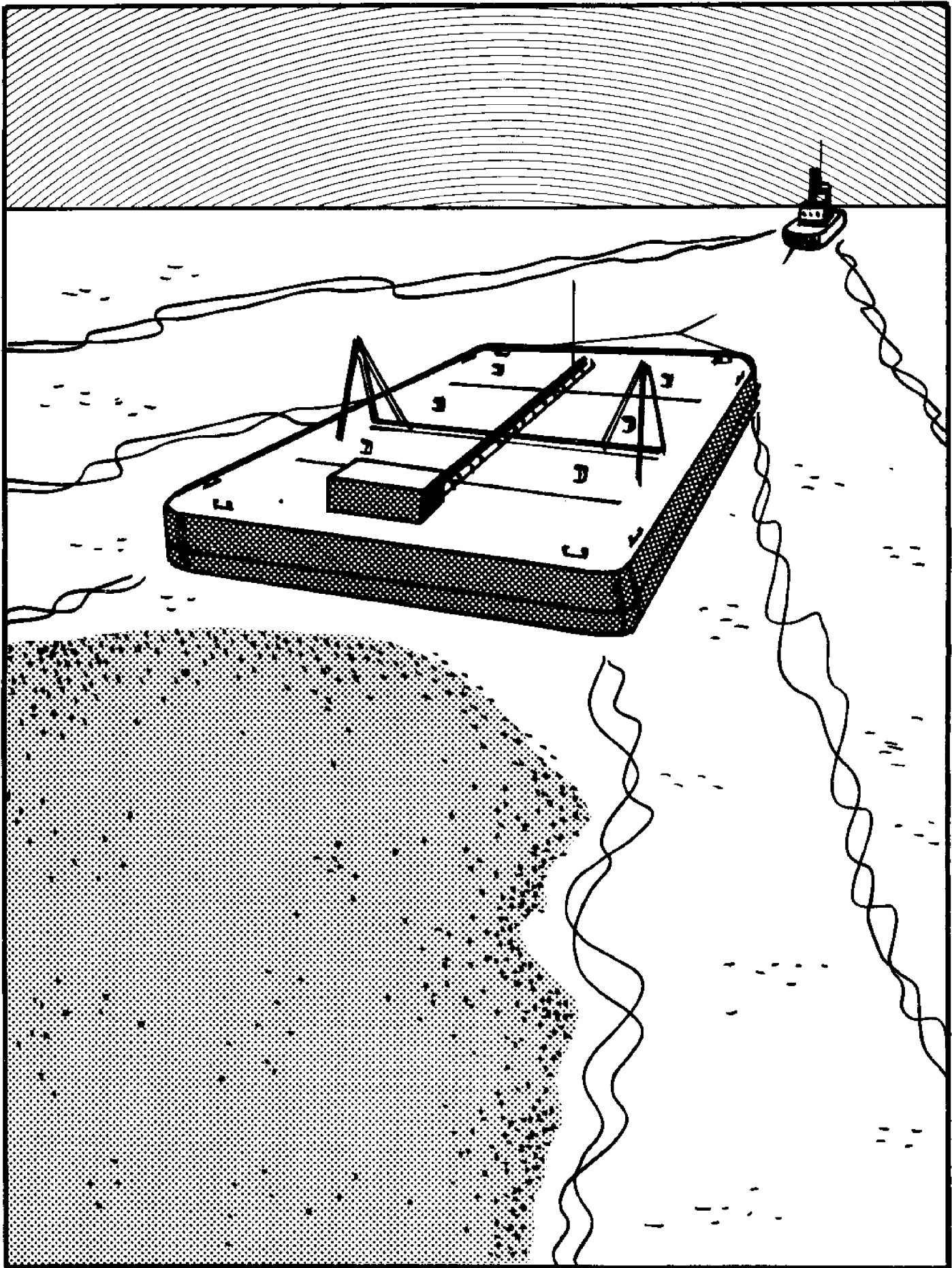
With regard to the licensing, construction, and operation of deepwater ports in territorial waters and interstate bays, the law is unsettled. States have title to the seabed within the territorial waters of the United States, but structures erected upon such submerged lands would be conditioned or controlled by various federal powers as well as a few international requirements.

