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**ENVIRONMENT IN NIGERIA** 

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## Abstract

International environmental law is primarily concerned, among others, with the control of pollution of the environment. Significantly, the control of environmental pollution, particularly oil pollution in marine environment in Nigeria will form the gravamen of this enterprise. This is predicated on the fact that the Nigerian marine environment coincides with its vast delta region. which is one of the largest in the world. The degradation and deterioration, renewable resources depletion and other negative effects of oil pollution has caused irreversible and prolonged consequences to the Nigerian marine environment. The authors therefore argued that the exploitation and exploration of oil and gas has hampered the nation's potential for environmental sustainability in terms of the associated pollution of the Nigerian marine environment. Apart from the available frameworks on oil pollution in the marine environment, the authors seek to draw a relational basis between the framework of International Maritime Organisation and control of oil pollution in Nigeria, especially in the marine environment in Nigeria. The paper therefore maintained that the control of oil pollution consequent on reliance on the provisional contents of the International maritime organisation will operate to affording the Nigerian state environmental sustainability.

**Keywords:** Oil-Pollution, Maritime Organisation, tropical rainforest, environmental challenge, hydro-carbons, environmental sustainability

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# **1. Introduction**

Nigeria as a country and the world generally is naturally blessed by the Almighty Lifegiver in different ways. Its natural beauty is briefly described by Okhumode to include 'large oil and gas deposits, extensive forests, good agricultural land, and water resources supportive of numerous species of terrestrial and water-living organisms.<sup>1</sup> The Nigerian environment ordinarily harbours a tropical rainforest ecosystems comprising of diverse species of flora and fauna, aquatic and terrestrial species, and a coastal area of mangrove vegetation traversed by many rivers, tributaries and creeks.<sup>2</sup>

One of Nigeria's natural endowments that hugely redound to severe environmental challenge is 'oil' or 'petroleum.' Oil (petroleum) is 'a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface.'<sup>3</sup> From the definition, 'oil' means crude oil, fuel oil, heavy diesel oil and lubricating oil.<sup>4</sup> It also means petroleum in any form including crude oil, sludge, oil refuse and refined products.<sup>5</sup> As 'crude oil,' it interpretatively mean 'petroleum which is in liquid conditions upon production from reservoir either in its natural state or after the extraction of water, sand or other foreign substance from it...<sup>6</sup> Or 'hydrocarbons and associated substances as exist in its natural state in strata... natural gas, condensate and mixtures of any of them, but does not include bitumen and coal.'<sup>7</sup>

To derive any value from 'oil' in its crude form, it is refined by subjecting or applying scientific process which at the end produces products that can be marketed and distributed for energy need in forms of petrol or PMS, Kerosene, diesel or DPK, etcetera. Valuable uses of 'oil' include: to lubricate motor vehicle, bicycles, strollers, and other things with moving parts; to make fuel for air planes, automobiles, and heating systems; to make petroleum products-cosmetics, paints, inks, drugs, fertilizers, plastics, etc., and for industrial purpose.

As valuable as oil or petroleum has been, the 'golden egg' seems to be a curse to some Nigerians. How is it so? For years, the exploitation and exploration of oil and gas has

<sup>&</sup>lt;sup>1</sup> Felicia A Anyogu and Empire Hechime Nyekwere, 'Appraisal of the Legal and Institutional Framework for Sustainable Environmental Management in Nigeria' *The Nigerian Juridical Review* (2020 – 2021) 16 155 – 176 <<u>https://doi.org/10.56284/tnjr.vl6il.18 https://www.tnjr.uneclaw.ng></u> accessed 12 May 2024

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Anonymous, 'Oil-How it Affects You' *Awake!* (2003) November 8 <<u>www.jw.org</u>> accessed 17 may, 2024.

<sup>&</sup>lt;sup>4</sup> International Convention for the Prevention of Pollution of the Sea by Oil, 1954

<sup>&</sup>lt;sup>5</sup> International Convention for the Prevention of Pollution from Ships, 1973/1978 (MARPOL Convention)

<sup>&</sup>lt;sup>6</sup> Section 318, Petroleum Industry Act (PIA), 2021

<sup>&</sup>lt;sup>7</sup> Ibid

hampered the nation's potential for environmental sustainability<sup>8</sup> in terms of the associated pollution of the environment. This is peculiar to the Niger Delta region of Nigeria. The degradation and deterioration, renewable resources depletion and other negative effects of oil pollution has caused irreversible and prolonged consequences to the nation, Nigeria.<sup>9</sup>

Against the foregoing background, the paper endeavour to find answer to the issue of oil pollution in Nigeria in lieu of the provisions of the International Maritime Organisation. The paper is structured to accommodate a brief examination of oil pollution as well as the relational basis between the provisions of the International Maritime Organisation in protecting the marine environment against pollution.

