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Developing an Effective Legal Framework for Oil Pollution Management in Nigeria

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Abstract

The Nigerian Oil Industry is today, one of the greatest sources of environmental pollution in Nigeria. Pollution from this sector's activities has affected land, water and air. It has also affected the health of the people in the Niger Delta Region. The legal framework to regulate the activities of this sector has been established firmly in Nigeria with the enactment of the Petroleum Act, which laid the basic legal foundation for oil prospection and exploration. This paper aims to examine the principal enactments which regulate the activities of the oil industry in Nigeria, taking into consideration the environmental friendliness of such laws, indicating lacuna where they exist, and analyzing the level of enforcement and compliance. In carrying out this research, recourse was had to literature review of relevant publications, including legislations, treaty obligations ratified by Nigeria, text books, journals, magazines, case laws, internet materials and articles relating to this study. The study reveals that, in relation to environmental protection, the various laws and regulations are deficient and should be reviewed in order to include provisions for the effective protection of the environment from the harmful activities of the oil industry.

Keywords: Environmental Pollution; Environmental Protection; Oil Exploration, Oil Spillage; Petroleum Resources.

1.1 Introduction

Since the discovery of oil in commercial quantity in 1956 in Oloibiri in present day Bayelsa State, oil revenue has remained a topical issue having gradually relegated to the background other sources of revenue for the government, and is currently, the main stay of the Nigerian economy. The discovery of oil led to its exploration, prospecting and mining, which in turn has adversely affected the environment. Pollution caused by the activities of operators in the oil industry has adversely impacted the land, water, air and lives of the people and the ecosystem of the Niger Delta region. In the 1970s, the protection of the environment became a topical issue especially after the United Nations Conference on the Human Environment in 1972 at Stockholm declared that man has a

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fundamental right to freedom, equality and adequate conditions of life, in environment of quality that permits a life of dignity and well being.[1]

The oil industry involves the processes of exploration, extraction, refining, transportation (often through oil tankers and pipelines) and marketing of oil products Furthermore, the industry comprises of upstream,[2] midstream and downstream[3] sectors. Before the discovery of oil for commercial production, Nigeria had a nearly pristine environment providing the local communities with a host of resources such as medicine, fish, wood for fuel, shelter as well as vital ecosystem services like stable soil, and habitat for wildlife. However, with the discovery of oil came attendant environmental effects caused mainly through oil spillages, oil well blow-outs and gas flaring. Almost every activity in the oil value chain impacts negatively on the environment—from the point when search is conducted through seismic operations to the point when oil is drilled, refined and distributed.

Research has shown that the major threats to the environment from the oil industry are caused by oil spillages and gas flaring.[4] In fact, oil spills in Nigeria occur at an alarming frequency and magnitude. Between 1976 and 2001, there have been about 6.817 oil spills with a loss of approximately three million barrels of oil.[5] Apart from the damages caused by oil spill, blow outs and gas flaring, there is also the day to day ravaging of the environment as a result of production activities. These spillages and leakages have lead to degradation of forests and land; depletion of aquatic fauna; destruction of farmlands, vegetation, terrestrial and marine life; loss of human lives; displacement of communities as well as impairment of human health; and economic/agricultural loss.[6] Thus the discovery of oil in commercial quantity in Nigeria could be said to be both a blessing and a curse. It is a blessing because it has become the chief means of revenue generation for the government since about 80% of revenue is from oil, with oil and related products being over 95% of Nigerian's total exports and over 90% of its foreign exchange earnings.[7] It is a curse in the sense that the activities in the oil industry have destroyed the Nigerian natural environment and left it desolate.

There are about seventy principal legislations and thirty subsidiary legislations regulating the oil industry in Nigeria. This notwithstanding, many years of exploration, prospecting and mining oil without recourse to environmental consequences have dealt a heavy blow to our naturally constructed social and economic environment. This being the case, the laws regulating the oil industry must be reviewed to make them environment friendly in order to accord with the principles of sustainable development.

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[1] See Principle 1 of Stockholm Declaration, 1972.
[2] This involves exploration, prospecting, mining and transportation of crude oil from drilling site to oil terminals from where it will be taken to the refinery.
[3] This sector has to do with activities ranging from refining, storage, importation, transportation, distribution and marketing of the oil products.
[4] Niger Delta Human Development Report, United Nations Development Programme (UNDP). 2006, p. 71
[5] Ibid, p. 76
[6] Ibid, p. 78 - 80
[7] Duruigbo Emeka, *et al*, (2005), p. 124