Governor Sherman Tribbitt appointed the Delaware Deepwater Oil Terminal Committee in 1974 to study the advisability and feasibility of a deepwater terminal in Delaware Bay, which includes analysis of the legal status of such structures and the possible interests or controls of both federal and state agencies.

U.S. port channels are grossly undersized for vessels with drafts greater than 45 feet (generally displacements of 80,000 dwt). The majority of U.S. ports, particularly those on the Atlantic and Gulf Coasts, are deep enough in their main ship channels and alongside their berthing facilities to accept vessels of only 35- to 40-foot drafts, or about 30,000-55,000 dwt. Relatively few can berth fully laden bulk vessels of 80,000. Tankers and bulk carriers over 100,000 tons, requiring depths of at least 55 feet, will be unable to arrive or depart fully loaded at any existing terminal along the entire southern and eastern sweep of the U.S. coast.

Ocean Transportation, Frankel, E.G. & Marcus, H.S., M.I.T. Sea Grant Program (1973), pp. 685.





Ocean Dumping

Dumping of waste material into the oceans is regulated under the Marine Protection, Research, and Sanctuaries Act of 1972. This report seeks to answer the following questions about the dumping of sewage, sludge, solid wastes, and other industrial wastes in the ocean beyond the three-mile territorial sea of the United States:

- *Who is responsible for granting dumping permits?*
- *What are the different types of permits and what standards must be met to get them?*
- *How has the permit system operated to date?*
- *Are permits legally issued if they may result in the violation of applicable state water quality standards?*
- *Are states pre-empted from adopting and enforcing rules relating to ocean dumping activities?*
- *Is state approval required before the designation of certain areas as marine sanctuaries?*
- *What and where are some major dumping sites off the Delaware coast?*

The Marine Protection, Research, and Sanctuaries Act of 1972 was enacted to regulate the dumping of materials into ocean waters. It governs the transportation of materials from the United States out to ocean waters, as well as the dumping of materials transported from outside the

United States, if the dumping occurs in ocean waters over which the United States has jurisdiction or over which it may exercise control, under accepted principles of international law, in order to protect its territory or territorial sea. The Act absolutely prohibits persons, including federal instrumentalities, from transporting any radiological, chemical, or biological warfare or any high-level radioactive waste from the United States for the purpose of dumping it into ocean waters. Nor may any person dump such materials transported from any location outside the United States into the territorial sea of the United States or into a zone contiguous to the territorial sea, extending to a line 12 nautical miles seaward from the base line from which the breadth of the territorial sea is measured.

The dumping of dredged material, which is "any material excavated or dredged from the navigable waters of the United States," into ocean waters is regulated by the Secretary of Army who may either issue permits for transporting dredge material or, in the case of federal projects, issue regulations governing such transportation. Before issuing any permit or regulation affecting dumping, the Secretary must notify the Administrator of the Environmental Protection Agency (EPA) of his intention to do so. The Administrator can effectively veto any permit or regulation which in his judgment does not comply with the conditions for EPA permits discussed below. If the conditions are not met, the Secretary may, with the Administrator's approval, issue a permit if there is no economically feasible method or site available other than one in non-compliance with the conditions. Unless the Administrator finds the dumping of the material will result in an unacceptably adverse impact on municipal water supplies, shellfish beds, wildlife, fisheries, or recreational areas, he permits the waiver of the above conditions.

All other materials to be dumped into the territorial sea or in the oceans beyond require a permit from the EPA. The Administrator grants them after notice and opportunity for public hearings, if he determines such dumping will not unreasonably degrade or endanger human health, welfare, or the marine environment, ecological systems, or various economic potentialities. Criteria he must consider in such a judgment include: 1) the need for proposed dumping; 2) the effect of such dumping on human health and welfare including economic, esthetic and recreational values; 3) the effect on fisheries resources, wildlife, shorelines and beaches; 4) the effect on marine ecosystems; 5) the persistence and permanence of the effects of the dumping; 6) the effect of dumping particular volumes and concentrations of such materials; 7) appropriate locations and methods of disposal or recycling, including land-based alternatives; 8) the effect on alternate uses of oceans, such as scientific study, fishing, and resource exploitation; 9) the feasibility of locations beyond the continental shelf; and 10) the impairment of navigation.

