OIL POLLUTION: ITS NATURE AND AFRICA'S LEGISLATIVE RESPONSE

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I. INTRODUCTION

Recent marine disasters, such as the break-up of the supertanker Torrey Canyon off the south-west coast of England in 1967 and the even more recent ruptures involving off-shore drilling platforms in the Santa Barbara Channel, have aroused popular concern about oil pollution in Europe and North America. Such catastrophes have brought demands on legislatures for action. The truth of the matter, however, is that the problem of oil pollution has been around, in less dramatic forms, for some time and that many nations, both Western and non-Western, have taken some action to alleviate it. The purpose of this paper is to see the problem of oil pollution as one group of non-Western nations sees it, to discover how their legislatures confront it and to determine, if possible, why the response of these legislatures is what it is.

The first part of the paper will define the primary sources of oil pollution and the effects of oil pollution in a general manner. The response of one Western nation, the United States, will be briefly noted, as a counterpoint to the detailed notation to be made of the response of a number of non-Western and essentially undeveloped nations, the nations of the continent of Africa. The choice of Africa is made for a number of reasons: the frontage of the continent on three oceans and two seas, the variety of its cultures and legal systems from which their legislation springs, the presence of numerous inland waterways, many of which are navigable and some of which cross national boundaries, and, lastly, the familiarity of the writer with African legislation.

Oil pollution has many sources. The earliest source of oil pollution to bring about legislative action was the discharging of bilge by vessels at sea or in port. With the development of the tanker came the problem of oil discharge which accompanied the flushing of the storage tanks of that vessel. These two sources of oil pollution are still very significant today, contributing a million tons of oil annually to ocean pollution world-wide. The storage of oil near harbors and along waterways created, and still creates, a problem of oil

seepage into the neighboring waters. The contribution to oil pollution by the above sources is an important one. They lack, however, the drama of off-shore drilling catastrophes or the foundering and breaking up of tankers and supertankers in which huge quantities of oil are spewed out into a localized area with the consequent obviousness and magnification of the effects. With more and more drilling platforms being built and more and larger tankers being constructed to haul away their product, oil pollution from these sources can be considered to be increasing as an important problem.

Before discussing the effects of oil pollution, the geographical areas most affected should be outlined. As might be suspected, the areas most affected are the coastal areas, the areas from which most of the seafood of the world is obtained. Nearly all of the marine organisms that we use for food are uniquely adapted to living in coastal areas while many of those food species which can and do live elsewhere depend on the coastal organisms for their food or depend on coastal areas for habitation during their reproductive and neophyte phases.

Oil pollution affects both the physical landscape and seascape as well as the organisms that live in the sea or which are bound to it in some other way. There are further biological effects of oil pollution: first, the immediate kill by the toxic fractions of the petroleum, sometimes resulting in windrows of dead fish and other organisms on the stricken beaches and second, the pollution of animals that are not killed, rendering them unfit for human nutrition. There are two other matters of concern. Hydrocarbons are stable in the food chain and are concentrated as they are passed on, therefore some scientists are concerned that carcinogens or certain toxins may become so concentrated as to present a danger to human beings. Organic chemical compounds, which ap-

Dr. Max Blumer, organic chemist, Senior Scientist, Woods Hole Oceanographic Institution in "The New Yorker," January 31, 1970, p. 29. Excellent scientific studies of the effects of oil pollution may be found in River Pollution 2: Causes and Effects, by Dr. Louis Klein (Butterworths: London 1962), and 'Torrey Canyon' Pollution and Marine Life--A Report by the Plymouth Laboratory of the Marine Biological Association of the United Kingdom, edited by J.E. Smith, Sc.D., F.R.S. (Cambridge University Press, 1968).

pear in the ocean in a few parts per billion, play many roles, and certain elements of petroleum mimic them very closely. Many fish find food or mates or their spawning grounds through smell. The addition of a million tons of oil a year, that minimum amount traceable to bilge and tank discharge alone, when stirred by ocean currents, may relatively quickly produce--could already have produced-wholesale pollution sufficient to block the finding of mates, food, or habitats, or to provide false stimuli for these. Oil pollution lasts. Dr. Howard Sanders, a marine ecologist working at the Woods Hole Oceanographic Institution, reported that oil from a spill near his laboratory last September had saturated the littoral sediment to a depth of one Oil is supposed to break down quickly to leave tar which most animals do not eat. This oil did not break down and since September every time a storm occurs in the area, enough oil appears to get stirred back into the water to produce a new kill. Yet the area and depth of the oil penetration into the sediment has remained the same. The beaches, the bottom, the entire littoral area cut to a depth of 40 feet are completely dead. None of the animals which lived there remain; the only living creature is a peculiar species of worm, known only to inhabit polluted waters.

