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AN EXAMINATION OF THE LEGAL FRAMEWORK FOR CURBING INCIDENCES OF OIL SPILLAGE AND GAS FLARING ON THE ENVIRONMENT IN NIGERIA

OLADELE OLUMUYIWA * and MURITALA GANIYU MURTALA**

ABSTRACT

The paper is set to examine and review the legal framework of the Nigerian oil and gas industry, assessing its efficiency, identifying the major issues and to make recommendations on the way forward in the environmental regulation of incidences of oil spills and gas flaring. Essentially the paper established that the environmental policies and strategies of the Nigerian oil and gas industry have impacted positively on the Nigerian environment for some years but with a rather slow effect. Factors affecting the effectiveness of the existing laws and the functioning of the agencies, lack of funding, lack of human resources, corruption, insufficient data and the influence of Multi-National Corporations. The prospect of environmental policies in Nigeria some consider to be evolving while some believe it is ineffective. Adopting a critical approach this article presents a detailed and critical review of the legislative and institutional framework of environmental protection and pollution control in the oil and gas sector in Nigeria. The paper further investigates the problems of compliance to these regulations established by the government which eventually accentuated the rate of environmental oil pollution and gas flaring in the region. It contends that the problems in the oil producing communities could be linked to the ineffective and unimplemented oil and gas regulations meant to ensure a clean, safe, preservation of and habitable environment. It further concludes and suggests that Nigeria must exhibit the political will to enforce the set out policies regulating the oil and gas industry to ensure environmental sustainability.

Key words: Oil spills, Gas flaring, Pollution, Environment, Oil and gas

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- * Oladele Olumuyiwa Ayotunde, LLB (Hons) University of Ilorin, BL (Nigeria Law School), LLM (Robert Gordon University, Aberdeen Scotland), E-mail: muyiwadele2002@yahoo.com, Faculty of Law, Department of Jurisprudence and International law, University of Ilorin, Ilorin Kwara state. Nigeria
- ** Dr Muritala Ganiyu Murtala, LLB (Hons) University of Ilorin, BL (Nigeria Law School), LLM, PhD (Malaysia), E-mail: muritalaganiyu@gmail.com, Faculty of Law, Department of Jurisprudence and International law, University of Ilorin, Ilorin Kwara State. Nigeria.
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INTRODUCTION

Oil spills and gas flaring problem started since the first discovery of oil in the Niger delta region and the two-major problem has continued to plague the community of people living in that area without seizure. Despite the abundant natural resources endowment and the Nigerian multi-ethnic diversity enrichment, and being the second largest wetland in the world with mangrove swamps and fertile alluvial plain which is one of the resourceful plain in the world, incidence of oil spills and the practice of gas flaring has been associated with many socio-economic, political and health implication within the region.¹ For nearly three decades, petroleum production and consumption has probably brought out both the best and worst of modern civilisation in Nigeria. It has contributed enormously to the country's economic growth and, on the other hand, has left profound adverse impact on the natural environment and has generated a number of other socio-economic concerns including human rights issues.² Estimates of Nigeria's oil reserves range from 16 billion to 22 billion barrels and almost all of these reserves are found in relatively simple geological structures along the country's coastal Niger Delta.

This makes it highly susceptible to more marine pollution through spillage and blowouts especially in the exploration and production (E & P) stages coupled with the continuous flaring of associated gas. The World Bank estimates that gas flaring in the Niger Delta releases some 35 million tonnes of carbon dioxide annually into the air.³ The increasing profile of climate change as an issue of growing global concern has drawn tremendous attention to the role of Nigeria's gas flaring in the build-up of greenhouse gases while incessant communal conflicts have highlighted the socio-economic dimensions of petroleum E & P.⁴ In the light of the profound dilemma facing the country, the task of reconciling the demands of economic development, social justice and environmental protection has become a challenge facing the entire spectrum of the Nigerian society, from the government and its agencies, the oil industry, local communities and the entire citizenry. Clearly, the environment versus petroleum extraction balance has tended to tilt more in favour of production in Nigeria.

Being aware of what is happening and the negative impact of these problems in the region, the government instituted many legal framework and institutions to curb and ensure that it is put to an end. These problems still persist irrespective of the orchestrated laws and institutions put in place to regulate the petroleum industry. This paper examines the

¹ Oshwofasa, Bright O., David E. Anuta, and J. O. Aiyedogbon. "Environmental degradation and oil industry activities in the Niger-Delta region." *African Journal of Scientific Research* 9.1 (2012)

² *ibid*

³ Ebeku, Kaniye SA. "Niger Delta Oil, Development of the Niger Delta and the New Development Initiative: Some reflections from a socio-legal perspective." *Journal of Asian and African studies* 43.4 (2008): 399-425

⁴ *ibid*

current state of the regulatory approaches of the oil and gas industry and their effectiveness on the industry. It further highlights the new themes for petroleum environmental regulation and the possible direction for future legal development especially within the regional context.

HISTORY AND ROLE OF OIL IN NIGERIA

The history of petroleum in Nigeria reveals that oil was discovered in Nigeria in 1956 at Oloibiri in the Niger Delta lying mostly to the southern part of the country endowed with immense natural resources, particularly crude oil. The Niger Delta which is situated around the tributaries of the Niger River into the Southern Atlantic Ocean and the core South-South of Nigeria.⁵ It is the world's third largest wetland. Half of the Niger-delta is made up of creeks and small islands and six core states (with an area of 75,000km²). It has a total area of 112,000km² with a combined population of 32 million people (20% of the Nigerian population 2010 estimate), and over 40 languages. Its ecological zone is made up of a coastal barrier sandy ridge, mangrove swamp, freshwater swamp, and lowland rainforest.⁶ It took the pioneering effort of a German company Shell in the early 1900's to set the nation on the road to becoming a major oil power.

Nigeria joined the ranks of oil producers in 1958 when its first oil field came on stream producing 5,100 barrels per day. After 1960, exploration rights in onshore and offshore areas adjoining the Niger delta were extended to other foreign companies.⁷ In 1970, Nigeria was able to reap instant riches from its oil production as Nigeria joined the Organization of Petroleum Exporting Countries (OPEC) in 1971 and established the Nigerian National petroleum company (NNPC) in 1977, a state owned and controlled company which is a major player in both the upstream and downstream sectors. By late 1960's and early 1970's, Nigeria attained a production level of over 2 million barrels of crude oil per day. Although figures dropped in the eighties due to economic slump, 2011 saw some improvements in oil supply,⁸ however current statistics shows the dwindling and reducing supply of crude oil in Nigeria.⁹

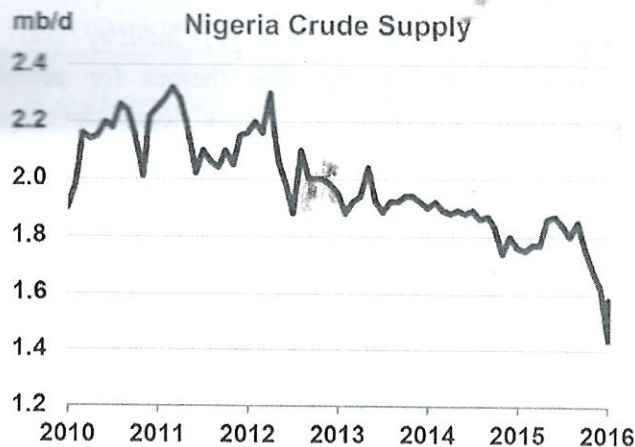
⁵ Francis, Paul, Deirdre Ann LaPin, and Paula Rossiasco. *Securing Development and Peace in the Niger Delta: A social and Conflict analysis for change*. Woodrow Wilson International Centre for Scholars, 2011. 178

⁶ *ibid*

⁷ The History of the Nigerian Petroleum Industry
<http://www.nnpcgroup.com/NNPCBusiness/BusinessInformation/OilGasInNigeria/IndustryHistory.aspx>
cessed on the 14th October 2017.

⁸ *ibid*

⁹ *ibid*



Source: The United States Energy information and administration (EIA)

Nigeria is still today famous as an oil power. It is the largest producer of oil in Africa, and a major supplier to the United States. Records show that in 2010, Nigeria exported over one million barrels per day (bpd) of crude oil and petroleum products to the United States (980,000 bbl/d of crude oil), representing 9% of US total crude oil and petroleum products imports.¹⁰ The Nigerian petroleum industry has been described as the largest among all industries in the country. This is however probably due to the belief that petroleum is one of the major sources of energy worldwide. The size, international characteristic, and role assumed by the petroleum industry were noted to have originated from the notion that petroleum is versatile as it currently satisfies a wide variety of energy and related needs.¹¹ The revenues obtained from crude oil in Nigeria are of absolute advantage to expenditure commitments on various projects at the local, state, and federal levels.

The Nigerian economy relies heavily on the revenue derived from petroleum products, as it provides about 70 percent of government revenue and about 95 percent of foreign exchange earnings, the economy depends on oil as the human body depends on oxygen. Apart from this, the contribution of petroleum to national development is many and varied; employment generation, foreign exchange earnings, income generation, industrialization, and improvements in other economic variables.¹² The contributions of the petroleum industry to growth and development of the Nigerian economy can be enumerated in terms of the industry's impacts on the economic variables responsible for economic growth and also in terms of its share of revenue generation.

