

POLLUTION IN PORTS: LEGAL ISSUES

1. INTRODUCTION

Marine environment is one of earth's most precious and delicate resources and there is a growing awareness amongst nations of the world that drastic and sustainable measures need to be adopted and implemented to protect it from further deterioration. Nigeria is a maritime nation with a coastline of approximately 853km on its southern border and a population of over 120 million inhabitants, 20% of which inhabit the coastal zone. The importance of the marine environment to Nigeria is underscored by the fact that about 90% of its international trade i.e. imports and exports are dependent on marine transport. Nigeria has about 9 major ports which are for navigational and administrative purposes divided into 5 Navigational Districts namely: Port Harcourt, Warri, Lagos, Calabar and Onne navigational districts. Ship traffic into these ports excluding tankers is estimated at approximately 3,500 vessels per annum. Out of the total traffic, ports within the Lagos area account for 50%, Rivers ports 25% and Delta ports 15%. Overall cargo throughput (excluding crude) is estimated at 22.23 million tones. The total number of passengers that pass through the sea ports is estimated at 1500 per year. Nigeria being a major oil producing and exporting country records approximately 1,000 petroleum tanker vessels calling at her ports annually, with an average tanker size of about 95,000 GRT.

All the vessels calling at these ports carry enormous amount of waste including bilge, sludge, garbage, sewage, chemical waste (toxic and non-toxic) and in the absence of Reception Facilities all the ship generated waste are discharged into the sea within the vicinity of the ports. Recent events including the oil spill resulting from collision of The Agulhas and The Asian Star, the Marina Bay rice pollution and Tank farm spillage at Tin Can Island of June 2002 together emphasis the problem of pollution in the ports. One must not forget the constant damage and threat to the port environment posed by industries like the Flour Mills, rice, salt and sugar factories located in the port area.

The focus of this Paper and indeed the entire workshop is on pollution in the ports. Nigeria as we all know has no dry ports at the moment therefore our area of discourse would be limited to seaports and pollution of the marine environment within the vicinity of the Ports. We would adopt as a working definition the meaning given to the concept of marine pollution by the **United Nations Convention on Laws of the Sea (UNCLOS) 1982** which provides as follows:

“Pollution of the marine environment means the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries which results or is likely to result in such deleterious effects such as harm to living resources and marine life, hazard to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of the sea and reduction of amenities.”

The use of the term marine environment in this paper is synonymous to port environment and both terms are used interchangeably. The port environment in Nigeria is even more precarious as it suffers not only from pollution activities emanating from ships but also from land based pollution. In this Paper the area of focus which I describe as the vicinity of the ports is extended to encompass the physical land area where the ports are located and the all sea area within 44 nautical miles of the ports.

This paper highlights the various legal regimes (domestic, regional and international) that aim at controlling and reducing marine pollution and also discusses the challenges of implementing the various conventions, standards and regulations currently in force and recommendations thereof. The laws governing marine pollution from land-based sources and ships/offshore installations, the liability of the responsible parties and the compensation regime for victims of marine pollution are discussed in detail. In this respect, prominence is given to International Maritime Organization (IMO) conventions including MARPOL 73/78, Civil Liability Conventions and the Fund Conventions. Attention is drawn to the noticeable vacuum in our domestic legislation of laws on marine pollution and the need to incorporate the relevant international conventions into the corpus of Nigerian laws. Liability, defence and compensation provisions in our municipal laws that specifically targets marine pollution are elaborated in detail.

2. SOURCES OF POLLUTION IN THE PORTS

The port is polluted from two major sources i.e. from *ships, offshore installations and pipelines; and from land based sources*. Technically, these sources of marine pollution can be divided into two broad categories: (1) point-source pollution i.e. oil and waste dumped by ships, offshore, pipelines, factories and sewage plants directly into the sea or watercourses; and (2) nonpoint-source pollution otherwise called polluted run-off i.e. discharge of sewage, agricultural and toxic industrial chemicals that seep underground, pollute underground water and finally gets deposited in the sea through rivers and estuaries.

2.1. Land Based Sources

Often times the land-based sources of pollution are ignored since they do not occur in the dramatic way as marine sources such as in the cases of oil spills from tankers or accidental discharge from vessels. The United Nation Royal Commission on Environmental Pollution (1981)¹ considered the issue of oil pollution of the sea and found that of all the oil reaching the sea 60% was through discharges from land; 20% from tanker operation (accidental/deliberate discharges), while the remaining 20% consists of oil released during shipping operation. As you drive towards the ports in Nigeria, you would discover that the port is literally surrounded by several industries.

¹ 8th Report of the Royal Commission on Environmental Pollution, Oil Pollution and the Sea. (October 1981).

Taking the ports in Lagos as an example, you have flour, rice, and sugar factories and well as fuel tank depots all within the vicinity of the port. Some of the specific incidents of land-based sources of pollution are itemized below:

- (i) **Industrial effluent and toxic wastes**- discharge of effluent and industrial waste into the sea by industries located in the ports and close to the ports. The industries in most cases were established without carrying out a proper environmental impact assessment and many do not have efficient waste treatment and disposal plants.
- (ii) **Garbage** - dumping of refuse and solid waste into the port environment by institutions and persons within the ports, coastal residents, locating refuse dumps at a close location to the ports which may inevitably lead to pollution by same harmful substances in packaged form, Non-degradable materials such as plastics that finds its way into the coastal seas as a result of dumping of garbage by man into coastal waters.
- (iii) **Sewage** - open defecation in the lagoons, inland waterways, etc by coastal residents and persons within the ports, dumping of human sewage into the marine environment e.g. dumping of soak away water in the Lagos lagoon at Ijora.
- (iv) **Oil spill from pipeline breakages and leakages** - oil from burst pipes or tanks which could be either from a major spill or small but consistent leakages from the tank farms located within the ports finds its way into the marine environment and often cause untold environmental havoc.

One cannot control the natural flow of the sea so even where the activities described above are committed very far from the port areas, these land-based pollution find their way to the port by the flow of sea current. And the structures in the port from the quayside, berths and even vessels disturb the natural flow of the sea thereby localizing these hazardous and polluting elements within the ports.

2.2. Marine Based Sources

Of all the sources mentioned, pollution of the sea by oil is by far the most dramatic in terms of the speed and magnitude of destruction of the marine environment. Most of the oil discharged into the sea occurs during routine operation of refineries and oil extraction operations in offshore installations, accidental/deliberate discharge and operational discharge from *ships*.

Studies conducted reveal that an estimate of the total oil lost to sea from marine sources nearly all come within the range of three million tons annually. The Report of the UN Commission already cited shows that the two major sources of oil pollution of the sea from ships are accidental/deliberate discharge and operational discharge. Accidental discharge is generally occasioned by collision, grounding or explosion involving laden tankers or while loading or discharging oil cargo. In this respect, it can be readily discovered that tankers are by far the major culprits. The incidents of

Exxon Valdez (1989) and Erika (1999) fall within this category. Masters of vessels due to perils of the sea deliberately discharge oil into the sea thus the expression “pouring oil over troubled waters”.