2. Legal Framework for Exploration, Prospecting and Mining of Oil in Nigeria

2.1 The Petroleum Act Cap. P10, LFN, 2004

The Petroleum Act of 1967[8] is the statutory backbone for exploration, prospecting and Mining of Oil in Nigeria. According to the Act, the Federal Government, utilizing the power of eminent domain, is the owner of oil discovered anywhere in this country.[9] Consequently, the Federal Government is entitled to produce and dispose any oil and gas which it may be able to recover by means of prospecting and mining or drilling oil wells. The government usually does this through a grant of lease to companies incorporated in Nigeria. The Minister in Charge of Petroleum Resources may grant: a licence to be known as an oil exploration licence to explore for petroleum; a licence to be known as an oil prospecting licence to prospect for petroleum; and a lease to be known as an oil mining lease, to search for, win, work, carry and dispose of petroleum. Moreover, only a company incorporated in Nigeria under the Companies and Allied Matters Act or any corresponding law can undertake any activity for exploration, prospecting or mining of oil in Nigeria.[10]

An Oil Exploration Licence (OEL) when granted by the minister upon an application by the prospective applicant grants the holder right to explore, that is, to make only a preliminary search in the area specified by surface geological and geophysical methods, including aerial surveys but excludes drilling below 91.44 metres[11]. Such licence does not extend to lands in respect of which an Oil Prospecting Licence or Oil Mining Lease has been approved by the Minister or is in force. The Licence does not confer exclusive rights over the area of the licence. Thus, an OEL can be granted to several applicants to cover the same area. This makes room for competition. A licencee is required to commence exploration activities within three months of the grant and each OEL terminates on 31st December next following the date of grant, although the licencee have an option to renew. The maximum area over which an OEL can be granted is 12,950 kilometre square.[12]

On the other hand, an Oil Prospecting Licence (OPL) grants the licencee the right to prospect, that is, to search by all geological and geophysical methods, including drilling and seismic operation[13]. The permitted maximum area for OPL is 2,590 square kilometres. The licencee has the exclusive right to explore and prospect oil within the granted area for such period as the Minister may prescribe but not exceeding 5 years for land and territorial waters, and 7 years for Continental Shelf and Exclusive Economic

[8] Now codified as Cap P10, Laws of the Federation of Nigeria 2004
[9] See S. 1 of the Act, as well as S.44(3) of the Constitution of the Federal Republic of Nigeria, 1999 as amended. See also the case of Attorney General of the Federation v. Attorney General of Abia State & ors. (2002) 6 NWLR (Pt. 764) 542
[10] See S. 2 (1) and (2) of the Petroleum Act
[11] Ibid, S. 15
[12] Ibid, First Schedule
[13] Ibid, S. 15

Zone Areas, including renewable periods, and subject to the payment of signature bonus with a certain time limit. The licencee has, among other specified rights, the right to cut down and clear timber and undergrowth; make roads; appropriate and use water found in the area reasonably; construct, dismantle and remove industrial buildings, storage tanks, jetties, piers, moles, landing places, facilities for shipping and aircraft, living accommodation and amenities for employees; to dredge; etc and the licencee can exercise any of these rights through agents or independent contractors and shall be responsible for their actions.[14] This licence is usually given to cover acreage where oil has been found to abound.

The Oil Mining Lease (OML) once granted confers more formal, greater and enduring rights than a licence. The lease has a more exclusive possession and exploitation of oils for the duration of the lease. In this case, the Minister grants the lease to search for, win, work, carry away and dispose of petroleum.[15] The lease does not create an interest in an estate per se but permits the lessee the use of the land to explore and dispose of any petroleum discovered within the leased area for a definite period, upon payment of Royalty reserved therein, among other considerations.[16] The term of OML shall not exceed 20 years, subject to renewal. Ten years after the grant of OML, one half of the concession area shall be relinquished and surrendered to the grantor.[17] It is the Oil Mining Lease that confers the ultimate right in petroleum exploration and production.

It should be noted that most of the impact on the environment in relation to the activities here will be with operators who have the OPL and OML. However, the Petroleum Act did not make regulations for the control of environmental pollution but only empowers the Minister to make regulations prescribing anything required to be prescribed for the purposes of the Act.[18] Thus, the Minister is empowered through his officials to exercise general supervision over all operations carried out under the licences or leases granted.[19] They shall have access at all times over all the granted areas, all refineries and installations subject to the Act for the purpose of inspection of the operations conducted therein and enforcement of the provisions of the Act and any regulation made under the Act.[20] Furthermore, the Minister has the powers to arrest without warrant, any person found committing or reasonably suspected to have committed any offence under the Act and regulations made under the Act, and handover such person to a police officer with as little delay as possible. The minister is empowered to, in writing; suspend operations of a licencee or lessee where it is necessary to prevent danger to life or property and also where such operator is not complying with good oil field practice in his conducts.[21] Unfortunately, the Act did not specify the conducts for which an operator may be arrested

[14] See Regulation 15 (1) & (2) , Petroleum (Drilling and Production) Regulations.
[15] See S. 2(1)(c) of Petroleum Act
[16] G. Etikerentse, *Nigerian Petroleum Law*, 2nd Edition, Dredew Publishers, Lagos, 2004, p. 66.
[17] Paragraph 12(1) of First Schedule to the Petroleum Act
[18] S. 9 of the Petroleum Act
[19] Ibid, S. 8
[20] ibid
[21] ibid

or his licence or lease suspended, as well as what good oil field practice entails. Thus, the Act left these major issues ambiguous, capable of various interpretations.

