

## **TOWARDS THE MITIGATION AND POSSIBLE AMELIORATION OF COASTAL POLLUTION IN NIGERIA – A REVIEW OF A LEGAL ACT (Oil In Navigable Waters Act [Cap 337] LFN 1990 [1968 No. 34.]**

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### **ABSTRACT**

The Nigerian Coastal ecosystem is daily characterized by multifaceted explorative activities which come in company of varied and numerous challenges chief among which is Oil Spillage. Oil Spillage which could be caused by inadequate carefulness or carelessness in offloading and loading oil vessels, sabotage, unethical (unsafe) practices by operators, accidental causes, etc. has proved overtime to be the major sources of coastal pollution in Nigeria. In a bid to forestall normalcy and to restore sanity to these economically important areas by preventing, controlling and reducing the incidence of oil pollution, different legal frame works and different laws have been enacted by the Federal Government and many International Conventions have been ratified and consequently domesticated. This study critically looked into some of the laws as contained in the Oil In Navigable Waters Act [Cap 337] LFN 1990 [1968 No. 34.], geared towards the curtailing (Control and Prevention) of Oil Pollution as it affects the Nigerian Coastal System. It censoriously examined the Act and the weaknesses therein. The outcome exposed the deficiencies inherent in some of the sections and the enforcement mechanisms and these granted the operators an untoward opportunity to exploit and continually perpetuate their unsafe practices unchecked. Recommendations aimed at helping the government in making informed decisions that can ameliorate this menace of oil pollution were also proposed.

**Key Words:** Coastal area, Oil Spillage, Coastal Pollution, Ecosystem.

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## 1.0 INTRODUCTION

Section 37 of the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007 defines “**pollution**” thus:

**“Pollution means man-made or man aided alteration of chemical, physical or biological quality of the environment beyond acceptable limits and pollutants shall be construed accordingly.”**

The Environment can be subdivided into the Land, the air and the water bodies. Coastal Pollution is thus the alteration of the chemical, physical and/or biological quality of the Coast thereby making it inimical to the health of its inhabitant.

Nigeria has a coastline of approximately 853km facing the Atlantic Ocean; from the western border with the Benin Republic to the eastern border with the Republic of Cameroon. This coastline lies between latitude 4° 10' to 6° 20'N and longitude 2° 45' to 8° 35' E. The terrestrial portion of this zone is about 28,000 km<sup>2</sup> in area, while the surface area of the continental shelf is 46,300km<sup>2</sup>. The coastal area is low lying with heights of not more than 3.0 m above sea level and is generally covered by fresh water swamp, mangrove swamp, lagoonal marshes, tidal channels, beach ridges and sand bars (Dublin- Green *et al*, 1997). The Nigerian coast is composed of four distinct geomorphological units namely the Barrier-Lagoon complex; the Mud coast; the Arcuate Niger delta; and the Strand coast (Ibe 1988, Nwilo 1995 and Nwilo & Onuoha 1993.). The vegetation of the Nigerian coastal area is also characterized by mangrove forests, brackish swamp forests and rain forests. The Nigerian coastal zone experiences a tropical climate consisting of rainy season (April to November) and dry season (December to March).

The Nigerian coast is a very important resource base. Crude oil and gas which contributes very significantly to the economy of the country are obtained from the coastal areas particularly the Niger Delta. Other important activities that take place within the coastal areas include: shipping, fishing, tourism, agriculture, lumbering and communication. Some fish that are harvested in territories as far away as Senegal, Republic of Guinea and Mauritania are said to be hatched and grown within the coastal wetlands of Nigeria.

Over 90% of the earth living and non-living resources are found within a few kilometers of the coast (Above, 2001), where more than 4 billion people live and this proposition according to prediction will rise to 75% by 2030. The coastal populations are growing at a rate of about 1 million people per day and 80% of the world biodiversity is concentrated within the coastal region, much of it undiscovered (IYO, 1998).

According to Amosun A. O. *et al*, 2012, Nigeria with a current population of 158 million significantly put as the most populous black nation for example, which accounts for 2.3% of the world's total population, with about 2% growth rate and having about 20% of Nigeria's residents

living in one of the nine coastal states that house greater number of biodiversity resources (Nigeria Biodiversity and Tropical Forestry Assessment, 2008). Therefore, a coastal pollution in Nigeria will have direct adverse effect on approximately 20% of her residence and indirect negative impact on the remaining 80%.