11. THE AMERICAN RESPONSE TO OIL POLLUTION

The control of water pollution (and thus oil pollution) in the United States is a responsibility shared by the several levels of government--federal, state, and local. The Federal Water Pollution Control Act declares "the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of the States in preventing and controlling water pollution," but with successive amendments to that Act and the promulgation of other laws the Federal role has in fact been considerable expanded in recent years. This review of the American legislative response to oil pollution will be limited to federal legislation. State and local laws will not be reviewed nor will our international boundary agreements with Canada and Mexico be reviewed. It should also

Blumer, Op. Cit., p. 29.

Dr. Howard Sanders, marine ecologist, Woods Hole Oceanographic Institution, in "The New Yorker," Jan. 31, 1970, p. 30. Sanders, Op. Cit., p. 30. 33 U.S.C. 466 et seq. (Section 1 of the Act is quoted.)

be pointed out that water pollution is governed by the fundamental law of water use, but since there is no single doctrine which is applicable and because this paper is concerned only with legislation, these laws will also not be reviewed. The Federal legislation to be discussed, however, will be broken into two groups: those laws which deal generally with water pollution and which may be applicable specifically to oil pollution and those laws which deal exclusively with the problem of oil pollution.

Water Pollution

Federal legislation on water pollution may be said to have begun with the provisions of the Rivers and Harbors Act of 1899, which, though primarily concerned with the prevention of damage to shipping, prohibited the deposition of waste materials, other than those flowing in a liquid state, from streets and sewers, in or on the banks of navigable waters and their tributaries. In 1912, the Public Health and Service Act gave authority to the Public Health Service to conduct investigations into water pollution relating to the diseases and impairments of man. This was followed by the Oil Pollution Act of 1924, which will be discussed later. A major development in the federal control of water pollution took place in 1948, with the passage of the Federal Water Pollution Control Act. That Act has been amended several times since 1948 to increase its scope and is administered by the Department of the Interior. Since this Act, as amended, is the Federal government's broadest grant of authority in the general field of water pollution, a brief examination of its provisions might be in order.

The jurisdiction of the Act extends to interstate or navigable waters in or adjacent to any state or states. Primarily the Act seeks to have individual states formulate their own water quality criteria applicable to interstate waters or portions thereof within each state and to adopt a plan for the implementation and enforcement of the water quality criteria formulated. If any state fails to formulate such standards or if such standards do not sufficiently

⁶Cf. Federal Water Pollution Control Act Amendments of 1961, PL 87-88; Water Quality Act of 1965, PL 89-234; and the Clean Water Restoration Act of 1966, PL 89-753.

meet the purposes of the Act, then the Secretary of the Interior may set such standards as may be necessary in that state. The Act generally seeks to leave enforcement of water quality standards to the states. If a situation arises where pollution having its origin in one state affects waters passing through another state and such pollution violates the water quality standards of that state or if such pollution affects the waters of a foreign state, the Secretary of the Interior is empowered to call a conference of the interested parties to discuss the matter and remedies for it. If the Secretary is not satisfied either during or after the conference that sufficient pollution abatement is being made he may make recommendations to the appropriate state agency. If this action does not produce abatement, the Secretary may call a public hearing on the matter which may result in abatement recommendations to the offending party or parties. If this action fails, a civil suit by the Secretary to secure abatement of pollution may be in order. As a further means of enforcement, the Secretary is authorized to prescribe such regulations as are necessary to carry out his functions under the Act.