# 2. Nature and Scope of Oil Pollution in the Nigerian Marine environment

According to section 3 of the Environmental Protection Act of 1990, 'pollution' is the releasing into any environmental medium from any process of substances which are capable of causing harm to man or any other living organism supported by the environment. Section 37 of National Environmental Standards and Regulations Enforcement Agency Act<sup>10</sup> also defined 'pollution' as man-made or man-aided alteration or chemical, physical or biological quality of the environment beyond acceptable limit.' Of the different forms pollution may assume, 'oil pollution' is one of the severest, as a result of many spills without proper clean-up exercise. In Nigeria today, especially in the Niger Delta region, oil spills, gas flares, and waste discharges, have been identified as some of the sources of oil pollution.<sup>11</sup> This is more so as movement of petroleum (oil) from the oil-fields to the consumer involves as many transfers between modes of transportation including tankers, pipelines, railcars, and tank trucks.<sup>12</sup>

It is a known fact that oil is one of the identified single largest pollutants in Nigeria. Think about this:

Used motor oil is poured on the ground. It seeps down and contaminates drinking water supplies, polluting them. Also, oil is poured into the sewer or on the street where it eventually wash directly into the stream or river.

<sup>&</sup>lt;sup>8</sup> Anyogu and Nyekwere, supra, at P. 117

<sup>&</sup>lt;sup>9</sup> Ibid

<sup>&</sup>lt;sup>10</sup> [Hereafter, NESREA 2007]

 <sup>&</sup>lt;sup>11</sup> P. A. Sakyi and Ors, 'Ghana's Quest for Oil and Gas: Ecological Risks and Management Framework' *West African Journal of Applied Ecology* (2012) 20 (1) <<u>www.researchgate.net</u>> accessed 17 May, 2024.
<sup>12</sup> Jacqueline Michel and Merv Fingas, 'Oil Spills: Causes, Consequences, Prevention, and Countermeasure' (2016) DOI: 101142/9789814699983\_0007 <<u>https://www.researchgate.net/publication/301932090></u> accessed 18 May, 2024.

Just one quart of the used motor oil can produce a poisonous slick, an acre in diameter.<sup>13</sup>

Another commentator observed that:

As a result of oil losses, vast tracts of agricultural land have been laid waste, thus becoming unproductive; surface water and river courses are invariably contaminated and polluted, rendering the water undrinkable, and the aquatic life is destroyed. The result is great hardship for the inhabitants who become impoverished and deprived. These unfortunate citizens are therefore compelled to migrate to other towns and villages in search of decent life.<sup>14</sup>

The multinational oil companies in Nigeria also contribute to oil pollution. As statistical records has it, increase in their oil prospecting activities in various parts of the world in recent times has contributed immensely to environmental pollution, if not most dangerously so. In discussing the relationship between the environment, peace and various conflicts in Africa, Bakut observed of oil companies' contribution to pollution thus:

The activities of oil companies like Shell (Nigeria)...has their physical environment being damaged...source of livelihood (fishing)...destroyed due to the contamination of the fishing areas by oil spills, flaring and chemical waste dumped into the environment by these companies.<sup>15</sup>

Drawing attention from the adumbrated relationship between oil pollution and the environment, there is need to examine the impact of the International Maritime Organisation on checking the menace of oil pollution in Nigeria.

# 3. The International Maritime Organisation and protection of Marine environment

The International Maritime Organisation is one of the specialized agencies and autonomous organization working with the United Nations through the coordinating machinery of the Economic and Social Council.<sup>16</sup> Historically, the UN Maritime Conference was convened in Geneva on 19<sup>th</sup> February, 1948 and adopted the IMO on 6<sup>th</sup> March, 1948. The Convention, then known as Inter-Governmental Maritime Consultative Organisation, entered into force on 17<sup>th</sup> March, 1958.<sup>17</sup> During its inauguration on 6<sup>th</sup> January, 1959, when the Assembly had its first session, the International Maritime Organisation, in accordance with an amendment to the Convention went into force on 22<sup>nd</sup> May, 1982.

