2016

Regulation of Environmental Pollution in the Nigerian Oil and Gas Industry: The Need for an Alternative Approach

Ugbaja, Francesca

UNIVERSITY OF CALGARY

Regulation of Environmental Pollution in the Nigerian Oil and Gas Industry: The Need for an Alternative Approach

by

Francesca Onyeka Ugbaja

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTER OF LAWS

FACULTY OF LAW

CALGARY, ALBERTA

JULY, 2016

Abstract

Oil pollution from spillages unquestionably threatens the existence of flora and fauna and their habitats. This phenomenon has negatively impacted the culture and political structure of many industrial groups and has been a source of health hazard for humans. The result of this malaise is that territorial waters and the lands are rendered unfit for marine, plant and human lives. In response to this vice, the Nigerian government has enacted legislations aimed at controlling oil spills and curbing environmental pollution. However, the Nigerian legal regime has proved largely inadequate to tackle the menace of oil spills and resultant environmental destruction.

This thesis therefore examines in comparative terms the Nigerian and Alberta legal regimes on oil spills resulting in environmental pollution. The intention in this thesis is to critique the laws in Nigeria as inadequate in combating oil spills and to advocate for effective enforcement of environmental laws.

Acknowledgements

I wish to express my sincere gratitude to those who, in some way, have been of assistance to me in the course of writing this thesis. First, my deep appreciation goes to my thesis supervisor, Professor Alastair Lucas, for his guidance, suggestions and encouragement both during the period of writing this thesis and throughout my journey as a graduate student. He has exhibited immense kind-heartedness right from the first day I met him, caring about my academics and my personal wellbeing. If given the opportunity, I would work under him again.

Also deserving of my enduring gratitude are Professors Jennifer Koshan and Jonnette Watson Hamilton, who provided me with useful comments which helped shaped my thesis. My appreciation also goes to Nadine Hoffman for her help all through the period of writing this thesis.

I owe special thanks to the Faculty of Graduate Studies and the Honourable N.D. McDermid Graduate Scholarships for funding my research project, without which this thesis would not have been possible.

To my husband, Charles, for his immense love, prayers and support throughout my graduate program and my little Charlotte who is more than a daughter but a light that shines through my darkest days; thank you! To my family and friends for their love, prayers and support during this challenging exercise, I say thank you.

To the supernatural being in my life, God Almighty, whose grace has been my support throughout this challenging journey of my life. Thank you for giving me the grace to complete this research project!

Table of Contents

Chapter One: Introduction

1.1 The Research Problem

Nigeria has large deposits of oil and natural gas, and is ranked one of the world's largest producers of oil.[1] This enormous oil deposit and its exploitation has brought about a significant improvement in the nation's economy but with enormous environmental consequences.[2] Many have associated the connotation, "black gold"[3] with the exploration, discovery and exploitation of crude oil in the oil-rich wetlands of Nigeria. This is because Nigeria has experienced the dual effects of oil discovery - that is, the country has experienced the benefits and simultaneously suffered greatly from the adverse externalities associated with this resource. According to Aghalino, while the benefits of oil discovery in Nigeria cannot be questioned, it has been argued that the price for the development propelled by oil discovery is the environmental pollution and degradation experienced by the oil producing regions of the country.[4] With over 50 years of oil exploitation, the Niger-Delta has mainly encountered the negative effects of oil and gas exploitation. This region of Nigeria has been and is still being plagued with the continuing effects of oil exploitation. Aside from the socio-economic impact on the inhabitants of this region in the form of loss of revenue realizable from the sale of agricultural products and marine resources, the environmental impact is monumental. The inhabitants of this region, who are rural in nature, depend largely on the untreated water from the streams and lakes in their communities

---

[1] See report on largest oil producers around the world online: <http://www.businessinsider.com/countries-with-most-energy-reserves-2014-2?op=1>.

[2] Onah R Ogri, "A review of the Nigerian Petroleum Industry and the Associated Environmental Problems" (2001) The Environmentalist 10 at 10; Ighodalo Akhakpe, "Oil-Environmental Degradation and Human Security in the Niger-Delta Region of Nigeria: Challenges and Possibilities", (November 2012) 8 European Scientific Journal 77 at 81 online: <www.eujournal.org/index.php/esj/article/view/570/639>.

[3] See S O Aghalino & B Eyinla, "Oil Exploitation and Marine Pollution: Evidence from the Niger Delta, Nigeria" (2009) Journal of Human Ecology 177 at 177.

[4] S O Aghalino, "Oil Exploration and its Impact on the Nigerian Environment" (2001) 7 Kiabara Journal of Humanities 103 at 103.

for sustenance. Natural fresh water sources in this region have consistently and recklessly been contaminated by various oil exploration activities thus resulting in severe health challenges among the people, and in some cases, death.[5] An attempt to estimate the oil spill incidents that took place in the Nigerian Niger-Delta between 1976 and 2005 showed that approximately 3,121.909.80 barrels of oil was spilled into the environment in about 9,107 oil spill incidents.[6]

This continued environmental degradation has thus been a source of serious concern for stakeholders in the Nigerian environment, as legislation either prohibiting or criminalizing harmful economic activities of multinational oil companies (MNOCs) have failed to either correct the attitudes and practices which promote environmentally harmful behaviours or enforce appropriate sanctions for these conducts.[7] According to an environmental analyst, the range of biological impacts that can result from an oil spill include, "physical smothering effects on flora and fauna; physical and chemical alteration of natural habitat; lethal or sub-lethal toxic effects on flora and fauna; and changes in biological communities resulting from oil effects on key organisms."[8] For instance, atmospheric pollution poses a three-pronged threat, comprising a threat to human health, a threat to ecosystems and a threat of severe climatic disruption resulting from global warming arising from excessive levels of greenhouse gases.[9] Nigeria, which is on

---

[5] Francis P Udoudoh, "Oil Spillage and Management Problems in the Niger Delta" (2011) 3 Journal of Environmental Management & Safety 141, online: <www.cepajournal.com>.
[6] O A Emunedo, G O Anoliefo & C O Emunedo, "Oil Pollution and Water Quality in the Niger Delta: Implications for the Sustainability of the Mangrove Ecosystem" (2014) Global Journal of Human Social Science 9 at 9.
[7] Akhakpe *supra* note 2 at 82.
[8] Dicks B, "The Environmental Impact of Marine Oil Spill – Effects, Recovery and Compensation" cited in Olarenwaju Fagbohun, *The Law of Oil Pollution and Environmental Restoration* (Lagos: Odade Publishers, 2010) 1 at 169 (Fagbohun).
[9] See Fagbohun *supra* note 8 at 175.

record the country with the highest level of gas flaring in the world,[10] is not ignorant of the adverse effects of oil and gas exploration and exploitation on the environment and human health. It was for this purpose, therefore, that it has enacted several laws[11] that proscribe environmentally harmful practices such as gas flaring. These laws, which were specifically enacted to abolish these harmful practices, and many others enacted after them, are still operative but may be described as little worth more than the paper materials on which they are written, as the problem of environmental degradation resulting from gas flaring and oil spills in the Nigerian oil and gas industry remains ever present.

1.2 Justification for Research

Studies have shown that more than seventy-five percent of Nigeria's oil reserve is in the Niger-Delta region. The area is known to house one of the largest oil reserves in Africa and is regarded as one of the largest in the world.[12] It is believed by researchers that "the Niger-Delta region contains one of the highest concentrations of biodiversity on the planet, and supports the abundant flora and fauna, arable terrain that sustains a wide variety of crops, economic trees and more species of fresh water fish than any other ecosystem in West Africa."[13] However, in the midst of this enormous wealth of resources in this region, the environment and its inhabitants continue to suffer immensely from the impact of oil exploration and production activities.

---

[10] According to Fagbohun, (citing a report at <http://www.remembersarowiwa/pdfsgasflaringnigeria.pdf> accessed October 3, 2005) as at June, 20, 2005, the estimate of annual financial loss to Nigeria from gas flaring was put at US$2.5billion.

[11] Examples of such laws are: *Petroleum Act*, 1969 Cap P10 Laws of the Federation of Nigeria ("LFN") 2004; *Petroleum (Drilling and Production) Regulations,* 1969 and the *Associated gas Reinjection Act* 1979 Cap A25 LFN 2004.

[12] See Worldwide Look at Reserves and Production (January 2015) Oil & Gas Journal cited in Country Analysis Brief: Nigeria 1 at 1, 4, online: <http://www.eia.gov/beta/international/analysis_includes/countries_long/Nigeria/nigeria.pdf>.

[13] *Ibid*. See also World Wildlife Fund 2006 "Fishing on the Niger Delta" online: <http://www.panda.org/news_facts/multimedia/video/index.cfm?uNewsID=61121>.

In view of the enormous environmental challenges posed by oil-related activities in the Niger Delta, it is imperative that new ways of environmental law enforcement are sought to minimize, and if possible, eliminate the continued environmental degradation currently in place in this region. This concern for environmental degradation has now become high-pitched and has attracted the attention of environmentalists and other experts who look at the region within the larger context of globalization.[14] Today, the world recognizes the importance of environmental sustainability to the development of nations. In fact, one of the cardinal objectives of the United Nations Millennium Development Goal (MDG) is to ensure environmental sustainability, which is only achievable when there is a reduction in environmental degradation.[15]

Environmental sustainability issues cannot be overemphasized in the Niger-Delta, as this is essential for the wellbeing and development of the area and its people. The Niger-Delta region, which is dominated by rural communities and largely reliant on subsistence endeavours, requires the efficacy of environmental laws to either minimize or extinguish harmful environmental practices. For instance, section 20 of the Constitution of the Federal republic of Nigeria, 1999 enacts the responsibility of the Nigerian state to protect and improve the environment in Nigeria. The section provides that "the State shall protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria." Notwithstanding this and similar provisions in various environmental legislation, the Nigerian environment continues to be a victim of reckless economic practices that are harmful to the ecosystem.