¹⁰ The United States Energy information and administration (EIA)

<<http://www.eia.gov/todayinenergy/detail.cfm?id=3050>> accessed on the 17th July October 2017

¹¹ Onyemaechi Joseph Onwe, 'Economic Implications of Petroleum Policies in Nigeria: An overview' http://www.aijcrnet.com/journals/Vol_2_No_5_May_2012/8.pdf (2012) Vol.2, No.5 AIJCR accessed on the 15th October 2017

¹² *ibid*

Every successive Nigerian government has depended on revenue from oil to finance its programmes and projects, so that every effort is made to ensure continuous exploration and production of oil and gas, sometimes to the detriment of some other important areas, such as effective environmental regulation of oil and gas operations. Nigeria's experience in this respect is similar to those of most other developing countries. It is however sad to note that the oil wealth of the country appears to have turned to a curse. The Nigerian government has employed various statutory and legislative means to effectively regulate the operations of the oil and gas industry and this has proved inefficient.

Environmental Impact of Petroleum Exploration in the Niger Delta Region

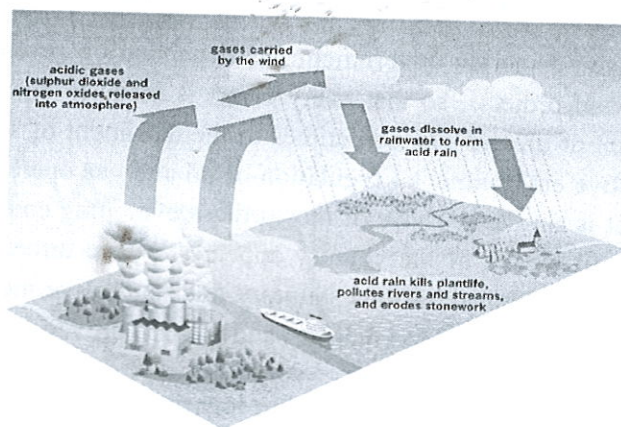
When an exploration well confirms a commercial discovery of proven reserves in an area field development follows and development wells are drilled to enable production. The use of explosives and heavy-duty equipment during the stages leading up to production is typical. The environmental impact of each phase on the host communities is self-evident and warrants immediate attention and redress.¹³ Land and water resources in the region play a vital economic role in the subsistence and livelihood of the peoples in the area. Fishing and farming are predominant occupations in the majority of the local communities in the region. In the Niger-delta region petroleum activities onshore and offshore have both an adverse impact on human health and the environment. Problems associated with petroleum exploration include; deforestation, drilling discharges, noise, nuisance, atmospheric emission of toxic gases, accidental spills/blowouts.¹⁴

1. Gas Flaring

This presents the most severe problem associated with petroleum activities in the Niger-delta region and its impact has far-reaching consequences on the environment. Gas flaring affects mainly the atmosphere and also the water and land resources. These flares containing high toxic chemical compounds such as sulphur dioxide, methane, nitrogen oxide and more gases harmful to human health and the environment.

¹³ Gao, Zhiguo, ed. *Environmental regulation of oil and gas*. Vol.1. Kluwer law International, 1998.

¹⁴ *ibid*



Source: United States Environmental Agency

Gas flares have been scientifically proven to cause acid rain. The above diagram demonstrates how acid rain occurs, as primary emissions from sulphur dioxide and nitrogen oxide from fossil fuel combustion react in the atmosphere with water, oxygen and other chemicals to form various acidic compounds.¹⁵ It is estimated that about 45.8 billion watts of heat is discharged into the atmosphere from 1.8 billion cubic feet of gas every day in the Niger delta region, leading to temperatures that render large areas inhabitable. It is rather sad to say as complete utilization of produced associated gas, reduction of flaring and production of greenhouse gases is one of the policies that oil companies are expected to comply with to stop gas flaring but still 84.60% of total gas produced is still flared with 14.86% only being used locally.¹⁶ Statistics from the year 1970-1986 also show that a total of 125.5 cubic meter approximately of gas was produced in the Niger delta region and 102.3%(81.7%) million cubic meters was flared, 2.6 million cubic meters was used as fuel by the oil producing and about 14.6 million cubic meters was domestically consumed.¹⁷ Though available statistics on the probable amount of gas flared in Nigeria vary and for this reason raises doubt about its reliability. It is conclusive that Nigeria is one of the world's biggest flarer of gas in absolute and proportionate terms. The single most important piece of national legislation on gas flaring is the Associated Gas Re-Injection Act 1979. The Act made provision for all petroleum companies in Nigeria to submit to the Minister detailed plans for gas utilisation. It stipulated that no petroleum company engaged in production of oil shall after 1 January 1984 'flare gas produced in association with oil without permission' in writing from the Minister'¹⁸ Despite these alluring provision oil exploration and exploitation activities such as this have continued till today

¹⁵ The United States Environmental Protection Agency <http://epa.gov/acidrain/what/> accessed on the 16th October 2017.

¹⁶ Adati Ayuba Kadafa, 'Oil exploration and spillage in the Niger Delta of Nigeria' (2012) Civil and Environmental Research Paper Vol.2 No 3

¹⁷ <http://www.iiste.org/Journals/index.php/CER/article/view/1789> accessed on the 16th October 2017.

¹⁸ Section 3(1) The Associated Gas Re-Injection Act 1979

and have significantly contributed to the environmental degradation of the region in spite of the governments measures to stop it.

2. Oil Spills

Over the years, incidents of oil spills during oil exploration, have become a recurring phenomenon. An estimated 9-13 million of oil has been spilled into the Niger Delta Ecosystem over the past 50 years; 50 times the estimated volume spilled in Exxon Valdez spill in Alaska in 1989.¹⁹ Between 1976 and 2001 a total of 6,817 oil spills were recorded, with only 70% recovered.²⁰ The National Oil Spill Detection and Response Agency recorded another 2,405 spills between 2006 and mid-2010, with an increasing trend year-on-year: 252 in 2006, 598 in 2007, 927 in 2008 and 628 in 2009.²¹ It rose again in 2010 partly because over 7,000 square km of pipelines linking 606 oil wells are old and begging replacement in the region. Since the year 2000, the following major spills have occurred:

Date	Location	Quantity (Gallons)	Vessel/Oil Company
21/12/2011	Bonga Field	1,694,000	Shell
01/05/2010	Niger Delta	29,414,000	Exxon Mobile
2009	Bodo	4,310,040	Shell
25/08/2001	Ogbodo	2,926,000	Shell
May 2001	Ogoniland	Unknown (but significant)	Shell

Source: Guardian.co.uk, businessweek.com, urhobohistoricalsocieity.com

¹⁹ The United Nation Development program (UNDP), Human development program website <<http://hdr.undp.org/en/reports/nationalreports/africa/nigeria/name.3368.en.html>> accessed on the 17th October 2017. According to the Niger Delta Human Development Report, the prevailing situation not only explains the increasing waves of restiveness in the region, it also presages a grim future for the region and the country. "For most people of the delta, progress and hope, much less prosperity, remain out of reach," the report states. "If unaddressed, these do not bode well for the future of Nigeria or an oil hungry world."

²⁰ *ibid*

²¹ Akpofure, E. A. "Oil spillage in Nigeria's Niger Delta: Psycho-Morphological and empirical overview." *International Association of Impact Assessment* (2), *Opulence Environmental Service Ltd. Psycho-Morphological Learning Exchange Network* (2000)

Many of the previous spills, arising from a number of causes, were not completely accounted for and were not properly cleaned up and often take many months to stop the spills. This made the UNDP claim that it would take upwards of thirty years to clean up the Niger Delta's oil spills and associated environmental degradations.²²

Causes of Oil Spills in the Niger Delta Region

Oil companies have often blamed most spills on sabotage; however, the following shows the ranking of causes of oil spills in the Niger-delta: 42% of failures were mechanically induced, 18% by corrosion, third party activity contributed 24%, 10% through operational error, and 6% by natural hazards).²³ It is also noted that the sour line failures, about 86% were leaks and 14% were ruptures. Achebe contends that;

*"The severity of spillage, measured by the amount of oil spilled, is higher in the Niger Delta than in Western Europe. The reason could be poor contingency planning for rapid response to spills; poor detection procedures; long distances between emergency shutdown valves; or the larger average diameter of pipelines"*²⁴

The Department of Petroleum Resources (DPR) of Nigeria reports that of the 17,644 barrels of crude oil (or 723,404 gallons) spilt in 2000, 88% are traceable to equipment failure. As a result of equipment failure and sabotage, oil spills have become endemic and devastating in the Niger Delta.²⁵

Legal Framework for an Effective Environmental Regulation of the Nigerian Oil and Gas Industry

At the national level, Nigeria has enacted many laws, Acts or regulations which are directly and indirectly channelled towards abating oils spills and gas flaring especially in the oil producing area of the Niger-delta. These national responses are however enacted to improve the quality of air and the protection of the entire environment.

²² Achebe, C. H., U. C. Nneke, and O. E. Anisiji. "Analysis of oil pipeline failures in the oil and gas industries in the Niger delta area of Nigeria." *Proceedings of the International Multi Conference of Engineers and Computer Scientists*, Vol. 2. 2012. <http://www.iaeng.org/publication/IMECS2012/IMECS2012_pp1274-1279.pdf> accessed on the 17th October 2017

²³ ibid

²⁴ ibid

²⁵ Opukri, C. O., and Ibaba S. Ibaba. "Oil induced environmental degradation and internal population displacement in the Nigeria's Niger Delta." *Journal of Sustainable Development in Africa* 10.1 (2008): 173-193 <http://www.jsdafrica.com/Jsda/V10N1_Spring2008/PDF/OilInducedEnvDegr.pdf> accessed on the 17th October 2017

As earlier mentioned, oil exploration commenced in Nigeria in the early 1904, but it was not until 1956 that commercial quantity of oil was discovered in the present Bayelsa state. Before the promulgation of the petroleum Decree in 1969, the mineral oils ordinance 1914 regulated "the right to search for, win, and work mineral oils."²⁶ The above principal legislation contained nothing with respect to the protection of the environment in all its 10 sections. But, *Section 9* empowered the governor –general in council to make regulations for any matter connected with carrying the ordinance into effect. In giving effect to this provision, the Minerals oils (safety) Regulations 1952 were adopted.