Figure 1a: Map of Nigeria Showing the Oil Producing States

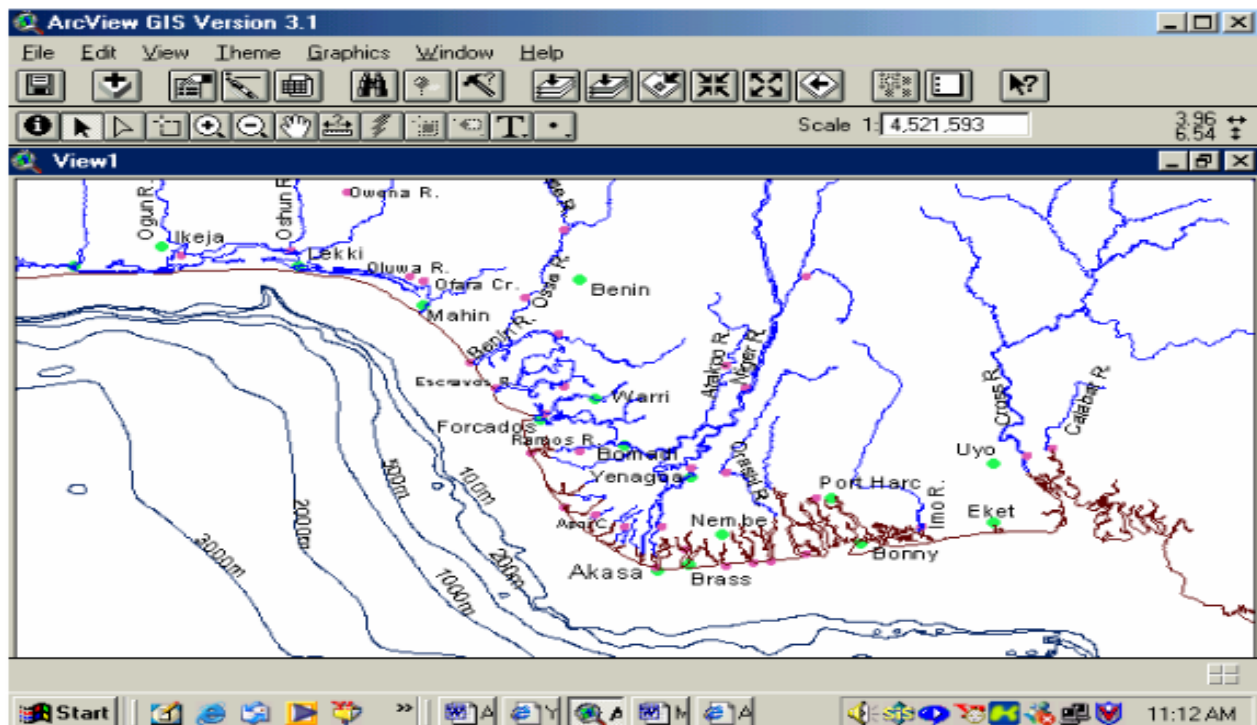


Figure 1b: Map Showing Nigeria Coastal Areas (Source: Badejo and Nwilo; 2006)

## 2.0. NEED FOR LEGAL FRAMEWORK TO MITIGATE THE EFFECT OF COASTAL POLLUTION

Little is known about the effects of petroleum pollution on shoreline communities (Garrity and Levings, 1990; McGuiness, 1990; Burns et al, 1993; Gesamp, 1993). Major oil spills heavily contaminate marine shorelines, causing severe localized ecological damage to the near-shore community. Ever since the discovery of oil in Nigeria in the 1950s, the country has been suffering the negative environmental consequences of oil development. The growth of the country's oil industry, combined with a population explosion and a lack of environmental regulations, led to substantial damage to Nigeria's environment, especially in the Niger Delta region, the center of the country's oil industry. Oil spills pose a major threat to the environment in Nigeria. If not checked or effectively managed, they could lead to total annihilation of the ecosystem, especially in the Niger Delta where oil spills have become prevalent. Life in this region is increasingly becoming unbearable due to the ugly effects of oil spills, and many communities continue to groan under the degrading impact of spills (Oyem, 2001).