According to a United Nations Report on the state of Ogoniland (a region of the Niger Delta ravaged by drilling activities executed by Royal Dutch Shell) and a possible clean up

[14] P B Eregha & I R Irughe, "Oil Induced Environmental Degradation in the Nigeria's Niger-Delta: The Multiplier Effects" (2009) 11:4 Journal of Sustainable Development in Africa 160 at 161.
[15] See MDG Factsheet, Goal 7 online: <http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom>.

exercise in the region, the restoration of the Nigerian Niger Delta "could prove to be the world's most wide-ranging and long-term oil clean-up exercise ever, if contaminated drinking water, land, creeks and other ecosystems are to be brought back to full health."[16] This report carried out by the United Nations Environment Programme (UNEP) upon the request of the Federal Government of Nigeria in 2011 was indeed very revealing. Spanning a 14-month period, the assessment revealed that greater and deeper pollution than previously contemplated existed in the Niger Delta region. [17]

It is apposite to mention that although this report primarily focused on an area known as Ogoniland, within the Niger Delta region, the findings in this report can be described as a true reflection of the current state of the environment in the larger part of the Niger Delta region which is dotted by oil wells and scared by exploration and mining activities. The current situation, as unearthed in this report, underscores the need for urgent intervention by government and policy makers if the ecosystem within this region is to be spared from continued degradation. In the meantime, the principal question that readily comes to mind while reviewing the UNEP report, and similar ones that have been issued by other bodies,[18] is the place of the various environmental legislation lying in Nigeria's statute books. In the face of the enormous resources deployed into law-making and enforcement, why is there still environmental pollution of historical proportion ongoing in the Niger Delta region of Nigeria? The answer seems to be that although the laws exist and enormous resources are channelled into enforcement, the enforcement mechanisms are square pegs in round holes and therefore ineffective.

---

[16] UNEP Report on Environmental Assessment of Ogoniland online: http://postconflict.unep.ch/publications/OEA.
[17] *Ibid* at 6
[18] Also see generally the Niger Delta Human Development Report by United Nations Development Programme (UNDP) 2006 1 at 75-79, online: <http://hdr.undp.org/sites/default/files/nigeria_hdr_report.pdf>.

It is pertinent to note that unlike Canada, and by extension Alberta, Nigeria is a developing nation that is heavily reliant on the continued exploration and exploitation of oil by international oil companies (IOCs) and as such enacting laws that may stifle the participation of these IOCs in the oil and gas industry in Nigeria is generally viewed as an unwise political and economic decision.[19] In the words of Ogri:

> Because industrial development increases the national per capita income and improves the standard of living, developing nations tend to be preoccupied with industrialization at the expense of environmental quality. The desire of industrialists to replace imports and thus conserve foreign exchange, weighs more with the government and planners than any warnings about the ecosystem, for the economic history of the affluent nations seems to support the concept of 'no other way to modernise and improve standards of living than massive industrialization". Faced with the choice between increasing environmental degradation or a non-growth policy leading to indigence and dependence, planners of developing nations opt for the former.[20]

Faced with the laxity and staggering inadequacy of the current regulatory enforcement regime to effectively curb the attendant issues of environmental pollution related to oil exploration and production in Nigeria, it becomes expedient therefore that alternative approaches to environmental enforcement be explored. It is not for want of extensive research on the subject of environmental law enforcement that this project is being undertaken, but the fact that measures and recommendations prescribed by existing works[21] have proven to be inadequate in causing a paradigm shift in enforcement and compliance and therefore, there is a need to look elsewhere for some lessons and recommendations that may become beneficial to the Nigerian environmental law enforcement regime in the long run.

---

[19] Ogri *supra* note 2 at 10.
[20] *Ibid*.
[21] See, for example, Akhakpe, *supra* note 2; Eregha & Irughe, *supra* note 14 at 160 - 175.

This thesis therefore seeks to explore possible enforcement alternatives to the existing framework in Nigeria, drawing from the current environmental regulatory regime in the Alberta oil and gas industry. The intention is to undertake a comparative analysis of the environmental regulatory enforcement regimes of both comparative jurisdictions, critically examine the strengths and weaknesses in both systems and prescribe lessons that the Nigerian regulators may learn from Alberta.

1.3 Reasons for Choice of Alberta as a Comparative Jurisdiction

This work is a comparative legal research on Alberta and Nigerian regulatory and enforcement regimes as tools for the control of environmental pollution related to oil and gas exploration and development. Alberta is the Canadian jurisdiction of choice for this comparative legal research because it shares certain features with Nigeria. First, the legal systems of Canada (and *ipso facto* Alberta) and Nigeria have a common origin in the English common law. Secondly, both jurisdictions operate the federal system of government. However, while Nigeria is a union of 36 federating units, Alberta is one of 10 federating provinces and 3 territories. Notwithstanding this difference in the levels of government of the two comparative jurisdictions, the legislative principles of federalism and judicial precedent run through both jurisdictions. Thirdly, Nigeria (particularly the Niger-Delta region) and the Canadian province of Alberta are both hosts to enormous oil and gas exploration and exploitation activities which will attract similar adverse effects on the environment. Finally, both jurisdictions are largely natural resource reliant, with oil and gas activities contributing over 70% of their respective Gross Domestic

Products.[22] It is only natural, therefore, that with the level of carbon mining going on in these jurisdictions, enormous environmental hazards will result from such mining activities in both jurisdictions. However, while Alberta has recorded some level of success with oil and gas related pollution management and control, Nigeria has been largely unsuccessful in curbing pollution through the instrumentality of the law. This, therefore, warrants the need to undertake a comparative appraisal of the enforcement mechanisms applied in both jurisdictions to determine what, if any, is to be learnt by one from the other.

1.4 Research Question

Achieving sustainable development globally is inextricably linked to the promulgation, establishment and enforcement of standard regulations, legislation and control criteria on environmental management. Research has shown that most environmental laws are rule oriented and not management oriented, as they tend to stipulate penalties for law-breaking as against practical incentives meant to stimulate the rational use and protection of the environment.[23] Thus, having identified that the current regulatory framework is inadequate in ensuring sustainable development *vis-à-vis* the environment, what then are the strengths and weaknesses of environmental enforcement within the legal regime for oil and gas exploration and development in Nigeria?

My thesis therefore seeks to answer the question: "How can the existing weaknesses in the Nigerian legal regime for oil and gas exploration and development be addressed, and what

[22] See, in the case of Nigeria, Fagbohun, *supra* note 8 at 8; see also the Canadian encyclopedia on the economy of Alberta, online: <http://www.thecanadianencyclopedia.ca/en/article/alberta/>; Nigeria/Alberta Relations, online: <http://www.international.alberta.ca/documents/Nigeria-AB.pdf>.

[23] Abdul R. Kolawole, *"*After Rio- What Next?*"* (Lagos: 1994) Nigerian Institute of Advanced Legal Studies 1 at 6.

lessons can be learnt from the Canadian province of Alberta, where similar economic activities in the oil and gas sector impact the environment?"

1.5 Scope of Research

This research project is a comparative appraisal of the legal and regulatory framework governing oil spill related environmental pollution in Alberta and Nigeria. Canada operates a federal system of government which comprises 10 provinces and 3 territories.[24] Each of the various provincial and territorial governments in Canada has its independent legislature with powers to enact provincial legislation, including statutes governing oil spills.[25] Similarly, Nigeria operates a federal system of government comprising 36 states and the Federal Capital Territory. Although the legislatures of these component states of Nigeria have powers to make laws applicable within their state territories, including powers to make environmental legislation, they are not endowed with the power to legislate on oil related pollution. Matters such as "mines and minerals, including oil fields, oil mining, geological surveys and natural gas" and *ipso facto* pollution arising from these subject matters are exclusively legislated upon by the federal legislative arm of government.[26]

---

[24] The 10 provinces are: (1) Alberta; British Columbia; (3) Manitoba; (4) New Brunswick; (5) Newfoundland and Labrador; (6) Nova Scotia; (7) Ontario; (8) Prince Edward Island; (9) Quebec; and (10) Saskatchewan. The three territories are: (1) Northwest Territories; (2) Nunavut; and (3) Yukon.

[25] See, for example, the *Environmental Protection and Enhancement Act*, RSA 2000 E12, *Responsible Energy Development Act* RSA 2012 R 17.3 and *Oil and Gas Conservation Act* RSA 2000 O6 which specifically regulates oil production within the province.

[26] Oil spill in Nigeria is regulated by the *National Oil Spill Detection and Response Agency (Establishment) Act* 2006, *National Environmental Standards and Regulations Enforcement Agency (Establishment) Act* 2007, *Oil Pipelines Act* CAP 07, LFN 2004 and the *Petroleum Act* CAP P10, LFN 2004. These laws are federal in nature and they specify punishment and penalties for oil spill offences and related matters. For instance under the Petroleum Act, the entire ownership and control of all oil and gas in place within any land in Nigeria, under its territorial waters and continental shelf are vested in the Nigerian state. This ownership of minerals is further reinforced by the provisions of section 44(3) of the Constitution of the Federal Republic of Nigeria 1999. This section provides: "…the entire property in and control of all minerals, mineral oils and natural gas in, under or upon any land in Nigeria or in, under or upon the territorial waters and the Exclusive Economic Zone of Nigeria shall vest in the

Alberta, as a comparative jurisdiction, has a different level of regulatory control from what is applicable in Nigeria. Its government largely regulates and legislates on oil pollution and other related environmental matters.[27] With this difference in the scope of the powers of these comparative jurisdictions therefore, it is expected that the level of control and regulation of environmental issues relating to oil pollution in Alberta will be more effective since it relates to a subject matter that is local to the impacted communities. The Nigerian regulatory system, being a centrally controlled regime is more alienated from the real problems and questions regarding oil induced environmental pollution since the federal government controls matters related to oil and gas and the fallouts of the exploration and exploitation of this resource is borne by the local communities. In fact, it is arguable that, apart from ineffective enforcement mechanisms, the most notorious factor limiting the full implementation of environmental protection laws and compensatory prescriptions in Nigeria is the Constitution of the Federal Republic of Nigeria 1999 (the "Constitution"). Although for the first time in the history of Nigeria, the Constitution reflects environmental concerns, those concerns are grossly inadequate to provide a remedy for victims of environmental pollution and degradation, especially those resulting from exploitation of natural resources in the oil-rich Niger Delta. As earlier mentioned, this Constitution creates a list of matters exclusively reserved for the federal government upon which the component states and local governments cannot legislate. The legal implication of this is that only the Federal Government of Nigeria has authority to dictate the use of land and environmental management where such use relates to mining activities, since the ownership of minerals, such as oil, the grant of oil exploration and mining licences and the management of oil related activities are matters

---

Government of the Federation and shall be managed in such manner as may be prescribed by the National Assembly."

[27] *Supra* note 25.

reserved for the Exclusive Legislative List. But unfortunately, the negative environmental fallout of activities touching the mining of oil as a natural resource in Nigeria take place in the states and local government areas such as the Niger Delta.