Oil Pollution

The major legislation in this field, with the exception of the very recent laws to be discussed below, is the Oil Pollution Act of 1924. Responsibility for administration of this act lies with the Secretary of the Interior. The prohibitions of the Act are as follows:

- Sec.3.(a) Except in case of emergency imperiling life or property, or unavoidable accident, collision, or stranding, and except as otherwise permitted by regulations prescribed by the Secretary as hereinafter authorized, it is unlawful for any person to discharge or permit the discharge from any boat or vessel of oil by any method, means or manner into or upon the navigable waters of the United States.
- (b) Any person discharging or permitting the discharge of oil from any boat or vessel, into or upon the navigable waters of the United States shall remove the same from the navigable waters of the United States, and adjoining shorelines immediately. If such person fails to do so, the Secretary may remove the oil or may arrange for its removal, and such person shall be liable to the United States, in addition to the penalties prescribed in section 4 of this Act, for all costs and expenses reasonably incurred by the Secretary in

removing the oil from the navigable waters of the United States, and adjoining shorelines of the United States. These costs and expenses shall constitute a lien on such boat or vessel which may be recovered in proceedings by libel in rem.

- (c) The Secretary may prescribe regulations which--
 - (1) permit the discharge of oil from boats or vessels in such quantities under such conditions, and at such times and places as in his opinion will not be deleterious to health or marine life or a menace to navigation, or dangerous to persons or property engaged in commerce on navigable waters of the United States; and
 - (2) relate to the removal or cost of removal, or both, of oil from the navi-gable waters of the United States, and adjoining shorelines of the United States.

Enforcement via arrest and trial in federal court may bring the following penalties:

- Sec.4.(a) Any person who violates section 3(a) of this Act shall, upon conviction thereof, be punished by a fine not exceeding \$2,500, or by imprisonment not exceeding one year, or by both such fine and imprisonment for each offense.
- (b) Any boat or vessel other than a boat or vessel owned and operated by the United States from which oil is discharged in violation of section 3(a) of this Act shall be liable for a penalty of not more than \$10,000. Clearance of a boat or vessel liable for this penalty from a port of the United States may be withheld until the penalty is paid. The penalty shall constitute a lien on such boat or vessel which may be recovered in proceedings by libel in the district court of the United States for any district within which such boat or vessel may be.
- Sec.5. The Commandant of the Coast Guard may, subject to the provisions of section 4450 of the Revised Statutes, as amended (46 U.S.C. 239), suspend or revoke a license issued to the master or other licensed officer of any boat or vessel found violating the provisions of section 3 of this Act.

The jurisdiction asserted by the Act and the severity of the possible penalties upon conviction make this Act a formidable weapon in alleviating at least one major source of oil pollution. However, the penalties are for "discharge" of oil (grossly negligent or willful spilling, leaking, pumping, pouring, emitting, or emptying of oil). The proof requirements under such circumstances seem to undercut the purposes of the Act. [As this paper was being written, Congress passed and the President signed PL 91-224, which dealt, in part, with the oil pollution problem. Unfortunately, a copy of the law could not be had in time for inclusion here.]

111. THE AFRICAN RESPONSE TO OIL POLLUTION

In general, African legislation on water pollution can be divided into two groups: those laws which deal generally with water pollution and which may find application against oil pollution and those laws which deal exclusively with oil pollution. Before discussing these laws, it should be pointed out that this review applies to the laws of all the presently independent African nations and the laws of Spain and Portugal as they relate to their African colonies. Emphasis is placed on those laws which have been adopted or acceded to after the attainment of independence of the nations concerned.

Water Pollution

Botswana

The Water Act of 1967 was passed to define the ownership of any rights to the use of water and to provide for the grant of water rights and servitudes. It is basically a water rights act, of the type commonly found in Africa. Incidentally, it provides the following prohibitions against pollution:

Pollution of Public Water etc.

- 36.(1) Any person who-
 - (a) save under the authority of this Act or any other written law interferes with or alters the flow of or pollutes or fouls any public water; or
 - (b) without the permission of the Water Registrar places any poison in any public water

 $^{^{7}}$ Laws of Botswana, Act No. 40/67.

or water in any work to which any member of the public or domestic animal may reasonably be expected to obtain access, whether lawfully or unlawfully

shall be guilty of an offence and shall be liable to the penalties prescribed in section 37.