Oil spills in the Niger Delta have been a regular occurrence, and the resultant environmental degradation of the surrounding environment has caused significant tension between the people living in the region and the multinational oil companies operating there. It is only in the past decade that environmental groups, the Nigerian federal government, and the foreign oil companies that extract oil in the Niger Delta have begun to take steps to mitigate the damage. Although the situation is improving with more stringent environmental regulations for the oil industry, marine pollution is still a serious problem (Nwilo, 2005).

A concise summary of some of the oil spillage occurrences that has been recorded in Nigeria between 1976 and 1998 as presented by (Nwilo & Badejo, 2002) is shown in Table 1.0 below:

Table 1.0: Summary of Oil Spill occurrences recorded in Nigeria between 1976 and 1998.

S/NO	Year	Number of Oil Spill Incidents	Quantity spilled (barrels)
1	1976	128	26,157.00
2	1977	104	32,879.25
3	1978	154	489,294.75
4	1979	157	694,117.13
5	1980	241	600,511.02
6	1981	238	42,722.50
7	1982	257	42,841.00
8	1983	173	48,351.30
9	1984	151	40,209.00
10	1985	187	11,876.60
11	1986	155	12,905.00

12	1987	129	31,866.00
13	1988	208	9,172.00
14	1989	195	7,628.16
15	1990	160	14,940.82
16	1991	201	106,827.98
17	1992	367	51,131.91
18	1993	428	9,752.22
19	1994	515	30,282.67
20	1995	417	63,677.17
21	1996	430	46,353.12
22	1997	339	59,272.30
23	1998	390	98345
	<b>Total</b>	<b>5724</b>	<b>2,571,113.90</b>

Source: The Department of Petroleum Resources

The above data can be further analysed and better expressed graphically as shown in figure 4 and figure 5 below:

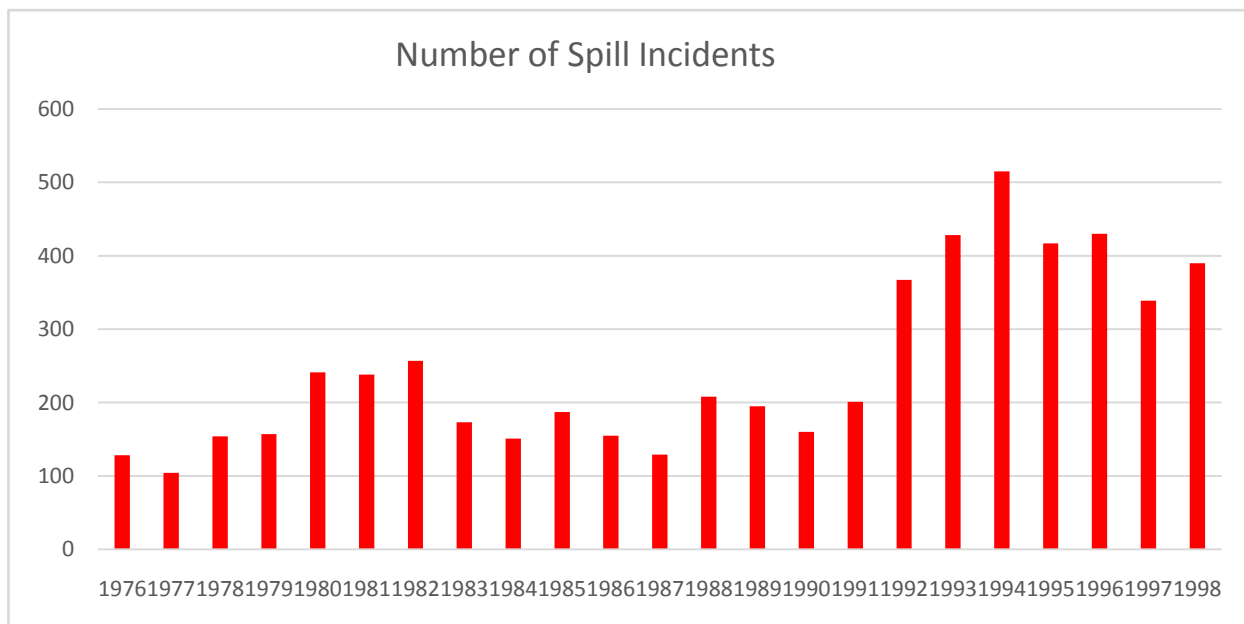


Fig 2.0: Showing a graphical representation of the number of Oil Spill incidents recorded in Nigeria between 1976 and 1998. (Source: Authors' research)