As this research work primarily focuses on oil spill related pollution, only select laws in both comparative jurisdictions are reviewed. A review of the statutory frameworks of both comparative jurisdictions is necessary to provide context for the core of this thesis, i.e., oil spill pollution. To this end, this research work takes the form of a review and analysis of various existing legislation and regulations governing oil spill environmental pollution in the Albertan and Nigerian oil and gas industries; laws such as the *National Oil Spill Detection and Response Agency (Establishment) Act* 2006 ("*NOSDRA Act*"), *National Environmental Standards and Regulations Enforcement Agency (Establishment) Act* 2007 ("*NESREA Act*"), *Nigerian Environmental Impact Assessment Act*, 1992 ("*EIA*"),[28] *Hydrocarbon Oil Refineries Act*,[29] *Oil Pipelines Act*,[30] the *Petroleum Act*,[31] *Environmental Protection and Enhancement Act*,[32] *Responsible Energy Development Act*,[33] *Oil and Gas Conservation Act*,[34] *Pipeline Act*[35] are considered. Furthermore, jurisprudence emanating from the Nigerian courts on oil related environmental pollution is reviewed and critiqued. Specifically, this thesis considers how Nigerian courts adjudicate matters concerning oil spill related environmental pollution and what remedies there are for aggrieved parties.

---

[28] CAP E12 LFN 2004.
[29] CAP H5 LFN 2004.
[30] CAP 07 LFN 2000.
[31] CAP P10 LFN 2004.
[32] RSA 2000 E12.
[33] RSA 2012 R17.3.
[34] RSA 2000 O6.
[35] RSA 2000 P15.

Given the comparative nature of this research work, the regulatory and legal framework on environmental pollution in the Alberta oil and gas industry is also examined in light of those in existence under the Nigerian jurisdiction. This is necessary for an effective analysis of the environmental enforcement regimes in both comparative jurisdictions and a critique of the existing frameworks in both systems in order to make meaningful recommendations on the directions for environmental enforcement in both Alberta and Nigeria.

There is no doubt that environmental pollution resulting from oil and gas activities is inextricably linked to oil and gas production and economic growth. The focus of this thesis, however, is to suggest realistic enforcement mechanisms, which will simultaneously ensure continued economic growth for Nigeria. In light of this, the thesis draws an analogy between provisions made in legislation governing oil and gas activities in both comparative jurisdictions and identifies the inherent weaknesses in these laws. Specifically, the Alberta legislation that deals with oil spill related environmental pollution will be critically examined so as to make recommendations on the way forward for Nigeria.

1.6 Research Methodology

By way of introduction, it is important to mention that this thesis is not the result of any empirical research. Given the limited nature of the program for which this thesis is being written, there is no empirical assessment of enforcement actions in the comparative jurisdictions. The findings in this work are based entirely on literature reviewed in the course of this research exercise. Therefore, the methodology adopted in this research work is comparative.[36] Comparative methodology is a research methodology that aims to make comparisons across

[36] This aspect has been influenced greatly by the following articles: John C Reitz, "How to do Comparative Law" (1998) 46:4 The American Journal of Comparative Law 617-636; Jaako Husa, "Methodology of Comparative Law Today: From Paradoxes to Flexibility" 1096-1117 online: <http://ssrn.com/abstract=1967406>.

different countries or cultures. In other words, it is the act of comparing two or more different cultures with a view to discovering something about one or all of the things being compared. Comparison therefore begins with identifying the similarities and differences between legal systems or parts of legal systems under comparison.[37] However, in carrying out the simple comparative job of identifying similarities and differences, a researcher has to consider the scope of comparison, that is to say, what is going to be compared with what? This research work only indulges in micro-comparison which is the comparison of a particular object within each system (oil spill pollution regulation) rather than comparing in totality the two legal systems. Narrowing it down to law, comparative legal study is a method and a way of looking at legal problems, legal institutions, and the entire legal systems. It is a study dedicated to the study of the "other" (study of the comparative thing, jurisdiction, etc.). By using this method, it becomes possible to make observations and to gain insights, which would be denied to any researcher who limits his study to the law of a single jurisdiction. Two kinds of comparative approaches set out below, are identified and applied in the comparison of the regulation of oil spill pollution in the Nigerian and Albertan oil and gas industries.

a) **Normative Approach**

The normative approach is used to classify and compare laws based on their usefulness or appropriateness to a given situation or problem.[38] This approach attempts to classify and select policy goals through analysis and provides a prescriptive statement as to what the law should be. One of the best ways to understand the normative approach to comparison applied in this thesis is to examine the enforcement approaches adopted by regulatory agencies in the comparative

[37] Reitz, *supra* at 618.
[38] Giuseppe Monateri, Methods of Comparative Law (Cheltenham, UK: Edward Elgar Publishing Limited, 2012) 1 at 307-308.

jurisdictions in combatting oil spill pollution. In this case, Alberta is compared to Nigeria, where some similarities and differences in enforcement exist. This comparison is the focus of Chapter Five of this research work, where an in-depth analysis of the environmental enforcement regimes in Alberta and Nigeria will be undertaken. This comparative analysis is carried out through enforcement and compliance indicators identified and discussed extensively in Chapter Five (pages 122 – 140).

b) **Functional Approach**

The functional approach takes a look not at rules and legal institutions but the effects of these rules, and examines how these rules work within that institution. In other words, the functional approach adopts a methodology that examines the socio-legal function of rules within a particular legal system.[39] Under the functional approach, the comparatist tries to find in a foreign system the norms, which are functionally comparable to those other rules or principles that have been taken into comparison from the other systems.[40] Here, the function of the rules and legal institutions serves as a yardstick for comparison. Institutions, both legal and non-legal, even doctrinally different ones, are comparable if they are functionally the same i.e. if they fulfil similar functions in different legal systems.

Placing this theory in the context of this present research work, applying the functional approach to comparative methodology means that specific problems relating to oil pollution have been identified within the oil and gas industry in Nigeria, which are also similar to those prevalent under the Alberta oil and gas industry. Then practical ways are identified in which the enforcement formula in one jurisdiction can be used to improve that in the other. This is in

[39] Ralf Michaels, "The Functional Method of Comparative Law" (2005) Duke Law School Legal Studies Research Paper Series 1 at 4 online: <http://ssrn.com/abstract=839826>. See also Reitz *supra* note 36 at 622.
[40] *Ibid* Michaels, at 4.

essence a summary of the functional approach to comparative methodology as applied in this thesis.

1.7 Thesis Organization

This thesis is divided into six chapters. Chapter One is introductory in nature and basically outlines the research problem, provides a justification for embarking on this research project and outlines the reason for the choice of the Canadian province of Alberta as a comparative jurisdiction. This part also explains the limited scope of this research work i.e. examining the regulation of oil spill pollution and enforcement mechanisms rather than the totality of environmental pollution within the Albertan and Nigerian oil and gas industries.[41] The methodology applied in the comparative analysis of the legal and regulatory regimes of the comparative jurisdictions will also be discussed in this chapter.

Chapter Two discusses the theoretical framework of environmental enforcement. The first part of this chapter focuses on a review of select literature on environmental enforcement as a tool for achieving sustainable development. It also reviews literature on some of the underlying bases for environmental protection which have largely influenced environmental legislation in Nigeria and have also received international recognition. Theoretical concepts such as the *polluter-pays* principle are considered in this chapter. Also, the applicability of the *precautionary* principle in environmental enforcement in the comparative jurisdictions is considered. Finally, the latter part of Chapter Two examines the *rule of law* theory, and describes the interaction between the rule of law and sustainable development.

---

[41] The reason for restricting and limiting the scope of this research project to oil spill pollution is to ensure that this thesis remains focused and manageable.

Chapter Three, which examines the regulatory regime for environmental pollution resulting from oil spills in the Nigerian oil and gas industry, is discussed in two parts. Part one discusses an overview of select laws and agencies regulating oil spill related environmental pollution in Nigeria. The aim is to identify how the law and the respective agencies react to and handle the issue of oil spills within the Nigerian oil and gas industry. Considering the glaring inadequacies of the current framework in regulating oil spill pollution, there is an urgent need for a workable recommendation. This is only achievable upon a careful analysis of the existing regime and revealing the inherent weaknesses. The second part of this chapter discusses the various approaches to environmental enforcement in the Nigerian oil and gas industry. Approaches such as inspection and searches, arrest, criminal prosecution and civil penalties are examined under this head.

Chapter Four, which is similar to the third chapter, reviews the regulatory framework for environmental pollution related oil spills in the Alberta oil and gas industry. Also discussed in two parts, the first part of this chapter considers select laws and agencies regulating oil spills while part two discusses the environmental enforcement approaches within the industry.

Chapter Five is the key comparative chapter. It juxtaposes enforcement mechanisms in both jurisdictions, draws out their similarities and differences, critiques the inherent weaknesses in these mechanisms and suggests measures to improve these enforcement mechanisms.

Chapter Six, the concluding chapter, summarises the issues identified from Chapters 1 to 5 and offers suggestions on how environmental pollution relating to oil spills can be limited through the instrumentality of the law and efficient enforcement mechanisms. The thesis concludes with recommendations and suggestions for further research in this area of environmental law.

Chapter Two: Environmental Enforcement and Compliance as a Tool for Achieving Sustainable Development

2.1 Introduction

This part examines relevant literature which espouses the theories upon which scholars have argued for the regulation of environmental pollution. The perspectives canvassed here are directed at revealing the need for effective environmental enforcement in order to ensure environmental sustainability in Nigeria. These perspectives will be discussed under two major parts. The decision to present this review in two parts is informed by the realization that a comprehensive analysis of effective environmental enforcement may be achieved where the rationale for environmental protection is provided. It is only where the rationale for environmental protection is made that we can effectively argue the need for effective environmental enforcement.