<sup>&</sup>lt;sup>13</sup> L O Omughele, Oil and Gas Law, Unpd. Lecture series for Undergraduate Students of the College of Law, Western Delta University, Oghara, Delta State, 2023

<sup>&</sup>lt;sup>14</sup> Ibid

<sup>&</sup>lt;sup>15</sup> Bakut tswah Bakut; 'The Environment, Peace and Conflict in Africa,' in Shedrack Gaya Best (ed.)

Introduction to Peace and Conflict Studies in West Africa: A Reader (Spectrum Books Limited, 2016) 234-251

<sup>&</sup>lt;sup>16</sup> [Hereafter, ECOSOC] Maritime Upgrading Studies Institute, Maritime Law Lecture Notes for  $2^{nd}$  and  $3^{rd}$  Mate – UM 132, 5 – 6.

<sup>&</sup>lt;sup>17</sup> Ibid,

The purpose of the organisation includes the following:

- I. To provide machinery for co-operation among governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships.<sup>18</sup>
- II. Of the IMO 170 Members and three Associate Members, it is also empowered to deal with administrative and legal matters related to those purposes.<sup>19</sup> As at 1<sup>st</sup> June, 2009, IMO was credited to have successfully promoted international cooperation and standardization in a wide array of matters affecting shipping as well as its wide acceptability.<sup>20</sup>

The structure of the IMO is as follows

- i. An assembly
- ii. A Council;
- iii. Committees
  - a. Maritime Safety Committee (MSC),
  - b. Maritime Environment Protection Committee (MEPC),
  - c. Legal Committee,
  - d. Technical Co-operation Committee, and
  - e. Facilitation Committee.<sup>21</sup>

Sub-committees under MSC (a) and MEPC (b):

- a. Human Element, Training and Watch-keeping (HTW) sub-committee;
- b. Implementation of IMO instruments (III) sub-committee;
- c. Navigation, Communications and Search and Rescue (NCSR) sub-committee,
- d. Pollution Prevention and Response (PPR) sub-committee,
- e. Ship Design and Construction (SDC) sub-committee,
- f. Ship Systems and Equipment (SSE) sub-committee, and
- g. Carriage of Cargoes and Containers (CCC) sub-committee.

The essence of this background information about IMO is to establish its regulatory role and associated potency in the prevention of oil pollution, especially in marine environment. It should be borne in mind that one of the purposeful objectives of IMO is the '...adoption of the highest practical standards in matters concerning...prevention and

<sup>&</sup>lt;sup>18</sup> Article 1, Convention on the Intergovernmental Maritime Consultative Organization, 1948

<sup>&</sup>lt;sup>19</sup> Maritime Upgrading Studies Institute at P. 7

<sup>&</sup>lt;sup>20</sup> Louis B Sohn and others, *Law of the Sea in a Nutshell* (2<sup>nd</sup> edn, West Publishing Co., 2010) 459.

<sup>&</sup>lt;sup>21</sup> Maritime Upgrading Studies Institute at P. 7

**Frank E. Akperegin, Esther C. Anya & Anya Kingsley Anya [PhD, B. L]** control of marine pollution from ships'.<sup>22</sup> In order to achieve these objectives, the IMO has promoted the adoption of 40 Conventions and Protocols as binding legal instruments

# to all State-parties, upon entry into force in terms of their implementation requirements.<sup>23</sup>

# 4. Selected frameworks of the International Maritime Organisation on protection of Marine environment

Some of the recondite efforts of the IMO in the protection of marine environment against environmental pollution caused by oil pollution are reflected in the under-listed dominant conventions and they include the following:

I. Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (as amended). $^{24}$ 

II. International Convention for the Prevention of Pollution from Ships, 1973, as Modified by the Protocol of 1978 (as amended).<sup>25</sup>

III. International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC), etcetera.

Notwithstanding the dominant oil pollution conventions adopted by IMO, the organisation also adopted numerous non-treaty instruments such as Codes and Recommendations in consonance with IMO Assembly, Maritime Safety Committee<sup>26</sup> and Marine Environment Protection Committee.<sup>27</sup> Others of include:

- a. Code for the Investigation of Maritime Causalities and Incidents;
- b. International Maritime Dangers Goods Code (IMDG Code);
- c. Manual on Chemical Pollution;
- d. Ships' Routing;
- e. Merchant Ship Search and Rescue Manuel
- f. Radio Communications GMDSS Handbook, Etc.

