American Journal of Humanities and Social Sciences Research (AJHSSR)

e-ISSN:2378-703X

Volume-3, Issue-6, pp-173-184

www.ajhssr.com

Research Paper

Open Access

# Environmental Pollution Caused By Oil And Gas Activities In Nigeria: The Inability Of The Legal And Institutional Framework To Curb The Menace.

<sup>1</sup>ADOGA-IKONG, J. ADAMS, <sup>2</sup> ROLAND OKAYI IPUOLE

**ABSTRACT:** Since the search for oil and gas in 1908 and the subsequent discovery in commercial quantity in 1956, in Nigeria, the country has passed through series of negative environmental problems as a result of the exploration and exploitation of oil and gas. Since that time till date, countless number of oil spills, gas flaring and effluent discharge have occurred, resulting in immeasurable pollution anddegredation of the environment. The country has since then been suffering the negative environmental consequences of the blessing in disquish which is the oil development. Thus, when there is, for instance, oil spills on water, it spreads immediately thereby affecting the flora and fauna. Also, the gaseous and liquid components evaporate, some got dissolved in water and even oxidize, and yet some undergo bacterial changes and eventually sink to the bottom by gravitational action. The soil is then contaminated with a gross effect upon terrestrial life. Several oil pollution prevention / control laws, policy, guidelines as well as instructions are put in place by the government to curb or possibly control this menace of oil and gas pollution incidents in the country. These efforts have resulted in the development of strong legal and institutional framework in the country for that purpose. Unfortunately and regrettably, these efforts have not achieved the desired goal or result, which explains the continuous oil pollution in Nigeria till date. This article explored the meaning and consequences of oil and gas pollution. Also, critical analysis of oil and gas pollution laws and institutions was undertaken so as to expose the inadequacies inherent in them and distill the consequences that flows from it. At the end, formidable recommendations were made as a way forward to curb the menace.

#### I. INTRODUCTION

Nigeria is the largest producer of oil and gas in Africa and the sixth in Organisation of Petroleum Exporting Countries (OPEC). This discovery of oil has greatly transformed Nigerian economy and has for the past three decades provided approximately 90 percent of foreign exchange earnings and 80 percent of government revenue. The production of oil alone has reached the height of between 2.8 to 3.0 million barrels per day.

Yet instead of Nigeria counting on the blessings which God has endowed her with in terms of oil and gas, it is woes. This is because of the damaging effects on the environment by virtue of the exploration and exploitation of the oil and gas in the oil producing area of the country.

The main source of the pollution in this regard is oil spill or oil spillage. Oil spill or spillage is a release of a liquid petroleum hydrocarbon into the environment due to human activity and is a form of pollution. Oil spills include a release of crude oil from tankers, barges, offshore platforms, drilling rigs and wells, as well as spills of refined petroleum products (such as gasoline, diesel) and their byproducts.

- \* LL.B, BL, LL.M, PhD Senior Lecturer and former Deputy Dean, Faculty of Law, University of Calabar, Calabar, Nigeria.
- \*\* LL.B., BL, LL.M (PhD candidate) Lecturer, Faculty of Law, University of Calabar, Calabar, Nigeria

because some of these storage tanks, oil pipelines and other facilities have been on use for decades without overhauling or replacement.

Gas flaring is another source of environmental pollution in Nigeria. Nigeria is said to have a deposit of 500 trillion cubic feet of gas, but unfortunately, this is wasted by being flared. Gas flaring therefore is the burning of excess gas associating with the crude oil. Oil companies instead of using or conserving the gas, tends to burn it which has caused environmental hazards to the people of Nigeria, especially the people of the oil producing area. This has caused a lot of health hazards and other environmental problems in the region.

Yet another source of environmental pollution is that of effluent discharge. Effluent discharge is the release of liquid waste or sewage discharge into the environment. Refineries in Nigeria, constantly release this liquid waste into a pit which invariably flow into the adjoining lands, creeks, rivers and sea causing pollution.

#### Impact of oil and gas activities on the environment

The combine effect of oil spillage, gas flaring and effluent discharge have major impact on the environment into which it is released. An estimated 5 to 10% of Nigerian mangrove ecosystems have been wiped out due to the activities in the oil and gas industry. The rainforest which previously occupied some 7,400km<sup>2</sup> of land has disappeared as well. Spills in populated areas often spread out over a wide area, destroying crops and aquacultures through contamination of the groundwater and soils. The consumption of dissolved oxygen by bacteria feeding on the spilled hydrocarbons also contributes to the death of fish. In agricultural communities, often a year's supply of food can be destroyed instantaneously. Because of the careless nature of oil operations in the Delta, the environment is growing increasingly uninhabitable. People in the affected areas complain about health issues including breathing problems and skin diseases. Many have lost basic human rights such as health, access to food, clean water, shelter and ability to work.

Oil spillage destroys vegetation, rendering farmlands barren and unproductive oil contains polycyclic aromatic like benzene, toluene and naphthalene. These are not easily biodegradable. When taken in by living organisms, they breakdown all membranes and this causes body and organ disorder and even death<sup>2</sup>. Oil spillage can also damage agricultural land and affect soil fertility. Whenever the oil spill is on water, some of the spills usually undergo bacterial changes and thus sink to the bottom of the seas by gravitational action. The soil then can be contaminated with a gross effect upon the terrestrial life.<sup>3</sup> Oil is capable of killing plants and animals, and can settle on beaches and kill organisms that live there like fish. Nigeria has suffered the consequences of the destruction of its mangrove ecosystem as a result of oil spillage. Instances are as follows: The overflow of the waste pit at Beni bay (Escravas) which destroys the environment. The vegetation of Ogharefe was destroyed as a result of oil spillage. The Idoho oil spill extended from Akwa-Ibom State to Lagos State dispersing oil through the coastal states, up to Lagos coast. This culminated in the presence of spilled oil along the coastal areas of Cross River State, Ondo State and Lagos State.<sup>5</sup>

It is a fact that in many villages near oil installations, even after a long time of oil spills, an oily sheen can be seen on the water, this usually in fresh water communities is the same water that the people living there use for drinking and washing. In April, 1997, samples taken from water used for drinking and washing by local villages were analysed in the USA. A sample from Luawii, in Ogoni where there had been no oil production for four years had 18ppm of hydrocarbons in the eater, 350 times the level allowed in drinking water in the European Union (EU). A sample from Ukpaleide, Ikwere contained 34ppm, 680 times the EU standards<sup>6</sup>

Following the major Taxaco spill of 1980, the report had it that 180 people lost their lives in one community as a result of the pollution<sup>7</sup>. Gas flares cause acid rain which affects the skin and hairs of humans and animals, corrodes roofs and cars and raises body temperature beyond limits that the heart can sustain. The quality of air inhaled by the people in the immediate vicinity is greatly reduced by the introduction of excessive smoke, suspended particles and carbon monoxide into the atmosphere.