The important point to note at this stage is that, contrary to popular belief, dramatic accidents account for less oil discharge to the sea than the routine discharges of small quantities. It is however true that accidental spillages often release large quantities of oil all at once and so cause more intense and localized damage. This explains why oil pollution of the sea has attracted by far the greatest attention from international and national Legislators. This Part of the paper will consider in detail the legal issues with respect to pollution in the ports from ships and from land-based sources (nonpoint-source), which as demonstrated above constitute the larger problem. The legal issues identified and discussed in this Paper include liability, compensation, scope of application and remediation. These issues are considered under the relevant international Conventions in force; regional legislation; national legislation and under the common law.

3. INTERNATIONAL CONVENTIONS

The sea does not recognize boundaries; any activity with a deleterious effect on the sea can have negative impact well beyond the waters of the responsible port. Thus several international and regional conventions have been adopted for the purpose of setting new standards and regulations that will not only protect but also sustain the aquatic environment.

Nigeria is a party to several regional and international conventions aimed at controlling and reducing marine pollution such as the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (better known as MARPOL 73/78), Civil Liability Conventions and the Fund Conventions. MARPOL in particular recommends in its Annexes and Regulations the minimum standards of safety and pollution prevention and control measures expected of member countries and specifically require member countries to install Reception Facilities at their ports. The Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC) also has a similar requirement. We note with satisfaction the determination and efforts of the Federal Ministry of Transport to facilitate the incorporation of relevant maritime conventions into our corpus of laws. Nigeria, through the Ministry of Transport in May this year deposited the instrument of accession to several IMO conventions including MARPOL 73/78. The rule in international public law is that once these conventions become parts of our domestic legislation, it becomes obligatory for Nigeria to implement and enforce all the regulations contained in the conventions. Moreover, in order to benefit from the compensation regime of these conventions, Nigeria would have to demonstrate that it had installed all the recommended safety and protection facilities. One of such facilities recommended by the IMO and expressed in MARPOL 73/78 is the installation of Reception Facilities in all the ports of member states.

MARPOL 73/78 is the principal international convention in force on matters of pollution of the sea from ships and since ship generated waste is a major source of

pollution in ports; we shall discuss in detail the relevant provisions under MARPOL and thereafter consider other important international regulations on pollution of the marine environment.

3.1. International Convention for the Prevention of Pollution from Ships (MARPOL 73/78)

In 1973, the International Conference on Marine Pollution adopted the International Convention for the Prevention of Pollution from Ships drafted by the IMO to, in the words of the Convention

“achieve the complete elimination of international pollution of the marine environment by oil and other harmful substances and the minimization of accidental discharge of such substances.”²

The Convention was later amended by the Protocol of 1978 and together is referred to as MARPOL 73/78. As is the case with the CLC and Fund Convention, MARPOL is essentially concerned with establishing rules and regulation with respect to the pollution of the sea from ships. The difference from the former is that whereas the CLC/FUND is limited to oil pollution, MARPOL covers the various sources of ship-generated pollution. Realising the need to preserve the seas and coastal environment from every source of pollution, the IMO drafted MARPOL to replace the 1954 International Convention for the Prevention of the Sea by Oil (OILPOL), thus the provisions of MARPOL 73/78 supersedes OILPOL 1954.

Nigerian Port Authority is quite familiar with the provisions of MARPOL. I have been made to understand and I can see in their brochure that the primary guidelines used by the Authority on pollution of the port environment are based on MARPOL. Let us examine a little bit more closing the legal issues arising from MARPOL. Chapter 11 of MARPOL prohibits any discharge into the sea of oil or oily mixture from ships with the exception of the following³:

- (a) for an oil tanker, except as provided for in subparagraph (b) of this paragraph
 - (i) the tanker is not within a special area;
 - (ii) the tanker is more than 50 nautical miles from the nearest land;
 - (iii) the tanker is proceeding *en route*;
 - (iv) the instantaneous rate of discharge of oil content does not exceed 30 litres per nautical mile;
 - (v) the total quantity of oil discharged into the sea does not exceed for existing tankers 1/15,000 of the total quantity of the particular cargo

² MARPOL 73, Preamble, para 4.

³ 1992 Amendments to Annex I, MARPOL 73/78.

of which the residue formed a part, and for new tankers 1/30,000 of the total quantity of the particular cargo of which the residue formed a part; and

- (vi) the tanker has in operation an oil discharge monitoring and control system and a slop tank arrangement as required by regulation 15 of this Annex
- (b) from a ship of 400 tons gross tonnage and above other than an oil tanker and from machinery space bilges excluding cargo pump-room bilges of an oil tanker unless mixed with oil cargo residue:
- (i) the ship is not within a special area;
 - (ii) the ship is proceeding *en route*;
 - (iii) the oil content of the effluent without dilution does not exceed 15 parts per million; and
 - (iv) the ship has in operation equipment as required by regulation 16 of this annex.

The Convention is divided into 5 Annexes, each concentrating on a particular source of pollution with extensive regulations on ship reporting systems/ requirement, including guidelines for reporting incidents involving discharge (actual or probable) of oil, dangerous good, harmful substances and marine pollutants. The term discharge is given a very wide definition and covers any discharge howsoever caused from a ship and includes any escape, disposal, spilling, leaking, dumping, emitting or emptying of any harmful substances or effluents.

Not all discharge of harmful substances into the sea is covered by the convention. It specifically excludes from the definition of discharge the following incidents:

- (i) dumping within the meaning of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972;
- (ii) release of harmful substances directly arising from the exploration, exploitation and associated offshore processing of sea-bed mineral resources; or
- (iii) release of harmful substances for purposes of legitimate scientific research into pollution abatement control.”⁴

MARPOL therefore is not applicable to pollution of the sea from land-based sources or from any source other than ships as these aspects are the subject of the Convention for Prevention of Marine Pollution from Land Based Sources, 1974 and

⁴ MARPOL 73, Art. 2(3).

the Anti Dumping Convention of 1972.

It is important therefore to bear in mind that the focus and the major offence created by the convention is based on “any discharge of oil”. The definition of oil in the convention is very wide and means petroleum in any form including crude oil, fuel oil, sludge, oil refuse, refined products, aviation oil and all 44 different substances listed under Appendix 1 to Annex I of MARPOL. Petrochemicals are specifically mentioned under Annex II.

3.1.1 Duty to Report

The regulation applies to any type of sea borne transportation with no limitation on the size of the ship. A ship according to the convention means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft and fixed or floating platforms. The Master of the vessel or whoever is in control of the vessel is obliged to make a full report without delay of any incident to the government of the state under whose authority the ship is operating. Where the ship is abandoned or the report is incomplete, the duty to make the full report and prompt report falls on the owner, charterer, manager or the ship’s agents. In the same vein, a state party who has received information of any incident is under a duty to “report without delay to the Administration of the ship involved and any other state which may be affected”⁵ a full detail of such occurrence.