At this juncture, there is need to examine the adumbrated conventions.

4.1 The Convention on the Prevention of Marine Pollution by the Dumping of Wastes and Other Matter<sup>28</sup>

<sup>&</sup>lt;sup>22</sup> Article 1

<sup>&</sup>lt;sup>23</sup> Maritime Upgrading Studies Institute at Pp. 7, 10

<sup>&</sup>lt;sup>24</sup> LDC

<sup>&</sup>lt;sup>25</sup> MARPOL 73/78

<sup>&</sup>lt;sup>26</sup> [Hereafter, the MSC]

<sup>&</sup>lt;sup>27</sup> Ibid, and [Hereafter, the MEPC]

<sup>&</sup>lt;sup>28</sup> 1972

This is one of the first global Conventions to protect the marine environment from human activities and has been in force since 1975. It regulates the deliberate disposal of certain substances at sea, including oily wastes, dredging and land-generated wastes, excluding the oil pollution caused by normal operational discharges of ships and pollution caused by maritime casualties.<sup>29</sup> It contains three factors: the dumping of wastes and other matter listed in Annex I of the aforesaid Convention is prohibited; the dumping of wastes and other matter listed in Annex II of the aforesaid convention require a prior special permit; the dumping of all other wastes or matter requires a prior general permit.

'Dumping of waste' under the Convention as the deliberate disposal at sea of wastes or other matter but not discharge from normal operation of ships or from accidents, was permitted unless the substances concerned were established to be harmful.<sup>30</sup>

4.2 International Convention for the Prevention of Pollution from Ship, 1973, as Modified by the Protocol of 1978 (as amended) (MARPOL 73/78)

In 1967, 'Torrey Canyon' the biggest oil pollution incident ever recorded at that time, led to the decision of the IMO Assembly 1969 to convene an international conference in 1973 in which MARPOL was adopted, for placing restraints in the contamination of the sea, land, and air by ships.<sup>31</sup> As recorded, the oil spill affected 120 miles (190 km) of British and 50 miles (80 km) of French coastlines.<sup>32</sup> Worse still, since the Liberian authorities that owned the oil tanker carrying 119,000 tons of crude oil could not be reached the Saturday it occurred, the British government ordered its Royal Air Force to bomb the ship in an attempt to burn up some of the spilled oil.<sup>33</sup>

MARPOL 73/78 is considered since that time as the primary source of international standards for controlling incidental vessel source pollution in seeking to achieve complete elimination of international pollution of marine environment by oil and other harmful substances and minimize accidental discharge of such.<sup>34</sup> The 1973 MARPOL Convention includes regulations aimed at preventing and minimizing pollution from ships-both accidental pollution and that from routine operations and currently includes six technical Annexes for such objectives:

<sup>&</sup>lt;sup>29</sup> <<u>http://www.imo.org/About/Conventions/List of Conventions/Pages/Convention-on the-prevention-of-marine-pollution-by Dumping-of Wastes-and-Matter-aspx</u>> accessed 18 May, 2024.

 $<sup>^{30}</sup>$  Article III (1) of the London Convention, 1972.

<sup>&</sup>lt;sup>31</sup> <<u>http://www.imo.org/en/ourWork/Environment/PollutionPrevention/Pages/Default. aspx</u>> accessed 18 May, 2024.

<sup>&</sup>lt;sup>32</sup> PA Sakyi, supra, at Pp. 369, 370

<sup>&</sup>lt;sup>33</sup> Ibid

<sup>&</sup>lt;sup>34</sup> Preamble of the 1973 Convention

#### A. Annex I – Oil

Covers prevention of pollution by oil from operational measures as well as from accidental discharges, bunkers, lubrication oil, cargo (crude oil, products), This Annex apply to every oil tanker of 150 tons gross tonnage and above, and every other ship of 400 tons gross tonnage.)

Exceptions in Annex I and provided under Regulations 9 and 10 of this Annex apply to:

- (a) The discharge into the sea of oil or oily mixture necessary for the purpose of securing the safety of a ship or saving life at sea; or
- (b) The discharge into the sea of oil or oily mixture resulting from damage to a ship or its equipment:
- (c) The discharge into the sea of substances containing oil approved by the Administration, when being used for the purpose of combating specific pollution incidents in order to minimize the damage from pollution. Any such discharge shall be subject to the approval of any Government in whose jurisdiction it is contemplated the discharge will occur.