Some instances of gas flare areas shows the following; in Ifie-Ikpor, an Itsekiri community in Warri, gas flaring inflicts the natives with heat rashes, also roof leakages resulting from the attack by the chemical fallouts of the exploration and production. Also in Ebocha-Egbema, the people complained of serious health problems and environmental issues caused by gas flaring. Huge flares accumulates in the air above them, black clouds leap into the sky. The air around them is usually hot and has a smell due to the gas flare. Also, water in this area is as dark as charcoal and this cause untold hardship on the people, thereby depriving them of their life

<sup>&</sup>lt;sup>1</sup> A practical example of the effect of effluent discharge through the activities of refining and petro-chemical products is that of Uboi (a small community near Warri Refinery and Petro-chemical Company where the people complain of destroyed vegetation and barren farmland. See also the effect of this at Okrika in Rivers

<sup>&</sup>lt;sup>2</sup>KayodeSoremekun, *Perspectives on the Petroleum Law in Nigeria*, Lagos: Amkara Books, 1995, p.69 <sup>3</sup> Ibid

<sup>&</sup>lt;sup>4</sup> See Shell Petroleum Dev. Co. Ltd v. Farah (1995) NWLR pt (382) at 148, seen also Victor Elim&Anor v. Shell Petroleum Dev. Co. Ltd. (Unrep) Suit No. PHC/101/76 Port Harcourt High Court, 1979.

<sup>&</sup>lt;sup>5</sup>"Impacts and management of oil spills pollution along the Nigerian coastal areas" – Peter Co. Nwilo and Olusegun T. Badejohttp://www.fig.net (last accessed on 3<sup>rd</sup> March, 2019) <sup>6</sup> Ibid

<sup>&</sup>lt;sup>7</sup> Human Rights Watch, June, 2007.

<sup>&</sup>lt;sup>8</sup>See Newswatch, Oil Producing Areas, neglects, poverty and controversy, July 2, 1990

to life and healthy environment<sup>9</sup>. In Bodo West, Bonny Local Government Area of Rivers State, an increase artisanal refining between 2007 and 2011 has accompanied by a 10 to 15 percent loss of healthy mangrove cover or 407,331m<sup>3</sup>. This if left unchecked may lead to irreversible loss of mangrove habitat in this area.<sup>10</sup>

## An overview of key legislations controlling oil and gas pollution in Nigeria Petroleum $\operatorname{Act}^{11}$

This legislation marked the beginning of the indigenous exercise of sovereignty over mineral and natural resources in Nigeria. The intent of this Act is to provide for the exploration of petroleum from the territorial waters and continental shelf of Nigeria and vest the ownership of all onshore and offshore including the revenue from petroleum resources derivable the reform, in the state. Under the Act, there is a power of general supervision and inspection conferred on the Minister of Petroleum Resources to ensure that operations are carried out in compliance with the provision of the Act and any regulations made thereunder. The Act gives the Minister the power to make regulations for the prevention of pollution of water courses and the atmosphere: This is provided under section 9(1)<sup>14</sup> of the Act, thus:

The minister may make regulations for:

- (i) Providing generally for matters relating to licenses and leases granted under this Act and operations carried on thereunder including...
- (ii) The prevention of pollution of water courses and the atmosphere

In a further development, the minister may direct suspension of all operations until he is satisfied that arrangements have been made to prevent danger to life and property<sup>15</sup> or where operations are not being conducted in accordance with good oilfield practice.<sup>16</sup> Again, under section 24(1) of the first schedule to the Act, the minister is empowered to revoke licenses or leases granted under the Act<sup>17</sup> where the grantee has failed to comply with the provisions of the Act or any legislation or direction given thereunder or is not fulfilling obligation under the special conditions of the licence or leases. In this respect, the question that begs for answer here is whether the provision of this section is sufficient enough to control oil pollution or even always complied with by the operators<sup>18</sup>

#### Oil Pipelines Act<sup>19</sup>

This Act and its regulations guide oil pipelines construction, operation and maintenance activities with regards to the conveyance of the oil through the pipelines. For instance, Section 14 provides to the effect that a license for the establishment and maintenance of an oil pipeline shall not, unless expressly permitted, be exercised in such a manner to affect the flow of water required for domestic, industrial or irrigational purposes or make deposit in a waterway that would cause flooding or erosion.

Specifically, Section 14(c) provides:

... construct such works in, under or over or deposit such material on or make such alteration in the flow of water required for domestic, industrial or irrigational use as would diminish or restrict the quantity of water available for such purpose or construct such works or make deposit in any waterways, as would cause flooding or erosion without the prior permission in writing of the minister or of such officer as may be nominated by the minister.

Section 17(4) establishes and underscores the fact that grant of licence is subject to regulations concerning public safety and prevention of land and water pollution. The section provides:

Every licence shall be subjected to the provision contained in this Act... of its grant and to such regulation concerning public safety... and the prevention of pollution of such land or any waters...<sup>20</sup>

<sup>15</sup> Section 9(1)(b)(iii) for details

<sup>&</sup>lt;sup>9</sup>See Jonah Gbemre v. Shell Petroleum Dev. Co. Ltd & Ors where the plaintiff for himself and on behalf of the Iwherekan community, Delta State through an action against the defendants for violation of their rights to life and healthy environment as a result of gas flared by the defendants which affected them and their environment (unrep) suit no FHC/B/53/05

<sup>&</sup>lt;sup>10</sup> United Nations Environmental Programme, Assessment of Ogoni land, Nairobi, 2011

<sup>&</sup>lt;sup>11</sup> Cap p. 10, LFN 2010

<sup>&</sup>lt;sup>12</sup>OlarenwajuFagbohun, *The law of oil pollution and environmental restoration: A comparative review*, Lagos: Odade Publishers, 2010, p. 292 see also S.1 of the Act.