Note that it is not a requirement for there to be an actual discharge from the ship before a report is lodged since the definition of incident covers any event involving an actual or probable discharge of any of the pollutants mentioned. The regulation expects the responsible party to make a report where any of the following situations occur:

- (a) “a discharge or probable discharge of oil, or noxious liquid substances carried in bulk, resulting from damage to the ship or its equipment, or for the purpose of securing the safety of a ship or saving life at sea; or
- (b) a discharge or probable discharge of harmful substances in packaged form, including those in freight containers, portable tanks, road and rail vehicles and ship borne barges; or
- (c) a discharge during the operation of the ship of oil or noxious liquid substances in excess of the quantity or instantaneous rate permitted under the present Convention.”⁶

Considering the unpredictability of marine adventure, a problem may arise on what constitute a probable discharge and the level of probability required for an event to be reportable. MARPOL simplifies the issue by providing a general guideline to the Master of a vessel and states that the Master should make a report in cases of:

⁵ MARPOL 73, Art 8.

⁶ MARPOL 73, Protocol 1, Art II.

1. damage, failure or breakdown which affects the safety of ships such as collision, grounding, fire, explosion, structural failure, flooding, cargo shifting; and
2. failure or breakdown of equipment or machinery which results in impairment of the safety of navigation such as failure or breakdown of steering gear, propulsion plant, electrical generating system and essential ship borne navigational aids.⁷

3.1.2. Annex I- Regulations For the Prevention of Pollution by Oil

Annex I has 26 Regulations all devoted to measures to be taken to prevent the discharge of oil from ships into the marine environment and it applies to all ships including oil tankers⁸. It sets out the requirement for constant **surveys and inspection** of ships to ensure that the vessels are fitted with the specified materials, appliances and equipments and that the conditions of the vessels and its equipment does not pose an unreasonable threat of harm to the marine environment. Annex I entered into force on October 2, 1983. It provides for a certificate of compliance called the International Oil Pollution Prevention Certificate (IOPP Certificate) to be issued by the Administration of the state party who shall have full responsibility for the certificate. The certificate is valid for 5 years and is applicable to “any oil tanker of 150 tons gross tonnage and above and any other ships of 400 tons gross tonnage and above who are engaged in voyages to ports or offshore terminals under the jurisdiction of other parties to the Convention”.⁹

The Annex requires contracting states to provide **reception facilities** with adequate capacities at all ports, terminals, repair ports, oil-loading terminals, all ports that handle ships with oily residue and sludge to discharge.¹⁰The relevant vessels are required to have segregated ballast tanks; dedicated clean ballast tanks and crude oil washings requirements are set out in detail. In addition, Annex I provides for **oil discharge and monitoring systems**, specification for sludge tanks, pumping and piping arrangement from ships to overboard discharge outlets, oil record book, requirements for drilling and other platforms.

Regulation 26 of Annex I require every ship and oil tanker to carry on board a **shipboard oil pollution emergency plan** approved by the Administration of the vessel's flag. The Plan shall amongst others make provisions for

- (a) the procedure to be followed by the master or other persons in charge of the ship to report an oil incident as required under Art. 8 of the convention;
- (b) the list of authorities or persons to be contacted in the event of an oil pollution incident;

⁷ MARPOL 73, Protocol 1, App.3.4.2.

⁸ MARPOL 73/78, Annex I, Regulation 2.

⁹ Ibid, Annex I, Reg. 5.

¹⁰ Ibid, Reg.12.

- (c) a detailed description of the action to be taken immediately by persons on board to reduce or control the discharge of oil following the incident; and
- (d) the procedures and point of contact on the ship for co-ordinating shipboard action with national and local authorities in combating the pollution.

3.1.3. ANNEX II- Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk

Annex II applies to all chemical tankers and ships constructed or adapted primarily to carry a cargo of noxious liquid substances in bulk and includes an oil tanker when carrying a similar cargo. The Annex entered into force on April 6, 1987. The noxious substances must be in liquid form or with a vapour pressure not exceeding 2.8 kp/cm² at a temperature of 37.8°C and are divided into categories A, B, C, or D, each depicting the degree of threat or harm to marine environment, the resources dependent on it, human health and harm to amenities and other legitimate uses of the sea. It provides special anti-pollution measures and operational conditions for carriage of substances which if discharged into the sea from tank cleaning or deballasting operations presents a danger from major hazard, serious harm, minor hazard, minor harm to recognizable hazard or minimal harm to marine resources or human health. The substances classified as noxious liquid are identified and listed in Appendix 11 to Annex II and a list of oil-like substances under this Annex are given in Regulation 14.

The discharge of substances listed in categories A to D, ballast waters, tank washings, or other residues or mixtures containing such substances into the territorial waters of a state i.e. "within 12 nautical miles from the nearest land"¹¹ or "above the waterline, taking into account the location of the seawater intakes" is absolutely prohibited whether or not such areas are designated as special areas.¹² The only allowance for discharge of noxious substances is where the government of a state party approves the procedure and arrangement for discharge provided that the procedure is based upon the standard developed and approved by the IMO.

The Convention provides exceptions where the prohibitions under this Annex shall not apply and includes the following situations

- (a) where the discharge is necessary for the purpose of securing the safety of life at sea; or
- (b) where the discharge of noxious substances resulted from damage to a ship or its equipment provided all reasonable measures have been

¹¹ "nearest land" means from the baseline from which the territorial sea of the state in question is established in accordance with international law, see Reg 1(5) Annex IV, MARPOL 73/78.

¹² *ibid*, Annex II, Reg.5.

taken to prevent or minimize the discharge after the occurrence of the damage or discovery of the discharge is exempted. This exemption is denied if the master or ship owner deliberately discharged the substance with intent to cause damage, or recklessly knowing that damage would probably occur; or

- (c) where the procedure of discharge is approved by the government of a state party and the discharge is for the purpose of combating specific pollution incidents in order to minimize the damage from pollution. Note that it is the approval of the government of the territory where the substance is to be discharged that is required.¹³ The use of chemical dispersants to combat oil spills in the sea would clearly come under this exception.

As in the case of oil, the convention makes it the responsibility of the government of every state party to provide adequate reception facilities at its ports, terminals and repair ports for ships with such substances or residue or mixtures containing noxious liquid substances for disposal. State Administrations are also required to carry out a regular survey and inspection of vessels. Vessels who are deemed to have complied with the provisions of Annex II are to be issued the IOPP Certificate by the State Administration after due survey.

3.1.4. Annex 111 - Regulations for the Prevention of Pollution by Harmful Substances Carried in Packaged Forms

Annex III expressly prohibits the carriage of harmful substances in packaged form, freight containers, portable tanks or road and rail tank wagons except such carriage is done in compliance with the regulations of the Annex. Under the Annex, the containers themselves are treated as harmful substances unless adequate measures have been taken to ensure that they do not contain any residue that may be harmful to the marine environment. Annex III came into force on July 1, 1992.

Harmful substances are defined as those substances which are identified as “marine pollutants” in the International Maritime Dangerous Goods Code (IMDG Code)¹⁴. Guidelines for the identification of harmful substances can be found in the Appendix to Annex III.

To put the regulations under Annex III into effect, the government of every state party is obliged to issue a detailed requirement on packaging, marking, labeling, documentation, stowage, quantity limitations and exceptions for preventing or minimizing pollution of the marine environment by harmful substances.

Neither the owner nor master is liable for any discharge of harmful substances where the discharge was necessary for the purpose of securing the safety of the ship or saving of life at sea or where appropriate preventive measures have been taken to

¹³ *ibid*, Reg. 6.