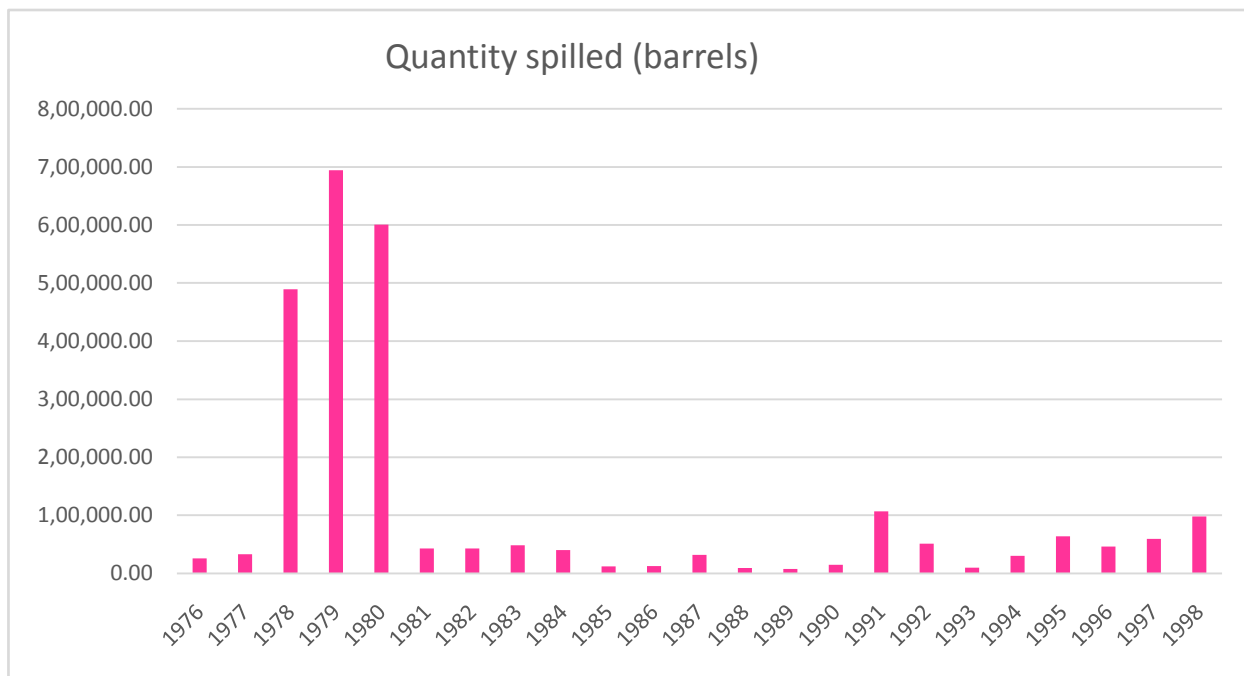


Figure 3: Showing the Estimated Quantity of Oil Spilled (In barrels) between 1976 and 1998. (Source: Authors' Research)

Other recorded spillage occurrences include:

Table 2.0: Summary of Oil Spill occurrences recorded in Nigeria between 2001 and 2011.

Date	Estimated Quantity Spilled (In barrels)
May, 2001	693, 500
June, 2001	23,695.8 – 693,500
May 2010	23,695.8 – 693,500
December, 2011	40,150

(Source: Authors' Research)

In the Nigerian Coastal environment a large area of the mangrove ecosystem has been destroyed. The mangrove was once a source of both fuel (wood) for the indigenous people and a habitat for the area's biodiversity, but is now unable to survive the oil toxicity of its habitat. The oil spills also had an adverse effect on marine life, which has become contaminated; in turn having negative consequences for human health from consuming contaminated seafood. Oil spill has also destroyed farmlands, polluted ground and drinkable water and caused drawbacks in fishing off the coastal waters (Badejo and Nwilo; 2012).