<sup>&</sup>lt;sup>13</sup>OlarenwajuFagbohun, *Ibid* 

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

<sup>&</sup>lt;sup>16</sup>Section 8(f)

<sup>&</sup>lt;sup>17</sup> Section 8(1)(g)

<sup>&</sup>lt;sup>18</sup> Section 2 of the Act

<sup>&</sup>lt;sup>19</sup> This will be discussed in due course

Finally, Section 11(5) creates a civil liability against the person who owns or is in charge of any pipelines. He would be liable to pay compensation to anyone who suffers physical or economic injury as a result of a break or leak in the pipeline.<sup>21</sup>

#### Oil in Navigable Water Act<sup>22</sup>

The importance attached to this legislation to fight against oil pollution is not misplaced<sup>23</sup>. Generally, as a result of geographical location between regions of production and that of consumption on one hand and that of production and utilization on the other hand, oil has to be transported in ships by railways and through extensive pipelines from producing to consuming areas. Thus, in the process of transportation, varying magnitude of pollution always occurs. The primary trust of this Act is to implement the terms of the International Convention for the Prevention of Pollution of the Sea by oil 1954 to 1962<sup>24</sup>

The Act was actually implemented for the first time in 1968 and was designed to deal with the prevention of oil pollution in Nigeria. 25 Section 1(1) of the Act makes it an offence for a Nigerian ship to discharge oil into prohibited sea areas created under the International Convention for the Prevention of Pollution of the Sea 1954 as amended in 196226. The oils covered by the Act include crude oil, fuel oil, lubricating oil and heavy diesel oil. The section affects only Nigerian ships traversing the seas of the world. In view of this, such ships may presumably be apprehended only by the authorities of the state to which the violated prohibited sea are contiguous<sup>27</sup>. Section 207creates an offence in circumstances when the owner or master of a ship, orthe occupier of the land adjoining Nigerian waters or the operator of apparatus for transferring oil, discharges oil into Nigerian waters from hisvessel, a place on the land or his apparatus respectively. The section speaks ofthe liability for the offence created under or of "any vessel". This includesforeign ships and their alien masters who may by virtue of the TerritorialWaters Acts be arrested and prosecuted under any laws in which they mayhave breached. Failure to install oil pollution prevention equipment onships<sup>28</sup> is an offence. Where a Nigerian or foreign owned ships fail to install equipment considered suitable for the prevention or reduction of oildischarges, an offence under this section would have been committed. Theequipment concerned are as may be specified by the Minister of Transport or his agent. Here, the guilty party is either the owner or master of theconcerned ship.

Masters of Nigerian ships exceeding gross tonnage of eighty (80) are required to keep a log of their oil discharges, oil spills and ballasting activities. In the p case of oil discharges, the important element is that it is done intentionally, for safety of life, vessel or cargo in the second case, discharge is accidental, hence the use of "escape" of oil or mixture of oil. In the third instance discharge or escape is due to ballasting activities relating to clearing of tanks, disposal of oil residues etc. Noncompliance constitutes an offence under section 7(1) which is applicable to Nigerian ships only. Also, and this relatesto both foreign and Nigerian owned vessels; detailed records of oil transfers to and from these vessels are required to be kept and failure to do so clearlyconstitutes an offence<sup>29</sup>. It should be noted that this arm of the offence is; relevant to the extent that pollution may result from such transfers. Themaking of fraudulent entries in connection with the first two offences is alsoan offence. It is relevant to the extent that it amounts to a cover upinformation concerning oil pollution.

It is an offence for Harbour Authority to failing to provide Oil ReceptionFacilities. This is the only offence specified for governmental agencies. Undersection 8, the harbour authority is required to provide facilities in theharbours for the disposal of oil residues and failure to provide, such facilitiesconstitutes an offence under section 8(8). The creation of this offencerecognizes the need for vessels to discharge oil in the process of ballastingand cleaning-up. The provision of oil receptacles in authorized areas willexpectedly minimize pollution by oil. Non provision therefore, amounts to active connivance in or precipitation of pollution activities

The longer oil pollutant remains in water, the greater the damage to the marine environments. It is in recognition of this fact that a duty is imposed on persons to report to harbour authorities' discharges of oil from vessels (accidental or otherwise) for the purpose of preventing damage to vessels or cargo under section 10. In addition, section 10 should be construed as having created an independent offence imposing a duty on operators

<sup>&</sup>lt;sup>20</sup>Cap 07 LFN 2010

<sup>&</sup>lt;sup>21</sup> See Section 17(4) for details

<sup>&</sup>lt;sup>22</sup> See Section 11(5) for details, see also 19-23 of the Act

<sup>&</sup>lt;sup>23</sup> Cap 06 LFN 2010

<sup>&</sup>lt;sup>24</sup> J. A. Omotola (ed) *Environmental Laws in Nigeria including Compensation*, Ibadan: Carton Press (West Africa) Ltd, 1990, p. 234

<sup>&</sup>lt;sup>25</sup> O. Fagbohun op cit at p. 300

<sup>&</sup>lt;sup>26</sup> I. Ehighelua op cit p. 40

<sup>&</sup>lt;sup>27</sup> J. A. Omotola op. cit p. 324

<sup>&</sup>lt;sup>28</sup> Section 5(5)

<sup>&</sup>lt;sup>29</sup> See Section 7(5) (b)

of all sea-going vessels and occupiers of land adjoining oil polluted waters whether responsible for the pollution or not, to lodge an immediate report with, harbour authorities failing which they shall be guilty of an offence under this head<sup>30</sup>.

#### Criminal/Penal Codes<sup>31</sup>

Under Criminal Code, the offence of "Common Nuisance" is committed under section 234 of the Act. Generally, this act has two important provisions regarding pollution: section 234 (e) and section 245, section 234(e) makes it an offence for any person to deliberately deliver or obstruct the course of any navigable water so as to diminish its convenience for purpose of navigation. It is a misdemeanor and the offender is liable to imprisonment for two (2) years.

The second and which is more important for the present purposes is section 245. It provides:

Any person who corrupt or fouls the water of any spring, stream, well, tank reservoir or place so as to render it less fit for the purpose for which it is ordinarily used is guilty of a misdemeanor and is liable to imprisonment for six months.