#### A. Application of Annex I

In applying the provisions of the Annex I, an International Oil Pollution Prevention Certificate shall be issued, after survey in accordance with the provisions of Regulation 4 of the Annex, to any oil tanker of 150 tons gross tonnage and above and any other ships of 400 tons gross tonnage and above which are engaged in voyages to ports or offshore terminals under the jurisdiction of other parties to the Convention for a period specified by the Administration, which shall not exceed five years from the date of issue.

The certificate shall cease to be valid

- i. If significant alternations have taken place in the construction, equipment, systems, fittings, arrangements or material required without the sanction of the Administration, except the direct replacement of such equipment or fittings.
- ii. If intermediate surveys are not carried out.
- iii. Upon transfer of the ship to the flag of another State.
- iv. In case of big accidents.

Documents to be carried in all ship other than oil tanker include:

- I. Oil Record Book No. A for machinery space operations (all ships):
- a. Ballasting or cleaning of oil fuel tanks;
  - b. Discharge of dirty ballast or cleaning water from tanks referred to under (i) of the subparagraph above;
  - c. Disposal of oily residues (sludge);
  - d. Discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces.

The Oil Record Book shall be kept in such a place as to be readily available for inspection at all reasonable times except in the case of unmanned ships under tow, shall be kept on board the ship. It shall be preserved for a period of three years after the last entry has been made.

- i. Engine Room Log Book
- ii. Tank Sounding Book
- iii. Instruction Manual for Operating Oil Water Separator Device
- iv. Shipboard Oil Pollution Emergency Plan (SOPEP)

Shipboard Oil Pollution Emergency Plan (SOPEP)

- (1) Every oil tanker of 150 tons gross tonnage and above and every ship other than an oil tanker of 400 tons gross tonnage and above shall carry on board a shipboard oil pollution emergency plan approved by the Administration.
- (2) Such a plan shall be in accordance with guidelines developed by the Organization and written in the working language of the master and officers. The plan shall consist at least of-.
- (a) The procedure to be followed by the master or other persons having charge of the ship to report an oil pollution incident.
- (b) The list of authorities or persons to be contacted in the event of an oil pollution incident;
- (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 coordinating shipboard action with national and local authorities in combating the pollution.

In addition to all documents carried in pervious paragraph, the oil tanker has to carry

Oil record book No. B for cargo/ballast operations (oil tankers):

- (i) Loading of oil cargo;
- (ii) Internal transfer of oil cargo during voyage;
- (iii)Unloading of oil cargo;
- (iv)Ballasting of cargo tanks and dedicated clean ballast tanks;
- (v) Cleaning of cargo tanks including crude oil washing;
- (vi)Discharge of ballast except from segregated ballast tanks;

(vii) Discharge of water from slop tanks;

- (viii) Closing of all applicable valves or similar devices after slop tank discharge operations;
- (ix)Closing of valves necessary for isolation of dedicated clean ballast tanks from cargo and stripping lines after slop tank discharge operations;
- (x) Disposal of residues.

Control of Discharge of Oil under Annex I

Any discharge into the sea of oil or oily mixtures from ships to which the Annex applies

shall be prohibited except when all the following conditions are satisfied:

- (a) For an oil tanker,
- (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 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 tankers has in operation an oil discharge monitoring and control system and a slop tank arrangement as required by regulation 15 of this Annex.

(b) For 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.

## Report for Oil Pollution

In case of oil pollution, ship's master has to inform the competent authorities without delay and send the report on oil pollution to the nearest coastal authority. Any default on their side, will cause them to be subjected to criminal punishment according to the law of the State which the pollution happened in its waters.

- (i) General Data report for oil pollution
  - a) Identity of ships involved;
  - b) Time, type and location of incident;
  - c) Time, type and location of view incident,
  - d) Sea, wind and current condition,
  - e) Ship's position,
  - f) Details of ship's condition.

- (ii) Particulars of Data
  - a) Data about cargo (commercial and chemical names),
  - b) Amount that spilled and its concentration,
  - c) Description of packs and its marks,
  - d) Name of consignee and shipper and factory,
  - e) Any other data requested by received authority.