This thesis in part discusses the theoretical framework for environmental protection. There are many principles upon which arguments for environmental protection have been made by various scholars and interest groups. It is, however, not the intention in this chapter to discuss all the principles of environmental protection, but to analyse the three major[42] principles of environmental protection as it applies to the comparative jurisdictions. The three major principles

---

[42] These principles are described as "major" in this thesis because they form the basis for most environmental legislation in Nigeria and in Canada. In Nigeria, for example, section 7 of the *NESREA Act* 2007 specifically authorises the enforcement of compliance with laws, guidelines, policies and standards on environmental matters. Section 6 (2) (3) of the *National Oil Spill Detection and Response Agency (Establishment) Act* 2006 ("*NOSDRA Act* 2006") imposes a reporting requirement on oil spillers or to pay a fine as specified in the Act for clean-up and failure to report. Also, Section 20 of the Constitution of the Federal Republic of Nigeria 1999 ("CFRN 1999") provides for its environmental objective. This section imposes an obligation on the state to ensure the protection and improvement of the environment as well as safeguard the water, air and land, forest and wild life of the state. See also *Imperial Oil Ltd*. v. *Quebec (Minister of the Environment)*, [2003] 2 S.C.R. 624 at para 23 where the Supreme Court of Canada ("SCC") noted that the polluter pays principle is found in most provincial and federal environmental statutes across Canada. These examples demonstrates that the legislations reviewed in the subsequent part of this thesis are shaped around these environmental principles.

of environmental law enforcement which will be discussed are: the *polluter pays principle*, the *precautionary principle* and the *sustainable development theory*. The choice of these principles is informed by specific reasons. Firstly, these principles impose obligations on public authorities by providing guidance on the choices and methods for limiting environmental risks while at the same time guaranteeing citizens the rights to enjoy a healthy environment.[43] Secondly, these principles have formed the underlying basis for most environmental laws and regulations and have therefore achieved recognition both internationally and locally.[44] Indeed, most environmental legislation is either implicitly or explicitly based on these three fundamental principles of environmental protection. A known example of this is the Nigerian National Environmental Policy, which provides specifically for principles such as the polluter-pays principle, precautionary principle, sustainable development theory, intergenerational equity principle and a host of others geared towards environmental protection and achieving sustainable development.[45] Lastly, these three principles are inter-related such that a proper understanding of them provides a strong appreciation of the need for effective enforcement of environmental laws.[46]

Part two of this chapter discusses the role of effective environmental enforcement as a mechanism for achieving sustainable development. The articulation of arguments for the effective enforcement of environmental regulation will be made here. Literature on the

---

[43] Nicholas De Sadeleer, *Environmental Principles: From Political Slogans to Legal Principles* (London: Oxford University Press, 2002) 1 at 5 (Sadeleer).
[44] See generally the *NESREA Act* 2007, the *Canadian Environmental Protection Act* SC 1999, c33 ("*CEPA*"), *Environmental Protection and Enhancement Act* RSA 2000 e12.
[45]See the National Environmental Policy Document 1 at 2, online: <http://www.nigeriatradehub.gov.ng/Portals/0/Documents/National%20Policy%20on%20Environment.pdf>.
[46] Sadeleer *supra* note 43 at 5.

"deterrence-based approach" and the "cooperation-based approaches"[47] to environmental enforcement will form the basis of the discussions in this latter part.

Although this part focuses primarily on effective environmental enforcement and compliance as a tool towards achieving sustainable development, the literature reviewed will comprise both those that provide a rationale for environmental protection and those that canvass arguments for effective environmental enforcement.[48]

2.2 Theoretical Principles of Environmental Protection

Natural resources have appeared to be inexhaustible, as human society has continued erroneously to believe that nature is endowed with a limitless capacity to assimilate and purify human waste produced in the course of development. Human society has however been shocked into reality by the fact that the widely believed limitless resources of nature are indeed limited. If therefore left unchecked, human economic activities will not only threaten the quality of life we hope to enjoy, but also human life itself, hence the need for government policy makers to intervene with the instrumentality of the law to curb the potentially self-destructive economic activities of mankind on the environment.[49]

The following paragraphs therefore examine relevant literature which considers the principles identified above as the underlying basis for environmental protection.

---

[47] See generally Clifford Rechtschaffen, "Deterrence Vs. Cooperation and the Evolving Theory of Environmental Enforcement" (1998) 71 S. Cal. L. Rev. 1181 at 1181 (Rechtschaffen); John T Scholz, "Cooperation, Deterrence and the Ecology of Regulatory Enforcement" (1984) 18 Law & Society Review 179 at 179 (Scholz).

[48] The decision to review these two bodies of literature is based on an understanding that pushing forward an argument for effective environmental compliance can only be made where there is an understanding of the rationale for environmental protection.

[49] Marian Stockzkuwick, "The polluter pays principle and State aid for environmental protection" (2009) 6 J European Envt'l & Plan L 171 at 173 (Stockzkuwick).

2.2.1 Polluter Pays Principle and Environmental Enforcement

The *polluter pays* principle is an environmental protection principle which requires that the cost of pollution be borne by those who cause it. In its original form, the *polluter pays* principle seeks to determine the allocation of the costs of pollution prevention and control. Its essence is that the polluter must pay.[50] Gaining global recognition in 1972 at the Organization for Economic Co-operation and Development ("OECD")[51] and reaffirmed in 1992 at the *Rio Declaration* summit,[52] the polluter pays principle was described as follows:

> The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce environmental resources and to avoid distortions in international trade and investment is the so-called "Polluter-Pays-Principle". This Principle means that the polluter should bear the expenses of carrying out the above mentioned measures decided by public authorities to ensure that the environment is in an acceptable state. In other words, the cost of these measures should be reflected in the cost of goods and services, which cause pollution in production and/or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment.

This definition imposes upon the polluter a mandatory responsibility for the payment of the costs associated with pollution prevention and control through a proper allocation of resources *via* an accurate pricing mechanism.[53] Curiously, this principle in the OECD definition is less concerned about the ultimate transference of pollution costs onto the final prices of goods and services, as its

---

[50] Vito De Lucia, "Polluter Pays Principle", The Encyclopedia of Earth, online: <http://www.eoearth.org/view/article/155292/>.

[51] OECD Recommendation of the Council on guiding principles concerning international economic aspects of environmental policies; Council Document C (72)128, 26.5.1972, point 4.

[52] Principle 16 of the Report of the United Nations Conference on Environment and Development (*Rio Declaration)* states: "National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment." Online: <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>.

[53] Ursula Kettlewell, "The Answer to Global Pollution? A critical Examination of the Problems and Potential of the Polluter Pays Principle" (1992) 3 Colo. J. Int'l Envtl. L & Pol'y 430 at pp 431- 435 (Kettlewell).

primary focus remains on the polluter paying the cost of its pollution.[54] The Supreme Court of Canada explained the polluter pays principle in a 2003 case, *Imperial Oil Ltd. v. Québec (Minister of the Environment),*[55] noting that the polluter-pays principle has been internationally recognized. The Court stated that "to encourage sustainable development, that principle assigns polluters the responsibility for remedying contamination for which they are responsible and imposes on them the direct and immediate costs of pollution."[56] Since the goal of the polluter pays is ensuring that the polluter pays the costs of pollution prevention and control, an internalisation of the external cost of pollution is required to make this possible.[57] Thus, the principle is primarily concerned with making the polluter the first to pay for the pollution caused by its activities rather than being focused on compensation for the damage which is a direct consequence of the pollution.[58]

The OECD's definition of a polluter describes a polluter as one whose activity has given rise to the pollution.[59] At the community level, the polluter is the person who directly or indirectly causes deterioration of the environment or establishes conditions leading to its deterioration.[60] For pollution from an industrial plant, the polluter may range from the plant operator to the person in charge of installation operations, and perhaps extend to the person who authorised or gave approval

---

[54] See the OECD Polluter Pays Principle: Definition and Analysis 6, <http://www.oecd-ilibrary.org.ezproxy.lib.ucalgary.ca/>.
[55] [2003] 2 S.C.R. 624.
[56] Ibid at paragraph 24.
[57] A C Pigou, *The Economics of Welfare* 2nd ed (London: Macmillan: 1924) cited in Sadeleer *supra* note 43 at 14.
[58] See the OECD note on Environmental Principles and Concepts OCDE/GE (95) 124 online: <www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=OCDE/GD (95)124&docLanguage+En>; see also J P Barde, "An Examination of the Polluter-Pays Principle Based on Case Studies" in *The Polluter Pays Principle: Definition , Analysis & Implementation* (Paris: OECD, 1975) 93 at 93.
[59] See The Polluter-Pays Principle OECD Analyses and Recommendations, General Distribution OCDE/GD (92) 81 online: <http://www.tradevenvironment.eu/uploads/OCDE_GD_92_81.pdf> 1 at 8.
[60] *Ibid*.

for the operation of an industrial plant.[61] This difficulty in defining and identifying who a polluter is, therefore makes the application of the theory of internalisation and allocation of cost difficult.

Different scholars have explained the polluter-pays principle in various ways. Sadeleer opines that the polluter-pays principle essentially reflects the "curative" and "preventive" model of thought.[62] According to him, the curative model opposes the concept of nature as an ocean with unlimited resources. It canvasses the argument that natural resources are exhaustive and as such, humans should pay for the over-exploitation and unwise use of the environment. It espouses that everything is capable of being indemnified, restored, compensated and cured. In Sadeleer's opinion, as a wound inflicted on the environment cannot cure itself, help is required from the inflictor to help cure it (i.e. the polluter is required to finance the restoration of the environment he damaged).[63]

The preventive model of thought, on the other hand, posits that the polluter-pays principle should not be viewed as a principle that encourages arbitrary pollution once polluters can pay the cost of pollution. Rather, the principle should be seen as one which institutes a policy of pollution abatement such that polluters are encouraged to reduce their pollution and not remain content with paying pollution charges.[64] This notion of environmental repair and restoration is, however, individualistic, as liability focuses on the polluter, i.e. the party responsible for the damage.[65]

Another theory of environmental enforcement is known as the theory of internalization which requires the integration of external costs into the prices of goods and services, costs such as those of using the environment so that the actual price of goods reflects the total price of

---

[61] Sadeleer, *supra* note 43 at 41.
[62] *Ibid* at 15.
[63] *Ibid*.
[64] *Ibid* at 36.
[65] *Ibid*.

production.[66] This internalisation of the external costs of pollution thus becomes complete when the polluter takes responsibility for the cost arising from its pollution. Internalisation of costs is regarded as incomplete when there is a shift of part of the pollution cost to the community, i.e. the public who, through the payment of taxes, finance environmental clean-ups and restoration.[67] Kettlewell, emphasising this need for the internalisation of pollution costs, explained that in order to prevent the transference of the pollution costs to the ultimate consumer, thereby circumventing the essence of the principle, governmental intervention is required.[68] This intervention is required through either regulations or through taxes to compel polluters to pay the cost of pollution prevention and control.[69]

Grossman's perspective on the utility of the polluter-pays principle is premised on the fact that an internalisation of the costs associated with pollution prevention and control will prevent market failures since the actual prices of goods and services will reflect hidden costs associated with externalities, thus ensuring efficient economic choices.[70] The difficult question implicit in this theory of cost internalisation and allocation is how to arrive at an objective criteria for determining that the ultimate bearer of the total cost of pollution is actually the polluter. This is not an easily achievable task.

---

[66] See generally A C Pigou, *The Economics of Welfare* 2nd ed (London: Macmillan: 1924). The application of the theory of internalisation of externalities is however a difficult concept as the environment is largely unquantifiable, how then is it possible to attach a monetary value on the aspects of the environment used in production such that the total cost of production is reflected in the prices of goods and services. Economists have made attempts at solving this and have argued for and against the Pigouvian model of internalisation of externalities and the Coase theory of assigning property rights. For further readings on the Coase theory see generally R H Coase "The Problem of Social Costs", (1960) 3 Journal of Law and Economics 1-44.