Mineral oil (safety) Regulations 1952

The Mineral oil regulations dealt mainly with safety issues at the well site, and contained little or nothing in the way of environmental protection of the host communities. **Regulation 7**, which dealt with drilling operations, stated that 'all operations of drilling shall conform to good oil field practice. The phrase "good oil field practice" was however not defined in the definition section. The Mineral Oil **Regulation 18** stated that no person shall accumulate or permit the accumulation of inflammable rubbish at any well. The second section, on rubbish accumulation at the well was only meant to prevent the risk of fire at the well and not meant to protect the host communities. These regulations were later amended in 1963, but the amendments did not further the protection of the host communities' environment. These were the provisions that heralded Nigeria's emergence as an oil power. Yet, they were not meant to protect the environment, but the workers at the site of the oil wells.

Again, the Mineral Oil (Safety) Regulations *Section 7* of the Regulations shows an improvement on the 1952 Regulations considered above. It provides that:

'All drilling, production, and subsequent handling of crude oil and natural gas shall conform to good oilfield practice which for the purposes of these regulations shall be considered to be adequately covered by the appropriate current Institute of Petroleum Safety Codes, the American Petroleum Institute Society of Mechanical Engineers Code.'

Commenting on this section, some writers have opined that the section effectively commits oil companies to respect international standards in their operations in Nigeria.²⁷

²⁶ Chapter 20 Laws of the Federation of Nigeria 1958, preamble to the ordinance (repealed)

²⁷ Manby, Bronwen. *The Price of Oil: Corporate Responsibility and Human Rights Violations In Nigeria's Oil Producing Communities*. Vol. 2156. Human Rights Watch,

1999. <http://www.hrw.org/reports/1999/nigeria/index.htm#TopOfPage> accessed on the 18th October 2017

However, it must be pointed out that "good oilfield practice" is a term not subject to any specific meaning. The oil companies are therefore left with a wide degree of discretion as to what amounts to "good oilfield practice." It is submitted that turning the key question of what practices should be adopted in oil exploitation to the companies carrying out such exploitation is hardly a good way of ensuring effective environmental protection. The temptation to resort to lower standards for commercial gains would be too strong for some companies to resist. Besides, the international standards referred to in the regulations are concerned with issues of safety at the exploitation site.²⁸ It may well be that safety regulations when effectively implemented, would ultimately enhance environmental protection, but it is doubtful whether a recourse to safety regulations for the protection of the environment is an effective way to deal with damages caused to the environment of the host populations. In terms of environmental protection, it is clear that the regulations fall short of the measures needed to adequately protect the environment and the host populations.

The Petroleum Regulations 1967

This represents a modest improvement to the Mineral Oil Regulations. There is a specific provision on environmental protection. **Regulation 25** deals with prevention of pollution. There are other environmental provisions in the regulations although not so styled. **Regulation 35** dealing with abandonment requires every borehole or existing well which is to be abandoned to be securely plugged to prevent ingress and egress of water, and to comply with approved abandonment programme. But the effectiveness of this requirement appears to be defeated by the provision that, the Director of Petroleum Resources may in writing dispense with this requirement.²⁹ Safety of navigation is also protected by the Regulation against offshore drilling work. The licensee is also to comply with any law relating to town or country planning.³⁰

Other provisions that are meant to protect the environment and interest of the host populations include, **Regulation 17 (1) (a)** prevents entry into land designated as sacred. Also, a licensee is prohibited from destroying anything or object considered to be an object of veneration. However, the effectiveness of these provisions is diluted by the requirement in the regulation that it is for the state official to decide on the question of the sacredness of an area, and on the question of what object is an object of veneration, and such decision is made final. One would have reasoned that such decision to prevent entry into a land designated sacred should be left into the hands of the local community, in

²⁸ *ibid*

²⁹ Regulation 35(2) of the Petroleum Regulation 1967

³⁰ Regulation 18, 24 Petroleum Regulation 1967

accordance with their customs and beliefs that should decide what they consider to be an object of veneration.³¹

Regulation 23 requires payment of compensation if the exercise of the licensee's right interferes with fishing rights. However, this is only payable if the licensee exercises his rights in a "manner that will unreasonably interfere with the exercise of fishing rights." Commenting on the regulations, its stipulations are mere directives, which do not prescribe ways of determining how they are to be carried out and also lack any provision to compel or stimulate compliance making them practically unenforceable.

The Petroleum Decree 1969

In 1969, the Petroleum Decree promulgated by the Federal Military Government was another move to ensure that the lacuna in the previous legislations were effected. It is however sad to note that, the Act contained no substantive provisions on the protection of the environment and host communities. But section 9(1) empowers the Minister to make regulations governing various aspects of petroleum operations, including "(9) (b)

- (i) "safe working,
- (ii) the conservation of petroleum resources,
- (iii) the prevention of pollution of water courses and the atmosphere,
- (c) regulating the construction, maintenance and operation of installations used in pursuance of this Act."

Section 4(1) of the Fourth Schedule to the Act reserved the application of the Mineral Oils (safety) Regulations of 1963 and the Petroleum Regulations of 1967. In terms of section 24(1) of the First Schedule of the Act, the Minister has the power to revoke an oil licence if the holder of the licence among other things, "is not conducting operations continuously and in a vigorous and business-like manner and in accordance with good oilfield practice." Although there are general references to environmental protection, it could be seen that at the core of the Act is a policy commitment, which encourages "continuous and vigorous operations" in a business-like manner. The maximization of oil production was at the core and at the expense of environmental protection.

³¹ Regulation 21(1); as the provision stands, it appears that the state is adopting a position that would facilitate oil exploitation without being bogged down by community claims. The licensee is also not allowed to cut down any productive or protected tree without the consent of the state authority and payment of compensation.

The Associated Gas (Re-injection) Act 1979

The Associated Gas (Re-injection) Act was a commendable step to address the problem of gas flaring by oil companies and its adverse effects on the environment and the host populations. The Act requires all oil companies producing petroleum in Nigeria to submit to the Minister, a preliminary programme for, schemes for viable utilisation of associated gas, projects to re-inject all gas produced in association with oil, but not utilised in an industrial project. This was to be done before 1st April 1980.³² Thereafter, but not exceeding 1st October, 1980, every such company was to submit to the Minister detailed programmes and plans either to implement programmes for re-injection of all produced associated gas or schemes for the viable utilisation of all produced gas.³³ In any event, except with the approval of the Minister, all flaring of associated gas was banned from 1st January, 1984.

These provisions were however whittled down by the provisions of *Section 3(2)* of the Act, which require that, the Minister under certain terms and conditions may authorise continuous flaring of gas after this date. Since then, gas flaring has been permitted in Nigeria. In 1984, the *Associated Gas Re-Injection (Continued Flaring of Gas) Regulations* were adopted which substantially modified the provisions of the 1979 Act. The Regulations granted exemptions under certain circumstances and empowered the Minister to issue certificates thereto. However, this step has not stopped or reduced gas flaring. In the first place, the penalty is not a sufficient deterrent to gas flaring as oil companies found it easier to pay the required fine than to embark on the expensive task of developing associated gas.

In the second place, most of the fields have been granted exemptions from compliance with the Act.³⁴ This latter regulation therefore made nonsense of the laudable objective of the enabling legislation to reduce gas flaring. Since then several dates to end gas flaring have been adopted without any implementation. It stands to reason, that a state policy that authorises the release of gas flares into the environment of the host communities is hardly intended for the protection of the environment and the host populations.

Federal Environmental Protection Agency (FEPA) Act 1992

As part of its commitment to environmental protection, the Federal Environmental Protection Agency was established in 1988 with specific functions in *Section 4* of the Act. Apart from these functions, the agency is also empowered to issue standards for water, air, land quality and effluent limitations. **Section 20** of the Act prohibits the discharge of

³² Section 1 of the Associated Gas Re-Injection Act

³³ Section 2 Associated Gas Re-Injection Act 1979

³⁴ *ibid*

harmful quantities of any hazardous substance into the air or upon the land and the waters of Nigeria except where permitted.

In 1992, the 1988 Act was amended to, among other things, provide for a governing body to be known as the Council.³⁵ **Section 2(a) (1)** of the amended law provides for a Technical Committee to be known as the "Federal Environmental Protection Agency Technical Committee" whose functions are to assist and advise the Council and the agency in the performance of their functions under the Act, and to give technical opinions on issues referred to it or delegated by the Council.³⁶ **Section 4** of the 1988 Act was also amended. The functions of the Agency have been expanded to include the all-important issues of protection of "biodiversity conservation and sustainable development of Nigeria's natural resources."

Environmental Impact Assessment Decree, 1992

The Environmental Impact Assessment Decree passed in 1992 had clear objectives. The Decree requires that projects or activities should not be embarked upon without prior consideration of their environmental effects, at the early stages. Section 2 (2) provides to the effect that

"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 this Decree."³⁷

The Decree in its schedule establishes a list of projects in which it is mandatory to conduct an EIA and such projects cannot be commenced without a definite decision by the Agency.

Section 7 of the Act stipulates that government agencies, members of the public, experts in any relevant discipline and interested groups should be given opportunity to make comments on environmental impact assessment of the activity before the Agency gives a decision on an activity to which an environmental assessment has been produced. This provision, therefore, gives the host populations an opportunity to intervene and be heard before approval is given for the exploitation of any oil field or other projects covered by the Decree. **Section 11** requires affected States or Local Government Areas to be notified of the potential adverse effects of the projects where the impact study indicates that

³⁵ The Federal Environmental Protection Agency (Amendment) Decree, 1992, Decree No 59

³⁶ Section 2(3) of the Environmental Impact Assessment Act 1992

³⁷ Environmental Impact Assessment Act 1992

projects will have such effects. The weakness of this statute is that it does not require cancellation of projects that show potential adverse impacts to the host populations, which still shows the level of consideration given to the host community.