¹⁴ Resolution A. 81(IV), IMO.

regulate the washing of leakages overboard in compliance with the provisions of the convention.¹⁵

3.1.5. Annex IV - Regulations for the Prevention of Pollution by Sewage from Ships

Annex IV applies generally to ships of 200 gross tonnage and above and ships of less than 200 gross tonnage who are certified to carry more than 10 persons. The definition of sewage includes:

- (a) drainage and other wastes from any form of toilets, urinals, and wc scuppers;
- (b) drainage from medical premises such as dispensary, sick bays via wash basins, wash tubs and scuppers located in such premises;
- (c) drainage from spaces containing living animals; or
- (d) other waste waters when mixed with the drainages defined above.¹⁶

The government of state parties to the convention are required to provide reception facilities for the discharge of sewage from ships at its ports and terminals to meet the needs of ships calling at such ports. Under Regulation 3 of this Annex, a ship is required to be fitted with

- (i) a sewage plant that meets operational needs as determined by the IMO standards;
- (ii) a system approved by the flag of the vessel to comminute and disinfect the sewage;
- (iii) a holding tank of adequate capacity for the retention of all sewage having regard to the operation of the ship, the number of persons on board and the holding tank should have a means to indicate visually the amount of its contents; and
- (iv) a pipeline leading to the exterior of convenient for the discharge of sewage to a reception facility and that the pipeline is fitted with a standard shore connection in compliance with Regulation 11 of this Annex.

The government is further required to conduct regular survey and to issue International Sewage Pollution Prevention Certificate to vessels that comply with the requirements of the Annex. Annex IV allows the Government of other state parties to issue the certificate at the request of the ship's flag provided that a survey is conducted and it is satisfied that the provisions of the Annex are complied with.

¹⁵ MARPOL 73/78, Annex II, Reg. 7.

¹⁶ Ibid, Annex IV Reg. 1(3).

Annex IV grants exemption from liability where the discharge is done in the circumstances similar to the exceptions under Annex III.

3.1.6. Annex V - Regulation for the Prevention of Pollution by Garbage from Ships

The provisions with respect to disposal of garbage under Annex V applies to all ships and it defines garbage as “all kinds of victual, domestic and operational waste excluding fresh fish and parts thereof, generated during the normal operation of the ship and liable to be disposed of continuously or periodically”¹⁷ Other substances already mentioned or listed under other Annexes are excluded from the definition. Annex V prohibits any disposal of garbage into the sea including all plastics, synthetic ropes, synthetic fishing nets and plastic garbage bags. It is significant that the types of garbage listed in the Annex are mostly non-biodegradable substances, which can cause suffocation and drowning to marine life and resources.

Regulation 3 of the Annex permits the disposal of certain types of garbage such as dunnage, lining and packing materials which are floatable if the disposal is done at a distance not less than 25 nautical miles from the nearest land. Food waste, paper products, rags, glass, metal, bottles and crockery may also be disposed off at sea at a distance not less than 12 nautical miles from the nearest land. The disposal of the substances identified as garbage from fixed or floating platforms engaged in the exploration, exploitation and associated offshore processing of seabed resources or within 500 metres of such platforms is also prohibited. However, food waste that has been grinded may be disposed off from such platforms from a location not less than 12 nautical miles from land. Exceptions from liability with respect to disposal of garbage in circumstances where it is necessary for the safety of ship and life, where it results from damage to the ship and accidental loss of synthetic fishing nets provided all reasonable measures had been taken to prevent such loss is provided for in Regulation 6. ***The governments of state parties have the responsibility of providing adequate reception facilities for the disposal of garbage at its ports and terminals for the use of ships calling at such ports.***

3.1.7. Enforcement of MARPOL

The convention makes it an offence for a ship to discharge any oil or oily substances, any harmful or noxious substances or effluence containing such substances in violation of the provisions contained therein. The discharge of ballast waters, tank washings and residues, sewage and garbage within the prescribed areas are all offences under MARPOL. In addition, failure to report any discharge of the prohibited substances, failure to carry on board IOPP certificate, shipboard oil pollution emergency plan are violations under the Convention.

Each contracting state is given the responsibility for ensuring enforcement of the convention. MARPOL does not specify the type of punishment for contravention or compensation limits but encourages state parties to impose sanctions and penalty for any violation of the convention in a manner that “shall be adequate in severity to

¹⁷ Ibid, Annex V, Reg. 1(1).

discourage violations”¹⁸ irrespective of where the violation occurred. The practice now is for the NPA to administratively attempt to enforce the provisions of MARPOL in its effort to control pollution at the ports. What they can actually do by way of enforcement is very limited indeed since MARPOL does not have the force of law in Nigeria and we do not have any domestic legislation that can effectively act as a deterrent to various violations detailed above.

3.2. The United Nations Convention on the Laws of the Sea 1982 (UNCLOS)

The United Nations Convention on the Laws of the Sea 1982 (UNCLOS) is generally regarded as the grundnorm on matters relating to pollution of the sea and in Article 1(4) defines the pollution of the marine environment to mean

“the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities”

Article 194(3) identifies the sources of pollution to include pollution from off-shore installations, installations used for exploitation of natural resources from the subsoil and sea-bed, ***pollution from vessels and release of toxic and harmful substances from land-based sources through dumping or the atmosphere.*** The convention apart from encouraging states to adopt laws and regulations to ensure the prevention, reduction and control of the marine environment also outlines the way states shall enforce such laws. UNCLOS further encourages states to cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, {e.g. International Maritime Organization (IMO)} in formulating and elaborating international rules, standards and recommended practices and procedures consistent with the Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features.

In this regard the IMO has produced several relevant conventions and regulations including the Convention on Safety of Life at Sea 1974 (SOLAS), Prevention of Pollution from Ships (MARPOL 73/78), 1969 Civil Liability Convention (CLC) and the 1971 Fund Convention and the 1992 Protocols to both the Civil Liability Convention and the Fund Convention which would be discussed in greater detail later on in this chapter.

Extensive provisions are made in Article 211 of UNCLOS on pollution of the sea from vessels. States i.e. countries are empowered to adopt laws and regulations for the prevention reduction and control of pollution of the marine environment from vessels flying their flag or of their registry. Such laws and regulations are required to in the very least have the same effect as that of generally accepted international rules and standards established through the competent international organisation or general

¹⁸ MARPOL 73/78, Art. 4(4).

conference. Coastal states may, in the exercise of their sovereignty within their territorial sea and exclusive economic zones, adopt laws and regulations for the prevention, reduction, and control of marine pollution from foreign vessels, including vessels exercising the right of innocent passage. Part II, section 3 however warns that such laws and regulations should not hamper innocent passage of foreign vessels. Also of importance to this topic is the introduction of the concept of exclusive economic zone by this convention which now extends the geographical scope of a country's responsibility beyond the territorial limits of 12 nautical miles from Nigeria's continental shelf to 200 nautical miles.