The minister has, in line with the directives under the Act, made certain regulations for the proper management of the oil industry. Some of these regulations would be considered, taking into consideration their environmental friendliness, level and extent of enforcement, pointing out if there is need for review, repeal or proper enforcement procedure which are enunciated to safeguard our environment.

(a) Petroleum (Drilling and Production) Regulations, 1969

The Regulation requires an applicant for oil mining lease to make such application in writing to the Minister, using the appropriate Form, and accompanied by the prescribed fee, ten copies of a map delineating in red the boundaries of the area for which application is made; adequate survey description of the boundaries; evidence of financial status and technical competence of the applicant; details of work the applicant is required to undertake or programme for carrying out any minimum working obligations imposed; details of annual expenditure the applicant is prepared to make; date it intends to start operations; details of a specific scheme for recruitment and training of Nigerians; evidence of ability to market the petroleum produced; annual reports of applicant's oil exploration and production activities in the preceding three years and any other information that the Minister may require by notice in the Federal Gazette or otherwise.[22] The Regulation however, failed to require that an Environmental Impact Assessment be carried out on the proposed project.

The Regulation provides for the prevention of pollution. It admonishes the lessee to adopt all precaution, including provision of up-to-date equipment approved by the Director of Petroleum Resources to prevent pollution of inland waters, rivers, water courses, the territorial waters of Nigeria or the high seas by oil, mud or other fluids or substances which might contaminate the water, banks or shoreline or which might cause harm or destruction to fresh water or marine life. Where any such pollution occurs, the licencee or lessee shall take prompt steps to control and if possible, end it.[23] Additionally, the licencee or lessee shall use approved methods and practices acceptable to the Director of Petroleum Resources to confine petroleum obtained from the relevant area in tanks, gas holders, pipes, pipelines or other receptacles constructed for that purpose. He shall also drain all waste oil, brine and sludge or refuse from all storage vessels; boreholes and wells into proper receptacles constructed in compliance with safety regulations made under the Act or any other applicable regulations and shall dispose thereof in a manner approved by the Director of Petroleum Resources or any other applicable regulations. [24]

To further protect the environment, every licencee or lessee is expected to ensure that abandoned borehole or well is securely plugged to prevent ingress and egress of water

[22] See Regulation 1 (2) (a) – (k) of Petroleum (Drilling and Production) Regulations
[23] Ibid, Regulation 25
[24] Ibid, Regulation 40 and 41

into and from any portion or portions of the strata bored through and shall be dealt with in strict accordance with an abandonment programme approved or agreed to by the Director of Petroleum Resources.[25]

(b) ***Oil in Navigable Waters Act Cap. O6, LFN, 2004***

This Act was promulgated to implement the terms of the International Convention for the Prevention of Pollution of the Sea by Oil of 1954 to 1962.[26] It is an elaborate law, which aims at reducing the incidence of pollution of the world's high seas generally and of Nigerian waters in particular. The Schedule to the Act designated the prohibited sea areas. They are all sea area within fifty miles from land and outside the territorial waters of Nigeria and also other sea areas within fifty miles[27] from the nearest land. The other seas are Pacific Ocean, North Atlantic Ocean, North Sea and Baltic Sea; Black Sea and Sea of Azor; Red Sea; Persian Gulf; Arabian Sea, Bay of Bengal and Indian Ocean and Australia.[28]

The Act prohibits the discharge of crude oil, fuel and lubricating oil, heavy diesel oil or any mixture containing not less than 100 parts of oil from a Nigerian ship into a prohibited sea area as specified under the Act. The Minister has the power to prescribe other oils that should be affected by the prohibition after considering the provisions of subsequent Conventions prohibiting pollution of sea by oil, as well as power to exclude from operation of the prohibition absolutely or subject to any prescribed conditions of some classes of ships or description of oil or mixtures in prescribed circumstances or in relation to particular areas of the sea.[29]

In Section 3(1), the Act extensively prohibited pollution of water courses either from activities on land, from an apparatus through which oil is transferred (for example pipeline) or from a vessel. The Act went further to make the occupier of the land, the person in charge of the apparatus or the owner of the vessel (whichever is in contravention) guilty of an offence and on conviction by the High Court or a superior court or on summary conviction by any court of inferior jurisdiction liable to a fine as prescribed by the court, provided that for inferior court, the fine shall not exceed two thousand naira (N2,000).[30] Currently however, the jurisdiction to try these cases is now with the Federal High Court.[31] The Act also provided defences to this offence, otherwise