- (2) For the purposes of this section the polluting or fouling of public water shall include the discharge into, or in the vicinity of, any public water, or in a place where public water is likely to flow, of any matter or substance likely to cause injury whether directly or indirectly to public health, livestock, animal life, fish, crops, orchards or gardens which are irrigated by such water or any product in the processing of which such water is used or which occasions, or which is likely to occasion, a nuisance. Penalties
- 37.(1) A person who is guilty of an offence under section 9(2) or 36(1) shall be liable to a fine of R1,000 or to imprisonment for a period not exceeding one year, or to both such fine and such imprisonment.
- (2) A person who is guilty of an offence under section 7(4), 17(2) or 29(3) shall be liable to a fine of R500 or to imprisonment for a period not exceeding six months or to both such fine and such imprisonment.
- (3) In addition to the penalties which may be imposed in terms of this section the court may, in the event of a continuing offence, impose a fine of R10 for each day during which the offence continues.

Administration of the Act is shared by the Water Registrar and the Water Apportionment Board, which can sue in civil court to abate violations. The Act itself is a strong one. It is quite capable of covering the problem of oil pollution originating in territorial waters, enforcement is uncomplicated and penalties are severe. Suit in civil court for enforcement and the emphasis of the statute on the reasonableness of conduct would seem to simplify problems of evidence.

Ghana

The Ghana Water and Sewerage Corporation Act establishes a

 $^{^{8}}$ Laws of Botswana, Act No. 40/67, s. 29.

corporation to distribute and conserve water for public, domestic and industrial use and to construct, operate, and control sewerage systems. The corporation has powers to engage in long-range planning and research. The governing board may make regulations for prevention of water waste and pollution, suspension of water supply, inspection of appliances and conditions of staff services. The corporation has authority over local and urban councils and preference over other authorities in the use of water resources for public, domestic and industrial purposes.

Kenya

The Water Ordinance provides the following prohibitions:

158.(1) Any person who, by any act or neglect, causes any source of water supply, the water from which is used or is likely to be used for human consumption or domestic purposes, or for manufacturing food or drink for human consumption, to become polluted, or to be likely to be polluted, shall be guilty of an offence:

Provided that nothing in this section shall be construed as prohibiting or restricting-

- (i) any lawful method of cultivation of land or the watering of stock which, in the opinion of the Minister, does not conflict with the principles of good husbandry;
- (ii) the reasonable use of oil, tar or other substances on any highway or road so long as the authority or person concerned takes all reasonable steps for preventing such oil, tar or other substance, or any liquid or matter resulting from the use thereof, from polluting any source of water supply; and any question as to what is reasonable use under the provisions of this paragraph shall be determined by the Minister; or
- (iii) the disposal of effluents or waste in any area which the Minister may, by order, from time to time specify.
- (2) Any person duly authorized under this Ordinance for the purpose may, on producing his authority, if so requested by the owner or occupier thereof, at all reasonable hours enter any land or premises for the purpose of ascer-

 $^{^{9}}$ Acts of Ghana, No. 310/65.

taining whether there is or has been any contravention of the provisions of this section in relation to such source of water supply, and section 164 of this Ordinance shall apply to such right of entry.

This act though not so broad in its scope as that promulgated by Botswana, nevertheless holds to the evidentiary advantages of that law. Penalties under the Kenya law are as follows:

- 178.(1) Every person who is guilty of an offence under this Ordinance, or under any rules or regulations made thereunder, shall be liable to the penalty expressly imposed by this Ordinance or by the rules, and, where no penalty is expressly provided, shall be liable to a fine not exceeding five thousand shillings or, in default of payment, to imprisonment for a term not exceeding three months.
- (2) Any operator who wilfully contravenes any of the provisions of this Ordinance or of any rules, regulations or order made thereunder, or any of the terms or conditions of his licence, sanction, permit or authorization, shall, in addition to all other penalties, be liable to have such licence, sanction, permit or authorization cancelled.

The Minister responsible for water resources, the Water Resources Authority or the Water Apportionment Board may institute proceedings, in any court of competent jurisdiction, against persons to be so penalized, but recovery of the penalty does not prejudice any right to take other proceedings. The Minister is empowered to make pollution regulations, so long as such regulations are not in derogation of the Ordinance.

Malagasy Republic

Order no. 1320 of March 20, 1968, which organizes and fixes the functions of the Director of Waters, Forests and Soil Conservation states very broadly that the Director will have the function of conserving water, and will also have the function of protecting marine and other aquatic fauna. The Order goes no further than defining these functions.