The Administrator may consult with interested federal and state agencies as he deems useful or necessary. No permit is issued that violates applicable water quality standards. No permit is required for dumping fish wastes, except when deposited in harbors or other protected or enclosed waters, or except where the Administrator finds that such deposits could endanger health, the environment, or an ecological system in a specific location.

EPA regulations, as issued in October 1973 and amended June 1974, provide insight into how the permit system works.

There are five different types of permits. *General permits* are issued for galley waste from ships and other non-toxic materials generally disposed of in small quantities. *Special permits* have a fixed expiration date of not more than three years from the date of issue, but are renewable. They are granted for certain materials in designated limited concentrations to prevent or minimize their harmful effects. The EPA's criteria for evaluation of permit applications require that these limiting concentrations be determined by bioassay procedure approved by the EPA. *Interim permits* are issued for no longer than one year and are not renewable, though application for a new permit is possible. They are issued for dumping these same materials in amounts greater

than specified by the regulation. (When interim dumping is permitted, it takes place in approved sites generally no larger than a few square miles.) Special conditions must be met, including assessment of the potential environmental impact of the dumping and the development and active implementation of a plan to either eliminate the discharge entirely from the ocean or to bring it within the amounts specified by the regulations. *Emergency permits* may be issued for specified toxic materials where an emergency requires the dumping of such materials which pose "an unacceptable risk relating to human health" and for which no other feasible disposal is demonstrated. *Research permits* are limited to 18 months but may be issued for other materials when the administrator determines the scientific merit of the proposed project outweighs the potential damage that may occur from the dumping.

The regulations state that regardless of designated specific requirements, no permit will be issued that would result in the violation of applicable state water quality standards. Furthermore, as mandated in the Act, the regulations prohibit the dumping or transportation for dumping of a) high-level radioactive wastes as defined by the regulations; b) materials in whatever form produced for radiological,

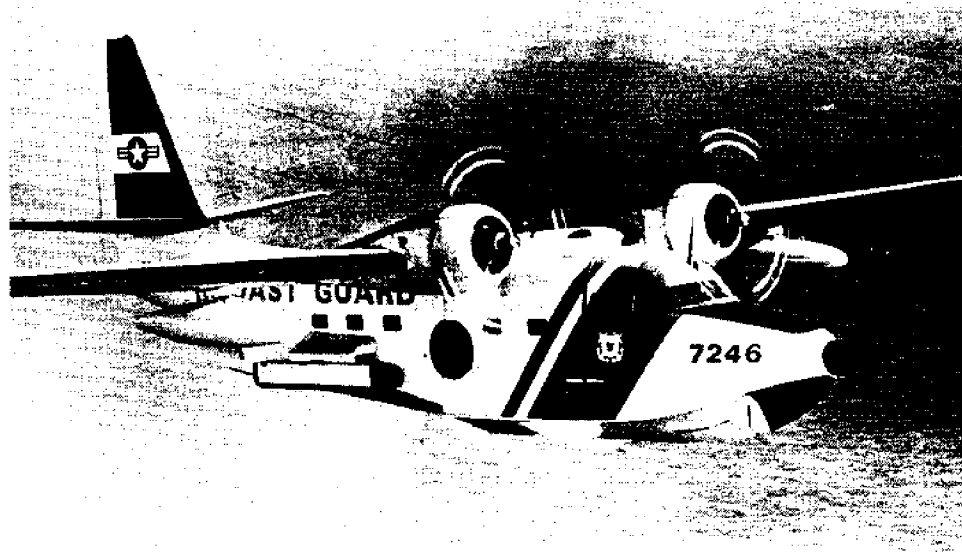
chemical or biological warfare; c) materials insufficiently described to permit evaluation of their impact on marine ecosystems; and d) persistent, inert materials which may float or remain in suspension in the ocean unless they have been processed in such a fashion that they will sink to the bottom and remain in place.