[25] Ibid, Regulation 36
[26] See the Preamble to the Act
[27] These miles have been increased to range from 100 miles to 150 miles from the nearest land, and Nigeria's continental shelf has been extended from 200 – 350 nautical miles increasing her sphere of exploratory activities and pollution control. See http//www.nigeriamuse.com.2009/0902095872g/nigeriawatch/unextends_nigeria_s_continentalshelf, assessed on November 20th 2015.
[28] S. 2 of the Act and Schedule to the Act
[29] Ibid, S. 1(3)
[30] Ibid, S. 6
[31] By virtue of S. 251 (g) (n) of the Constitution of the Federal Republic of Nigeria

categorised as special defences through which defaulters or offenders could be absolved of any liability.[32]

Finally, the Act empowers the Minister to make regulations requiring Nigerian ships to be fitted with pollution prevention equipments as may be prescribed and any Nigerian ship or foreign owned ship operating within Nigeria territorial waters that fails to install such equipments has committed an offence under the Act.[33] Consequent upon this mandate, the Minister for Transport made the Oil in Navigable Waters Regulation 1968, which made specific provisions relating to equipment to be installed by ships operating in Nigerian waterways. These provisions, though not having environmental protection as their basis, may achieve such purpose if strictly adhered to. It is suggested that a distinct legislation or regulation or provision in the already existing law should be made to protect the environment.

(c) ***The Constitution of the Federal Republic of Nigeria, 1999 (as Amended)***

The Constitution recognised the importance of the environment and included the fact that the state shall protect and improve the environment and safeguard the water, air, land, forest and wildlife of Nigeria.[34] However, this provision is in Chapter 2 of the Constitution which deals on Fundamental Objectives and Directive Principles of State Policy. This part of the Constitution is non justiciable and the government cannot be held liable for its breach. Be that as it may, it at least creates a moral duty on the government of Nigeria to observe these basic responsibilities.

(d) ***The Environmental Impact Assessment (EIA) Act, Cap E12, LFN, 2004***

This Act was promulgated to ensure environmental soundness and sustainability for development projects. It was a direct outcome of the United Nations' directive at its Conference on the Environment and Development (UNCED) held in Rio de Janeiro in 1992, wherein it directed that countries should enact laws that would check environmental degradation and at the same time not jeopardise economic development. The Act intends to achieve this by ensuring that all possible negative impacts of developmental projects are predicted and addressed prior to the take off of the proposed project.[35]

The Act requires that the public or private sector of the economy shall not undertake, embark or authorise projects or activities without prior consideration at an early stage of their environmental impact. Where the extent, nature or location of a proposed project or activity is such that is likely to significantly affect the environment, its environmental impact assessment shall be undertaken in accordance with the provisions of the Act.[36] A

[32] Ibid, S. 4(1) – (5)
[33] See ibid, S. 5(1)
[34] S. 20 of the Constitution of the Federal Republic of Nigeria, 1999 as amended
[35] J. C. Nwafor, *Environmental Impact Assessment for Sustainable Development: The Nigerian Perspective,* Environmental and Development Policy Centre for Africa ((EDPCA) Publications, Enugu, Nigeria, 2006, P. 441
[36] S. 2 of Environmental Impact Assessment (EIA) Act

close examination of the Act shows that an environmental impact assessment is predicated on: prediction of the likely environmental impact of a proposed project; finding ways and means to prevent, mitigate or compensate for unacceptable impacts and making developments responsive to their local environment as well as presenting the predictions and options to decision makers.

According to the Act, the minimum content of an environmental impact assessment include: a description of the proposed activity, potential affected environment and practical activities as appropriate; an assessment of the likely or potential environmental impacts of the proposed activity and the alternatives, including the direct or indirect cumulative, short-term and long-term effects; an identification and description of measures available to mitigate adverse environmental impacts of proposed activity and assessment of those measures; indication of gaps in knowledge and uncertainty which may be encountered in computing the required information; indication of whether the environment of any other State or Local Government Area or areas outside Nigeria are likely to be affected by the proposed activity or its alternative and a brief and non technical summary of these information.[37]

The Act specified three categories of actions for the purpose of environmental impact assessment. The first category is where environmental impact assessment is compulsory, and they include projects dealing on agriculture, airport, drainage and irrigation, land reclamation, fisheries, forestry, housing, industry, infrastructure, ports, mining, petroleum, power generation and transmission, quarries, railways, transportation, water supply etc. The second category consists of projects and activities that would require environmental impact assessment only when the Federal Environmental Protection Agency (FEPA) considers that their likely environmental impact would be significant, while the third category consist of projects and activities excluded from the requirement of environmental impact assessment.

The monitoring and enforcement of the Act is vested in the Federal Environmental Protection Agency, now the Federal Ministry of Environment (FMENV).[38] The Petroleum Act did not in any way make reference to environmental impact assessment. Hence, for implementation of environmental impact assessment in the oil industry in Nigeria, resort is made to the EIAA.