¹⁰ Laws of Kenya, Cap. 372.

Journal Officiel De La Republique Malagasy, March 23, 1968, p. 659.

Malawi

The Water Resources Act of 1969, basically a water rights act, effectively reproduces the Botswana legislation cited and discussed above.

South Africa

The Water Act of 1956, consolidates the laws in force relating to the control, conservation and use of water for domestic, agricultural, urban and industrial purposes. vides:

- 23.(1) Any person who wilfully or negligently, and, where any provision of section twenty-one or twenty-two applies, contrary to that provision, does any act whereby any public or private water, including underground water, is polluted in such a way as to render it less fit for the purposes for which it is ordinarily used by other persons (including the Government, the South African Railways and Harbours Administration and any provincial administration) entitled to the use thereof, or for the propagation of fish or other aquatic life, or for recreational or other legitimate purposes, shall be guilty of an offense.
- (2)(a) The Minister may out of moneys appropriated by the Parliament for the purpose, take any steps which he may consider necessary to prevent the pollution, as a result of seepage or drainage from any area on which mining or other industrial operations have been carried on, of public or private water, including underground water, after such operations have been abandoned, and may in his discretion recover the cost or any part of the cost incurred in taking such steps from any person who carried on or is entitled to carry on such operations.
- (b) The Minister or a person acting under his authority may at any time enter upon any land for the purpose of taking any steps referred to in paragraph (a), and may take with him on to such land any men, animals, vehicles, equipment, appliances, instruments, stores or materials, and may erect such camps and construct such works as may be necessary for that purpose.

 $^{^{12}}_{13} \rm Laws$ of Malawi, Act No. 15/69. Statutes of the Union of South Africa, Act. No. 54/56.

(c) No compensation shall be payable to any person for any loss which may be sustained by him in consequence of any action taken under this sub-section, except by order of a competent court.

Administration of the Act lies with the Minister for Water Affairs who may institute proceedings in a magistrate's court. Penalties range from fines of ten to one hundred pounds and/or imprisonment from one to six months. Again, the Act seems broad enough to cover the problem of oil pollution in territorial waters and has the novelty of providing that those responsible for any pollution may bear the responsibility for alleviating it.

South-West Africa

The Water Act of 1956 of South Africa, cited and discussed above, may apply in whole or in part to South-West Africa (Namibia).

Southern Rhodesia (now Rhodesia)

The Water Act provides:

156. Any person who, without lawful right or authority (the proof whereof shall lie upon him)-

- (c) interferes with or alters the flow of or pollutes or fouls the water of an irrigation work or of a public stream---
- (i) Interferes with the bed, banks or course of a public stream or any swamps or marshes forming the source of a public stream or found along its course;

shall be guilty of an offence, and liable--

- (i) in the case of a first conviction, to a fine not exceeding twenty-five pounds, or in default of payment to imprisonment for a period not exceeding six months, or to both such fine and imprisonment;
- (ii) in the case of a second or subsequent conviction, to a fine not exceeding one hundred pounds, or in default of payment to imprisonment for a period not exceeding one year, or to both such fine and such imprisonment.
- 158. Any person who, except under and in accordance with the written permission of the Director of Water Development, places any poison in any public or private water shall be guilty of an offence and shall be liable to a fine not exceeding five hundred pounds or to imprisonment for a period not exceeding two years.

This Act, ¹⁴ another water rights act, although apparently able to deal with the problem of oil pollution in its sections 156 and 158 seems more removed from that problem than the other acts which have been cited. Tucked away as subsections (c) and (i) are in section 156 and the vagueness as to what constitutes pollution in section 156, interference in that same section, and poisoning in section 158, it seems that they may not conceive of the problem at all. This is not at all surprising in an act primarily designed to deal with the parcelling out and administration of rights to the use of water for agricultural and industrial purposes.

Swaziland
The Water Act of 1967, 15 repealing certain provisions of the Act of the High Commissioner of 1959 which were not consistent with Swaziland's status as an independent nation, is basically the same in its water pollution provisions as the South African law described above.