Penalties for violations are both civil and criminal. A fine of up to \$50,000 and imprisonment up to one year for each violation is possible. Each day of a continuing violation constitutes a separate offense. Injunctive relief also may be granted. Civil suits by private persons are authorized by the Act.

States are pre-empted from adopting or enforcing any rule (except as provided in the Fish and Wildlife Coordination Act) relating to any activity regulated by the Act. Any state may, however, propose to the Administrator criteria relating to the dumping of materials into ocean waters within its jurisdiction, or into other ocean waters to the extent that such dumping may affect waters within the jurisdiction of the state. A determination of whether the proposed criteria will be imposed must be made within 120 days of their receipt.

The Coast Guard conducts surveillance and other appropriate enforcement

The U.S. Coast Guard uses a variety of specialized surveillance equipment to carry out its enforcement responsibilities. This aircraft is used to detect oil on water.



activity to prevent violations of the Act. The Secretary of Commerce oversees a continuing program of monitoring and research regarding the effects of dumping. He is required by the Act to "conduct and encourage, cooperate with, and render financial and other assistance to appropriate public (whether federal, state, interstate, or local) authorities, agencies, and institutions. . . to promote the coordination of research, investigations, experiments, training, demonstrations, surveys and studies for the purpose of determining means of minimizing or ending all dumping by October 23, 1977."

The Marine Protection, Research and Sanctuaries Act is limited in several respects. No person is subject to penalties for dumping materials from a vessel if such materials are dumped in an emergency to safeguard life at sea. Routine discharges of effluent incidental to the propulsion or operation of motor-driven equipment or vessels are permissible. So is the construction of fixed structures, artificial islands, and the intentional placement of any device on the seabed of ocean waters for a purpose other than disposal, if such a placement is otherwise regulated by federal or state law. Likewise, materials deposited to develop, maintain, or harvest fisheries and which are otherwise regulated by federal or state law are exempt from the Act. Furthermore, the disposition of effluents regulated under the provisions of the Federal Water Pollution Control Act, the Atomic Energy Act, or Section 407 of the Rivers and Harbors Act are not defined as "dumping."

The Secretary of Commerce may, with the President's approval, designate as "marine sanctuaries" those areas of the ocean/waters which he determines necessary for the conservation of recreational, ecological, or esthetic values. The National Oceanic and Atmospheric Administration on 18 March 1974 proposed guidelines for nominating areas as marine sanctuaries and procedures for their selection, designation and operation. Consultation with and approval by appropriate state officials is required on the part of the Secretary before such areas may be designated as sanctuaries and all concerned parties must have a chance to be heard. Once designation for a sanctuary has been accomplished, dumping permits in the area from the EPA are invalid without further authorization by the Secretary of Commerce.

The actual operation of the permit system is relatively new and the EPA is still "feeling its way" in its management.

In April 1974 the EPA Region II office canceled its tentative decision to issue 40 *special permits*, deciding to use *interim permits* instead. Of the 22 involved industries, 20 failed to show that their waste would meet the criteria necessary for special permit status. The two successful applications were permitted to discharge construction rubble and inert tunnel debris. Four applicants, including Allied Chemical and duPont, were only issued interim permits, because EPA found it could not issue special permits in the absence of an approved bioassay procedure. DuPont objected to the provision in its permit requiring it to change its dumping site from 15 miles offshore to 106 miles off the Atlantic Coast. DuPont claimed the change would cost \$2 million and require an additional 200,000 gallons of oil for transport. Although the hearing officer for Region II recommended that duPont be allowed to continue dumping at the 15 mile site until evidence was presented that the dumping has a harmful effect on the marine environment, the Regional Administrator ruled otherwise. Thirteen other companies also have been required to dump at the 106 mile site. Another interim permit allows duPont to dump about 125 million gallons of iron-chloride acid wastes into the Atlantic Ocean about 45 miles southeast of Cape Henlopen.