[67] Sadeleer, *supra* note 43 at 21.

[68] Kettlewell, *supra* note 54 at 436.

[69] Kettlewell, *supra* note 54 at pp 434 - 436.

[70] M R Grossman, "Agriculture and Polluter Pays Principle: An Introduction" (2006) 59 Oklahoma Law Review 1 at 3.

On the question of distribution of pollution costs, Mamlyuk[71] argues that governments find it politically challenging to allocate pollution costs between multiple actors or require polluters to implement precautionary abatement measures. True to this argument, the OECD commentary explains that the governments of participating states are responsible for determining how much the polluter needs to pay in order to ensure that the environment is in an "acceptable state".[72] Determining an "acceptable state" as specified by the OECD creates room for discretion characterised by political and economic considerations of participating states and not solely on the sustainable use of the environment.[73]

The meaning and the application of the polluter-pays principle, according to Amokaye, raises some more questions, some of which are: (1) Does the principle suggest that the cost of preventing pollution or minimising environmental harm be borne by those responsible for the pollution such that past polluters are included? (2) Is the polluter required by this principle to cease polluting for the future, to clean up, or to remove the pollution already caused?[74] Answering some of these questions posed by Amokaye requires us to define who a polluter is.

Another question brought to bear by the polluter-pays principle, is how much the polluter must pay and to whom payment must be made. Cordato[75] argues that in order to determine how

---

[71] Boris N Mamlyuk, "Analysing the Polluter Pays Principle through Law and Economics (2009-2010) 18 South-eastern Envtl. LJ 39 at 45.

[72] See the OECD Commentary on the Polluter Pays Principle as it relates to International Trade com/env/td (2001) 44/final, online:<http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=COM/ENV/TD(2001)44/FINAL&docLanguage=En> 1 at 6.

[73] Holger Bonus *Fair Principles for Sustainable Development: Essays on Environmental Policy and Developing Countries*, ed. by Edward Dommen, (UK: Cambridge, 1993) 1 at 67 cited in Muhammad Munir, "History and Evolution of the Polluter Pays Principle: How an Economic Idea Became a Legal Principle online: http://ssrn.com/abstract=2322485. (Munir) 1 at 11.

[74] Oludayo G Amokaye, *Environmental Law and Practice in Nigeria* (Lagos: University of Lagos Press, 2004) 1 at 100 (Amokaye).

[75] Roy E Cordato, "Polluter Pays Principle: A proper Guide to Environmental Policy" online: <http://iret.org/pub/SCRE-6.PDF>1 at 5.

much the polluter must pay and to whom payment should be made, the principle must be viewed, not just as one necessitating payment of costs for control and prevention, but also as one necessitating the inclusion of costs of damage suffered by another as a result of the pollution. He opines that:

> A correct interpretation of the polluter-pays principle would define pollution as any by-product of a production or consumption process that harms or otherwise violates the property rights of others. The polluter would be the person, company, or other organization whose activities are generating that by-product. And finally, payment should equal the damage and be made to the person or persons being harmed.[76]

This interpretation, of course, is at variance with OECD's intention at the conception of this principle. OECD's intention was to ensure that prices of goods reflect the total cost of production, consideration was not given to payment of damages caused to the environment and individuals by these destructive economic activities.[77]

Although the polluter-pays principle appeals to our sense of fairness and equity because of its inherent logic, applying the principle is laden with challenges. The principle appears to impose liability on polluters to ensure they pay the cost associated with pollution while simultaneously encouraging the continuation of pollution by giving polluters the right to pollute simply by paying the cost of pollution.[78]

2.2.1.1. Polluter-Pays Principle in Nigerian Environmental Law

In Nigeria, the effect of the polluter-pays principle can be described merely in the musical rhymes the words make when used, but not in its effectiveness. The Niger Delta region, home to the vast majority of exploration and production activities of multi-national oil companies, is described

[76] *Ibid*. at 4
[77] Kettlewell, *supra* note 54 at 7.
[78] Sadeleer, *supra* note 43 at 59.

as one the most polluted regions on planet earth. Ironically, this region can barely boast of any thoroughly cleaned up oil spill pollution notwithstanding the entrenchment of the polluter-pays principle in almost all environmental laws in Nigeria.[79] With the enactment of the *NESREA Act* 2007, one would have expected that this legislation, which, establishes the principal environmental agency in the country - NESREA, would have the powers to regulate all kinds of pollution including oil spills. Shockingly, however, the provisions of the Act expressly ousts the jurisdiction of NESREA over oil spill related offences[80] and empowers another agency with exclusivity in dealing with oil and gas related pollution.[81] Section 7 (g-l) of the *NESREA Act* 2007 provides as follows: "the Agency shall:

> g) enforce compliance with regulations on the importation, exportation, production, distribution, storage, sale, use handling and disposal of hazardous chemicals and waste other than in the oil and gas sector.
> (h) enforce through compliance monitoring, the environmental regulations and standards on noise, air, land, seas, ocean and other water bodies other than in the oil and gas sector.
> (i) enforce environmental control measures through registration, licensing and permitting system other than in the oil and gas sector.
> (k) conduct environmental audit and establish data bank on regulatory and enforcement mechanisms of environmental standards other than in the oil and gas sector.
> (l) create public awareness and provide environmental education on sustainable environmental management, promote private sector compliance with environmental regulations other than in the oil and gas sector and publish general scientific or other data resulting from the performance of its functions.

These sections above, clearly oust the jurisdiction of the NESREA to take any action in the face of oil related environmental pollution. Indeed, section 1 of the *NOSDRA Act* 2006 which is the establishment section clearly states that the agency is established with the responsibility for

---

[79] Theresa Okenabirhie, "Polluter Pays Principle in the Nigeria Oil and Gas Industry: Rhetoric or Reality?" (2009) Centre for Energy, Petroleum and Mineral Law and Policy Dundee 1 at 1 online: <www.dundee.ac.uk/cepmlp/gateway/files.php?file=cepmlp_car13>.
[80] Section 7 of the *NESREA Act* 2007.
[81] The *NOSDRA Act* 2006 is exclusively charged with the responsibility of dealing with oil and gas related pollution.

preparedness, detection and response to all oil spillages in Nigeria; while section 6 sets out its function as being "responsible for the surveillance and ensure compliance with all existing environmental legislation and the detection of oil spills in the petroleum sector."[82] This in itself is a weakness in the enforcement mechanism and control of oil spill pollution as other agencies cannot act in the face of any oil spill pollution notwithstanding the polluter-pays provisions in the environmental legislation.

In Alberta, it is different as the *EPEA* specifically recognizes "the responsibility of polluters to pay for the costs of their actions"[83] and the act equips different agencies with the responsibilities of dealing with issues arising therefrom. Indeed, the *EPEA*[84] provides that an inspector, investigator or the director may take emergency measures which he or she considers necessary to protect human life, health or environment where there is, in the opinion of the inspector, investigator or the director, a release of substance into the environment which may cause or has caused immediate or significant adverse effects has occurred. Also, section 41(1) the *Oil and Gas Conservation Act* (OGCA)[85] provides that "if at any time the flow or escape of oil, gas, water or any other substance from a facility, or from a well or any underground formation that the well enters, is not prevented or controlled, the Regulator may take any means that appear to it to be necessary or expedient in the public interest to prevent or control the flow of escape" Thus, the *OGCA* and the *EPEA* authorises regulatory officials to act in the face of any environmental emergency.[86]

---

[82] Section 6 (1) (a).
[83] Section 2(i) of the *EPEA.*
[84] Section 115(1) of the *EPEA.*
[85] RSA 2000 O6.
[86] *Ibid.*

2.2.2. The Applicability of the Precautionary Principle and Environmental Enforcement in the Comparative Jurisdiction

The precautionary principle is seen as an extension of the already existing legal concepts which rest on the broad and well accepted notion that "environmental degradation should be prevented by avoiding pollution or nuisance rather than waiting for it to occur and then trying to counteract its adverse effects."[87] This principle has its origin in the German democratic socialism of the 1980s[88] where the idea arose at a time "when a relationship was being developed between the individual, the economy and the state to encourage the recognition that the improvement of a society was intrinsically linked to the improvement of the natural environment on which it depended."[89] Initially known as *Vorsorgeprinzip,*[90] the precautionary principle evolved to include a preventive dimension through which public authorities intervene prior to the occurrence of an environmental damage.[91] It ensures the prevention of activities posing a threat to the environment whether or not there are conclusive scientific proof linking such activities to the foreseen environmental damage.[92] The precautionary principle therefore places an obligation on decision makers to consider the likely harmful effects of human activities on the environment before pursuing such activities.[93]

---

[87] See R Harding & E Fisher, "Introducing the Precautionary Principle" in R Harding & E Fisher eds, *Perspectives on the Precautionary Principle* (Australia: The Federation Press, 1999) 2 at 8; see also A Trouwborst, "Evolution and Status of the Precautionary Principle in International Law" (2002) 62 Kluwer Law International 285 cited in S J Mead "The Precautionary Principle: A Discussion of the Principle's Meaning and Status in an Attempt to Further Define and Understand the Principle" (2004) New Zealand J Envtl L 137.

[88] The term literarily translates to "principle of prior care and worry." See S J Mead "The Precautionary Principle: A Discussion of the Principle's Meaning and Status in an Attempt to Further Define and Understand the Principle" (2004) 8 New Zealand J Envtl L 137 at 139 (Mead), Sadeleer *supra* note 4 at 93; C Stone, "Is there a Precautionary Principle?" (2001) 31 Environmental Law Reporter 10790 at 10792.

[89] *Ibid*.

[90] Sadeleer, *supra* note 43 at 4.

[91] Sadeleer, *supra* note 43 at 91.

[92] James Cameron & Juli Abouchar, "The Precautionary Principle: A Fundamental Principle of Law and Policy for the Protection of the Global Environment" (1991) 14 B C Intl Comp L Rev 1 at 2.

[93] *Ibid*.