There is a provision in the Act against air pollution, thus section 247 provides:

Any person who: [a] violates the atmosphere in any place so as to make it noxious to the health of persons in general dwelling or carrying out business in the neighbourhood, or passing along the public highway or (b) does any act which he knows or has reasons to believe to be likely to spread the infection of any disease dangerous to life, whether human or animal, is guilty of a misdemeanor, and is liable to imprisonment for six months<sup>32</sup>.

Although not targeted against the activities of oil companies, these provisions have the potential for controlling oil pollution<sup>33</sup>. Penal Code under section 192 makes it more broadly an offence attracting imprisonment for six monthsfor any person to voluntarily vitiate the atmosphere in any place so as to make it noxious to the health of persons dwelling or carrying on business in the neighbourhood or passing along a public way<sup>34</sup> to the degree of damage that might have been wrought by the act in question in agreeing with the above submission. The Penal Code is equally considered not to be too helpful in this regard.

#### Associated Gas Re-injection Act<sup>35</sup>

This Act contains regulations aimed at addressing the problems of oil pollution as a result of gas flaring in Nigeria. By section 2(1) of the Act, every company producing oil and gas in Nigeria is compelled to submit preliminary programmes for gas re-injection and a detailed plan for the implementation of gas re-injection. This Act becomes necessary to curb the incidence of gas flaring. By section 3(1) of the Act no company engaged in the production of oil and gas shall after 1st January 1984 flare gas produced in association with oil without the permission in writing of the Minister, section 4 stipulates penalty for breach of permit condition.

One pertinent issue that needs to be discussed here is the willingness of the government to actually stop the gas flaring as it were. This is because of the condition set out in section 1 of the Associated Gas Re-injection (continuing flaring of gas) Regulations<sup>36</sup>. The AGRA Regulation in section 1 empowers the minister in-charge of petroleum to issue a certificate for the continuation of flaring of gas in a particular field or fields, if one or more of the following conditions are satisfied.

- 1) Where more than 75% of the produced gas is effectively utilizedor conserved;
- 2) Where the produced gas contains more than 15% impurities which renders it unsuitable for industrial purposes;
- 3) Where an ongoing utilization programme is interrupted byequipment failure, etc.

The implication of this is that the minister shall continue to permit the flaring of gas in Nigeria as long as desiring oil and Gas Company, satisfies one ormore of the above conditions. This by extension reveals the unwillingness of the Nigerian government to stop gas flaring<sup>37</sup>

\_

<sup>&</sup>lt;sup>30</sup> Cap 08 LFN 2004, J.A. Omotola op. cit at p. 238

Cap p. 38 and cap p. 3 LFN 2004 respectively

<sup>&</sup>lt;sup>32</sup> This provision may be appropriate for the punishment of gas flaring

<sup>33</sup> KSA Ebeku op cit at p. 195

<sup>&</sup>lt;sup>34</sup> Section 247 Criminal Code compared looking at this provision it is submitted that it is wide enough to cover pollution in the air and on the land (by the use of the expression in any place) and also encompasses gas flaring, see pages and spilage.

<sup>&</sup>lt;sup>35</sup> Cap A8 LFN 2004

<sup>&</sup>lt;sup>36</sup>Hereinafter referred to as AGRA Regulations. This regulation came into effect on 1<sup>st</sup> January, 1983 and since then, gas flaring in the Niger Delta has continued unabated.

More of this will be discussed later in the course of this work

#### National Oil Spillage Detection and Response Agency NOSDRAAct38

This Act which came into place established an Agency (NOSDRA) in compliance with the international convention on oil pollution preparedness, response and co-operation (OPREAO)<sup>39</sup> which Nigeria is a signatory. The primary aim of this is to intensify efforts towards compliance, monitoring and enforcement of oil and gas regulations and standard and to mount pressure on oil and gas operators for gas flaring and to use environment friendly drilling fluid and mud system<sup>40</sup>.

Section 5 of the Act provides for fourteen objectives of the agency which among others are:

- Establish a viable national operational organization that ensures asafe, timely, effective and (a) appropriate response to majordisastrous oil pollution.
- Identify risk areas as well as priority areas for protection and lean up (b)
- Establish the mechanism to monitor and assist or whereexpedient direct the response, (c) including the capability to mobilize the necessary resources to save lives, threateneden vironment, and clean up to the best practical extent of the impacted site<sup>41</sup>.

Section 6 on the other hand, makes provision for the function of the Agency<sup>42</sup>. Section 6 (2) compel the spiller to report an oil spill to the Agency in writing not more than 24 hours after the occurrence of the spill or face a criminal sanction of N500,000.00 for each day of failure to report the occurrence 43. As laudable as this subsection might look, it still has some problems. One, for a big and giant oil conglomerate such as Shell, is ¥500,000.00 penalty and even such amount for each day of failure to report oil spillage enough to serve as deterrence? Two, the Act does not take into consideration the interest of the victim of oil pollution<sup>44</sup>.

### **Environmental Guidelines and Standards for the Petroleum Industry** <sup>45</sup>

The genesis of the history of the guidelines started in 1981 when the Department of Petroleum Resources (DPR) relying on the power conferred by the existing legislation, issued interim guideline concerning the monitoring, handling, treatment and disposal of effluents, oil spills and chemicals drilling mud and drill cuttings by lessees and oil operators. The Environmental Guidelines and Standards for the Petroleum industry in Nigeria which was first issued in 1991 and subsequently revised in 2002 thus has the following objectives:

- 1) Establish guidelines and standards for the environmental quality control of the petroleum industry taking into account existing local conditions and planned programmes
- 2) Provide in one volume for the operator and other interested persons a comprehensive integrated document on pollution abatement technology guidelines and standards for the Nigerian petroleum industry.
  - 3) Standardize the environmental pollution abatement and monitoring procedures, including the analytical methods for various parameters<sup>46</sup>.

By paragraph 5.1.1<sup>47</sup> all spillages of crude oil/chemical/oil product shall be reported to the Director of Petroleum Resources in accordance with the Oil Spillage/Notification Reporting Format "A", "B" and "C". In addition, a joint spillage investigation comprising of the licensee/operator/spiller community and DPR shall be constituted within 24 hours of spillage notification to investigate the spillage. Paragraph 5.1.2 makes provisions for crude oil/chemical spillage and contamination clean-up certification. Under this head, cleanup efforts for all in land and near shore spillage of crude oil products and chemicals, shall be subjected to clean-up certification as contained in the forms. For further management, control of environmental practices under the provision, licensees/operators are required to keep a register of potentially polluted sites or past impacted sites. Such sites are to be cleaned-up, remediated and certified accordingly by the Department of Petroleum Resources.