3.3. Liability and Compensation under 1992 Civil Liability Convention (CLC) and the 1992 Fund Convention (Fund)

Liability and compensation for pollution damage to the marine environment caused by ships, spills from oil tankers and oil installations are governed by the CLC and the Fund Conventions elaborated under the auspices of the International Maritime Organization (IMO). The CLC and the Fund conventions compliment MARPOL by providing the punishment for activities that result in pollution of the marine environment. These two Conventions work in conjunction with each other and the implication is that only countries that are parties to the CLC can benefit from the Fund. Most importantly they impose liability on the shipowner in a manner to reflect the gravity of the worldwide pollution situation. Note though that the Conventions apply only to pollution of the sea by oil caused primarily by ships and tankers. The framework for the new regime was originally the 1969 International Convention on Civil Liability for Oil Pollution Damage (1969 Civil Liability Convention) and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971 Fund Convention).

The 1992 Civil Liability Convention and the 1992 Fund Convention replaced the old regime of liability of shipowners for oil pollution damage and compensation. The 1992 Conventions entered into force on 30 May 1996. Together the Conventions provide a two-tier regime of compensation where the cost of oil pollution is borne primarily by the ship owner and where it is deemed inadequate then additional compensation is paid by the oil industry. A major difference from the former regime is that **liability by shipowners for oil pollution damage is strict i.e. no requirement of fault** and provides for a system of compulsory insurance by ship owners.

Nigeria is a party to both the 1969 and 1971 conventions but have never benefited from the provisions of these conventions because they do not have the force of law in Nigeria. As would be pointed out in this chapter, the 1992 regime has a wider scope of application and provides higher limits of compensation than the 1969/71 Conventions which Nigeria acceded to in 1981 and 1987 respectively. To benefit from the new regime, most countries have denounced the 1969/71 regimes and acceded to the 1992 Protocols. Out of the 77 member states to the 71 Fund convention, 35 countries have denounced the conventions and by March 2001 a

further 12 countries would cease to be members.¹⁹ Happily, Nigeria deposited both the instruments of denunciation of the 1969/71 conventions and accession to the 1992 Protocols. In view of this development, the analysis of the issues in marine pollution under this chapter would concentrate largely on the provisions of the 1992 CLC and Fund Conventions.

Under the 1992 CLC/FC the geographical scope is extended to include any damage occurring in the exclusive economic zone (EEZ) of a contracting state or 200 nautical miles from the baseline from which the territorial sea of a contracting state is measured. The new regime therefore applies to a situation where the accident occurs outside the territorial waters of the State but the damage extends to, occurs or threatens to cause pollution damage within the territory of a State party. It therefore follows that a shipowner would be liable to the port authority if any of its ports suffer threatened or actual pollution damage as a result of oil spill which occurred outside the vicinity of the port area i.e. 44 nautical miles around the port.

The Fund convention essentially provides compensation to oil pollution victim where the amount recoverable under the CLC is inadequate and the three situations where this may occur are identified in the Fund convention as cases:

- (i) where no liability for the damage arise under the CLC;
- (ii) where the owner liable for the damage under the CLC is financially incapable of meeting his obligations in full and any financial security provided under the CLC does not cover or is insufficient to satisfy the claims for compensation which result from an incident; or
- (iii) where the damage exceeds the owner's liability as limited by the applicable version of CLC.²⁰

The Fund is operated in conjunction with the applicable Civil Liability Convention as such only parties to the 1992 CLC can benefit from the 1992 Fund. We would now highlight the salient issues in the new regime which provides greater advantages to victims of oil pollution damage.

The potential defendants or liable parties under the Conventions are basically the insurer and owner of the vessel involved in the incident. The Conventions impose liability for oil pollution incidents involving "pollution damage". Pollution damage means:

- (a) "loss or damage caused outside the ship by contamination resulting from the escape or discharge of oil from the ship, wherever such escape or discharge may occur, provided that compensation for impairment of the environment other than loss of profit from impairment shall be limited to

¹⁹ Joe Nichols, 'Recent Developments within the Framework of International Conventions on Liability and Compensation for Oil Pollution Damage' 13th Annual Forum on Oil Pollution, INMARSAT, London, March 2000, p10.

²⁰ Fund 92 Art. 4.1

costs of reasonable measures of reinstatement actually undertaken or to be undertaken;

(b) the cost of preventive measures and further loss or damage caused by preventive measures.”²¹

The definition determines the extent to which claims are recoverable under the convention. The operative words are **contamination by oil** with the implication that victims of losses or damage in a marine adventure such as loss of life or property not caused by oil contamination but by fire or collision would have to seek relief outside the CLC. A detailed analysis of the recoverable losses and damages as provided by the 92 CLC is presented below.

3.3.1. Application to Ships

The 1992 Conventions unlike the 69 CLC whose application was limited only to “laden tankers” the Convention has wider applicability as its definition of ship in Article 1(1) includes “any sea-going vessel and any sea-borne craft of any size whatsoever constructed or adapted for the carriage of oil in bulk as cargo”.²² The proviso to Art 1(1) goes even further to state that “a ship capable of carrying oil and **other cargoes** shall be regarded as a ship only when it is actually carrying oil in bulk as cargo **and during any voyage following such carriage** unless it is proved that it has no residue of such carriage of oil in bulk aboard”²³. It therefore covers spills of bunker oil from unladen tankers or any mishap after unloading or during the ballast voyage. Moreover, the term “other cargoes” has been interpreted by the Working Group on the Convention to mean non-persistent oil as well as bulk solid cargo such as aviation fuel. It is therefore not restricted only to persistent hydrocarbon mineral oil.

3.3.2. On-shore and Off-shore Oil Installations and Pipelines

A significant proportion of oil pollution of our port environment emanates from burst or ruptured pipelines of oil installations at the ports. The incidents of Tank Farm spillage at MRS Tin Can Island and the underground pipe rupture of June 2002 readily comes to mind. Sadly, Nigeria cannot claim compensation from the oil companies for oil pollution damage resulting from onshore or off-shore spills and burst pipelines under the Civil Liability Conventions or the Fund Convention. This is because such oil installations are excluded from the definition of ships in the Conventions. Under the conventions, the purpose for which the craft was constructed should be for conveying oil from one point to another even though it is not necessary that it must be laden on board at the time of the incident nor is it a requirement that the vessel must be in motion at the material time. Where the offshore installation whether floating or permanent was constructed primarily for the purpose of exploitation of oil with production and storage facilities, it falls outside the scope of the Conventions. In the United Kingdom and the United States national

²¹ *ibid* Art I.6

²² CLC 92 Art I.1

²³ *ibid*

legislation on oil spill have been enacted which applies to ships as defined under the convention and to other classes of vessels including onshore and offshore installations. Other CLC States have enacted legislation which extends parts of the Convention to oil pollution from vessels other than tankers in addition to specific legislation on oil pipelines.²⁴

Considering that oil pipelines and tanks located within the ports are a major source and a great percentage of oil in Nigeria is produced offshore from offshore platforms with extensive network of pipelines, it is imperative for Nigeria to enact legislation on oil pollution, which will extend to onshore and offshore installations and pipelines.

3.3.3. Environmental Damage

Claims for the reinstatement of the environment are generally quite difficult to assess and is open to subjective measures. The 1971 Fund Assembly, in 1980, adopted an important Resolution on the admissibility of claims relating to damage to the environment. The Resolution warned that the assessment of compensation "... is not to be made on the basis of an abstract quantification of damage calculated in accordance with theoretical models"²⁵. In 1981, the Assembly adopted the recommendation of the Working Group that compensation should be granted only if a claimant, who has a legal right to claim under national law, has suffered quantifiable economic loss.