The precautionary principle received international recognition in 1992 at the United Nations Conference on Environment and Development held in Rio de Janeiro. Principle 15 of the report provides as follows:

> In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.[94]

Puttagunta[95] stating the underlying premise of this principle opined that since science cannot adequately predict all possible environmental outcomes of human activity, rather than wait for scientific certainty, policy makers and regulators must act in anticipation of environmental harm to ensure that this harm does not occur. It has been said that risk and uncertainty are the underlying basic concepts of the principle.[96] Although universally agreed among scholars that there is no single acceptable definition of the precautionary principle, there seems to be an agreement that the concepts of risk and uncertainty are basis of this principle.[97] Defining risk, Jaegar *et al*, described it as an occurrence or circumstances in which something of human value has been put at stake and the outcome is uncertain; a situation where it is possible to define all possible consequences and confidently assign a possibility to reflect the likelihood of each outcome.[98] Cameron explained risk as "the amalgam of the probability of an event occurring and the seriousness of the consequences

---

[94] *Supra* note 52.
[95] P S Puttagunta, "The Precautionary Principle in the Regulation of Genetically Modified Organisms"(2000) 9 Health L Rev 10 at 10.
[96] Joakin Zander, *The Precautionary Principle in Practice: Comparative Dimensions* (London: Cambridge University Press, 2010) 1 at 8.
[97] *Ibid.* See also Jon M Van Dyke, "The Evolution and International Acceptance of the Precautionary Principle" (2004) online: <www.law.hawaii.edu/sites/www.law.hawaii.edu/files/content/Faculty/PrecautionaryPrinciple.pdf> 357 at 359; Timothy O'Riordan & Andrew Jordan, "The Precautionary Principle, Science, Politics and Ethics" a working paper (CSERGE 1995 Working Paper PA 95-02) presented at the Centre for Social and Economic Research on the Global Environment (University of East Anglia and University College London) 1 at 3 online: <http://cserge.ac.uk/sites/default/files/pa_1995_02.pdf>.
[98] C C Jaegar, *et al Risk, Uncertainty and Rational Action* (New York: Earthscan, 2001) 1 at 17.

should it occur."[99] Explicit in these definitions is that risk evidences the probability of an event with grave consequences occurring. Sadeleer explained that risk is a synonym for danger, peril and an unfortunate event.[100] Thus, where there is a doubt as to whether or not an event will occur, there is an element of risk.[101]

The precautionary principle generally emphasises preventative and anticipatory actions to environmental damages where their full impact is largely undetermined. Although many scholars have argued that these preventative actions are part of the operational failures of the principle as it highlights the paradox on which the precautionary principle lies,[102] yet the precautionary principle remains one valid justification for taking environmental measures in the face of scientific uncertainty. This principle can be described to have found expression in most environmental laws in Nigeria and Alberta as they implicitly incorporate the precautionary provisions into a large number of environmental regulatory statutes.

In Canada, the Supreme Court in a 2001 decision[103] recognised and commented on the efficacy of the precautionary principle as follows:

> The interpretation of By-law 270 contained in these reasons respects international law's "precautionary principle", which is defined as follows at para. 7 of the Bergen Ministerial Declaration on Sustainable Development (1990): In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent and

---

[99]See James Cameron, "The Precautionary Principle: Core Meaning, Constitutional Framework and Procedures for Implementation" in R Harding & E Fisher eds, *Perspectives on the Precautionary Principle* (Australia: The Federation Press, 1999) 29 at 37.
[100] Sadeleer, *supra* note 43 at 150.
[101] *Ibid*.
[102] See Stephen R Dovers & John W Handmer, "Ignorance, Sustainability, and the Precautionary Principle: Towards an Analytical Framework" in R Harding & E Fisher eds, *Perspectives on the Precautionary Principle* (Australia: The Federation Press, 1999) 167 at 173; see also B A Marjolein, Van Asselt & Ellen Vos, "The Precautionary Principle and the Uncertainty Paradox" (submitted to the Journal of Risk Research) 1 at 5 online: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.110.9670&rep=rep1&type=pdf>.
[103] See *114957 Canada Ltée (Spraytech, Société d'arrosage)* v. *Hudson* (*Town*), [2001] 2 S.C.R. 241 paras 31 and 32.

> attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

Although it is clear that there is the need for decision makers to take preventative actions in the face of uncertain environmental risks, such precautionary measures should not be directed at halting developments but rather directed at providing adequately for the "what ifs" that may be consequences of society's quest for continued economic development.

2.2.3. Sustainable Development Theory of Environmental Law

Implicit in the phrase "sustainable development" is economic development based on ecological sustainability.[104] The most widely quoted definition of sustainable development is that of the 1987 Brundtland report of the United Nations' sponsored World Commission on Environment and Development, *Our Common Future*, where the phrase was defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[105] The concept of sustainable development seeks to achieve equilibrium between humans and nature for the co-existence of both on earth without jeopardising the ability of future generations to achieve such equilibrium. Humans must understand that there is a moral obligation on the part of this generation to use finite resources in a way that the resources remain beneficial to future generations.[106] Smith aptly explains the sustainability development theory as follows:

---

[104] Natasha Affolder, "The Legal Concept of Sustainability" a paper delivered at a Symposium on Environment in the Courtroom: Key Environmental Concepts and the Unique Nature of Environmental Damage, March 23-24 2012 (University of Calgary) 1 at 2 (Affolder) online: <cirl.ca/symposium/2012-symposium/download-2012-materials>.
[105] World Commission on Environment and Development, *Our Common Future*, U.N. Doc. A/42/427 (August 4, 1987) online: <http://www.un.org/en/ga/search/view_doc.asp?symbol=A/42/427>.
[106] Susan L Smith, Ecologically Sustainable Development: Integrating Economics Ecology and the Law (1995) 31 Willamette L Rev 261 at 262 (Smith).

> The concept requires a fundamental shift in global collective thinking. A global society no longer can merely attempt to maximize the material wealth of the present generation, but must attempt to maximize the quality of life of the present generation by including non-material dimensions. Relying on technology to accommodate the infinite expansion of the world's population and industrial activity is an unacceptable gamble. Most significantly, we cannot steal the environmental legacy of our children and our grandchildren in order to provide material luxuries for ourselves.[107]

Smith's comments underlie the reason governments cannot afford to turn a blind eye to the dangers of preferring economic pursuit to environmental protection. Hence the need to intensify efforts at navigating towards effective environmental enforcement mechanisms. Sustainable development theorists therefore argue that development and the environment are intricate parts of one another, and as such, the integration of environmental concerns into development is necessary in achieving sustainability. The strength of the concept, however, lies in the simple definition of its fundamental objectives, which is, meeting current needs and sustainability requirements; it advocates for a simultaneous pursuit of economic prosperity, environmental quality and social equity.[108] Here, we can derive a range of operational objectives, such as, scientific realities, an agreement on ethical principles, and considerations of long-term self-interest.[109] Scholars have agreed that engaging in development that reduces the carrying capacity of the environment speaks to our conscience, as it gives the present generation controlling powers over the lives and the developmental capacities of future generations.[110] To this end, the Brundtland report advocates for the equitable distribution of resources and opportunities between

---

[107] *Ibid* at 263.
[108] Rodrigo Lozano, "Envisioning Sustainability Three-Dimensionally" (2008) 16 Journal of Cleaner Production 1838 at 1839 (Lozano).
[109] Lele M Sharachchandra, "Sustainable Development: A Critical Review" (1991) 19 World Development 607 at 612 (Sharachchandra).
[110] *Ibid*, see also Desta Mebratu, "Sustainability and Sustainable Development: Historical and Conceptual Review" (1998) Environmental Impact Assessment Rev 493 at 503.

the present inhabitants of the earth and future inhabits in the light of finite resources. Ballhorn succinctly explained this as follows

> Sustainable development is an approach to decision-making that takes a long-term focus, incorporates social, economic and environmental factors and recognizes the interdependence of domestic and global activities. It is an ethical principle that incorporates a commitment to equity between the current generation and those that will follow; and between the poor and the more affluent. It means working to ensure a fair distribution of the costs and benefits of development between the nations of the developed and developing worlds. Sustainable development is also about ensuring that choices we make as citizens, consumers, producers and investors are compatible with an excellent quality of life for all…now and in the global future.[111]

Lofty and admirable as the sustainable development theory of environmental law may appear, the theory has been criticised for a number of reasons. Some scholars have criticised the phrase for its elusiveness and vagueness.[112] Indeed the phrase, in the words of Lozano,[113] lacks "definitional precision", as it is subject to competing interpretations and its use is sometimes dependent upon the political and philosophical underpinnings of its users. According to Sharachchandra, the theory's lack of coherent or generally consistent guiding concepts with social and physical realities speaks to its disadvantage.[114] Another criticism of the concept lies in its wording. The term "sustainable development" implies that infinite economic development is valuable while recognising the earth's finite capacity in supporting this infinite economic development.[115] What then are the criteria for measuring sustainable development?

---

[111] R Ballhorn, "The Role of Government and Policy in Sustainable Development" (2005) 1 McGill Intl J Sustainable Dev L & Poly 19.
[112] See John Robinson, "Squaring the circle? Some thoughts on the idea of Sustainable Development" (2004) 48 Ecological Economics 369 at 373; Harim M Osofsky, "Defining Sustainable Development after Earth Summit 2002" (2003) 26 Loy L A, Intl & Comp L Rev 111 at pp 112 - 113.
[113] Lozano, *supra* note 108 at 1839.
[114] Sharachchandra, *supra* note 109 at 613.
[115] Smith, s*upra* note 106 at 282.

Notwithstanding the criticisms levied against the sustainability development theory, the concept remains a necessary part of today's world.[116] The sustainable development theory provides a framework within which different societies can structure their respective developmental aspirations in line with a healthy environment. The essence of the theory is therefore, ensuring its workability, i.e. to "operationalize" the concept such that an ecologically sustainable pattern of production and consumption becomes an integral part of society's existence. [117]

The effect of oil exploration on the oil rich regions of Nigeria's delta is very glaring in terms of its negative effect on the region. Over the last four decades, oil exploration and exploitation has impacted disastrously on the socio-physical environment of the Niger Delta oil-bearing communities, massively threatening the subsistence peasant economy and the environment and hence, the entire livelihood and basic survival of the people.[118] The amount of deprivation and damages which are the consequences of the quest for economic prosperity are numerous. Notable among them include pollution, environmental degradation leading to low agricultural yield, destruction of aquatic lives, home displacement and many more. It is generally agreed that the concept of sustainable development measures or focuses more on the ability of the present generation to meet its own needs without jeopardizing the ability of future generations to meet its own needs. In light of the massive environmental mishaps being experienced as a result of the unsustainable use of natural resources in the oil rich wetlands of the Nigeria's Niger Delta, one may safely conclude that the impact of oil and gas exploration and

---

[116] Affolder, *supra* note 105 at 1.
[117] *Ibid.*
[118] See Iniaghe, O P, Godswill Okeoghene Tesi & Patrick Othuke Iniaghe, "Environmental Degradation and Sustainable Development in Nigeria's Niger Delta Region" (2013) 15 Journal of Sustainable Development in Africa 61 at 66.

exploitation on Nigeria's environment makes a total mockery of the concept of sustainable development which has been adopted in most environmental regulations in Nigeria.