The Constitution of the Federal Republic of Nigeria 1999

Generally, the Nigerian Constitution recognises the importance of improving and protecting the environment. Under Section 20, one of the objectives of the Nigerian State is protecting and improving the environment and safeguarding the air, land, water, forest and wildlife of Nigeria. Similarly, section 33 and 34 which guarantee fundamental human rights to life and human dignity respectively, can also arguably be linked to the need for a healthy and safe environment to give these rights effect.³⁸ By virtue of these provisions, the ultimate responsibility for managing risks to human safety and the environment (especially from downstream activities) is that of the Nigerian government. The active involvement of the federal government in oil industry operations either through equity participation or as outright ownership, including downstream, means that the federal government is also potentially a polluter. Indeed, all the refineries owned by the federal government, through the State owned NNPC, have been implicated in some of the major downstream pollution incidents. The effect of the discharged wastewater from refineries on its host environment and the gaseous pollutants that are released during oil refining, solid and liquid waste emanating from the refinery pollute the receiving water bodies.³⁹ Thus, while the constitution of Nigeria vests the responsibility of protecting human health and improving the quality of the environment on the government, the same government through its corporation is in this case clearly polluting the environment and endangering the health of its citizens.

Nigerian National Petroleum Corporation (NNPC) Act 2004

By virtue of its statutory duties as provided, inter alia, in the Act and with regard to the production, refining, treating, processing, handling, purchasing, marketing, storage and transportation of petroleum and petroleum products,⁴⁰ Nigerian National Petroleum Corporation (NNPC) is involved in environmental protection in the oil and gas sector. Though, the involvement of the NNPC might be incidental yet as a major player and in order to avoid oil spillages and the attendant weighty consequences, they ought to be

³⁸ The Constitution of the Federal Republic of Nigeria CFRN 1999

³⁹ Marcus AC, Ekpote OA (2014) Impact of discharged process wastewater from an oil refinery on the physiochemical quality of a receiving waterbody in rivers state. Nigeria IOSR Journal of Applied Chemistry (IOSR-JAC) 7(12):1-8. The evidence is seen in pollution of the River Romi and the high number of adverse health issues within the community. The existence of notable threats to human and ecological wellbeing from oil related pollution in their research which revealed concentration of contaminants within and around the NNPC Apata product depot to be higher than allowable limits by the World Health Organisation (WHO) and the European Union (EU).

⁴⁰ Section 5(1)(a-e), *ibid*.

involved at least with regard to their own operations. The Act clearly provides that the Corporation is particularly charged with the duty of providing and operating pipelines, tanker-ships or other facilities for the carriage or conveyance of crude oil, natural gas and their products and derivatives, water and any other liquids or other commodities related to the corporation's operations; and constructing, equipping and maintaining tank farms and other facilities for the handling and treatment of petroleum and its products and derivatives.⁴¹ Accordingly, apart from the criminal liability for oil spillages in relation to their facilities, they are tortuously liable for any spillages, discharges, escape or leakage from their facilities.⁴² They ought to take due care and diligence thereof to avoid such liability, hence their involvement in environmental protection in the sector. Furthermore, the National Oil Spill Contingency Plan⁴³ listed NNPC as one of the Agencies to be mandatorily co-opted and engaged by NOSDRA in the event of Tier 3 oil spill, saddling it therein with the following functions:

- I. To cooperate with the oil spiller in determining appropriate measures to prevent excessive damage.
- II. To promptly refer the proposal made to her for the rapid response to the Federal Ministry of Environment.
- III. To mobilize their internal resources and also assist in obtaining any outside resources that may be required to combat the spill.
- IV. To assist in the assessment of damage caused.⁴⁴

These functions were imposed on the NNPC because by equity participation in oil operations with her joint venture partners, the NNPC absorbs a good proportion of the expenditure incurred by her operating partners including compensations and claims arising from damage caused by oil spill disasters.⁴⁵

National Oil Spill Detection and Response Agency (Establishment) NOSDRA Act 2006

This is a specialized and principal legislation on environmental protection in the oil and gas sector in Nigeria. It established the National Oil Spill Detection and Response Agency with responsibility for preparedness, detection and response to all oil spillages in Nigeria.⁴⁶ It also established the advisory, monitoring, evaluating, mediating and co-

⁴¹ Section 5(1)(d& e), *ibid*

⁴² *Rylands v. Fletcher* (1866) LR 1 EX. 265

⁴³ The Sub-Committee on Oil Spill Response of the National Action Coordinating Committee of the Forum for Cleaning-up the Niger Delta, December, 2000 – <http://www.nosdra.org/techinfo.html>, accessed on 22nd October 2017

⁴⁴ *ibid*

⁴⁵ *ibid*

⁴⁶ Section 1, NOSDRA (Establishment) Act, CAP N157, LFN 2006

ordinating arm of NOSDRA known as the National Control and Response Centre (NCRC).⁴⁷ It must be pointed out that the constitution of the Governing Board of the Agency⁴⁸ and the operational modus of the Agency in the event of major or disastrous oil spill⁴⁹ takes into account the multi-sectoral demand of environmental protection in the oil and gas sector. Accordingly, the NOSDRA Act provides that the objectives of NOSDRA shall be to co-ordinate and implement the National Oil Spill Contingency Plan for Nigeria.⁵⁰ The National Oil Spill Contingency Plan⁵¹ as may be formulated (or revised) from time to time, by the Federal Government which coordination and implementation shall be the objective of NOSDRA include:

- a) Safe, timely, effective and appropriate response to major or disastrous oil pollution;
- b) Identify high-risk areas as well as priority areas for protection and clean-up;
- c) Establish the mechanism to monitor and assist or where expedient direct the response, including the capability to mobilizing the necessary resources to save lives, protect threatened environment, and clean up to the best practical extent, the impacted site
- d) Maximize the effective use of the available facilities and resources of corporate bodies, their international connections and oil spill co-operatives, that is Clean Nigeria Associates⁵² in implementing appropriate spill response;
- e) Ensure funding and appropriate and sufficient pre-positioned pollution combating equipment and materials, as well as functional communication network system required for effective response to major oil pollution;

⁴⁷ Section 18, *ibid*.

⁴⁸ Section 2(1) & (2); established the Governing Board and equally listed the composition of the Board; one might observe that of all the relevant stakeholders delineated in the Second Schedule, the Ministries of Health and that of Science and Technology have no representation on the Board

⁴⁹ Section 19(1) & (2); Schedule to the NOSDRA Act: provides the functions of all the Ministries or Agencies which NOSDRA shall co-opt and collaborate with in the event of any major or disastrous oil spill (i.e. for major Tier 2 or Tier 3 oil spill). NB: In Nigeria Oil Spill is classified into 3 tiers, Tier 1 – Oil Spill of less than or equal to 7 tonnes (i.e. 50 barrels); Tier 2 – Oil spill greater than 7 tonnes but less than 700 tonnes (5000 barrels); Tier 3 oil spills greater than 700 tonnes; strategic response to each tier varies in the Plan, i.e. National Oil Spill Contingency Plan.

⁵⁰ Section 5 of the NOSDRA Act; This is subsequently referred to as the Plan; the complete document can be down loaded from the NOSDRA website; http://www.nosdra.org/tech_info.html, accessed 22nd October, 2017

⁵¹ Section 5(a-n), *ibid*; this and the provisions of Second Schedule to the NOSDRA Act constitute principal parts of the National Oil Spill Contingency Plan as published on the NOSDRA website – The Plan is mandatory for all parties to the International Convention on Oil Pollution Preparedness and Response Cooperation (OPRC) to which Nigeria is a signatory. It was prepared for the Presidency by the Sub-Committee on Oil Spill Response of the National Action Coordinating Committee of the Forum for Cleaning-up of the Niger Delta in December 2000.

⁵² CNA – is formed by Oil producing companies to assist member companies in handling oil spill cases that an individual company is unable to combat – i.e. Tier 2; they are also involved in Tier 3 response.

- f) Provide a programme of activation, training and drill exercise to ensure readiness to oil pollution preparedness and response and the management and operational personnel;
- g) Co-operate and provide advisory services, technical support and equipment for purposes of responding to major oil pollution incident in the West African sub region upon request by any neighbouring country, particularly where a part of the Nigerian territory may be threatened;
- h) Provide support for Research and Development (R&D) in the local development of methods, materials and equipment for oil spill detection and response;
- i) Cooperate with the International Maritime Organization and other national, regional and international organizations in the promotion and exchange of results of research and development programme relating to the enhancement of the State of the art of the oil pollution preparedness and response, including technologies, techniques for surveillance, containment, recovery, disposal and clean up to the best practical extent;
- j) Establish agreements with neighbouring countries regarding the rapid movement of equipment, personnel and supplies into and out of the countries for emergency oil spill response activities;
- k) Determine and preposition vital combat equipment at most strategic areas for rapid response;
- l) Establish procedures by which the Nigerian Customs Service and the Nigerian Immigration Services shall ensure rapid importation of extra support response equipment and personnel;
- m) Develop and implement an appropriate audit system for the entire plan.
- n) Carry out such other activities as are necessary or expedient for the full discharge of its functions and the execution of the Plan under this Act.