The 1992 CLC specifically admits claims for impairment of the environment. Claims for compensation for impairment of the environment (other than loss of profits from such impairment) should be limited to the "costs of reasonable measure of reinstatement actually undertaken or to be undertaken". In order for claims for the cost of measures to reinstate the marine environment to be admissible for compensation, the measures should fulfil the following criteria:

- the costs of the measures should be reasonable;
- the costs of the measures should not be disproportionate to the results achieved or the results which could reasonably be expected; and
- the measures should be appropriate and offer a reasonable measure of success.²⁶

The test of reasonableness laid down in the 1992 Conventions is an objective one, i.e. the measures should be reasonable from an objective point of view in the light of the information available when specific measures are taken. Compensation is payable only in respect of measures actually undertaken or to be undertaken.

3.3.4. Admissibility of Claims for Compensation

For a claim to be accepted by the IOPC Funds, it has to be proved that the claim is based on a real expense actually incurred, that there was a link between the

²⁴ Idowu E.A.O and Usoro M.E. 2001 "Liability and Compensation in Oil Pollution Claims".

²⁵ Resolution No. 3 of the 1971 Fund, Fund/a/es.1/13.

²⁶ FUND/WGR.7/21 para 7.3.16.

expense and the incident and that the expense was made for reasonable purposes. Based on the Report of the Working Group of the Fund which was endorsed by the Fund Assembly, the IOPC Funds in London have published Claims Manuals, which contain general information on how claims should be presented and set out the general criteria for the admissibility of various types of claim.

3.3.5. Property Damage

Pollution incidents often result in damage to property: i.e. oil may contaminate berths, piers, boats and quaysides. The Funds accept costs for cleaning polluted property. If the polluted property cannot be cleaned, the Funds compensate the owner for the cost of replacement, subject to deduction for wear and tear. Measures taken to combat an oil spill may cause damage to roads, piers and embankments and thus necessitate repair work. Reasonable costs for such repairs are accepted by the Funds.

3.3.6. Clean-Up Operations On Shore And At Sea, And Preventive Measures

The Funds pay compensation for expenses incurred for clean-up operations at sea or on the shore. Operations at sea may relate to the deployment of vessels, the salaries of crew, the use of booms and the spraying of dispersants. In respect of onshore clean-up, the operations may result in major costs for personnel, equipment and absorbents.

3.3.7. Preventive Measures

Where pollution damage in the port is foreseeable the Port Authority may take steps to prevent or minimise pollution damage otherwise called “preventive measures”. Sometimes the intervention may be in the form of placing booms along the coast, which is threatened, or the use of dispersants. Such measures usually involve substantial cost and are recoverable under the 1992 CLC, which specifically provides for preventive measures taken “after an incident has occurred”.²⁷ In the Convention an “incident” means “any occurrence, or series of occurrences having the same origin which causes pollution damage **or creates a grave or imminent threat causing such damage**”.²⁸ This definition expands the 1969 CLC and admits of costs used for prevention of pollution on the basis of pure threat regardless of whether or not there was a spill or actual escape of oil from the ship. The claimant must prove though that there was grave and imminent threat of oil pollution.

It must be emphasised, however, that the definition only cover costs of *reasonable* measures employed for purposes of preventing pollution damage. It therefore follows that claims for costs are not accepted when it could have been foreseen that the measures taken would be ineffective. On the other hand, the fact that the measures prove to be ineffective is not in itself a reason for rejection of a claim for the costs

²⁷ ibid Art I.7

²⁸ ibid Art. I.8

incurred. The costs incurred, and the relationship between these costs and the benefits derived or expected should be reasonable and reasonableness is assessed on the basis of objective criteria guided by the particular circumstances of the incident.

3.3.8. Consequential Loss And Pure Economic Loss

The Fund accepts in principle claims relating to loss of earnings suffered by the owner or users of property, which has been contaminated as a result of a spill (consequential loss). Claims for pure economic loss are admissible only if they are for loss or damage caused by contamination. The starting point for consideration is the pollution and not the incidents itself.

3.3.9. Limits of Liability

The usual practice is for the shipowner to limit his liability to an amount which is linked to the tonnage of his ship. The limit under the new regime is significantly higher than what is applicable under the 1969 CLC regime and the procedure for increasing the limits are simplified. Under the 1992 CLC, the limits for a vessel not exceeding 5,000 gross tonnage is 3 million SDR (Special Drawing Rights as defined by the International Monetary Fund) i.e. about USD4 million; for a vessel between 5,000 to 140,000 gross tonnage, 3 million SDR plus 420 SDR (about USD565) for each additional tonnage and a limit of 59.7 SDR (about USD80 million) for a vessel of 140,000 tonnage or over. The 1969 CLC provided for the meagre sum of 133 SDR (about USD179) per ton or maximum of 14million SDR (about USD19 million).

The maximum sum payable for oil pollution damage from one incident under the 1971 Fund Convention is limited to 60 million SDR (about USD81 million). This amount includes the amount recoverable from the ship owner under the 1969 CLC. Under the 1992 Fund Convention the aggregate compensation payable is 135 million SDR (about USD182 million).

3.3.10. Strict Liability of the Liable Party

The shipowner's liability for any oil pollution damage under the CLC is strict.²⁹ The claimant is not required to prove any fault or negligence on the part of the owner, which are often times very difficult to prove. This is a significant advantage to the victim in view of the fact that all the relevant evidence is usually outside his knowledge or control. Except the exemptions apply, the victim can recover from the owner even where it is evident that the incident occurred without the fault of the shipowner. The convention allows the owner exemption from liability where the pollution damage

(a) resulted from an act of war, hostilities, civil war or insurrection(*as in war risks*) or a natural phenomenon of an exceptional, inevitable and irresistible character (*as in perils of the sea*)³⁰;

²⁹ CLC 92 Art III.1

³⁰ Italics author's addition

(b) was wholly caused by an act or omission done with intent to cause damage by a third party (e.g. *sabotage, terrorism or other malicious acts*);

(c) was wholly caused by the negligence or other wrongful act of any government or other authority responsible for the maintenance of lights or other navigational aids in the exercise of its function.³¹

It is significant that the owner is required to prove that damage was wholly caused by the incident for him to benefit from the exclusion. Thus even in cases of proven sabotage by third parties, the owner would still be liable if it could be proved that his own negligence such as failure to observe safety precautions contributed to the incident.

As is generally the case with exemption clauses they are given a very restrictive interpretation on a *contra preferentum* basis. It can be observed that these exemptions essentially mirrors those found under marine insurance contract and it seems reasonable on account of the requirement for compulsory insurance to exempt owners from liability which their insurers are unwilling to bear.

4. LIABILITY AND COMPENSATION UNDER NATIONAL LEGISLATION

In this section, we shall examine the relevant Nigerian laws with respect to pollution of the port environment and marine environment generally. The starting point would naturally be the Nigerian Port Authority Act 1999 (Decree 38).