2.3. Summary

Part I of this chapter examined, in general terms, the theoretical structures upon which various scholars have canvassed measures for protection of the environment and prevention of environmental pollution. While these theoretical formulations are many in number, only three key principles were examined. The first is the polluter-pays principle, which seeks to allocate the costs of pollution and advocates that such costs be borne by those who cause pollution. The second theory considered was the precautionary principle which advocates proactive measures on the part of government policymakers by considering the potential cost of environmental pollution before approval is granted for economic developmental activities. The core of this theory is prevention rather than remediation of environmental pollution. The last of the three principles considered is the sustainable development theory which advocates equilibrium between human quest for economic development and the need to conserve nature. This theory advocates economic development, which does not jeopardise the ability of future of generations to realise the full potential of environmental resources. All three theoretical framework for environmental law play important roles in the formulation of enforcement mechanisms in both Nigeria and Alberta.

2.4. The Role of Environmental Enforcement and Compliance as a Tool for Achieving Sustainable Development

The preceding part of this chapter considered the theoretical foundations upon which the arguments for environmental protection have been made. This section will consequently consider

the role of environmental enforcement and compliance as a tool for achieving sustainable development. Here, an attempt is made at exploring the connections between the rule of law and the enforceability of existing environmental laws, which have embedded in them the underpinnings of environmental protection. Thereafter, it examines the various theories of compliance and enforcement and concludes that effective environmental enforcement and compliance is necessary in achieving sustainable development.

2.4.1. Interaction between Sustainable Development and the Rule of Law

In the words of Zaelke *et al*, "successfully addressing the complex and interrelated issues of sustainable development requires designing and implementing appropriate governance systems, which in turn must be built on the rule of law and compliance…"[119] Today, the rule of law is generally considered as the foundation of good governance, as it requires "adherence to constitutional supremacy, recognition that government and the governed are equal before the law, acknowledgment that government itself is limited by the law and cannot engage in any arbitrary exercise of power, and recognition that individuals are endowed with certain inalienable rights that cannot be denied even by legitimately constituted governments."[120]

A. V. Dicey, a British jurist, describing the three meanings of the rule of law stated that a system premised on the rule of law must be one in which no one is punishable or can be lawfully made to suffer in body or goods except where there is established a distinct breach of law in the ordinary legal manner before the ordinary courts of the land; that everyone is subject to and

---

[119] D Zaelke, M Stilwell & O Young "Compliance, Rule of Law and Good Governance" in D Zaelke , D Kaniaru & Eva Kruzikova eds, *Making Law Work: Environmental Compliance & Sustainable Development* vol 1 (London: Cameron May, 2005) 29 at 30 (Zaelke *et al*).

[120] Lal Kurukulasuriya, (UNEP Chief) "The Role of the Judiciary in Promoting Environmental Governance and the Rule of Law" a paper prepared for Global Environmental Governance: the Post-Johannesburg Agenda 23-25 October 2003 Yale Center for Environmental Law and Policy New Haven, CT 1 at 3, online: <http://www.yale.edu/gegdialogue/docs/dialogue/oct03/papers/Kurukulasuriya%20final.pdf>.

equal before the law; and that the general rights of the constitution arise out of particular cases as described by the courts.[121] This definition formulated by Dicey emphasises "supremacy of laws as opposed to the influence of arbitrary power, and it excludes the existence of prerogative or even of wide discretionary authority on the part of the government."[122]

In Jones' view, the essence of the rule of law is protection of the individual against state power holders.[123] He opined that the rule of law must embody three core elements: the right of an individual to seek redress in court where there is a breach of those rights; that adjudicating officers be independent in the full sense; and that decisions be rationally considered and justified such that general principles of existing norms and demands of particular situation are adequately considered.[124] These attributes, of course, are not exhaustive, as there are other essential attributes of the rule of law.

One major trend consistent in the definitions and descriptions of a system where the rule of law is prevalent is that compliance with promulgated rules is paramount. That is to say a society where set rules and regulations are complied with by the ruler and the ruled can be described as one built on the rule of law.[125]

Most environmental legislation premised on the three theoretical frameworks for environmental protection discussed in the early part of this chapter require effective enforcement to attain the goal of sustainable development. Achieving effective environmental enforcement is

---

[121] A V Dicey, *Lectures Introductory to the Study of the Law of the Constitution* ed by J W F Allison (London: Oxford University Press, 2013) 1 at pp 97, 233, 234; David Schneiderman, "A V Dicey, Lord Watson, and the Law of the Canadian Constitution in the Late Nineteenth Century", (1998) 16 Law & History Rev 495 at 508 in A V Dicey, *Introduction to the Study of the Study of the Law of the Constitution* 3rd ed (London: Macmillan, 1889) 1 at pp 175-184.

[122] Michael Allen & Brian Thompson, *Cases & Materials on Constitutional and Administrative Law* 10th ed (USA, New York: Oxford University Press, 2011) 1 at 114.

[123] Harry W Jones, "The Rule of the Law and the Welfare State" (1958) 58:2 Columbia Law Rev. 143 at 145.

[124] *Ibid.*

[125] Nigel Simmonds, "Law as a Moral Idea" (2005) 55 U Toronto L J 61 at pp 63 - 64 (Simmonds).

only conceivable within the rule of law. Indeed, attaining the goal of sustainability is dependent upon the rule of law, which is itself dependent upon compliance with existing rules and regulations.[126] For instance, the polluter-pays principle, which advocates that the costs of pollution prevention and control be borne by those who cause pollution, is only achievable through effective enforcement of existing laws.[127] Compliance with these laws is premised upon a system where the law rules, a system where a polluter is aware that non-compliance with existing rules will attract sanctions. According to Kettlewell, laws made must provide for an authority responsible for the enforcement of the statutory controls and penalties made pursuant to such rules.[128] In other words, there must be in existence agencies responsible for ensuring that the law reigns supreme. Since human activity needs regulation to ensure sustainable development and prevent ecological imbalances, state actions through law become expedient to prevent these activities giving rise to environmental pollution.[129] A system where there is a flagrant disregard of existing rules will make a mockery of the instrumentality of the law. Simmonds described this aptly by stating that a system where norms lacks efficacy cannot be characterised as one in which the rule of law prevails.[130]

The precautionary principle, described in the phrase "better safe than sorry", encourages preventative action towards environmental damage in the face of scientific uncertainties. The principle encourages state authorities to take measures to protect the environment even when environmental damage is yet to occur.[131] It places a responsibility on states to enact laws targeted

---

[126] Zaelke *et al*, *supra* note 119 at 30.
[127] Kettlewell, *supra* note 54 at 435.
[128] *Ibid* at 449.
[129] *Ibid*.
[130] Simmonds, *supra* note 126 at 64.
[131] Sadeleer *supra* note 43 at 70.

at preventing irreparable environmental damage.[132] In an environmental legal system where there is embedded the precautionary principle of environmental enforcement, the polluter pays principle, and the sustainable development theory, the purpose of effective regulation can only be achieved if the spirit and letter of these principles are complied with. Dicey's conception of the rule of law includes respect for enacted laws. This respect is built where existing laws are a reflection of the principles cherished by the state which also contemplates that individual rights are protected by the courts.[133] Sustainable development is achievable where "laws governing society connects with our deepest values" such that the enforcement of the law is not only done by agencies responsible for enforcement, but also by society at large both domestically and internationally.[134] Thus, the rule of law and the theoretical underpinnings for environmental protection are intertwined. Government must therefore not only make the laws, but must also be seen to act and work within the dictates of the law.

2.4.2. Enforcement and Compliance Mechanism

Enforcement and compliance are essential aspects of the rule of law without which the rule of law is essentially meaningless.[135] It is therefore imperative that enforcement and compliance mechanisms of various environmental laws be strengthened. Stronger enforcement and compliance mechanisms for environmental laws have been advocated for internationally.[136] One obvious reason for this clamour for enforcement and compliance is tied to the view that existing laws will make a mockery of a legal system if such laws are either unenforced or

---

[132] *Ibid.*
[133] See the Preface to Zaelke *et al*, *supra* note 119 at 13.
[134] *Ibid.*
[135] Zaelke *et al*, *supra* note 119 at 45.
[136] See Agenda 21 of the *Rio Declaration* where an international mandate to build compliance and enforcement as an essential element of environmental management was established *supra* note 55.

blatantly disregarded.[137] To gain better insight into the concepts of enforcement and compliance, some definitions will be attempted.

Castrilli[138] defined enforcement generally as activities that compel offenders to comply with their legislative requirements; while Duncan defined enforcement to mean "any government or private intervention taken to determine or respond to noncompliance." [139] In her words, "enforcement is more than punishment after the fact, it includes the process of creating binding standards for imposing liability, accountability for ensuring compliance, obligation to comply and the duty to enforce."[140] Enforcement also includes the rights and responsibilities associated with exercising enforcement powers.[141]

Duncan again defined compliance as the "achievement of a prescribed process or standard."[142] In a society governed by the rule of law, compliance can be interpreted as acting within the confines of defined and enacted laws.[143] Compliance has also been defined as "an actor's behaviour that conforms to explicit rules."[144] Thus, the measurement of compliance is tied to the level of conformity with legally imposed standards.[145] In other words, compliance is

---

[137] Zaelke *et al supra* note 119 at 36; Simmonds *supra* note 126 at 64.
[138] Joseph Castrilli "Canadian Policy and Practice with Indicators of Effective Environmental Enforcement" cited in Meinhard Doelle & Chris Tollefson, *Environmental Law: Cases and Materials* 2nd ed (Canada: Carswell, 2013) 1 at 344.
[139] L. F Duncan "Effective Environmental Enforcement: The Missing Link to Sustainable Development" LL.M Thesis, Dalhousie University, Dalhousie Law School, 1999 13-18 at 13 cited in E Hughes, A R Lucas & W A Tillerman, *Environmental Law and Policy* 3rd ed. (Toronto: Emond Montgomery, 2003)1 at 348. The thesis is also available online: <http://search.proquest.com.ezproxy.lib.ucalgary.ca/docview/304464321?pq-origsite=summon>.
[140] *Ibid* citing Duncan at 349.
[141] *Ibid.*
[142] *Ibid.*
[143] *Ibid.*
[144] Ronald B. Mitchell, "Compliance Theory: A Synthesis" (2006) 2 RECIEL 327 at 328 online: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9388.1993.tb00133.x/pdf>.
[145] *Ibid* at 328.

the realisation of a prescribed process or standard, which finds expression in a system, built on the rule of law.[146]

Achieving environmental enforcement and compliance, therefore, generally requires that public officers saddled with the responsibility of enforcing enacted rules devise a way of ensuring that a regulated community complies with such enacted laws. United States Senator Joseph Lieberman, speaking to this issue of environmental enforcement, stated that an environmental protection law that is lacking in enforcement makes the totality of such laws meaningless, lacking in truth and reality.[147] Emphasis is placed on ensuring that enacted laws and standards are enforced to achieve the ultimate environmental goal. In other words, laws must be seen in action and not just limited to the written letters.