The harmful effects of oil spill on the environment are many. Oil kills plants and animals in the estuarine zone. Oil settles on beaches and kills organisms that live there, it also settles on ocean floor and kills benthic (bottom-dwelling) organisms such as crabs. Oil poisons algae, disrupts

major food chains and decreases the yield of edible crustaceans. It also coats birds, impairing their flight or reducing the insulative property of their feathers, thus making the birds more vulnerable to cold. Oil endangers fish hatcheries in coastal waters and as well contaminates the flesh of commercially valuable fish (Nwilo and Badejo; 2001).

Apart from the huge loss of economic resources that results as a proceed of oil spillage, oil dispersants used in cleaning oil spills has also proved to exert serious toxic effects on the plankton which in turn poisons marine organisms which can also lead to the loss of lives via food poisoning.

These and many more in exhaustive reasons are why Oil spillage must be completely ameliorated or at least mitigated on Nigeria Coasts and one of the basic way of confronting this monster is to adopt the use of sound and practicable legal mechanism and to enforce same.

Series of Statutes and Legislations have been enacted in order to mitigate the issue of Oil Spillage and Coastal pollution in Nigeria some of which include:

1. Constitution of the Federal Republic of Nigeria 1999 as amended.
2. Petroleum Regulations for Drilling and Production
3. Petroleum Act Cap P10 L.F.N 2004.
4. Minerals and Mining Act Cap M12 LFN 2004
5. Environmental Impact Assessment Act Cap E 12 LFN 2004
6. Oil In Navigable Waters Act [Cap 337] LFN 1990 [1968] as amended in 2004
7. Oil Pipelines Act Cap 07 LFN 2004
8. Oil Terminal Dues Act Cap 08 LFN 2004
9. Associated Gas Re-injection Act Cap 08 LFN 2004
10. Harmful Waste (Special Criminal Provisions) Act Cap H1 LFN 2004
11. National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007

It is worthy of note to affirm that the matter of pollution and the environment is not contained either in the Exclusive legislative list or concurrent legislative list of the Second Schedule of the 1999 Constitution (as amended). To that extent therefore, it remains a residual matter upon which the State legislature can competently and exclusively enact a law to the exclusion of the Federal legislature (Nwagbogu, 2011)

### **3.0. Oil in Navigable Waters Act 1968**

The Act was enacted to give effect to the domestication of the International Convention for the Prevention of Pollution of the Sea 1954 in compliance with the relevant provisions of the 1963

Republican Constitution which is *imperi materia* with the provisions of sections 12(1) of the 1999 Constitution of Nigeria as Amended. It was last amended in 2004.

Section 1(1) of the Act clearly makes the owner or master of the vessel responsible for any violation of the provisions of the Act, thereby entrenching the age long principle of Vicarious Liability (the master being held responsible for the acts or omission of his servant). It is common knowledge that the owners of the vessels either corporate persons or human beings will not be in charge of sailing the vessel on the sea and hence might not be privy to whatever leads to the violation of the relevant provisions of the Act, however, the presumption of law which in this sense is irrefutable is that the master or owner of the vessel is responsible for the acts and/or omissions of the servants on board.

The Consolidate Revenue Fund referred to in Sec 19(1) (2) of the Act doesn't envisage the payment of compensations to the community or person (s) that are victims of oil spills. It only relates to the expense or expenses made by the Minister and also fees received by the minister must be paid into the fund. This provision ought to be amended to accommodate payment of adequate compensations to communities and victims of oil spills.

A critical study of the Prosecution section of the Act, Sec 12 and other relevant sections of the Act reveal that the intendment of the law makers is basically to criminalize any act or omission violating the Act. It is my view that provisions should be made for victims of oil spills to be able to claim damages and compensations directly from the owners or masters of vessels by instituting civil actions in competent courts of records.