Other Countries
Senegal, 17 Libya, 18 Tanzania, 19 and Uganda, 20 were also found to have laws dealing with the use and conservation of water. However the particular pieces of legislation were not available for review. For all other African nations, with the exception of the Moslem states, no water laws were found. This, of course, does not mean that such laws do not exist or that there is no applicable customary law.

14 15Statute Law of Southern Rhodesia, Cap. 268.

16 Laws of Swaziland, Act No. 25/67. 18 Swaziland Legislation, Act. No. 73/59.

Ministerial Order no. 3165 bis of March 6, 1968 (Journal Official De La Republique Du Senegal, March 30, 1968,

20 Laws of Tanzania, Water Ordinance, Cap. 410.

^{18 376)} organizes the Directorate of Waters and Forests. Laws of Libya, Royal Decree and Law, October 19, 1969,

²¹ Cf. Dante A. Caponera, "Water Laws in Moslem Countries," F.A.O. Development Papers in Agriculture, number 43 (Rome, 1954).

Oil Pollution

Prior to the adoption of the International Convention on Prevention of Pollution of the Sea by Oil, only Egypt and the colonial powers of Spain and Portugal had adopted specific legislation to combat oil pollution. All of these acts were designed specifically to combat the problem of discharge of oil by vessels in harbors and navigable waters.

Egypt

The pertinent portions of the Petroleum Regulations, issued by the Ministry of Communications, Ports and Lighthouses Administration, are as follows:

Article 14 All pipes, land, floating or flexible, to be maintained in an efficient condition and leakage prevented. Pipes through which any kind of petroleum other than liquid fuel has been passing are, before being disconnected from the vessel, to be flushed out with water, or emptied by other means considered satisfactory by the Port Authorities.

Article 15 Any petroleum spilled on board the vessel or on shore is to be immediately absorbed by sand and removed. Every effort is to be made to ensure that petroleum is not spilled in the harbor.

 $\underline{\text{Article 16}}$ No bilges or water from tanks to be pumped out whilst the vessel is in the harbour.

Article 17 Tanks are not to be cleaned out in the harbour either by steam or other means; this is to be done outside the harbour beyond the limits indicated by the Port Authorities.

A glance at the Egyptian regulations demonstrates that they are primarily designed to promote safety in the harbors. No mention of marine life is made. The penalties incumbent upon breach of the regulations could not be found nor could the method of enforcement used by the Egyptian authorities.

Portugal

Prior to the 1954 Convention Portugal had issued legislation

²²3 U.S.T. 2989, T.I.A.S. No. 4900, 327 U.N.T.S. 3. ²³Cf. U.N. Docs. ST/ECA/41 (1956).

relating to the pollution of sea water by oil. This legislation referred only to the pollution of territorial waters or harbor waters.

Spain

The following regulations were found:

A Ministerial Order issued by the Ministry of Marine prohibiting the pollution of sea water by oil in Spanish territorial waters. The Order provides that instructions shall be given by the naval authorities to warships to ensure that the latter obey the regulations.

Four circulars to the same effect have been issued by the Directorate General of Shipping:

Circular dated 27 July 1925 (confirmed by Circular No. 18, dated 8 June 1954)

Under this circular, the discharge of contaminated ballast water and of oil residues within customs waters, i.e. within six nautical miles of the coast, is prohibited.

Contraventions are punishable by fines.

Circular No. 21, dated 29 September 1954

This circular, which was issued following the London Conference, prohibits the discharge of contaminated ballast water or tank washings into the sea less than fifty nautical miles from the coast.

Circular No. 24, dated 29 November 1954

This circular contains special provisions applicable to CAMPSA ships until they are equipped with oily-water separators or until the ports are equipped with facilities for the reception of contaminated ballast water.

1V. AFRICA AND THE INTERNATIONAL CONVENTION ON PREVENTION OF POLLUTION OF THE SEA BY OIL

In May, 1954, thirty-two nations attended the London Confer-

Laws of Portugal, Decree No. 9, 704 of May 21, 1924 and Decree No. 14, 354 of September 29, 1927.