Annex II: Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk

Details of discharge criteria and measures for the control of pollution by noxious liquid substances carried in bulk; some 250 substances (divide to 4 categories X, Y, Z and OS) were evaluated and included in the list appended to the Convention. The discharge of their residues is allowed only to reception facilities until certain concentrations and conditions (which vary with the category of substances) are complied with. In any case, no discharge of residues containing noxious substances is permitted within 12 miles of the nearest land.

### B. Application of Annex II

An International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk shall be issued, after an initial or renewal survey in accordance with the provisions of Regulation 10 of this Annex, to any ship carrying noxious liquid substances in bulk and which is engaged in voyages to ports or terminals under the jurisdiction of other Parties to the Convention.

Such Certificate shall be issued or endorsed either by the Administration or by any person or organization duly authorized by it. In every case, the Administration assumes full responsibility for the Certificate.

An International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk shall be issued for a period specified by the Administration which shall not exceed 5 years, and annual survey.

Required Documents include

- I. Cargo record book
- II. Tank Sounding Book
- III. Instruction manual for measurement device
- IV. Shipboard Emergency Plan (SOPEP)

The general conditions for discharge of noxious liquid substances involved:

(a) The ship is proceeding *en route* at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of ships which are not self-propelled;

- (b) The discharge is made below the waterline, taking into account the location of the seawater intakes; and
- (c) The discharge is made at a distance of not less than 12 nautical miles from the nearest land in a depth of water of not less than 25m.
  - C. Annex III: Regulations for the Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form.

Annex III contains general requirements for the issuing of detailed standards on packaging, making, labelling, documentation, stowage, quantity limitations, exceptions and notifications for preventing pollution by harmful substances identified as marine pollutants in the International Maritime Dangerous Goods Code,<sup>35</sup> which has, since 1991, included marine pollutants. The carriage of harmful substances is prohibited, except in accordance with the provision of this Annex.

- i. For the purposes of the Annex, empty packaging which has been used previously for the carriage of harmful substances shall themselves be treated as harmful.
- ii. Substances, unless adequate precautions have been taken to ensure that they contain no residue that is harmful to the marine environment.

The requirements of the Annex do not apply to ship's stores and equipment.

Documentation required under Annex III includes the following:

i. In all documents relating to the carriage of harmful substances by sea. Where such substances are named, the correct technical name of each such substance shall be used (trade names alone shall not be used) and the substance further identified by the addition of words 'MARINE POLLUTANT.'

ii. The shipping documents supplied by the shipper shall include, or be accompanied by, a signed certificate or declaration that the shipment offered for carriage is properly packaged and marked, labelled or placard as appropriate and in proper condition for carriage to minimize the hazard to the marine environment.

iii.Each ship carrying harmful substances shall have a special list or manifest setting forth the harmful substances on board and the location thereof. A detailed stowage plan which sets out the location of the harmful substances on board may be used in place of such special list or manifest. Copies of such documents shall also be retained on shore by the owner of the ship or his representative until the harmful substances are unloaded. A copy of one of these documents shall be made available before departure to the person or organization designated by the port State authority.

<sup>&</sup>lt;sup>35</sup> [Hereafter the IMDG Code]

iv. When the ship carries a special list or manifest or a detailed stowage plan, required for the carriage of dangerous goods by the International Convention for the Safety of Life at Sea, 1974 (as amended), the documents required by this Regulation may be combined with those for dangerous goods. Where documents are combined, a clear distinction shall be made between dangerous goods and harmful substances covered by this Annex.

- v. IMDG code.
- vi. Bill of Lading for dangerous cargo.
- vii. Certification or declaration from marine expert showing that loading and stowage was done in proper way according to IMDG code.

Some states do not allow any ship to load or discharge dangerous cargo unless the ship carry certificate giving the right to this ship to load or unload this kind of cargo. This certificate issued for sound scientific and technical reasons, such as needed to be prohibited for carriage or be limited to the quantity which may be carried aboard any one ship. In limiting the quantity, due consideration shall be given to size, construction and equipment of the ship, as well as the packaging and the inherent nature of the substances.

D. Annex IV: Regulations for the Prevention of Pollution by Sewage from Ships This annex contains requirements to control pollution of the sea by sewage coming from accommodation and clinic or hospital on board ship, which has gross tonnage of 200 ton or more and carry 10 persons or more. The discharge of sewage into the sea is prohibited, except when the ship has in operation an approval sewage treatment plant or when the ship is discharging comminute and disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest land. Sewage which is not comminute or disinfected has to be discharged at a distance of more than 12 nautical miles from the nearest land, at speed not less than 4 knots.