4.1. Nigerian Ports Authority Act 1999

Section 7(1) of the Act expressly authorizes, NPA to “control pollution, arising from oil or any other substance from ships using the port limits or their approaches”. It further provides that NPA “shall maintain, improve and regulate the use of ports and shall also “carry out such other activities which are connected with or incidental to its other functions vide this Decree” (sub-sections 7(b) and (k).

These sections may appear to be inconsistent with other statutes and regulations which give broad powers on pollution matters to other agencies such as FEPA Act and its Regulations. My understanding is that the Act confers on NPA the powers make and enforce laws and regulation affecting pollution of the ports and its immediate environment. Where the exercise of these powers conflict with each other, the general rule is that the specific law prevails over the general. The regulations and guidelines imposed by NPA is in addition to any other applicable laws on pollution and it makes sense that NPA should be able to enforce even the FEPA laws where the contravention occurs within the port area.

4.2. Oil In Navigable Waters Act, Cap 337, LFN

³¹ CLC 92 Art III.2

This Act was promulgated in 1968 in order to implement the International Convention for the Prevention of Pollution of the Sea by Oil {OILPOL (1954-1962)}. The Act establishes criminal liability for the discharge of oil from ships used for transferring oil into the Nigerian territorial or inland waters.

Prior to 1968, the remedy of an individual for damage caused by oil pollution from ships lay, at common law, in nuisance, trespass and/or negligence. With the coming into force of OIL IN NAVIGABLE WATERS Act No. 34 of 1968 on April 22, 1968 (Decree No.34) {now Cap 337 LFN}, it became a statutory offence to discharge any oil from a ship into a part of the sea that is a prohibited area within 50 miles from land. As mentioned earlier, we are in the process of enacting the 1992 CLC (which has been discussed *in extenso*) into our municipal laws we would merely highlight only the salient points in the Act.

- The potential liable parties under the Act are:
 - (a) the owner or master of a vessel; or
 - (b) the occupier of land; or
 - (c) the person in charge of an apparatus³²
- An offence is committed if there is any oil discharge from the vessel or the land or from an apparatus used for transferring oil from or to a vessel, within the “prohibited zones”.
- The Act requires the provision of oil reception facilities at every port for the discharge of ballast water from vessels at such times and subject to such conditions as the harbour authority may impose.

It is evident that "Oil In Navigable Waters Act," Cap.337 was designed to establish, among other things, criminal liability for the prohibited discharge of oil and it also provides for creation of facilities for the discharge of dangerous oil. It thus contains preventive and punitive measures. However, Oil in Navigable Waters Act and the 1969 Civil Liability Conventions do not cover the following major aspects that also constitute pollution damage:

- (a) Damage caused by non-persistent oils, or chemical products, from ships;
- (b) Oil escaping from any cargo, ships and tankers not carrying oil in bulk as cargo;
- (c) Oil escaping from river and lake vessels, offshore installations, land installations and pipelines;

³² Oil in Navigable Waters Act 1990, Cap 337, LFN 1990, Section 3(1) (a) – (c).

- (d) Damage suffered by installations outside the territorial sea of a party to the Civil Liability Convention and all damage suffered on the territory or territorial sea of a non-party to the Convention;
- (e) Claims against salvors and bareboat/demise charterers;
- (f) Damage caused by oil spilling onto the sea and then catching fire;

The two Conventions did not provide for the institution of legal action against a party who is neither registered owner nor his servants nor agents. The inadequacies of these Conventions have been substantially addressed under the 1992 CLC and Fund Conventions already discussed in this paper.

4.3. Federal Environmental Protection Agency (FEPA) Act, Cap 131 LFN 1990 as amended by Decree 59 of 1992 and Decree 14 of 1999.

The centrepiece of the national initiative on pollution is the **Federal Environmental Protection Agency Act, 1988**, which I believe we are all familiar with. The Act established FEPA (now absorbed into the Federal Ministry of Environment) as the agency of government responsible for the regulation and enforcement of environmental standards in the areas of land, air, water, toxic and other hazardous wastes. Pursuant to the FEPA Act, certain regulations were enacted which though not specifically targeted at oil pollution from ships or pollution in the ports set standards on effluent discharge, industrial and hazardous waste discharge and management such as the National Effluent Limitation Regulation S.I.8, 1991; Pollution Abatement in Industries and Facilities Generating Wastes Regulations S.I.9, 1991; and Management of Solid and Hazardous Waste Regulations S.I.15, 1991.

These regulations are of special significance in view of the fact that they are the only legislative instruments for the control of pollution in the port emanating from land based sources such as the several industries located at the ports. Although FEPA has now been absorbed into the Federal Ministry of Environment, the law that brought it into being has not been repealed. A quick decision must be taken specifying the monitoring and enforcement authorities with clearly delineated tasks in order to avoid disputes as to overlapping or usurpation of functions with respect to regulatory and enforcement powers of the defunct FEPA.

Out of the five sections of the FEPA Act (i.e. sections 20, 21, 27, 34, 35 and 36) on offences, only Section 20 specifically relates to pollution of the environment in general. Section 20 (1) of the Act makes it an offence for any one to engage in the act of discharging hazardous substances into the environment and provides that ***“the discharge in such harmful quantities of any hazardous substance into the air, or upon the land and the waters of Nigeria or at the adjoining shorelines is prohibited, except where such discharge is permitted or authorised under any law in force in Nigeria.”***³³ Any individual that contravenes the provisions of section

³³ Federal Environmental Protection Agency Act, Cap 131, LFN 1990, Section 20.

20(1) of the FEPA Act will be liable to pay the sum of N100, 000.00 as fine or sentenced to a term of imprisonment not exceeding 10 years while body corporate will be liable to pay a fine of N500, 000.00 on conviction.

The general penalty for contravening the provisions of this Act or any regulations made under the Act where no specific penalty is prescribed is a fine not exceeding N20,000.00 or to imprisonment for a term not exceeding two years or to both such fine and imprisonment. Where the offence is committed by a body corporate, the company shall be liable to a fine not exceeding N500, 000.00 for such offence and in addition the body corporate shall be directed to pay compensation resulting from such breach thereof or to repair and restore the polluted environmental area to an acceptable level as approved by the agency.

4.4. The Harmful Waste (Special Criminal Provisions) Decree No. 42 of 1988 Cap 165 LFN 1990

This Act prohibits all activities relating to the dumping of harmful waste in Nigeria's territorial waters,³⁴ the purchase, sale, transit, transportation, deposit or storage of harmful wastes. Any importer, depositor, dumper or their agent who violates this Act is guilty of an offence punishable with imprisonment for life as well as forfeiture of all facilities and places connected with this crime. Enforcing agency is the Ministry of Works and Housing.

4.5. Environmental Impact Assessment Decree No. 86 of 1992.

This Act was enacted to institutionalise the inclusion of environmental considerations in the planning of any public or private project. Its primary objective, amongst others, is to establish and take into account, before a decision is taken by any person, including the Government of the Federation, State or Local Government, the significant extent to which an activity intended to be undertaken or authorised will impact on the environment. The environmental impact assessment is a study in which the potential physical, biological, economic and social effects of a proposed development project on the immediate and also the more distant environment are identified, analysed and predicted. It ensures that significant environmental impacts (whether adverse or favourable) are satisfactorily assessed and taken into account in the planning, design, authorization and implementation of all major types of development projects. It finds ways to reduce unacceptable impacts and it provides options or alternatives in design, location and operation of the proposed development. The enforcing agency is the Ministry of Environment.