Inasmuch as the functions of NOSDRA are partially embedded in the gamut of its objectives as espoused above, the NOSDRA Act for the avoidance of doubt, went on to specify and detail the functions of NOSDRA in Section 6 as follows⁵³,

"The Agency shall be responsible for surveillance and ensure compliance with all existing environmental legislation and detection of oil spills in the petroleum sector;⁵⁴ receive reports of oil spillages and co-ordinate oil spill response activities throughout Nigeria; co-ordinate the implementation of the Plan as may be formulated, from time to time, by the Federal Government; co-ordinate the

⁵³Section 6(1)(a-e), NOSDRA Act

*implementation of the Plan for the removal of hazardous substance as may be issued by the Federal Government;⁵⁵ perform such other functions as may be required to achieve the aims and objectives of the Agency under this Act or any Plan as may be formulated by the Federal Government pursuant to this Act.*⁵⁶

Furthermore, the so-called special functions of the NOSDRA which are also for the attainment of the objectives are delineated in Section 7 as follows; The Agency shall –

- (a) ensure the coordination and implementation of the plan within Nigeria including within 200 nautical miles from the baseline from which the breadth of the territorial waters of Nigeria is measured;
- (b) undertake surveillance, reporting, alerting and other response activities as they relate to oil spillages;
- (c) encourage regional cooperation among member states of West African sub-region and in the Gulf of Guinea for combating oil spillage and pollution in our contiguous waters;
- (d) strengthen the national capacity and regional action to prevent, control, combat and mitigate marine pollution;
- (e) promote technical cooperation between Nigeria and member states of the West African sub-region;
- (f) facilitate –
- (g) the arrival and utilization in and departure from Nigeria of ships, aircrafts and other modes of transport engaged in responding to oil pollution incidents or transporting personnel, cargo, materials, and equipment required to deal with such an incident; and (ii) the expeditious movement into, through and out of Nigeria of personnel, cargoes, materials and equipment; (g)(i) The National Control and Response Centre shall for the purposes of a Tier 3 Oil Spill response, undertake such functions as specified under Section 19 of this Act;⁵⁷ (ii) the Director-General shall have power to co-opt all the Government Ministries and Agencies mentioned under the Second Schedule to this Act, in the Management of a Tier 3 or a major Tier 2 Oil Spill.⁵⁸

⁵⁶ National Oil Spill Detection and Response Agency (Establishment) Act 2006

⁵⁷ NOSDRA Act, CAP N157 LFN, 2006.

⁵⁸ *ibid*; Section 18 established the National Control and Response Centre (NCRC) as a subsidiary of NOSDRA to act as a report processing and response co-ordinating centre for all oil spill incidents in Nigeria; receive all reports of oil spillages from the Zonal offices and units of the Agency; and serve as the command and control centre for compliance monitoring of all existing legislation on environmental control, surveillance for oil spill detection and monitoring and coordinating responses required in Plan activation.

The NOSDRA Act went on to provide that; the Agency shall act as the lead Agency for all matters relating to oil spills response management and liaise with the other Agencies for the implementation of the Plan, as contained in the Second Schedule;⁵⁹ cooperate with an oil spiller in the determination of appropriate measures to prevent excessive damage to the environment and the communities; expeditiously consider any proposal made for response effort by the oil spiller; mobilize internal resources and also assist to obtain any outside human and financial resources that may be required to combat any oil spill; and assist in the assessment of damage caused by an oil spillage.⁶⁰

The National Environmental Standards and Regulations Enforcement Agency (Establishment) NESREA Act 2007

The National Environmental Standards and Regulations Enforcement Agency (Establishment) Act which was promulgated in 2007 establishes the NESREA, by virtue of Section 1(1) of the NESREA Act.⁶¹ The NESREA Act repealed the erstwhile FEPA Act. By virtue of Section 2 of the NESREA Act, the agency "has responsibility for the protection and development of the environment, biodiversity conservation and sustainable development of Nigeria's natural resources in general and environmental technology including coordination, and liaison with, relevant stakeholders within and outside Nigeria on matters of enforcement of environmental standards, regulations, rules, laws, policies and guidelines". Section 27 prohibits the discharge of harmful quantities of hazardous substances into air, land, water and the shorelines of Nigeria except permitted by law.⁶² Oshionebo in his book, argues that oil-related waste can qualify as hazardous in the context of the NESREA Act, because section 37 of the Act defines hazardous substances as "any chemical, physical or biological and radioactive material that poses a threat to human health and the environment".⁶³ However, the term "harmful quantities" has been criticised by Oshionebo. He avers that the NESREA do not have the requisite capability to determine whether quantities of hazardous substances are harmful.⁶⁴

Furthermore, subject to Section 27 (1) of the NESREA Act, harmful quantities of hazardous wastes can be discharged if any law in force in Nigeria permits it. Individual

⁵⁹ *ibid*; The Second Schedule laid down the functions or duties of every stakeholder Ministry or Agency (Public or private) that will be co-opted and involved in the event of a major or disastrous oil spill. Section 19(2), *ibid*. C/F this power granted NOSDRA in S. 19(2) is vested on the Federal Ministry of Petroleum Resources in the Plan – the National Oil Spill Contingency Plan at paragraph 8.2. As the Act is superior to the Plan, the provision of the Act supersedes

⁶⁰ Section 19(3); It should be noted that it is not apparent in the Act and all the functions of NOSDRA therein that NOSDRA is in anyway directly involved with clean-up or remediation of oil spill sites

⁶¹ NESREA Act, available at <http://www.nesrea.org/nesraact.php> accessed 18th October, 2017

⁶² Oshionebo, Evaristus. *Regulating Transnational Corporations In Domestic And International Regimes: An African case study*. University of Toronto Press, 2009 p.56

⁶³ *ibid*

⁶⁴ *ibid*

violators of provisions of harmful discharge of hazardous substances in Nigeria, by virtue of Section 27(2) of the NESREA Act, violators are liable on conviction to a fine not exceeding NGN 1,000,000.00 or imprisonment for a term not exceeding five years. By virtue of Section 27(3) of the NESREA Act, where the violator is a body corporate, it shall on conviction be liable to a fine not exceeding NGN 1,000,000.00 and an additional fine of NGN 50,000.00 for each day the fine subsists. Section 27(4) creates some defences for corporate officers. Here, under Section 27(4), officers of a company can escape liability if they can prove that the said prohibition or offence was committed without their knowledge or that they exercised all due diligence to prevent the discharge.⁶⁵ As at the time of writing, NGN 1,000,000.00 was approximately \$2,879 and NGN 50,000 was approximately \$140.36. Thus, for corporate violators of the Act, the fines will be very affordable.

As a panacea to this conundrum, the fines should be computed in international currencies such as US dollars or British pounds, to guard against rampant depreciation of the fines in the Nigerian context. Under Section 28, the Minister of Environment may compel violators (which may include owners or operators of vessels) of the Act to undertake certain obligations as adopting certain methods for the disposal or removal of harmful substances amongst others. Undermining the innovative slant of the NESREA Act in regards to environmental protection in Nigeria, the major defect in the NESREA Act is that the powers of the regulatory agency established by the Act do not extend to environmental issues arising in the oil and gas sector. Under Section 8(8), the agency shall have the power to "conduct public investigations on oil pollution and the degradation of natural resources except investigations on oil spillage". Thus, investigations by the agency into oil spillage are expressly omitted from the functions of the agency. Furthermore, under Section 8(k), (i), (m), (n) and (s), which state the various functions of the agency, the oil and gas industry in Nigeria is omitted from the list. Also, under Section 7(k) of the NESREA Act, the agency cannot conduct environmental audits in respect of the oil and gas industry in Nigeria. It is arguable that the removal of oil spill investigations from the ambit of NESREA was to prevent conflict of interest between NESREA and NOSDRA. The NOSDRA is statutorily required to prevent, control and respond to the incidence of oil spillage in Nigeria. However, the NESREA Act, despite its innovative provisions of mobile courts in environmental cases, has been criticised on the ground that it is narrowly focused in comparison with the now defunct FEPA Act.⁶⁶ As an addendum, under Section 40 of the NESREA Act, the Minister of Environment can make regulations for ensuring the sustenance of the Act. Some of the regulations made by the Minister include:⁶⁷

⁶⁵ Section 27(3) of the NESREA Act 2007

⁶⁶ Abila and Derri, "A Critical Examination of the National Standards and Regulations Enforcement Agency (Establishment) Act 2007" (2009), p.10.

⁶⁷ Section 40 of the NESREA Act <http://www.nesrea.org/lawsandregulations.php> accessed 29th October, 2017.

1. National Environmental (Pollution Abatement in Mining and Processing of Coal, Ores and Industrial Minerals) Regulations 2009;
2. National Environmental (Sanitation and Wastes Control) Regulations 2009;
3. National Environmental (Pollution Abatement in Chemicals, Pharmaceuticals, Soaps and Detergent Manufacturing Industries) Regulations 2009;
4. National Environmental (Pollution Abatement in Food, Beverages and Tobacco Sector) Regulations 2009;
5. National Environmental (Pollution Abatement in Textiles, Wearing Apparel, Leather and Footwear Industry) Regulations 2009;
6. National Environmental (Wetlands, River Banks and Lake Shores Protection) Regulations 2009;
7. National Environmental (Watershed, Hilly, Mountainous and Catchment Areas) Regulations 2009;
8. National Environmental (Ozone Layer Protection) Regulations 2009;
9. National Environmental (Noise Standards and Control) Regulations 2009;
10. National Environmental (Access to Genetic Resources and Benefit Sharing) Regulations 2009; and
11. National Environmental (Permitting and Licensing Systems) Regulations 2009. In May 2011, 13 regulations were made by the Minister. These were:⁶⁸
 - i. National Environmental (Protection of Endangered Species in International Trade) Regulations;
 - ii. National Environmental (Soil Erosion and Flood Control) Regulations;
 - iii. National Environmental (Control of Bush, Forest Fire and Open Burning) Regulations
 - iv. National Environmental (Desertification Control and Drought Mitigation) Regulations
 - v. National Environmental (Surface and Groundwater Quality Control) Regulations;
 - vi. National Environmental (Coastal and Marine Area Protection) Regulations;
 - vii. National Environmental (Control of Vehicular Emissions from Petrol and Diesel Engines) Regulations;
 - viii. National Environmental (Electrical/Electronic Sector) Regulations;
 - ix. National Regulations (Non-Metallic Minerals Manufacturing Industries Sector) Regulations;
 - x. National Environmental (Construction Sector) Regulations;
 - xi. National Environmental (Standards for Telecommunications and Broadcast Facilities) Regulations;

⁶⁸ Okorududu-Fubura, "Country Report: Nigeria-Legal Developments, 2009–2011" (2012) IUCN Academy of Environmental Law e-Journal 1, 170–179.