Part III, deals basically with production and operation while parts IV, V, VI and VII deal with terminal operations, Hydrocarbon processing operations, oil and gas transportation and marketing operations respectively<sup>48</sup>. In the above parts, the approach for environmental management are similar to that of part II,

<sup>48</sup> See Part III, IV, VI, VI and VII for details

<sup>&</sup>lt;sup>38</sup> Section 36 of FEPA compared

<sup>&</sup>lt;sup>39</sup> P. Awilo& O. Obadejo op cit., see also the long title of the Act

<sup>&</sup>lt;sup>40</sup> Alexandra gas and oil connection 2006, www.google.com

<sup>&</sup>lt;sup>41</sup> See other objectives in section 5

<sup>&</sup>lt;sup>42</sup> See section 6(1) for details.

<sup>&</sup>lt;sup>43</sup> See section 68 of Nigerian Oil and Gas Industry Content Development Act 2010

<sup>&</sup>lt;sup>44</sup> The critique of the above will be discussed in detail later in the course of this work.

<sup>45</sup> Revised in 2002

<sup>&</sup>lt;sup>46</sup> See Part 1 of the Guidelines

<sup>&</sup>lt;sup>47</sup> See Part II

though the only addition is that in part V the DPR is further required to take necessary and appropriate measure to safeguard human health and welfare in the event of disaster or emergency arising from spillage. Part VIII provides for standardization of environmental abatement procedures. Paragraph 1.3 of part VIII identifies the two tools to be used in achieving the goals of part VIII namely; Environmental Impact Assessment Report and Environmental Impact Evaluation (Post impact) Report. The aim of EIA is to assess the environmental impacts of the proposed action plan rather than justification for decisions already made, while the aim of EER is to evaluate the already polluted or impacted environment to enable the government determine how good or bad the recipient environment is, so as to decide and design strategies for protection and restoration.

Paragraph B of part VIII covers contingency planning for the prevention, control and combating of oil and hazardous substances spills. It requires ail operators in the petroleum industry to compile in a document its orderly /arrangement of events to contain and control oil spills incidents<sup>49</sup>. The Guidelines no doubts are comprehensive and well-intended. Its obvious deficiency however is that all powers of monitoring, compliance and enforcement are centered in and around the DPR without corresponding checks and balances. The immediate implication of this is that its success or otherwise is wholly dependent on vision of the Director of Petroleum Resources and the extent to which he is allowed and equipped to operate. According to Olarenwaju "if we are to go by precedent and experience a situation like this is unhealthy and cannot be relied upon to deliver".

#### Critical Appraisal of the Legislations

Although serious attempts have been made to comment on some of the provisions of the legislations, the entire regulatory fabric will now be generally examined. Generally, most of the provisions of the legislation touching on oil pollution are too vague. According to Akanle<sup>50</sup>"they lack policy direction..." with the exception of the Oil in Navigable Waters Act<sup>51</sup>, all other enabling pieces of legislation do not take environment protection as their objective or part of their objectives. To show more of vagueness of objective in the legislation, the Petroleum Act for instance, in section 9 only provides for power to the Minister to make regulations as at when deemed necessary for the prevention of pollution of water course andthe atmosphere. The Act merely vests discretionary powers to make regulations which discretion may or may not be exercised by the Minister. Notably, is the fact that under the regulation, the licensee or lessee has a duty to (a) adopt all practicable precautions including the provision of up-to-date equipment to prevent the pollution of inland waters, rivers, water courses, territorial waters of Nigeria or high seas by oil, mud or other fluids or substances which might contaminate the waters, banks or shore line etc. and where such a pollution has occurred, the licensee or lessee shall take prompt and adequate steps to control and if possible to stop the effects of the pollution<sup>52</sup>.

Regulation 40 specifically provides that all waste oil, brine and sludge from the operation should be carefully and neatly drained into receptacles constructed in compliance with safety regulation and shall dispose them in a manner approved by the Director of Petroleum Resources or as approved by any other applicable regulations. Regulations 3 (6)(d) on the other hand provides that the licensee or lessee shall maintain all apparatus or appliances in use in his operation, and all boreholes and wells cables of producing petroleum in good repair and condition, and shall carry out all his operation in a proper and workman like manner... and without prejudice to the generality of the foregoing, he shall in accordance with those practices, takeall steps practicable to prevent the escape of petroleum into any water, well, spring, stream, river, lake reservoir, estuary or harbour.

It is pertinent to say here that although the above provisions of the regulation, seem very broad, their enforceability dispend on the interpretation to be given to such difficult terms as "practicable precautions", "up-to-day equipment" and "prompt steps". Unfortunately these terms are not defined either in the Petroleum Act or in the Regulations<sup>53</sup>.

The Oil in Navigable Waters Act in section 4 (1) provides that it shall be a defence for an offence under section 1 thereof to prove that oil was discharged for the purpose of saving life or to prevent damage or destruction of vessels. According to UwemUdok<sup>54</sup>, "the above section seems to indicate that saving life on board a vessel is of greater importance than endangering the lives of hundreds of people who may be affected by the resultant pollution of the sea". "The most alarming defence is the one offered for "the discharge ofpollutants for the purpose of preventing damage or destruction of any vessel or cargo". Sadly, the nature of

<sup>52</sup> Regulations 25

<sup>&</sup>lt;sup>49</sup> See for details paragraph B of Part VIII

<sup>&</sup>lt;sup>50</sup> O. Akanle*Pollution Control Regulation in the Nigeria Oil Industry* (Lagos: NIALS 2007) 15

<sup>51</sup> Supra

<sup>&</sup>lt;sup>53</sup>Ehighelua, Environmental Protection Law (Warri: New Pages Law Publishing Co., 2007) 42-43

<sup>&</sup>lt;sup>54</sup> U. E. Udok, "Environmental Degradation in the Niger Delta: A Critique of Existing Laws Curbing the Degradation" *Nigeria Environmental Law Review* C.A. Omaka (ed) vol 1, 2007, 73

cargo to be saved as well as which water is to be saved, is not specified. A similar defence is extended to foreign shippers using Nigerian territorial water and operators of equipment and other facilities which discharged oil. This blanket and easily available defencemakes one to wonder whether indeed this legislation was formulated with a deep understanding of its implications. Thus, these defences as enshrined in this legislation can make a polluter to escape liability for degrading the environment<sup>55</sup>.