The Act further provided for several pollution offences in order to reduce the incidence of oil pollution. These offences as provided for by section 3 include, deliberate or negligent discharge of oil into prohibited sea areas and/or Nigerian waters, failure to install oil pollution equipment on ship or keep record of oil matters, failure by harbor authorities to provide oil reception facilities and also report the presence of oil in harbor waters. Section 4 of the Act provide for a number of defenses that can be pleaded. For instance, it is a defense to an offence charged under section 1 of the Act to prove that the discharge of oil was for the purpose of saving life, or to prevent destruction of vessel or cargo. Section 4 (2) (a) further stressed that it is an acceptable defense if a polluter can prove that the pollutant escaped accidentally as a result of damage to his vessel or leakage there from. Also, that all reasonable steps were taken to contain the discharge and reduce its impact on the environment. Moreover, in order to command strict adherence to the act, provision for penalties were enshrined in it. Such penalties include payment of compensations and taking up responsibility for cleanup which could be the cost of removal therefrom. The cost may however include any of such that may be incurred by any government body or agency in the restoration or replacement of natural resources damaged or destroyed as a result of the discharge. It could also include costs to third parties in the form of reparation,



restoration, restitution or compensation as may be determined by the Agency from time to time (Ajayi, 0. 0, 2011).

***Primary intent and objective of the Act as summarized by*** (Coalition for Change, 2010).

The Oil in Navigable Waters Act provides for the implementation of the International Convention for the Prevention of the Pollution of the Sea by oil and also makes provision for such prevention in the navigable waters of Nigeria.

***Strengths:***

- a. The Act makes the discharge of oil into a prohibited sea area an offence and the owner or master of the ship responsible for such discharge is guilty of an offence;
- b. The owner or master of a vessel, or place on land or apparatus from which oil or any mixture containing oil is discharged into the sea within the territorial waters of Nigeria is guilty of an offence (section 1 and 3).

***Weaknesses***

The monetary penalties for the offences under the Act are grossly inadequate (sections 6 and 7), making the Act nothing but “a toothless bull dog”.

***Application of the law***

The law can be applied to enforce safety and protection of the marine ecosystem and environment. It can also be used to demand for cleanup of oil spill in the country’s territorial waters and to a large extent relied on for compensation for destruction and damage to marine ecosystem

#### **4.0 PROPOSED REVIEW FOR SOME SECTIONS OF THE ACT**

For the purpose of this study, we shall be limiting the scope of the review to the special defenses of Sections 1 to 3 and the penalty factors attached to the violation of any of the law in the act as contained in Sections 4 and 6.

#### **SECTION 4, Sub sections:**

***(2) Where a person is charged as mentioned in subsection (1) of this section, it shall also be a defence to prove—***

***(a) that the oil or mixture escaped in consequence of damage to the vessel, and that as soon as practicable after the damage occurred all reasonable steps were taken for preventing, or (if it could not be prevented) for stopping or reducing, the escape of oil or mixture; or***

***(b) that the oil or mixture escaped by reason of leakage, that the leakage was not due to any want of reasonable care, and that as soon as practicable after the escape was discovered all reasonable steps were taken for stopping or reducing it.***

***(3) Where a person is charged with an offence under section 3 of this Act as the occupier of a place on land, or as the person in charge of any apparatus, from which oil or a mixture containing oil is alleged to have escaped, it shall be a defense to prove that the escape of the oil or mixture was not due to any want of reasonable care, and that as soon as practicable after the escape was discovered all reasonable steps were taken for stopping or reducing it.***

***(4) Without prejudice to subsection (3) of this section, it shall be a defense for the occupier of a place on land, who is charged with an offence under the last preceding section, to prove that the discharge was caused by the act of a person who was in that place without the permission (express or implied) of the occupier.***

From the aforementioned section, particularly sub-section 2a- 3, it can be inferred that the word 'reasonable' and 'practicable' are too sensitive for their definition to be left to the discretion of the operators. The Law needs to state in clear terms what it refers to as been practicable and reasonable as the words could be defined from different perspectives from anybody. The words reasonable and practicable should be well spelt out with respect to some designated standards. Also, the kind/type and nature of the vessel's damage that could lead to the escape of oil from the vessel and discharge of oil into the sea should be clearly stated. Some vessels could break down due to improper maintenance culture of the operators. These are human errors which should not be regarded as pillars of defence. It is also pertinent to propose that the fact that there was undue leakage of oil into the Navigable waters of Nigeria should be a punishable offence irrespective of the reason or possible cause of such leakage. The awareness of this alone will set the operators on their toes to ensure that they don't default knowing fully well that they will have no justifiable excuse. Infact, as stated by Subsection 2b; that '***the oil or mixture escaped by reason of leakage...***', The word leakage means the discharge of a fluid from some container. It is believed that if proper maintenance culture was imbibed by the vessel operators, there wouldn't be any issue of leakage at all therefore; leakage should not be accepted as a measure of self-defense.