- xii. National Environmental (Base Metals, Iron and Steel Manufacturing/Recycling Industries Sector) Regulations; and
- xiii. National Environmental (Domestic and Industrial Plastic, Rubber and Foam Sector) Regulations.

The inherent strengths of the regulations can be deduced from the following statement by Professor Okorududu-Fubura, who posited that: "Inherent in these Regulations are salient areas of synergy and features relevant for regulating the environment. Some points of synergy include: the adoption of licensing and permit system; the inclusion of the polluter pays principle; the use of environmental management plans; the introduction of effluent pollution abatement measures; the use of monthly discharge monitoring report; the recognition of environmental auditing; obligations to embrace best practices; and the implementation of stiffer fines, punishment and sentencing; and capacity building initiatives."⁶⁹

The Petroleum Act 2004

Under this Act, the Minister and Ministry of Petroleum Resources have a role in environmental protection in the oil and gas sector. Accordingly, under this statute, the Minister of Petroleum Resources may make regulations providing generally for matters relating to licences and leases granted under this Act and operations carried out there under including the prevention of pollution of water courses and atmosphere.⁷⁰ Furthermore, the said Minister of Petroleum Resources may also make regulations:

- I. Regulating the importation, handling, storage and distribution of petroleum, petroleum products and other flammable oils and liquids, and in particular (without prejudice to the generality of the foregoing) – defining dangerous petroleum and dangerous petroleum products, prescribing anchorages for ships carrying dangerous petroleum or dangerous petroleum products as cargo and requiring those ships to proceed to and remain at those anchorages;⁷¹
- II. Regulating the loading, unloading, transport within a port, landing, transshipment and shipment of petroleum and petroleum products;⁷² and
- III. Prescribing conditions and restrictions to be imposed upon vessels arriving at a port after having carried petroleum, petroleum products, dangerous petroleum or dangerous petroleum products.⁷³

⁶⁹ Ibid 40

⁷⁰ The Petroleum Act, CAP P10 LFN, 2004 Section 9(1)(b)(iii),

⁷¹ *ibid*, Section 9(1)(e)(iii),

⁷² *ibid*, Section 9(1)(e)(iv),

⁷³ *ibid*, Section 9(1)(e)(iii),

It may be pertinent to point out that the present regulations made pursuant to section 9 by the Minister of Petroleum Resources made elaborate provisions for the transportation, handling, storage, etc. of all petroleum products. Thus, strict compliance to the Act and its regulations may engender safe handling of petroleum and its products and thereby prevent pollution of water courses and the atmosphere. The said regulation however, did not make direct and explicit provisions on the prevention (and impacted sites remediation) of pollution of water courses and the atmosphere.⁷⁴ Furthermore, with regard to environmental protection in relation to oil pipelines, the Minister of Petroleum may by regulation prescribe (inter alia) – measures in respect of public safety, the avoidance of interference with works of public utility in, over and under any land and the prevention of pollution of any land or water; such matters relating to the construction, maintenance and operation of oil pipelines as the minister considers it necessary or appropriate to prescribe.⁷⁵

Oil in Navigable Waters (ONWA) Act 2004

This statute as aforementioned domesticated in Nigeria, the International Convention for the Prevention of Pollution of the Sea by Oil of 1954 as amended in 1962 and made provisions for such prevention in the navigable waters of Nigeria;⁷⁶ and is therefore a principal statute of Environmental protection in Nigeria. However, the Act is also to be operated or regulated and enforced by the Minister and Ministry of Transport who may appoint inspectors to report to him and for the purposes of enforcement of the Act.⁷⁷ In a nutshell, the Act provides inter alia as follows:

- i. It prohibits the discharge of crude oil, fuel, lubricating oil, heavy diesel oil and any mixture containing not less than 100 parts of oil, etc. into prohibited seas areas by Nigerian ships otherwise the owner or master of the ship shall be guilty of an offence subject to the provisions of the Act.⁷⁸
- ii. It designates prohibited areas of the sea and empowers the Minister of Transport to designate by Order other areas, outside the prohibited areas of the sea and Nigerian territorial waters, as prohibited areas for the purpose

⁷⁴ However, ONWA which domesticated International Convention for the Prevention of Pollution of Sea by Oil 1954 to 1962 made detailed, provisions for the prevention of pollution of water courses and the sea.

⁷⁵ Section 33(c) & (d), Oil Pipelines Act, CAP 07 LFN, 2004; see also Oil and Pipelines Regulations made pursuant thereto which provides for the design; construction; inspection inclusive of environmental protection guidelines, etc for oil and gas pipelines.

⁷⁶ Oil in Navigable Waters Act (ONWA) 2004

⁷⁷ *ibid.* section 55(3) and 11, however, the Act empowers every surveyor of ships to be taken as having been so appointed by the Minister. However, NOSDRA Act under Section 6(1) empowers NOSDRA to be responsible for surveillance and ensure compliance with all existing environmental legislation and detection of oil spills in the petroleum sector.

⁷⁸ Section 1, Oil and Navigable Water Act, CAP 06 LFN, 2004.

of protecting the coast and territorial waters of Nigeria from pollution by oil; and to vary or exclude any prohibited area as such.⁷⁹

- iii. The Oil in Navigable Waters Act makes the owner or master of the vessel, the occupier of a place on land or the person in charge of the apparatus used for transferring oil from or to a vessel guilty of an offence, if any oil or mixture containing oil is discharged into the whole of the sea within the seaward limits of the territorial waters of Nigeria, and all other waters (including in land waters) which are within those limits and are navigable by sea going ships.⁸⁰

However, Section 3 (3) provides *inter alia* the singular exception with regard to the discharge of dangerous petroleum only, wherein it authorizes "the harbour authority to appoint a place within its jurisdiction where the ballast water of vessels in which a cargo of dangerous petroleum has been carried may be discharged into the waters of the harbour, at such times, and subject to such conditions as the authority may determine..."⁸¹

Accordingly, by this exception, the ballast water of vessels in which dangerous petroleum had been carried (which might have a mixture of oil) can be discharged legally into the waters of the harbour under this subsection. It is apparent that ONWA is concerned with territorial waters of Nigeria. Considering the nature of oil pollution, a question that may arise is the near sea outside the territorial waters of Nigeria or those oil terminals outside the prohibited sea areas and designated prohibited sea areas; how would such navigable waters be protected from oil pollution? These questions were answered adequately by the Oil Terminal Dues Act; which at Section 6 thereto makes the provisions of section 3 of the ONWA applicable in any area within which any oil terminal is situated (even) if it is situated outside the limits of the territorial waters of Nigeria.⁸² Therefore, any discharge, escape, etc from a pipeline, tank, apparatus or vessel or as a result of any operation for evacuating oil, etc from any such oil terminal is an offence and the owner thereto is guilty of an offence under section 3 of the ONWA and is punishable as provided in section 6 thereto. Thus, ONWA is directly applicable to prohibited areas (within Nigerian territorial waters) and designated prohibited areas (outside Nigerian territorial waters); and is indirectly applicable through the Oil Terminal Dues Act⁸³ in any area within which any "Nigerian" oil terminal is situated even if outside the territorial waters of Nigeria. Thus, the whole field of Navigable waters of Nigeria is covered between the two laws; the question however lies in how effective and efficient is the monitoring and enforcement with regard to these laws vis-à-vis oil pollution incidents?

⁷⁹ *ibid*; Section 2(1) & (2), (3), (4)

⁸⁰ Section 3, *ibid*; it appears Section 1 applies to only Nigerian ships whereas Section 3 applies to all ships plying Nigeria waters.

⁸¹ *ibid*

⁸² *ibid*

⁸³ *ibid*

Petroleum Industry Bill (PIB) 2012

The law seems promising as it consolidates all other old legislations. The bill is comprehensive as it covers the entire regulation of the oil and gas industry in Nigeria. The bill proposed for the establishment of the Upstream Petroleum Inspectorate and Downstream Petroleum Regulatory Agency with a wide array of duties and power. The inspectorate according to *Section 16* of the bill empowers the inspectorate to:

"power to modify, extend, renew, suspend and revoke any licence or permit issued by it"

Section 46 also empowers the downstream petroleum agency same. The writers' observation of the bill is that it gives the inspectorate and the agency the mandate to manage and control pollution (Upstream and Downstream) in Nigeria alongside other duties. It represents the government's general interest in the industry, in collaboration with other relevant government agencies. The inspectorate is 'one window' in anything that has to do with the petroleum industry when passed into law. For example, the bill provides in *Section 276* with regards to gas flaring that:

"Natural gas shall not be flared or vented after a date ('the flare-out date') to be prescribed by the Minister in regulations made pursuant to this Part, in any oil and gas production operation, block or field, onshore or offshore, or gas facility such as, processing or treatment plant, with the exception of permits granted under subsection (1) of section 277 of this Act.

(1) The oil and gas operators with flared gas resources shall within six months of the commencement of this Act categorize all of their flared gas resources (daily flare quantity, reserve, location, composition) and submit this data along with gas utilization plans to the Inspectorate for the gas they intend to utilize before the flare out date as stated in section 275 of this Act.