An International Sewage Pollution Prevention Certificate (1973) shall be issued, after survey in accordance with the provisions of Regulation 3 of this Annex, to any ship which is engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention.

This certificate shall be drawn up in an official language of the issuing country in the form corresponding to the model given in the Appendix to this Annex. If the language used is neither English nor French, the text shall include a translation into one of these languages. The International Sewage Pollution Prevention Certificate shall be issued for a period specified by the Administration, which shall not exceed five years from the date of issue, and subject to annual survey.

E. Annex V: Regulations for the Prevention of Pollution by Garbage from Ships This annex deals with different types of garbage and specifies the distances from land and the manner in which they may be disposed off. The most important feature of the Annex is the complete ban imposed on the disposal into the sea of all forms of plastics. It also includes:

- i. All plastics, including but not limited to synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products which may contain toxic or heavy metal residues.
- ii. Dunn-age, lining and packing materials which will float;

iii.Food wastes and all other garbage including paper products, rags, glass, metal, bottles, crockery and similar refuse;

- iv. All wastes from engine room.
- v. Dead animals.

Documents required under Annex V are:

i Manual for operating the devices.

ii Garbage management plan.

iii Garbage record.

- iv Receipts for delivering the garbage to port reception facilities.
- v Placards which notify the crew and passengers of the disposal requirements.
  - F. Annex VI: Regulations for the Prevention of Air Pollution from Ships

The Protocol adopted in 1997 included the new Annex VI of MARPOL 73/78, which entered into force on 19 May, 2005. MARPOL Annex VI sets limits on sulphur oxide and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ozone depleting substances. The Annex includes a global cap of 4.5% m/m on the sulphur content of fuel oil and calls on IMO to monitor the worldwide average sulphur content of fuel.

Annex VI contains provisions allowing for special SOx Emission Control Areas (SECAS) to be established with more stringent controls on sulphur emissions. In these areas, the sulphur content of fuel oil used onboard ships must not exceed 1.5% m/m.

Alternatingly, ships must fit an exhaust gas cleaning system or use any other technological method to limit SOx emission. The Baltic Sea Area is designated as SOx Emission Control area in the Protocol.

Annex VI prohibits deliberate emissions of ozone depleting substances, which include halon and chlorofluorocarbons (CFCs). New installations containing ozone-depleting substances are prohibited on all ships. Annex VI also sets limits on emissions of nitrogen oxides (NOx) from diesel engines. A mandatory NOx Technical Code, which defines how this shall be done, was adopted by the Conference under the cover of Resolution 2.

The Annex also prohibits the incineration on board ship of certain products, such as contaminated packaging materials and polychlorinated biphenyls (PCBs).

4.3 International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001.

It was adopted on 5<sup>th</sup> October, 2001 and entered into force on 17<sup>th</sup> September, 2008. The Convention prohibits the use of harmful organ tins in anti-fouling paints used on ships and established a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems.

Anti-fouling paints are used to coat the bottoms of ships to prevent sea-life such as algae and molluscs attaching themselves to the hull – thereby slowing down the ship and increasing fuel consumption.

There is a general obligation that:

i. Each Party to this Convention undertakes to give full and complete effect to its provisions in order to reduce or eliminate adverse effects on the marine environment and human health caused by anti-fouling systems.

ii. The Annexes form an integral part of this Convention. Unless expressly provided otherwise, a reference to this Convention constitutes at the same time a reference to its Annexes.

iii. No provision of this Convention shall be interpreted as preventing a State from taking, individually or jointly, more stringent measures with respect to the reduction or elimination of adverse effects of anti-fouling systems on the environment, consistent with international law.

iv. Parties shall endeavour to co-operate for the purpose of effective implementation, compliance and enforcement of this Convention.

v. The Parties undertake to encourage the continued development of anti-fouling systems that are effective and environmentally safe.

According to Controls of Annex I on Waste Materials under the Convention, taking into account international rules, standards and requirements, a Party shall take appropriate measures in its territory to require that wastes from the application or removal of an anti-fouling system controlled in Annex I are collected, handled, treated and disposed of in a safe and environmentally sound manner to protect human health and the environment.

4.4 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969.