There is also the defence of accident under section 4 (2) (a) of the Act. It states that a polluter is exculpated if he can prove that the pollution escapes accidentally as a result of damage to his vessel or leakage and that all urgent and reasonable steps were taken to contain the discharge and reduce its impact on the environment. The implication of this kind of defence is that a polluter can use it as an excuse for an accidental discharge or leakage even where it was grossly negligent. It is pertinent to say here that the numerous defences created under this Act raise doubts about its efficacy of the criminal liability created there under. This means that they are to be given subjective rather than objective considerations, and in the prosecution, of such cases, only a proof beyond reasonable doubt can be taken but not any intention for strict liability to be proved. This is very bad indeed. Again, when a person is found guilty of an offence under the Act, he is liable to a fine. The defence highlighted above which the law allows and the nature of the punishment prescribed under the Act makes it very clear that it would be practically difficult, if not impossible to secure the conviction of any person under this Act.

Under section 12 of the Act, any discharge relating to contravention of the Actcan only be initiated with the consent of the Attorney-General of the Federation. One can imagine how tedious and long it will take to obtain the consent of the Attorney-General before a case of oil spillage that is very devastating can be prosecuted. Finally, the Act does not make provision or rather impose liability on foreign ships. The lacuna created in this legislation is that where a foreign ship violates the provision of the Act, what will be the penalty? Again the Act only provides for criminal sanctions<sup>56</sup> without any provision for compensation either to someone directly or indirectly affected or the environment.

The Associated Gas Re-injection Act on the other hand is also bedevilled with problems. Looking at section 3 (1) of this legislation<sup>57</sup>, it must be noted that the above provision does not place an absolute ban on gas flaring in Nigeria. According to Fagbohun<sup>58</sup>

... both the government and the oil companies are not trulydesirous of bringing an end to gas flaring. Government on itspart is content with the money that it is making from the oilwhile the companies are also concerned more with their economic interest.

Another critique is the area of lack of adequate administration and enforcement machinery. There are absent of legal provisions that either induce the adoption of preventive measures by operators or deter them from operating in a manner that would pollute the environment. Most of the statutes do not provide for any institution that monitors the activities of the oil companies in their operation. With the exception of the defunct FEPA<sup>59</sup> Act and presently NESREA Act and NOSDRA Act, no other statute provide for a monitoring institution. All the statutes are more or less relying on the inspectorate division of the NNPC which is a major player in the petroleum exploration and exploitation in Nigeria today. The sad thing to note here is that, the inspectorate division institutions such as NOSDRA and NESREA are ridiculously incapacitated in their statutory duties of providing the much needed help. In discussing the helplessness of NNPC and other bodies in putting a stop to the pathetic situation of oil pollution which is fast posing serious threats to human beings and the environment, it is essential for us to examine the roles of Federal Government of Nigeria in controlling oil pollution through these institutions. In this direction, the inspectorate division of NNPC despite the fact that NNPC is one of the major operators in the oil industry, is saddled with responsibilities for setting out of standards for prevention or control of pollution and if one should ask; how possible is it for a unit under NNPC to control its parent-body? Certainly, this hypocritical arrangement is doing the oil industry no good and it should be changed. As a result of this, it is pretty difficult to enforce the laws set by the division to regulate the main body (NNPC).

Another issue to be considered is the issue of penalties or fines imposed by the legislation. Under section 7 (1) and (20) of the Oil in Navigable Water Act, a fine of  $\maltese1,000$  is provided for anybody who fails to keep record of spills or escape of oil caused by a desire to save life, vessel or cargo or resulting from damage to ship or leakage. Also section 6 (2) National Oil Spill Detection and Response Agency (NOSDRA) Act provides a fine of  $\maltese500,000$  for an oil pollution. In some cases, imposition of prison terms is made as an alternative to

<sup>&</sup>lt;sup>55</sup> U. E. Udok Ibid

<sup>56</sup> Section 6

<sup>&</sup>lt;sup>57</sup> Section 1 o the Associated Gas Re-injection (Continued Flaring of Gas) Regulation

<sup>&</sup>lt;sup>58</sup>O. Fagbohun, *The Law of Oil Pollution and Environmental Restoration* (Lagos: Odade Publisher, 2012) 303 Federal Environmental Protection Agency

<sup>&</sup>lt;sup>59</sup> On 29<sup>th</sup> of November 2012, (9 O' Clock NTA News) it was reported that there was an oil spill incident somewhere in Akwa-Ibom State, when the people reported to the author of NOSDRA, it took them five (5) days to respond.

payment of fine or both. For instance where a person deliberately falsifies an entry, he is liable to a fine in the same amount or to an imprisonment for 6 months or both. It appears that the legislation had imposed lenient fines rather than heavier fines which have greater detrimental effects. As a result of this lenient fine imposition, any multinational oil company should as a matter of fact, prefer to pay such a laughable pittance of \$\frac{\text{N1}}{1},000\$ fine than to be involved in spending so much money for effective cleaning-up.

Another shortcoming of the existing legal framework is in the area of compensation. Most of the legislative enactments have no provisions for payment of compensation to victims of oil pollution. Rather, provision is made for litigation. The Petroleum Act for instance, makes provision for litigation. It provides that the court has jurisdiction to try any dispute that relates to payment of compensation. It also provides that the court shall award compensation as it considers just having regard to certain circumstances.

Another critique is in the area of civil liability under common law principles. The major issue for discussion here is in respect of "fault principle". This basically has to do with the burden of proof. The burden of proof shifts to the person who alleges that he has suffered damage occasioned by the pollution. It is for the victim to prove that the oil company is responsible for the loss or damage suffered by him. First, he has to prove that the oil company owes him a duty of care and that, the duty is breached before he can bring an action in negligence. The big problem here is that, no satisfactory guidelines have been evolved in relation to proof of existence of duty of care. Secondly, in nuisance, especially public nuisance, it is only the Attorney-General that can bring an action and for an individual to bring an action a proof of peculiar damage or nuisance occurring to him in public nuisance, he must show the one suffered by an individual which is over and above the generality of the people. This does not only cause delay in an action but also cause untold hardship and inconvenience on the victim of pollution. Thus, the law of negligence, nuisance, trespass to land and the rule in *Ryland v. Fletcher*; have not been of much assistance to the victims of oil pollution.