2.2 Legal Framework for Gas Flaring and Movement of Oil in Nigeria

Gas flaring has been a major source of environmental pollution both to Nigeria and the world at large as it contributes heavily to acid rain, green house effect and depletion of the ozone layer. Most gas produced in Nigeria is associated gas and to harness the oil, the operators had little or no choice than to flare the gas. Hence, gas flaring has become a major source of environmental pollution in the Nigerian oil industry. There have been persistent calls to end gas flaring in Nigeria.

[37] Ibid, S. 4
[38] Ibid, S. 63

Transportation of oil is another major source of environmental pollution in Nigeria. Oil is mostly moved by tankers (ships), barges, pipelines, and motor trucks. Once any of these modes of transportation of oil get involved in an accident there is heavy pollution of the environment. An example is the Exxon Valdez accident of 1989. In Nigeria, there are also the incidents of pipeline leakages or explosions that had polluted the environment to an immeasurable extent. Some relevant legislations are discussed below.

(a) ***Associated Gas Re-Injection Act, Cap. A25, LFN, 2004***

This Act compels oil producing companies in Nigeria to submit preliminary programme for gas re-injection and detailed plans for implementation of gas re-injection for all produced associated gas. The Act also made provision for sanction by forfeiture of concession for companies that failed to comply with this directive.[39] The Act was geared toward conserving natural gas and stopping or reducing considerably from January 1984 the flaring of natural gas produced in association with oil, as well as prohibiting atmospheric pollution. However, what the Act intended to do with one hand, it took away with the other hand when it empowered the Minister to make exemptions for oil producing companies where in his opinion the scheme is not feasible and to permit gas flaring upon payment of a stated sum.[40] This made the Act look unserious. Moreover, the oil producing companies preferred to pay the penalty and continue to flare gas as this is cheaper for them. Further, the provisions of the Act could not be implemented as the Federal Government has kept putting off the final date to cease gas flaring from 1984 to date.

(b) ***Crude Oil (Transportation and Shipment) Regulation, 1984***

The aim of this regulation is to protect Nigeria's fiscal interest in crude oil carried by ship by ensuring that the quantity of crude oil carried by ships are duly accounted for. It therefore required great government surveillance and control in the matters of crude oil transportation as well as guarding against fraud in the process. It made no provision relating to the protection of the environment from pollution that may occur during the course of oil transportation.

(c) ***Oil Terminal Dues Act, Cap O8, LFN, 2004***

According to the Supreme Court in the case of *Texaco Panama Inc. V. S.P.D.C. Ltd,*[41] the purpose of the Act is for the levying and payment of terminal dues on any ship evacuating oil at any terminal in any port in Nigeria, and in respect of any services provided at these ports. Thus, the main purpose of the Act was to raise revenue for the government. However, the Act incorporated the provisions of S. 3 of the Oil in Navigable Waters Act which prohibits the discharge of oil and mixture containing oil into the territorial waters of Nigeria from any vessel or apparatus used in, for transferring oil to any vessel.[42] Note

[39] S. 1 of the Associated Gas Re-Injection Act, Cap. A25, LFN, 2004.
[40] Ibid, S. 3
[41] (2002) F.W.L.R. (Pt. 96) P. 579
[42] See S. 6 of the Oil Terminal Dues Act

however that the special defences that avails defaulters in Oil in Navigable Waters Act also applies in this Act.

(d) ***Coastal and Inland Shipping (Cabbotage) Act, No. 5 of 2003***

This Act aimed at encouraging Nigerians to venture into coastal trade and restrict foreign dominance of the trade, prohibited the use of foreign vessels in domestic coastal trade. It established a Cabbotage vessel financing fund and related matters. It prohibited any vessel other than a vessel wholly owned and manned by a Nigerian citizen to engage in the domestic coastal carriage within the territorial waters of Exclusive Economic zone, except where there is marine pollution or any risk, then the Minister may give approval to the foreign vessel to provide succour to Nigeria in the face of the threatening risk.[43] The Act did not provide for environmental pollution prevention.

(e) ***Oil Pipelines Act, Cap. O7, LFN, 2004***

The Act was promulgated to provide for licences to be granted for the establishment and maintenance of pipelines incidental and supplementary to oilfields and oil mining.[44] It empowers the Minister to grant Permit to Survey (PTS) of a proposed route to determine its suitability or otherwise for the desired pipeline from the project operational standpoint. However, the Act did not make provision for reference to environmental impact assessment or environmental protection. It made provision for compensation to be paid by the holder of a licence to a person whose interest has been affected by the exercise of the right conferred by the licence.[45]

(f) ***Oil and Gas Pipeline Regulations***

The Regulation gave detailed requirements, guidelines and standards for the grant of a permit to survey a pipeline route and a licence to construct and operate a pipeline. The Regulation specified detailed technical guidelines and standards to govern the design of an oil pipeline, the construction of pipeline and the design for the relocation, replacement and upgrading of an existing pipeline. The Regulation makes provision for the Department of Petroleum Resources to approve pre-operational guidelines for the operation and maintenance of the pipeline which shall contain a written emergency plans in the event of systems failure, accidents or other emergencies and procedures for prompt and expedient remedial action for the protection of life, property, the environment and adequate training of safety personnel for the handling of emergencies.[46]