(2) The Inspectorate shall approve the categorization within sixty days of receipt of the plan and shall post all approved plans, data of planned natural gas resource and unplanned natural gas resources on the Inspectorate's website for public consumption."

Section 277 goes on to provide that:

(1) A person shall not direct, permit or otherwise aid, empower or authorize any company engaged in petroleum operations to flare or vent gas with the exception of such permits granted under this section.

(2) The Minister may grant a permit of not more than one hundred days, or such longer period as may be approved by the Minister, to flare or vent gas in cases of start-up, equipment failure, shut down, safety flaring or due to inability of Gas customer to off-take-Gas.

(3) Any licensee or lessee who flares or vents gas without the permission of the Minister in the circumstances mentioned in subsection (2) (b) of this section shall be liable to pay a fine which shall not be less than the value of the gas flared."

On May 25, 2017, the Nigerian Senate passed the Petroleum Industry Governance Bill ("the Bill"). The passage of the Bill followed the submission of a report by the National Assembly Joint Committee on Petroleum (Upstream and Downstream) and Gas. Attempts to pass the Bill by the 7th Senate were met with a lot of controversies and a rejection of certain clauses in the bill, forcing the then Senate to drop the Bill at the point of passage. The Bill is only a segment of the original Petroleum Industry Bill (PIB) that was sent to the National Assembly over 12 years ago. With several years of deliberation, the previous assemblies were unable to pass the holistic PIB in its original form. However, the determination of the current regime led to a split of the PIB into smaller parts for ease of legislative review; the result of which is the passage of the Bill.

The above are the statutory provisions on the environmental regulation of natural resources exploitation namely, oil and gas in Nigeria. It is arguable that Nigeria wants to effectively regulate its petroleum sector and bring it in line with international standards by the adoption of all these statutes. But the desire to ensure that the various legislations are actually enforced has been a difficult task. More so, the environmental provisions are contained in fragmented and uncoordinated statutes with overlapping mandates that fall short of the goal of sound environmental protection.⁸⁴ The earlier statutes that dealt specifically with the sector were promulgated when environmental regulation had not taken root even in the developed countries. Perhaps, it would have been a little too much

⁸⁴ George Akpan, *The failure of Environmental Governance and implications for foreign investors and the host state; A study of the Niger Delta Region of Nigeria* www.ogel.com (2005) accessed on the 18 October 2017

to have expected Nigeria at that stage of its development, and given the state of global environmental consciousness then, to do better than it did. However, nothing prevents the country from adopting sophisticated environmental legislation adequate to protect the environment and the host populations, especially in the face of the environmental problems that resources exploitation have given rise to.⁸⁵ The legislation that were adopted in the 1960s are still largely in operation and the latter ones like the Gas Re-Injection Act has not done anything to advance the cause of environmental protection. Other latter legislation like the FEPA and EIA Acts that have the potential of remedying the situation are applicable to all sectors and are not specific to the petroleum sector, and thus, suffer from the inadequacy that they may not be strictly enforced in the sector.⁸⁶

The Institutional Framework and Structure of Nigerian Oil and gas Industry

In addition to the environmental laws discussed above, the Nigerian government also created legal institutions to enforce environmental laws in Nigeria. These institutions are formed to supervise, enforce implement and prosecute defaulters. The institutional organs under the second generation of environmental policies and strategies development in Nigeria included the defunct Federal Environmental Protection Agency (FEPA) which became subsumed into the Federal Ministry of Environment with the subsequent creation of the latter in 1999 by the civilian administration of retired General Olusegun Obasanjo.⁸⁷ By the creation of the Federal Ministry of Environment it could be said that the Nigerian government had accorded environmental matters as it relates to the oil and gas sector and all the rest sectors indeed, the highest institutional status and priority. This meant that issues of environmental legislations, policies and strategies were considered at the highest administrative organ of the country, which is the Federal Executive Council. This a highly welcomed development for enhancing environmental policy and strategy issues especially in the oil and gas industry.⁸⁸

However, over the years it was realized that the Federal Ministry of Environment was bugged down with a lot of bureaucratic bottlenecks that made effective implementation and enforcement of environmental legislations cumbersome and highly inefficient. Consequently, the National Oil Spill Detection and Response Agency (NOSDRA) and the National Environmental Standards Regulatory and Enforcement Agencies were created in

⁸⁵ *ibid*

⁸⁶ *ibid*

⁸⁷ Omorogbe, Yinka. "The legal framework for the production of petroleum in Nigeria." *Journal of Energy & Natural Resources Law* 5.4 (1987): 273-291 Federal Environmental Protection Agency (FEPA) Draft Revised National Policy on the Environment under the auspices of UNDP supported Environment and Natural Resources Management Programme for Nigeria;

⁸⁸ *ibid*

2006 and 2007 through Acts No. 15 and 12 respectively.⁸⁹ Whereas NOSDRA was to focus exclusively on regulatory functions of the oil and gas sector as regards spill detection/response and other environmental pollution arising from oil production, NESREA focus was on ensuring standards and enforcement of relevant environmental laws in all facets of Nigeria socio-economic life.⁹⁰ The creation of these agencies under the supervision of the Federal Ministry of Environment has helped tremendously in ensuring that the content of environmental policies and strategies in Nigeria is not only enriched, but also that its implementation has become greatly enhanced over the recent past years. However, these agencies are generally poorly staffed, ill equipped and grossly underfunded.⁹¹ Consequently, their activities are far from actually impacting a significant bite on the challenges of significantly transforming the environmental policies and strategies of the nation from being merely theoretical to practicable concepts.

Nigeria Maritime Administration and Safety Academy (NIMASA) also has as one of its core mandate the protection of the Nigerian Marine Environment.

The Ecological Fund Office (EFO) is yet another institution that was created in year 2003, apparently to constitute a viable source of funding the numerous ecological and environmental problems facing the nation.⁹² The precise role of the EFO as it relates to environmental policies and strategies of the oil and gas sector been made lucidly manifest in her vision and mission statements;

"Ensuring the effective coordination and monitoring of the implementation of Government policies and programmes as it affects Ecological Fund and projects, in all spheres of our national life for the development of the country and the benefit of our citizenry"— Vision statement.⁹³

"To serve as the strategic vehicle for effective communication, co-ordination and monitoring, as it affects Ecological Fund and projects, in compliance with government policies and programmes as they affect public

⁸⁹ The National Environmental Standard and Regulations Enforcement Agency
<<http://www.nesrea.org/functions.php>> accessed on the 19th October 2017

⁹⁰ *ibid*

⁹¹ *ibid*

⁹² The National Oil Spill Contingency Plan: National Oil Spill Detection Agency Bill 2000, at
<<http://www.nassng.org/bills>> accessed on the 17th October 2017

⁹³ *ibid*

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and private sectors of the economy in the best tradition of political and public service loyalty”— Mission statement.⁹⁴

Even though the polluter pays principle largely operates in the oil and gas industry as an environmental policy/strategy, it is not absolutely practicable. Major reason for this flaw is that the Nigerian oil gas sector is usually a joint venture between the Nigerian government and the core investing corporate entity.⁹⁵ It is therefore often very difficult for the government interest, mostly represented by the NNPC to channel parts of her own share of the oil revenue in ensuring compliance to environmental standards and guidelines of the industry. In this regard, of paramount importance is the issue of exclusively Nigerian government owned and operated facilities such as Petroleum refineries, Tank farms, Oil bunkering jetties and Pipelines that has constituted a significant source of oil pollution. Although the EFO is currently funding some remediation projects in NNPC refineries, the process of accessing and applying the fund is rather rigorous and cumbersome.⁹⁶

Another set of institutions involved in formulating and implementing environmental strategies and policies for the oil and gas industry include the various state environmental protection agencies/state ministries of environment, especially for the oil producing states within the country. This development has often times resulted in conflict of interest and unnecessary duplication of policies and strategies for the industry.⁹⁷ For example, the rivers state government launched its own policy document on the environment in the year 2006, called the “Rivers Green Book”. According to a consultative and policy making forum called the National Council on Environment was created to promote cooperation, coordination and harmonization of policies and implementation of enforcement strategies between the Federal and States EPAs as well as among the State EPA’s themselves. About 60% of the States now have autonomous EPAs while the remaining operates environment units either under the Ministry of Works and Housing or Ministry of Health. The issue of conflicts still persists.⁹⁸

The last category of institutions driving environmental policies and strategies for the oil and gas industry are the NGO’s and the professional bodies. Even though this category of institution is contributing meaningfully to the process, their roles are barely recognized.

⁹⁴ Federal Republic of Nigeria, Environmental Guidelines and Standards for the Petroleum Industries in Nigeria (EGASPIN) 1991. Issued by the Department of Petroleum Resources, Revised Edition 2002, Official Gazette Vol 79 No. 73, 1-361

⁹⁵ Echefu, Nerry, and E. Akpofure. "Environmental impact assessment in Nigeria: regulatory background and procedural framework." *EIA Training Resource Manual* (2002): 63-74

⁹⁶ *ibid*

⁹⁷ Adegoroye, Adegoke "The Challenges of Environmental Enforcement in Africa: The Nigerian Experience." *Proceedings of the Third International Conference on Environmental Enforcement. Oaxaca, México*. Vol. 1. (1994) 43-54

⁹⁸ *ibid*

Especially, the professional body involvement in policy and strategy development for the oil and gas sector is currently not streamlined.