By the summer of 1974 more than 100 interim dumping sites had been approved. Only 20 of these were very far from the shore, while the rest were near-shore sites used solely for the disposal of dredged material. The dumping of sewage

and sludge into the Atlantic Ocean off New York, New Jersey, and Delaware has raised concern about the condition of shore waters nearby. Some experts believe that the sludge that is dumped 12 miles offshore in the New York Bight by New York City has been moving closer to the beaches and will touch land by 1977. Both EPA and NOAA, however, discounted these reports, although in October 1974 the EPA notified the permit holders that they would not have their permits renewed in 1976. While EPA maintained there was no immediate threat, it believed that the expected three-fold increase in sludge could not be accommodated by the nearshore site and would have to be placed much further out to sea.

A problem troubling Delaware for some years has been the disposition of Philadelphia's sewage sludge. On 13 February 1975 the city received an interim permit of one year's duration to dump 150 million gallons a day of digested sewage sludge 38 miles seaward of the Maryland-Delaware border on the Atlantic Ocean. At the same time, EPA required that the city reduce its dumping by 50% in 1978 and stop dumping completely by 1981. Philadelphia has argued that the EPA went beyond its authority, that the city should be permitted to dump 175 million gallons of sludge a year, and that "alternatives" were extremely costly, with pollution problems of their own.

The magnitude of the dumping problem in the Atlantic Ocean and over the continental shelf of the United States can be seen from the following table.

OCEAN DISPOSAL OF WASTE, 1973

Waste Type	Atlantic Ocean	Gulf of Mexico	Pacific Ocean	Total (in tons)
Industrial waste	3,997,100	1,408,000	0	5,405,100
Sewage sludge	5,429,400	0	0	5,429,400
Construction and demolition debris	1,161,000	0	0	1,161,000
Solid waste	0	0	240	240
Explosives	0	0	0	0
TOTAL*	10,587,500	1,408,000	240	11,995,740

*Does not include dredged material

Source: Environmental Protection Agency

Findings

The following summarizes the three major pieces of federal legislation affecting development of outer continental shelf resources:

OUTER CONTINENTAL SHELF LANDS ACT (1953)

<i>Purpose:</i>	To permit leasing of offshore lands for purpose of extracting mineral resources.
<i>Licensing Authority:</i>	Bureau of Land Management (Department of Interior)
<i>State Participation:</i>	Input permitted in choosing areas to be leased. Onshore impacts must conform to state plans approved pursuant to Coastal Zone Management Act of 1972. Waters within state jurisdiction (generally three miles from shore) not subject to federal leasing.
<i>Problems:</i>	Oil spills inevitable — consequences unknown. Proposed development may be too great for oil industry to handle.

DEEPWATER PORT ACT (1974)

<i>Purpose:</i>	To permit construction and operation of deepwater ports beyond territorial sea to be used for the transfer of oil from large tankers to the United States.
<i>Licensing Authority:</i>	Secretary of Transportation
<i>State Participation:</i>	“Adjacent” coastal state approval required prior to issuance of license. States may be licensees. As such, receive priority over equally competitive non-state applicants.
<i>Problems:</i>	High costs, environmental constraints, and lagging petroleum consumption may inhibit development.

THE MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT (1972)

<i>Purpose:</i>	To regulate dumping of materials into ocean waters. To provide for designations as “marine sanctuaries,” those areas determined necessary to conservation of ecological and recreational values.
<i>Licensing Authority:</i>	Secretary of Army issues permits for dredged material. All other types regulated by Environmental Protection Agency. Secretary of Commerce designates marine sanctuaries.
<i>State Participation:</i>	Applicable state water quality standards are inviolate. May propose to EPA criteria relating to dumping which may affect waters within state’s jurisdiction. State approval required prior to designation of marine sanctuaries.
<i>Problems:</i>	Uncertain standards for assessing environmental impact in dumping many substances and need for alternate land sites for dumping.

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