4.6. Other Instruments of Enforcement

Several sector specific regulations and instruments on environmental management were made pursuant to FEPA Act and include:

³⁴ Harmful Waste (Special Criminal Provision) Act Cap 165, LFN 1990, Section 1.

4.6.1. National Environmental Protection (Effluent Limitation) Regulations, S.I.8 Of 1991

This makes it mandatory for industrial facilities to install anti-pollution equipment, compels in-house effluent treatment, prescribes maximum limits of effluent parameters allowed for discharge and stipulates penalties for contravention.

The punishment for violation is payment of a fine not exceeding N500, 000.00³⁵ and the liable party is compelled to pay compensation for any resultant damage or repair and restore the polluted area to a level approved by FEPA, unless such a person can prove he acted diligently to comply with the FEPA Act or the offence was committed without his knowledge, consent or connivance. The enforcing Agency is the Ministry of Environment.

4.6.2. National Environmental Protection (Pollution Abatement In Industries And Facilities Generating Wastes) Regulations S.I.9 Of 1991

The regulation imposes restrictions on the release of hazardous toxic substances by industries and stipulates requirements for monitoring of pollution to ensure that permissible limits are not exceeded while unusual and accidental discharge contingency plans, generator's liability and strategies for waste reduction and the safety of workers are put installed. The enforcing Agency is the Ministry of Environment. The punishment for violation is as provided in the FEPA Act already mentioned above.

4.6.3. National Environmental Protection (Management Of Solid And Hazardous Waste) Regulations, S.I.15 Of 1991.

This regulates the collection, treatment, recycle and disposal, spill and discharge of solid and hazardous wastes from municipal and industrial sources and gives the comprehensive list of chemicals and chemical wastes by toxicity categories. Again, the punishment for violation is as provided in the FEPA Act already mentioned above and the enforcing agency is the Ministry of Environment.

4.6.4 National Guidelines and Standards for Environmental Pollution Control In Nigeria (March, 1991).

The Guidelines published by the erstwhile FEPA serves as the basic instrument for monitoring and controlling industrial and urban pollution.

4.6.5. National Guidelines and Standards for the Petroleum Industry in Nigeria, 1991

³⁵ National Effluent Limitation Regulations 1991, Section 18.

This Guidelines is issued by the Department of Petroleum Resources and sets out detailed regulations that must be complied with by stakeholders in the oil sector which includes the fuel tanks located within the ports.

5. CONCLUSION

We have surveyed the laws that govern pollution in the ports whether from ships or from land-based activities and we have demonstrated that the laws in Nigeria on pollution damage are grossly inadequate. The laws we have listed above is by no means exhaustive. You may have a clearer picture if you add to the list, the several laws and edicts from State Legislature and environmental protection agencies.

The domestication of MARPOL, the 1992 CLC and the 1992 Fund Convention is essential for NPA to be able to effectively minimize and control pollution in the ports. Nigeria has been accustomed to fire-brigade approach for a long time that it has now become engrained in our system. We must pray never to have a major oil spill of the magnitude of the Exxon Valdez or the Erika; for if we do, the damage will be catastrophic and without access to compensation.

The purpose of creating offences or criminalizing certain actions and imposing sanctions is to discourage would be offenders from violating the law. The punishment regimes for causing damage to the environment in our laws are so lenient that they fail to constitute a deterrent against contravening environmental laws. The laws/sanctions appear not to fully appreciate the magnitude of the risk that their violation poses to society in the short and long term. For instance, under the Oil in Navigable Waters Act, the offence of pouring oil into navigable waters attracts the paltry fine of Two Thousand Naira only and under FEPA, a fine not exceeding Twenty Thousand Naira where an offence under the Act is committed. This is clearly a slap on the wrist and stiffer penalty that properly appreciates the disastrous effects of environmental offences and which will act as sufficient deterrent is recommended.

Beyond imposing fines and paying compensation, our laws should be amended to incorporate reparation and remediation measures in line with international practices. The National Assembly have to provide the regulatory framework in the form of national, regional, international laws and regulations that would aid in:

- Preventing operational pollution;
- Reducing accidents;
- Reducing consequences of accidents;
- Providing compensation;
- Practicable implementation strategies.

While enacting these laws, the provisions should reflect economic reality by ensuring that environmentally friendly shipping makes economic sense. They should factor in

the cost and benefits of polluting the sea in the laws and policies. In this regard, we recommend the use of economic incentives such as stiff penalty for defaulting ships; differentiated port dues and bonus for green ships i.e. vessels meeting IMO standards; higher cost for borderline and non-compliant vessels

The inadequacy or virtual non-existence of appropriate laws on marine pollution has contributed immensely to the continued abuse of the aquatic environment generally including the port environment. This trend can only be arrested with the enactment and effective enforcement of laws that would act as deterrent to the polluter and which would reflect the strict liability and the polluter pays principle of the Rio Declaration. It is advisable for the National Assembly to speedily enact legislation that will bring into force all the Conventions and laws mentioned in this paper. This would positively contribute to the prevention, reduction of pollution damage to the marine environment in general and the port environment in particular and would protect, conserve and sustainably manage the marine environment for the benefit of the present and future generations.

While emphasizing the need to enact adequate legislation, it must be mentioned that a programme of environmental regulation is only as good as its enforcement mechanism. The best laws in the world would accomplish nothing unless they were complied with, and purely voluntary compliance cannot be expected within our social and economic institutions. But given the existing laws, it must be pointed out that laws by themselves do not restore order. Enforcement does; and the success of an enforcement programme depends on whether the legal requirements are enforceable or, in the alternative, on the strategies adopted by the enforcement agency to circumvent legal booby traps, and plug loopholes in the laws. Sometimes environmental regulations contain strong declarations of goals but weak substantive requirements or enforcement mechanisms.

The cost or method of administering and enforcing of a particular regulatory model determines its success or failure. This requires the establishment of sophisticated administrative machinery, internal capacity building and adequate infrastructure. Administrative enforcement could be exercised through the issuance of infringement notices, search and seizure, withdrawal of permits or closure of business premises where people contravene environmental regulations. Within the resources available to the Ministry of Transport and NPA, the Authority must set up and empower the specialised departments on inspection and survey of vessels; monitoring units; well equipped pollution control and public awareness units.

References

1. Civil Liability Convention 1969 and 1992.
2. Fund Convention 1971 and 1992.
3. Marine Environment Law Lloyd's of London Press Limited Service LLP 1993 Edition
4. IMO (1992) MARPOL 73/78, International Maritime Organization, Consolidated Edition, 1991.
5. Shipping and Environment Colin De la Rue Charles B. Anderson LLP 1988 Edition.
6. "Oil Pollution from Ships in Nigeria Territorial Waters" Article written by Chief E.O.A Idowu and Mfon Ekong Usoro May 2001.
7. "Liability and Compensation in Oil Pollution Claims" Article written by Chief E.O.A. Idowu March 1999.
8. "Ship Reference Technical, Safety, Environmental and Commercial aspects" Cyril Huges 2nd Edition LLP 1996. Particularly at Chapter eight.