Finally, the Department of Petroleum Resources (DPR) which has always been there from the inception of its creation till date was the main institutional agency that formulated and implemented environmental policies and strategies within the first generation of environmental policies and strategies development for the oil and gas industry in Nigeria. The DPR as a foremost regulator of the oil and gas industry in Nigeria is still very much relevant in discharging its statutorily assigned role of ensuring adequate compliance by operators to environmental guide lines and standards. This department created by NNPC which is under the ministry of petroleum, and was charged with responsibility, essentially to deal with environmental pollution emanating from petroleum and oil production. It might be oil pollution on land, water or air, gas flaring or other social atrocities from oil production. Some laws used by this department for enforcement and prosecution of the offenders are: the Mineral Oils Regulation of 1963; the Petroleum Control Decree of 1967; the Oil Navigable Waters Decree (No. 34) of 1968; the Petroleum Decree (No.51) of 1969; the petroleum Act 1994; Environmental Impact Assessment (EIA) of 1992; and also Revised Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASIN) of 2002. DPR ensures the compliance of oil and gas companies with the industry and environmental regulations established during agreement processes.⁹⁹ It monitors and enforces safety and environmental regulations and ensuring that those operations conform to national and international industry practices and standards, it also ensures the environmental performance and compliance of oil companies, and prosecutes when necessary, the offenders of the stipulated regulations and guidelines in the industry.¹⁰⁰

Institutional Re-structuring of the Oil and Gas Industry (New Petroleum Industry Bill)

The newly passed Bill seeks to open up the sector to more business opportunities as well as ensure transparency and accountability. The Bill would hopefully seek to restructure the Nigeria National Petroleum Corporation and the Department for Petroleum Resources. It will also create new agencies with more responsibilities as well as establish an institutional and regulatory framework for the Nigerian Petroleum Industry.¹⁰¹ The Bill also seeks to remove the overlap of functions among the regulatory, policy and commercial institutions. Furthermore, the Bill seeks to merge Petroleum Inspectorate, Department of Petroleum

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⁹⁹ Department of Petroleum Resources <http://dprnigeria.org.ng/about-dpr/functions-of-dpr/> accessed on the 19th October 2017

¹⁰⁰ *ibid*

¹⁰¹ A Critical Review of the Petroleum Industry Governance Bill <https://guardian.ng/features/tax-discourse/a-critical-review-of-the-petroleum-industry-governance-bill/> accessed 19th October 2017

Resources, Petroleum Products Pricing Regulatory Agency and the Petroleum Equalization Fund (Management Board) as a body to be known as the Nigerian Petroleum Regulatory Commission (NPRC).¹⁰² The Bill seeks to create two commercial entities - the Nigerian Petroleum Assets Management Company (NPAMC) and the National Petroleum Company (NPC) – which shall be the direct outcome from the restructuring of the Nigerian National Petroleum Corporation (NNPC). The Nigerian Petroleum Assets Management Company (NPAMC) shall hold and manage certain petroleum assets on behalf of the government and enter into new exploration and production agreements on behalf of the government, whilst the National Petroleum Company (NPC) shall run as a full commercial entity and operate the assets transferred to it pursuant to the restructuring of the Nigerian National Petroleum Corporation (NNPC).¹⁰³ The shares in the commercial entities shall be held by a body to be known as Ministry of Petroleum. The Bill requires NNPC to transfer employees, assets and liabilities to the NPAMC and NPC within 6 months of incorporation. A lot still remains to be done towards realizing a robust legal framework for the Nigerian Petroleum industry.¹⁰⁴

Currently, there are several other similar Bills awaiting passage by the National Assembly. This includes the Petroleum Fiscal Framework Bill, the Petroleum Industry Downstream Administration Bill, the Petroleum Industry Revenue Management Framework Bill and the Petroleum Host Community Bill. Stakeholders in the industry are anxiously looking forward to the passage of the entire Bill, so as to reap the full benefits thereof. It can be seen that the overall intention of the legislature in drafting this Bill is to ensure that the petroleum industry is run in an efficient and transparent manner for the benefit of the country. It is hoped that this noble intention is ultimately actualised. The House of Representatives is also implored to toe the path already charted by the Senate in this regard, by passing the Bill in its entirety.

CONCLUSION AND RECOMMENDATION

This paper having examined the legal framework of the oil and gas industry, highlighting the roles of governmental agencies/ institution in the industry. It is clear that both regulatory agencies in environmental protection in Nigeria are hampered by both institutionally and politically induced ills. Until the laws establishing the agencies are amended or repealed to reflect the prevailing people-centred sentiments of the indigenes of the Niger-Delta, the agencies will continue to be barking without the requisite bite to

¹⁰² *ibid*

¹⁰³ An Analysis of The Petroleum Industry Governance Bill 2016 – Establishment of The Nigeria Petroleum Regulatory Commission <http://www.petroleumindustrybill.com/2016/04/21/an-analysis-of-the-petroleum-industry-governance-bill-2016-establishment-of-the-nigeria-petroleum-regulatory-commission/#.WgqenGhSzIU> accessed on the 18th October 2017

¹⁰⁴ *ibid*

enforce fines or authority on multi-national companies. It all stands to show that despite the various legislative framework and over-lapping duties of regulatory agencies which causes conflict between the institutions, enforcement of environmental legislation is a challenge. One can conclude with the rest of the regulatory framework governing the protection of the environment in Nigeria, that little enforcement of the requirements to carry out Environmental Impact Assessments, either by the Federal Environmental Protection Agency (FEPA) or the Department of Petroleum Resources (DPR) regulatory arm, and the Petroleum Inspectorate, that virtually, no quality control over assessments are carried out.

Additionally, there is inadequate funding of environmental enforcement bodies, lack of adequate trained staff and expertise to carry out effective enforcement of existing environmental provisions. This has forced regulatory bodies to rely on oil companies to provide facilities to perform their basic functions. The result, therefore, is that despite the claim that Nigeria's specific environmental standards in petroleum industry is comparative to those of the advanced countries, environmental problems arising from oil exploitation have continued to beset the host communities. It is one thing to enact a good legislation; it is another thing to implement it effectively. Moreover, the solution to the problem of oil spills and gas flaring in Nigeria requires more than a piece of legislation. The following is hereby recommended;

1. Nigeria must set its face firmly against gas flaring and oil spillage. Earlier discussed, the history of the regulatory framework operating in Nigeria, the government has so far shown a half-hearted dedication in enforcing laws that prohibit oil spillage and gas flaring. This has been blamed on the fear that enforcing strict environmental legislation will discourage multi-national companies from investing in Nigeria and thus reduce revenue.¹⁰⁵ But the experience in other developed oil producing countries show that providing appropriate laws and enforcing them is to the advantage of both the host country and the multi-national companies. Nigeria must exhibit the political will to enforce these laws.
2. Environmental pollution during exploration of oil and gas should be a strict liability offence in Nigeria. This will make it easier for victims of oil pollution to recover damages and compel clean-up and remedy by the polluter. On the other hand, it will make the oil companies more careful, responsible and environmental conscious and cautious. Accordingly, the multitude of defences,

¹⁰⁵ Malumfashi, Garba I. "Phase-out of gas flaring in Nigeria by 2008: The prospects of a multi-win project." *Centre for Energy Petroleum and Mineral Law and Policy (CEPMLP), University of Dundee, Scotland, United kingdom* (2007).²

<[http://www.nccrtrade.org/images/stories/publications/IPG/Nig_Gas_Flaring_Petroleum%20Training%20journal%\(20PTJ\)%20vol&5b1%5D%204%20No.%202%20july%202007.pdf](http://www.nccrtrade.org/images/stories/publications/IPG/Nig_Gas_Flaring_Petroleum%20Training%20journal%(20PTJ)%20vol&5b1%5D%204%20No.%202%20july%202007.pdf)>accessed on the 25th October 2017

exceptions in the statutes should be reviewed and removed so as to make the polluter responsible and liable for all its actions, inactions and negligence.

3. Furthermore, the Courts should be proactive on matters bothering on environmental protection and pollution control. Matters filed before the courts by any Nigerian including conservationists, and environmental protection bodies and civil society organizations to sue oil companies and even regulatory government agencies on environmental protection and pollution matters should be given top priority on the cause list. This is because one man's environment is everybody's' environment and what affects one's environment affects everybody's' environment.
4. Again, Nigeria must think of expanding its associated gas market by increasing domestic utilization of associated gas and taking advantage of the increase in the global demand for energy. Though, the development of associated gas infrastructure or re- injection of associated gas may prove very expensive in the current term, but the benefits far outweigh the costs. Domestically, Nigeria must utilize gas to meet local cooking, water, heating and the ever-re-occurring power outage. More so, non-regulatory measures such as; the opening of markets for gas; and allowing private participation in the development of gas infrastructure; providing financial incentives and close collaboration between operators and regulators in developing policies for gas utilization played a key role in the curbing of gas flaring in the United Kingdom.¹⁰⁶ Nigeria can also adopt such measures.
5. More so, every operator should carry out preventive surveillance such as weekly aerial patrols over its main pipe lines. They should carry actual on-site inspections out in known areas of instability, whenever possible. Cooperation among the government, operators and the inhabitants can reduce or prevent the problems of sabotage of oil producing communities. The government should ensure economic development in the host communities. This may take the form of essential social services, such as potable water, electricity, schools and hospitals. The oil operators should also employ skilled and unskilled workers from these areas and make prompt payment of compensation to affected people. Oil companies should provide the public, especially in oil producing areas with proper training materials, seminars/workshops, public enlightenment programs and other expert services for abating and controlling oil spills and other environmental problems associated with the industry, these in turn would help to ensure sustainable development in the production of oil and gas.
6. For sustainable environment and development, Nigeria should equally join the race for renewable energy because apart from the hazards attributed to oil and

¹⁰⁶ *ibid*

gas, the end of oil and gas age is fast approaching and Nigeria should not be left behind. Hopefully the new Petroleum Industry Bill (PIB) would be addressing this age long lingering environmental issues.

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