Section 4 ***further provides that***

***'Without prejudice to subsection (3) of this section, it shall be a defence for the occupier of a place on land, who is charged with an offence under the last preceding section, to prove that the discharge was caused by the act of a person who was in that place without the permission (express or implied) of the occupier.***

Holding on to the presence of an unauthorized person as a legal excuse to justify the occurrence of Oil Spillage into the Nigerian Navigable waters should not be justifiable. If the area is a barricaded arena and there is no free access or exit of unauthorized people, then there must be law enforcement agents on ground to keep watch over the arena's boundary and ensure that no unauthorized fellow gains access to such environment, not to talk of causing the discharge of oil.

If by anyway, a person gains access into the property or area and his presence fostered the leakage or spillage of contaminable oil into the Nigerian Navigable waters, then the security operatives or law enforcements should be held responsible and consequently, their employer- the Operator.

### **Section 6. Penalties for offences under sections 1, 3 and 5**

*‘A person guilty of an offence under section 1, 3 or 5 of this Act shall, on conviction by a High Court or a superior court or on summary conviction by any court of inferior jurisdiction, be liable to a fine: Provided that an offence shall not by virtue of this section be punishable on summary conviction by a court having jurisdiction inferior to that of a High Court by a fine exceeding N2, 000.’*

Penalty can be defined as the disadvantage or painful consequences of an action or condition. It is purposely meant to deter people from flagrantly (both consciously and ignorantly) breaking the law. The Punishment for any offence should in all ways possess the gravity to deter people from committing the particular offence. One of the major things that sets people on their toes and makes them cautious enough to keep and live by the law is the capital nature or the grievousness of the punishment attached to it. It is opined that the fine not exceeding two thousand naira only (N2, 000) is too light compared to the consequences of discharging oil into the Navigable waters of Nigeria. The negative impact of coastal pollution cannot be compared with the positive impact of N2, 000 in reversing such ill-condition.

The Problems that will be caused by the discharge of oil into the Navigable waters of Nigeria cannot be solved by N2,000. Also, N2,000 is too meager and can easily be afforded by convicted operators, hence, they can choose to flagrantly discharge oil and cause oil spillage as long as the economic benefit of such heinous crime will accrue more than N2,000 into their purse. The Punishment is too light that it cannot in any way deter people from willfully discharging oil into the Nigerian Navigable waters and hence causing coastal pollution.

### **5.0 RECOMMENDATIONS**

In view of the afore-made review, the following recommendations are objectively proposed:

- The fact that the discharge of oil was caused by the leakage of vessels should not be regarded as a valid point of defense because if all ‘practicable and reasonable’ measure had been put in place for a sound maintenance culture, the possibility of such leakage should have been discovered before the on-loading of the vessel with oil. Leakage can be categorized as to be caused by human error; therefore, it should incur the full weight of the penalty as stated by the law.

- The term or words ‘reasonable and practicable’ as used in the content of this law, should be clearly defined according to some laid-down standards. Their definition should not be left at the discretion of the operators as it could be a major loop hole against our quest of ensuring a pollution free coastal environment.
- Discharge of oil into Nigeria Navigable waters as caused by the invasion of an authorized person/people should not be regarded as a defense because it portrays the inability of the operator to secure and provide adequate protection for the coastal environment where such vessels are kept. The operators must be able to guarantee maximum protection such that no unauthorized fellow will gain access to the confined or barricaded arena.
- The Penalty of a fine not exceeding N2, 000 is too weak to deter people from willfully polluting the Nigeria navigable waters or causing coastal pollution. Revocation of Operation license, Suspension of License, Imprisonment and heavy fine should be considered. It is my belief that the punishment should be so grievous that no individual or operator (company) will be able to easily and cheaply afford to incur it. Also, the gravity of the punishment should be commiserate to the impact of the offence committed.

## **6.0 CONCLUSION**

It is opined that the Oil in Navigable Waters Act should still be subjected to another round of amendment by our Law makers in order to correct the various identified weaknesses that have been highlighted above and also to ensure that its provisions meet international best practices. Since navigable waters are matters for the residual legislative list, State Law makers are also enjoined to make laws that will address the challenges confronting their states in order to cover the field for the Oil in Navigable Waters Act.

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