## II. EVALUATION OF SOME INSTITUTIONAL FRAMEWORK Department of Petroleum Resources (DPR):

The Department of Petroleum Resources (DPR) as it is today, started as a hydrocarbon section of the Ministry of Lagos Affairs in the early fifties. It is the first statutory agency set up to supervise and regulate the petroleum industry in the country <sup>60</sup>. It became the Department of Petroleum Resources in 1970 though constituted later into the Ministry of Petroleum Resources in 1975. In March 1988, the NNPC was commercialized and this resulted in the petroleum Inspectorate being excised from the corporation and merged with the MPR as its technical arm. The DPR is saddled with many responsibilities <sup>61</sup>. The functions of DPR are quite broad and also varied. Looking at its functions, it is clear that this same department saddled with the responsibilities of encouraging full development of Nigeria's petroleum resources and also ensuring full participation of Nigeria's investment herein is the same body responsible for the enforcement of environmental regulations in the industry.

As pointed out earlier, there is an indication of conflict of duties. This is a big problem with this institution. Again, to be able to carry out its operations, the department is expected to have its own equipment and facilities including vessels that could convey its monitoring teams to offshore rigs and other installations. Unfortunately, this is not the case and the result is that the department has to rely often times, on the oil companies to provide needed equipment. It also has to make do with information by these companies without being able to verify the same. There is every indication that standard must be compromised in a situation like this.

#### The National Oil Spill Detection and Response Agency (NOSDRA)

NOSDRA is an initiative of the Federal Ministry of Environment and was subsequently approved by the Federal Executive Council of Nigeria in 2003. The main reason for this agency is to set up an institution for the detection and monitoring of spill as well as setting up oil spill contingency plan and take responsibility for detection and clean-up of any oil spill in Nigeria<sup>62</sup>. Apart from the objectives of the agency which are contained under section 5 of the Act<sup>63</sup>, the Agency has its responsibilities which are provided for under sections 6 (1) and 7 of the Act<sup>64</sup>. Apart from intensifying efforts towards compliance monitoring and enforcement of oil and gas regulations and standards, the ministry is also mounting pressure on the oil and gas operators for a gas flare-out. Effort is also being made to ensure the use of environmental-friendly drilling fluid and mud systems. As laudable as these objectives and functions of the agency are, the agency has not been able to live up to its expectations. Paragraph A of section 5 for instance provides for a viable national operational organization that ensures a safe, timely and effective response to major and

<sup>&</sup>lt;sup>60</sup> See DPR Historical Background http://www/dprnigeria.com/aboutusonntn. Accessed on 22 May 2013.

<sup>&</sup>lt;sup>61</sup> See the functions of DPR

 $<sup>^{62}</sup>$  See the NOSDRA Act 2006 see especially its long title in section 1(1)

<sup>&</sup>lt;sup>63</sup> See section 5 of the Act

<sup>&</sup>lt;sup>64</sup> See sections 6 and 7 of the Act

disastrous oil pollution. But looking at the performance of the agency and the way and manner it responds to issue of spillage and other disasters, one would conclude that the agency is not doing its work well.65

#### The National Environmental Standards, Regulations and Enforcement Agency (NESREA)

This agency which is established by virtue of National Environmental Standards, Regulations and Enforcement Agency (Establishment) Act<sup>66</sup> is aimed at protecting and development of the Nigerian environment as well as bio-diversity, conservation and sustainable development of Nigeria's natural resources<sup>67</sup>. It is sad to note that as beautiful as the functions of the agency, it does not live up to its billing and this worsens the situation. Hence, instead of the Act to add more to its functions, as contained under the defunct FEPA Act with regard to the control and prevention of pollution, the Act rather takes away the functions from the agency, and thus compounding the problems of environmental degradation and oil pollution.<sup>68</sup>

#### CONCLUSION AND RECOMMENDATIONS III.

The nature of operations in the petroleum industry is such that one of the direct consequences of petroleum activities is usually the generation of waste and hazardous materials. These products together with toxic chemicals are not only used in the petroleum industry but are also transported from one point to another. The interplay of these products with our environment must be regulated in order to prevent avoidable calamities on the human population guidelines and supervision to protect and / or restore the environment to as near perfect as possible if damage does occur from the petroleum industry or related activities. These attempts, as evaluated above, have been quite dismal and unsuccessful. In this connection, and for a more effective oil pollution prevention and control in Nigeria, the following recommendations are hereby made *infra*.

More and stricker laws with stiffer penalties should be passed so that oil companies are more mindful of their activities and the spills that they cause. Accordingly, Nigerian legislators should consider a law to impose new fines on operators responsible for oil spills, a measure that could make major foreign companies pay penalties running into tens of millions of dollars a year. Such law should impose new fines on oil firms when they are responsible for spills and strengthen the regulator's powers, including being able to force firms to shut operations. Particular attention should be given to the remedy and inadequacies identified in the laws evaluated above. In fact, Nigeria should emulate the reaction of the US after the Exxon Valdez spill. A raft of legislation including The Clean Water Act, the Federal Water Pollution Control Act and the Outer Continental Shelf Lands Act and the Oil Pollution Act<sup>69</sup>leading to the establishment of the oil Spill Liability Trust Fund emerged and changed the scene. We are glad to note that the NOSRDA amendment bill has set the framework for the incorporation of a contingency fund into the oil spill management system in Nigeria. Once this fund is operational, the oil companies will pay into the Fund a very small fraction of money, which will be monitored and operated by an independent board with members drawn from among the operators, the regulators and experts nominated or appointed on the basis of their expertise. It will be used in the way and manner the superfunds of the United States work 70. Legislation isoften difficult to enforce in

<sup>&</sup>lt;sup>65</sup> A Recent case of an oil spill in a community in AkwaIbom State Nigeria, reveals that the authority of NOSDRA was contracted but it took them five (5) days to responds. This was reported on NTA Network News (9pm) on 29<sup>th</sup> November, 2012

<sup>&</sup>lt;sup>67</sup> See the long title to the Act and especially section 2