The Regulation sets out procedure to be followed, the specifications required and other matters that shall be taken into consideration in the construction of a new pipeline or in the replacement of an existing one; guidelines and procedure for environmental protections as well as means for conducting completion of construction of the pipeline, inspection and pressure tests to be conducted in order to ensure the protection of life,

[43] See Ss. 2 and 3 of Cabbotage Act
[44] See the Long title to the Oil Pipeline Act
[45] Ibid, S. 11
[46] Regulation 7 of Oil and Gas Pipeline Regulation.

property and the general environment of the pipelines.[47]Contravention of any provision of the regulation constitutes an offence, which is punishable upon conviction by a fine of up to N500,000 or imprisonment for a term of six months or both such fine and imprisonment.[48]

(g) *Petroleum Production and Distribution (Anti-Sabotage) Act, Cap. P12, LFN, 2004*

This Act was enacted in order to forestall the activities of vandals who disrupt the free flow of oil through pipeline. The Act created the offence of sabotage in respect of production and distribution of petroleum products. According to the Act, a person is said to commit the offence of sabotage when he/she wilfully does anything with intent to: obstruct or prevent the production or distribution of petroleum product or the procurement of petroleum products for distribution in any part of Nigeria; or in respect of vehicle or public highway, to prevent the use of that vehicle or public highway for the distribution of petroleum product.[49] Apparently, an act of sabotage occurs where a person does anything calculated to disrupt the flow of oil by tampering with or destroying oil installations, such as well-heads, tank farms and pipelines. The Act made the offender liable to either death sentence or imprisonment for 21 years.[50] By virtue of the Constitution, the Federal High Court is the court that has jurisdiction to try the offence created under this Act.[51]

2.3 Administrative Mechanism for Regulating Environmental Pollution in the Nigerian Oil Industry

(a) The Federal Ministry of Petroleum Resources (FMPR)

It has been shown that regulations are the most common approach to control and contain environmental pollution. Hence policy makers have always favoured granting licences and permits, stipulating standards, bans, and closure without close monitoring and enforcement. This has resulted in paucity of laws on industrial pollution and hazardous waste. This has also reflected in laws regulating pollution in the oil industry, which have also affected the administrative mechanism for enforcement of these laws.

As a result of public outcry for effective control of environmental pollution, the Federal Ministry of Petroleum Resources was established to among other duties monitor and control environmental pollution associated with oil and gas operations and the administration and enforcement of environmental protection statutes and statutory provisions affecting such operations[52]. In undertaking this duty, the Federal Ministry of Petroleum Resources liaise with the Department of Petroleum Resources and Federal

[47] Ibid, Regulations 6, 8, 16 and 17
[48] Ibid, Regulation 26
[49] S. 1 of Petroleum Production and Distribution (Anti-Sabotage) Act
[50] Ibid, S. 2
[51] See S. 251(3) of the Constitution of the Federal Republic of Nigeria, 1999 as amended
[52] See "Assignment of Responsibilities", Federal Government of Nigeria Official Gazette, Vol. 70, No. 15, March 3, 1989 in Adrain j Bradbrook: *The law of Energy for SD.* IUCN Academy of Environmental Law, 2005, p. 350.

Environmental Protection Agency (FEPA) and other related agencies for the effective discharge of this task of protecting the environment.

Consequently, the ministry is mainly saddled with oversight functions of ensuring that pollution in the oil industry is as much as possible reduced when it occurs and that the agency or company responsible for the pollution is mandated to clear the pollution.

(b) The Department of Petroleum Resources (DPR)

The Department of Petroleum Resources (DPR) is the technical, supervisory and enforcement arm of the Federal Ministry of Petroleum Resources. It is the agency in charge of enforcement of the Petroleum Act and the Oil Pipelines Act and regulations made under them. It has the duties, among others of: ensuring that the activities of all the oil companies are conducted in accordance with applicable laws and regulations; monitoring and controlling oil industries operations to ensure compliance with national goals and governing policies in relation to the Nigerian petroleum resources; keeping record of petroleum activities, data, production and significant operational occurrences; and monitoring and controlling environmental pollution associated with oil and gas operations.[53] In carrying out its duties of ensuring that adverse effects of oil related pollution are curbed or reduced, the DPR issued interim guidelines for effective monitoring, handling, treatment and disposal of effluents, oil spills and chemicals, drill cuttings by oil operator. It also provided for tentative allowable time limits of waste discharge into fresh water, coastal water and offshore areas.[54]

(c) The Nigerian National Petroleum Corporation (NNPC)

The Nigerian National Petroleum Corporation which came into being through the merger of the Nigerian National Oil Corporation (NNOC) and the then Ministry of Petroleum Resources is essentially the commercial arm of the Nigerian oil industry[55]. The NNPC had operational interests in and was granted statutory powers with respect to refining, petrochemicals, transportation and marketing of petroleum products. It also took over exploration and production activities carried out offshore and in the Niger Delta by NNOC.