The Convention adopted on the 29<sup>th</sup> November 1969 and went into force on 6<sup>th</sup> May, 1969 affirms the right of a coastal State <sup>36</sup>to take such measures on the high seas as may be necessary to prevent, mitigate or eliminate danger to its coastline or related interests from pollution by oil or the threat thereof, following upon a maritime casualty.

Under the Convention, the coastal State is, however, empowered to take only such action as is necessary and after due consultations with appropriate interests including, in particular, the flag State(s) of the ship(s) involved. The owners of the ship(s) or cargo(es) in question and, where circumstances permit are independent experts appointed for this purpose.

A coastal State which takes measures beyond those permitted under the Convention is liable to pay compensation for any damage caused by such measures. Provision is made for the settlement of disputes arising in connection with the application of the Convention. In the area of application the Convention applies to all seagoing vessels except warships or other vessels owned or operated by a State and used on Government non-commercial service.

The 1969 International Convention applied to casualties involving pollution by oil. In view of the increasing quantity of other substances, mainly chemical, carried by ships, some of which would, if released cause serious hazard to the marine environment, the 1969 Brussels Conference recognized the need to extend the Convention to cover substances other than oil.

<sup>&</sup>lt;sup>36</sup> Article I, International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969.

The 1973 London Conference on Marine Pollution therefore adopted the Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances other than Oil. This extended the regime of the 1969 Inter Convention to substances which are either listed in the Annex to the Protocol or which have characteristics substantially similar to those substances. The 1973 Protocol entered into force in 1983 and has been amended subsequently to update the list of substances attached to it.

4.5 International Convention on Civil liability for Oil Pollution damage.<sup>37</sup>

The Civil Liability Convention was adopted on 29<sup>th</sup> November, 1969 and came into force on 19<sup>th</sup> June 1975 to ensure that adequate compensation is available to persons who suffer oil pollution damage resulting from maritime casualties involving oil-carrying ships. The Convention places the liability for such damage on the owner of the ship from which the polluting oil escaped or was discharged.

Subject to a number of specified exceptions, this liability is strict. It is the duty of the owner to prove in each case that any of the exceptions should in fact operate. However, except where the owner has been guilty of actual fault, they may limit liability in respect of any one incident.

The Convention requires ships covered by it to maintain insurance or other financial security in sums equivalent to the owner's total liability for one incident. The Convention applies to all seagoing vessels actually carrying oil in bulk as cargo, but only ships carrying more than 2,000 tons of oil are required to maintain insurance in respect of oil pollution damage.

However, this does not apply to warships or other vessels owned or operated by a State and used for the time being for Government non-commercial service. The convention, however, applies in respect of the liability and jurisdiction provisions, to ships owned by a State and used for commercial purposes. The only exception as regards such ships is that they are not required to carry insurance. Instead they must carry a certificate issued by the appropriate authority of the State of their registry stating that the ship's liability under the Convention is covered.

## 5. Conclusion and Recommendation

As a specialized and autonomous agency working with the United Nations (UN) since 1948 when it was adopted and went into force on 17<sup>th</sup> March, 1958, the International

<sup>&</sup>lt;sup>37</sup> [Hereafter, The CLC]

Maritime Organization (IMO) has played and still playing significant role in curbing oil pollution, especially in the marine environment. Its regulatory role is seen and felt in IMO Conventions such as Convention on Prevention of Marine Pollution by Dumping of Waste and Other Matter, 1972 (as amended); International Convention for the Prevention of Pollution from Ships, 1973, as Modified by the Protocol of 1978 (as amended) (MARPOL 73/78); International Convention on Civil Liability for Oil Pollution Damage, 1969; etc. Non-treaty instruments such as Codes and Recommendations are all relevant in prevention of oil pollution. So too are the various technical Annexes. What then is next? The following recommendations are apt.

It is expected that signatories to IMO Conventions on prevention of oil pollution domesticate them to be part of their national laws. Coastal States like Nigeria should be quick in this if it has not been done. Parties are to willingly meet their responsibilities and discharge their obligations under the Conventions of IMO. This is very important by properly putting in place adequate and effective legal framework and implementation process toward protection of the marine environment from oil pollution. Also, policies that will clearly ensure enforcement of IMO Conventions should be introduced and pursued.

It is assumed that when the above recommendations are applied by states, the resultant effect will go a long way in preventing oil pollution from our marine environment, premised on the fact that the agreement remains a joint and cooperative effort.