<sup>&</sup>lt;sup>68</sup> It is worthy of note here too that the Niger Delta Development Commission (NDDC) which was established among other reasons to also assist in controlling oil pollution and degradation could not live up to its expectations in the regards

<sup>&</sup>lt;sup>69</sup> The Oil Pollution Act of 1990 (OPA 1990) is responsible for many of the nation's improvements in oil spill prevention and response. OPA 1990 provides guidance for government and industry on oil spill prevention, mitigation, cleanup and liability. The majority of OPA 1990 provisions were targeted at reducing the number of spills followed by reducing the quantity of oil spilled. OPA 1990 also created a comprehensive scheme to ensure that sufficient financial resources are available to clean up a spill and to compensate persons damaged by a spill. It also ensures that the federal response system is adequately prepared to manage the impacts of oil spills that do occur; and mandates that industry implement prevention of preparedness measures. The OPA also mandates that industry and inland oil facilities develop individual response plans. Furthermore, the OPA also mandates enhancements to the national response system, and development of Area Contingency Plans

<sup>&</sup>lt;sup>70</sup> A Speech by His Excellency, Sen. (Dr.) BukolaSaraki at the Niger Delta and National Development Working Group of the Nigeria - U.S. Bi-National Commission Meeting on Wednesday 17 Oct 2012 in Rivers State Titled

Nigeria, where a patronage culture and widespread corruption create loopholes, therefore corruption should be tackled seriously.

Nigeria is highly dependent on oil as a means of foreign exchange and revenue. The government is unlikely to want to discourage the presence of foreign oil companies that drill for oil in the oil rich region despite the spills that their activities cause. A shift from the dependence on oil to other sources of revenue such as agriculture will make it more likely for stricter laws and stiffer penalties for organisations guilty of oil spills to be implemented.

In contrast to the attitude of Oil Companies in Nigeria, BP reaction to the Gulf of Mexico spill in the United States was quite commendable. BP, the vicariously responsible party, is reported to have spent about \$14b on the response to the clean-up of the Gulf Coast. BP set aside \$20b for compensations, paid out \$7.4b on the same spill. \$lb was committed to early restoration projects for the Gulf Coast. What the BP spills on the Gulf Coast of the United State is a child's play to what is going on in the Niger Delta today. However, all the efforts of the oil companies put together in dealing with oil spill in this region is not even a fraction of what the BP has spent on the Gulf Coast alone. Against this background therefore, Oil companies in Nigeria should be compelled to abide by world environmental standards as they carry out their business. They should also modernize their equipment; establish proactive maintenance schedules for ageing and corroding pipes that cause leaks. Before drilling commences in an area, a satisfactory and exhaustive environmental impact assessment should be conducted to ascertain the impact of prospecting in the area.

The Nigerian government should also impress upon oil companies to become very responsive when spills occur to restore the pipes. Emergency response teams must always be handy to immediately plug leaks while full-blown maintenance crews are dispatched to provide lasting fixes. Of course, in the unfortunate event of a spill, the companies must always compensate the communities affected and provide continuous education on how to deal with the spills. It is also important that more and better-equipped hospitals are provided for treatment of people who fall sick from ailments that may be pollution-related. The government, in concert with oil-bearing communities and other stakeholders, should undertake a comprehensive environmental survey of the pollution prone areas in order to establish the causes of ecological and socio-economic change over time, and, accordingly, induce corrective action by encouraging relevant stakeholders to address specific environmental and related socio-economic problems in order to improve the quality of life of the people and achieve more development.

On the issue of gas flaring, Nigeria should simply stick to the deadline for ending the practice. In the meantime, the oil companies should modernize their drilling equipment to bring them in line with modem ones that make the need for gas flaring obsolete. Also, since some oil reserves contain more gas than others, drill sites that reveal high levels should be left alone until better ways of containing associated gas are found.

The companies appear less compassionate about the human suffering spills impose on the people and on the environment and remained severely intransigent on their obligation to cleanup, remediate and pay compensations for the damages cost. They in most cases did not think they were under any legal obligation to do so. This mindset is a flagrant disregard of Sec 11 (5) of the Oil Pipelines Act, which creates an obligation on a licensee to compensate anyone who suffers damage as a result of the operation of the license issued under the Act. It would appear that the oil companies ride on the fact that the Act does not provide a clear basis for measuring the value of compensation and compels claimants to go to court where they would have to prove that the damage is not the act of a third party and/or prove that the damage was due to negligence of the licensee.

Regulatory agencies lack the requisite capacity to provide quality self-reliant regulation of the system. This has led to a situation of chronic dependency on the goodwill of the operators in carrying out their function. They relied on them to provide logistics for their visit to impacted sites, relied on them to provide data on impact site, value and even in determining where the responsibility for a spill lay. Thus, improving on the funding of the agencies dealing with oil pollution with a view to dealing with their logistical challenges and improving on their ability to act independently without relying on the operators whose operations they regulate is imperative. In this wise, it will be necessary for them to be able to employ state of the act technology to make their one assessment and findings in the discharge of their duties. To exacerbate the problem, the regulatory framework itself is riddled with too many overlap of jurisdiction, too many agencies claiming authority and acting in conflict with each other. A situation that has lent itself to the operators who simply play them against each other- DPR,.NIMASA, NOSDRA, the Ministry of Petroleum Resources and the Ministry of Environment.

"Oil Spills in the Niger Delta: The Way Forward". The new NOSDRA Amendment Bill 2012 will when passed into law create a framework for compensation for anyone who has as a result of oil spill suffered damage or less of opportunity. The idea of is to create a clear and transparent process of accessing and assessing compensation in a methodical manner so that it is fair and reaches the people affected. The New NOSDRA law will also make it economical for companies and operators to take positive and proactive steps towards avoiding spills and invest in periodic infrastructural renewal as a way to avoid the heavy penalties that may apply for oil spills and even heavier penalties for spills due to negligence.

The challenge for the Nigerian government, both federal and state, is to construct and implement enduring policies that recognize the imperative of enhancing the quality of the environment. The government should adopt policies to improve the standard of living and quality of life of rural poor people in the country, especially women and young people. A major concern is to reduce .current tension and conflict by improving employment opportunities for young people and channelling their energies into the development of sustainable livelihoods and natural resources management activities. The government should also ensure active participation of locsal people in development activities.