In line with its duties, between 1978 and 1989, it constructed refineries in Warri, Kaduna and Port Harcourt. It took over about 35,000 barrel shell refinery established in Port Harcourt in 1965. It constructed several kilometres of pipelines, pump stations and depots for the distribution of petroleum products throughout Nigeria. It also pioneered exploration activities in the Chad basin, as well as deregulation of product retail formally

[53] See B. A. Osuno, "The Role of the Petroleum Inspectorate Division of the Nigerian National Petroleum Corporation as the Guardian of the Nigerian Oil Industry". A paper delivered at the National Workshop on Nigerian Petroleum Law, May 3, 1984.
[54] Regulatory Bodies, Department of Petroleum Resources (DPR), http//www.rainforestlimited.com/dpr.html, 2003, p.1, assessed on 13th December 2015
[55] See the Preamble to the Nigerian National Petroleum Corporation Act, No. 33 of 1977 cap. 320, LFN, 1990.

in the hands of major multinational oil companies to accommodate independent indigenous marketers.[56]

(d) The Federal Ministry of Environment (FMENV)

The ministry has wide powers to formulate and monitor compliance with environmental standards in all industries, including the oil industry. This ministry was established in June 1999 by the Obasanjo administration with the mandate to protect and improve water, air, land, forest and wildlife of Nigeria as mandated by Section 20 of the Constitution. The Ministry has the duty to approve environmental impact assessment, ensure sustainable utilization of the environment and its resources by evolving tools for poverty alleviation, ensuring food security, foreign policy and international development and good governance.

To enable this Ministry carry out its duties effectively, several departments were transferred to it from other ministries - the Federal Ministry of Agriculture, Health, Works and Housing and Water Resources. The Ministry has taken steps toward accomplishing its duties by addressing municipal waste management and sanitation; industrial pollution control, including oil and gas; afforestation and conservation of biodiversity and wildlife; desertification and the mitigating effects of drought; managing mining sites and restoring derelict lands; and environmental problems of the Niger Delta.[57]

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

NOSDRA is a parastatal under the Federal Ministry of Environment. It was established by the NOSDRA Act, 2006 and vested with the responsibility to coordinate the implementation of the National Oil Spill Contingency Plan (NOSCP) for Nigeria, in line with the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPPRC) 1990 to which Nigeria is a signatory. It has the mandate to play a lead role in ensuring the timely, effective and appropriate response to oil spills as well as ensure clean up and remediation of all impacted sites to all best practicable extent. It has the duty to identify high risk priority areas in the oil producing environment for protection as well as ensure compliance to all existing environmental legislations in the petroleum sector by operators in the oil industry. NOSDRA also has the duty to establish mechanism to monitor and assist, or where expedient, direct the response, including the capability to mobilize when necessary, resources to save lives, protect threatened environment and clean up to the best extent of the impacted site, as well as maximise the effective use of available facilities and resources of corporate body, their international connections and oil spill cooperatives in implementing appropriate spill response. It is its duty to also ensure funding, provision of appropriate and sufficient prepositioned

[56] See Ibibia Worika, *The Law of Energy for Sustainable Development*, Cambridge University Press, London, 2005, p. 351

[57] See "The Ministry of Environment", 2006. http://www.nigeriafirst.org/printer_336.shtml, assessed on December 21, 2015

pollution combating equipment and materials, and functional communication network system required for effective response to major pollution.[58]

Finally, NOSDRA has been given special duties, among which are: to undertake surveillance, reporting alerting and other response activities as they relate to oil spillages; encourage regional cooperation among member states of the West African Sub Region and in the Gulf of Guinea for combating oil spillage and pollution in our contiguous waters and to strengthen the national capacity and regional action to prevent, control, combat and mitigate marine pollution.

3. An Appraisal of the Regulatory Frameworks: Need for Total Overhaul

The fact that the environment has been, is, and will continue to be polluted, negatively impacted and degraded by man's technological activities cannot be overemphasized. In Nigeria, the operations of the oil industry are a major contributor to environmental pollution. These operations include exploration, prospecting, mining, transportation, refining, storage, importation, distribution and marketing of petroleum products, and evidence has shown that no aspect of these operations is free from negatively impacting on the environment. Hence the need that laws be enacted by enabling authorities to regulate man's activities in the oil Industry in Nigeria. In relation to this, of the 70 principal legislations and 30 subsidiary legislations regulating the oil industry in Nigeria, only 3 deal with environmental protection.