Laws of Spain, Ministerial Order of March 24, 1933.

ence and came up with the International Convention on Prevention of Pollution of the Sea by Oil. This Convention established a system of pollution-free zones to encompass both territorial and non-territorial waters. All sea areas within 50 miles of land were to be prohibited zones and special regimes were established for the Adriatic Sea, the North Sea, the Northeast Atlantic and Australia. main problem which the conference addressed itself to was deliberate pollution by tanker cleaning operations. Contracting states were given permission to board vessels in their ports to examine the record book when such vessels were suspected of violations. The oil record book was thought to be sufficient to provide evidence for violations. For violations by vessels on the high seas, only the contracting flag state was allowed enforcement jurisdiction. In such a case, the flag state was to investigate the violation and to prescribe penalties therefor which could not be less severe than those prescribed for the same violation within territorial waters. Liability for discharge within the prohibited zones, however, was made subject to the defenses of emergency action and the taking of all reasonable precautions to prevent or minimize the escape of oil following damage or unavoidable leakage. As a preventive enforcement measure, the Convention required the installation of oily-water separators in some circumstances and installation as a general measure was encouraged by an annexed resolution. The Convention went into effect on July 26, 1958, when the Intergovernmental Maritime Consultative Organization, which was to supervise it, was formed. By 1968, the following African nations had ratified or adhered to the Convention: Algeria, Ghana, Ivory Coast, Liberia, Malagasy and Egypt. Portugal and Spain had also ratified the Convention by this time.

Following the 1958 Geneva Conference on the Law of the Sea, the Convention adopted a provision requiring states to "draw up regulations to prevent pollution of the seas by the discharge of oil from ships or pipelines or resulting from the exploitation and exploration of the seabed and its subsoil, taking account of existing treaty provisions..." The modified Convention was considered the prevailing view of inter-

²⁶Convention on the High Seas, April 29, 1958, 2U.S.T. 2312, T.I.A.S. No. 5200, 450 U.N.T.S. 82. Section 24 is quoted.

national law on the subject, ²⁷ as it emphasized the duty of states to take action to prevent and abate pollution.

The Second London Conference on Oil Pollution, sponsored by IMCO, was held in 1962 and resulted in several amendments to the 1954 Convention. Among other things, the prohibited zones were extended and the list of exempted vessels cut down. The Conference also resolved to move toward a complete prohibition of oil discharges.

To date, the 1962 Amendments have been ratified or adhered to by the following African states: Ghana, Liberia and Egypt. Portugal and Spain have also ratified the Amendments.

V. SUMMARY AND RATIONALE

To summarize, it is safe to say that the amount of African legislation which could conceivably deal with the problem of oil pollution is not staggering. Most of the laws discussed in this paper were basically water rights laws; they were not designed to solve any pollution problem, much less any oil pollution problem. Some of the pollution sections of these laws were strongly written but some, like that of the Rhodesian law, were not. The legislation is strictly territorial and except for the intimations in the South African statute, applicable only to inland waterways. There is, of course, the set of regulations issued by Egypt. They are the only African laws of any kind which were found to bear directly on the problem of oil pollution and they were only designed to alleviate the problem of oil discharge by vessels in port. However, when one considers the inherent enforcement problems in the American statutes, the paucity of African legislation on the subject does not seem quite as important.

Many African nations have subscribed to the International Convention on Prevention of Pollution of the Sea by Oil, some have subscribed to the 1962 Amendments thereto. For

<sup>27
28</sup> Cf. Preamble to the Convention on the High Seas, cited:n.26.
28 Cf. The Caroline, International Law as Interpreted and applied by the United States, by C. Hyde (1945) Vol.1, p. 239.
International Convention for the Prevention of Pollution of the Sea by Oil, London, April 11, 1962, 2U.S.T.1523, T.I.A.S.
6109.
30 Cf. Singh, International Conventions of Merchant Shipping, 1963.

the gross problems of oil pollution of the oceans, international conventions are perhaps the only answer.

As to the reasons behind the paucity of African legislation in this area there may be several. The fact that most African states are undeveloped, and producers of raw materials, puts them in such an economic situation that they may be willing to overlook the problems of oil pollution. Their unfamiliarity with the problem and the influence of the oil companies may also be important. As their economies improve and the problem becomes more obvious—and it may come quickly in those states which depend on tourism for a significant portion of their revenues or those states with seafood industries to protect—new and stronger legislation may be expected as well as more and more participation in ever stronger international commitments toward arresting the pollution of perhaps our most valuable natural resources—our oceans and waterways.

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