The principal legislation – the Petroleum Act did not make any reference to environmental protection, although it can be argued that the power to do this was granted to the Minister. It is further arguable that the Minister in the Petroleum (Drilling and Production) Regulation, made under his powers in Section 9 of the Petroleum Act did make provision for the protection of the environment when in Regulation 25 he admonishes lessees to adopt all practicable precaution and use up to date equipment to prevent pollution of the water courses. The Oil in Navigable Waters Act is essentially a pollution prevention convention adopted, ratified and domesticated as Nigerian law. It is meant to prevent pollution of the world high seas and the Nigerian waters, and empowers the Minister to make further regulations for effective protection of the environment. On the other hand, the Environmental Impact Assessment Act does not specifically target the oil industry. Further there are so many bodies created with clashing functions with respect to enforcement of compliance with laws regulating environmental protection in the oil industry.

Finally, given the nature of oil and its impact on the environment, it is obvious that there is need for a home grown legislation to be enacted to regulate specifically the effective protection of the environment. Moreover, the monitoring agencies should be streamlined and reduced in number to ensure effectiveness. There seem to be conflict of interest and overlap among the agencies existing now. They should be well funded and independent.

[58] See S. 20 of the NOSDRA Act.

Consequent upon the foregoing, the researchers hereby make the following recommendations:

(a) Statutory Reforms

There should be a total overhaul and review of the Petroleum Act to include provisions for the protection of the environment. Oil Exploration licence is granted mostly to get data. It should be noted that the Federal Government now has comprehensive seismic data on virtually all lands in Nigeria, the acquisition of such levels of data being one of the reasons for OEL, the necessity of the continuous grant of OEL now hardly exist, although the provision of such grant remains in the Petroleum Act. Thus, it is suggested that this provision should be expunged from the Act. What is more the current pollution suffered by the environment is not seriously attributed to exploration activities since the use of seismic survey has largely been replaced with computer imagery through satellite and remote sensing using geoinformatics.

The limitation of persons who can participate in oil exploration, prospecting and mining to only incorporated companies by the Petroleum Act was not intended to be restrictive, hence once incorporated, the company is qualified irrespective of the fact that the owners may be foreigners. This is also taken from the background that oil exploration and exploitation is highly technical, cost effective and required high man-power training, which Nigerian citizens may not be able to provide if operations in the industry is per chance limited to citizens only.

The Petroleum Act that granted the lessee of a mining lease certain rights and powers to cut down trees, clear timber and undergrowth, made roads, appropriate and use water found in the area, construct and remove industrial buildings and installations, construct facilities for shipping and aircraft etc did not impose a corresponding duty on the lessee to protect the environment. Interest seemed to be focused on maximization of the benefits accruing to the lessee with little or no attention paid to the damaged environment.

Regulations and laws on environmental protection in the oil industry should be made more stringent and make the lessee compliant, failing which sanctions should be imposed and adherence to such regulation should not be left to the discretion of one office only but to a team of independent environmental experts who should assess the situation on ground and make an independent report to the Department of Petroleum Resources, Federal Ministry of Environment and the State Ministry of Environment where the activity is carried out. It is further recommended that the ability of the company to maintain best environmental practices and effect quick clean up or remediation of the environment should be a condition for renewal of mining lease.

The Petroleum Act prescribed arbitration as a means of settling dispute. It is suggested that it has now become obvious that issues of environmental protection should not be left to arbitration as arbitral tribunal have no enforcement powers to compel compliance, hence, judicial adjudication is proposed, as such would be more adequate since it has the wherewithal to ensure compliance with its judgment.

Though the EIA Act included petroleum as projects where environmental impact assessment is mandatory, a close look shows that the Act does not contain the detailed, and step by step account of what is required of a thorough environmental impact assessment on the oil industry and for this, reliance is placed on the national and international oil industry association guidelines, and which will when adequately implemented reduce the negative impacts of oil exploration and production. The Associated Gas Re-Injection Act should be amended to remove the power of the minister to permit gas flare upon payment of penalty. The Federal Government should also rise up to stop gas flare by taking a stand to do that.

(b) ***Institutional Reforms***

The Department of Petroleum Resources (DPR) has to a very large extent being effective in its duty of monitoring and control of environmental pollution in the oil industry notwithstanding the non availability of standard equipment to work with. Hence it is suggested that DPR should be provided with proper funding, adequate and skilled manpower, effective laboratory and the required up to date equipment for immediate response to removal of pollutants in the environment. It is believed that once this is done, DPR would perform better than it has done. Alternatively, an independent Agency should be established to regulate and over see the activities of the oil industry in respect to environmental protection.

The National Assembly should review deficient laws to ensure curtailing the daily occurrence of polluting activities in the Country. Step should be taken to review the NOSDRA Act so as to provide the agency with the sort of teeth needed to deter polluters. Moreover, it should be properly funded, staffed and well equipped to carry out its functions independent of the oil companies. Remediation strategies should be strengthened.