Some have opined that the goal of enforcement and compliance is realised either through compulsion and coercion or by cooperation and conciliation.[148] These two theories are therefore the major principles governing environmental enforcement. While some experts have advocated for the deterrence-based approach to enforcement, others have argued against it and instead have canvassed arguments in support of the cooperative-based approach. Harrison has, noted in her article that the distinction between the two approaches is overstated as the cooperative approach

---

[146] Zaelke *et al*, *supra* note 119 at 45 – 46.

[147] See Clifford Rechtschaffen & David L Markell, *Reinventing Environmental Enforcement and the State/Federal Relationship* (Washington: Environmental Law Institute, 2003) 1 at 2; see also David L. Markell, "The Role of Deterrence-Based Enforcement in a "Reinvented" State/Federal Relationship: The Divide Between Theory and Reality" (2000) 24 Harv Envtl L Rev 1 at 12.

[148] See Clifford Rechtschaffen, "Deterrence vs. Cooperation and the Evolving Theory of Environmental Enforcement" (1998) 71:1 Southern California L Rev 1181 at 1186; John T Scholz, "Cooperation, Deterrence and the Ecology of Regulatory Enforcement" (1984) 18 Law & Society Review 179 at pp 179-180; see also K Harrison "Is Cooperation the Answer? Canadian Environmental Enforcement in Comparative Context" (1995) 14 J Poly Analysis & Management 221 at 222.

to enforcement relies on the implied threat of coercion.[149] We shall now briefly consider the two models of environmental enforcement.

2.4.2.1. **Deterrence Based Approach**

The deterrence based approach to environmental regulation "seeks to coerce compliance through the maximal detection and sanctioning of violations of legal rules."[150] This theory underscores the need for regulatory agencies to devise mechanisms directed at ensuring that "amoral subjects" find it in their best interest to comply with the law.[151] The deterrence theory "assumes that most regulated entities are rational economic actors that act to maximize profits. As such, decisions regarding compliance are based on self-interest."[152] This contextual meaning of the theory implies that businesses only comply with environmental regulations when the costs of non-compliance outweigh the benefits of noncompliance.[153] This approach is also well grounded in what some scholars have called the rationalist theory of compliance.[154] This theory is founded on the logic of consequence; that is, potential violators respond to the probability of detection and the severity of the consequence associated with such detection and conviction. Deterrence is a means of inducing potential violators to comply with regulatory requirements.[155] Implicit in this theory therefore is a critical need that enforcement agencies ensure that penalties for contravening environmental laws and the probability of detecting such contraventions are

---

[149] *Ibid* (Harrison) at 222.
[150] *Ibid* (Scholz) at 179.
[151] *Ibid* (Scholz) at 179.
[152] Rechtschaffen, *supra* note 148 at 1187.
[153] An example of businesses calculating the costs of noncompliance and the benefits of noncompliance is calculating how much it will cost to pay the fines associated with environmental pollution as opposed to the cost involved of employing high tech equipment designed specifically for preventing such environmental pollution. *Ibid at* 1187.
[154] Zaelke *et al*, *supra* note 119 at 59.
[155] Mark Seidenfeld & Janna Satz Nugent "The Friendship of the People: Citizen Participation in Environmental Enforcement" (2005) 73 Geo. Wash. L. Rev. 269 at 290 (Seidenfeld & Nugent).

high enough that it becomes economically unreasonable for regulated entities to violate set environmental standards.[156] According to Rechtschaffen, a deterrence-based enforcement of environmental regulations is the essence of environmental enforcement. He argues that this model articulates an expressive function, evidenced through governmental action.[157] Governmental action is described as expressive when a regulated entity realises that any action, not at par with laid down rules, will attract tangible consequences. People generally tend to comply more with rules backed with expressive actions rather than mere words.[158] They are more inclined to obey an environmental regulation when they know that disobedience will attract grave consequences.

One of the criticisms of the deterrence-based approach, according to Rechtschaffen, is that it circumvents "agency capture"[159] by ensuring a more steady treatment of regulated facilities, that is, preventing regulators who become very friendly and closely identified with regulated entities such that they overlook some important violations and "bend over too far in the direction of lenient treatment".[160] This approach also provides a strong and credible threat of vigorous enforcement needed for widespread voluntary compliance. This is because visible enforcement actions validate the compliance decisions of voluntary compliers who may consider a failure to enforce vigorously against non-compliance as unfair.[161] Thus, a failure to sanction violators publicly may delegitimize the rule violated and consequently encourage the

---

[156] *Ibid* at 292.
[157] See Rechtschaffen *supra* note 148 at 1220.
[158] *Ibid*.
[159] *Ibid* at 1222.
[160] Rechtschaffen, *Supra* note 148 at 1220.
[161] See Matthew D. Zinn, "Policing Environmental Regulatory Enforcement: Cooperation, Capture and Citizens Suits" (2002) 21 Stan Envtl LJ 81 at 97 (Zinn).

noncompliance of others who would otherwise have complied voluntarily.[162] This is one of the problems identified by Rechtschaffen in the deterrence-based approach. Notwithstanding this setback of the deterrence-based approach to environmental enforcement, it may be safe to argue that only substantial, predictable and public sanctions for non-compliance can ultimately achieve effective compliance with environmental laws.[163] This is because regulated entities will only conform to environmental rules and fulfil their legal obligations when they are convinced that public authorities might detect and penalize non-compliance. Thus, a regulated entity's compliance level is dependent largely on the likelihood that those entitled to enforce regulatory obligations will detect violations.[164]

2.4.2.2. **Cooperation Based Approach**

The cooperation approach to environmental enforcement has been described as one which emphasises "compliance and not the deterrence of non-compliance."[165] The function of inspection under this model is not to accumulate evidence of violations for subsequent enforcement actions but rather to "provide advice to regulated entities as a means of facilitating compliance."[166] Scholz views the cooperation-based approach to environmental enforcement as a "strategy which helps both individuals and enforcers to achieve higher utility in the long run by abstaining from temptations to maximize short-term gains."[167] The cooperation-based approach generally gives discretionary powers to regulatory agencies to provide flexibility to regulated

---

[162] *Ibid.*
[163] See generally David L Markell, "The Role of Deterrence-Based Enforcement in a "Reinvented" State/Federal Relationship: The Divide between Theory and Reality" (2000) 24 Harv Envtl L Rev 1 at pp 10-11. (Discussed the advantages of a deterrence based enforcement).
[164] *Ibid.*
[165] Robert L Glicksman & Dietrich H Earnhart "Depiction of the Regulator-Regulated Entity Relationship in the Chemical Industry: Deterrence-Based V. Cooperative Enforcement", (2007) 31 William & Mary Envtl L & Poly Rev 1 at 10 (Glicksman and Earnhart).
[166] *Ibid.*
[167] Scholz *supra* note 148 at 181.

entities through the provision of "compliance assistance" that is designed to encourage them to address non-compliance proactively.[168] Furthermore, the cooperative theory, according to Rechtschaffen, emphasizes securing compliance rather than sanctioning wrongdoing.[169] This is based on the notion that penalties are seen as threats rather than sanctions, and sanctions are typically withdrawn if compliance is achieved. Sanctions and punishments are thus "seen as a mark of the system's failure (to otherwise obtain compliance)."[170] Enforcement here is geared towards inducing conditions that lead to conformity since the primary focus is the violations and not the violator.[171]

Dismissing the argument made by deterrence theorists, that all regulated firms are "amoral calculators" that will choose to contravene environmental laws where it is economically reasonable to do so, Scholz and Kagan[172] argue that the "amoral calculator" model of firm behaviour is inaccurate in many cases and that apart from the "amoral calculators" firms, there also exist two other types of regulated firms: the "political citizen" and the "incompetent." In their words, voluntarily complying with legal rules by the "political citizen" firm may be consequent upon the belief of the firm's decision makers that such rules are legitimate while non-compliance may stem from the opinion that such rules are unreasonable.[173]

One of the strongest arguments made in support of the cooperation approach is the ability to save enforcement costs. Zinn explains that the enormous resources directed at ensuring compliance (i.e. by engaging in environmental prosecution) can be saved when agencies engage

---

[168] Glicksman & Earnhart *Supra* note 116 at 4.
[169] Rechtschaffen *supra* note 148 at 1188.
[170] *Ibid.*
[171] *Ibid.*
[172]Robert A Kagan & John T Scholz, "The Criminology of the Corporation and Regulatory Enforcement Strategies", cited in Zinn *supra* note 162 at 98.
[173] *Ibid* Kagan & Scholz cited in Zinn at 98.

in informal action as a means of securing compliance, i.e. being conciliatory as against high handedness.[174] Rechtschaffen, however, has disputed this claim. He argues that the cooperative model of enforcement underplays the economic pressures associated with non-compliance.[175] To him, persuading regulated entities to comply may be productive only when such entities make good-faith efforts to comply and have the means to do so. Complying naturally is, however, a remote possibility when the financial implication of complying is significant.[176]

2.5. Conclusion: Deterrence and Cooperation: Striking a Balance

In this literature review, a modest attempt was made at examining generally the theoretical structures upon which the argument for environmental protection is postulated, its relationship with the rule of law and how a system premised upon the rule of law, in which effective enforcement and compliance is embedded, can propel a state towards achieving sustainable development. In Nigeria, for example, various legislation, policy initiatives and environmental regulations are directed towards achieving sustainable development. The National Environmental Policy (NEP),[177] which provides specifically for environmental principles such as the polluter-pays principle, the precautionary principle, intergenerational equity principle, and a host of others, is directed at attaining sustainable development. Specifically under part one of the NEP statements, it provides that in order for the NEP to succeed, the NEP must be built on some of the aforementioned principles of environmental law which are all titled towards achieving sustainable development. Apart from this policy, other Nigerian legislation provide for environmental protection but unfortunately, these laws have failed to achieve their intended goal

---

[174] Zinn supra note 161 at 99.
[175] Rechtschaffen *Supra* note 148 at 1206.
[176] *Ibid.*
[177] National Environmental Policy 2, available at online: <http://www.nesrea.org/images/National%20Policy%20on%20Environment.pdf>.

due to non-compliance. This obvious disregard of environmental laws in Nigeria, in particular, raises crucial environmental concerns which need to be addressed with a view to meeting basic human needs and equally promoting sustainable development. Addressing these concerns therefore requires an effective governance structure that is firmly rooted in the rule of law.[178] Indeed, the failure of the government to effectively enforce the various environmental laws is the reason for the continued environmental pollution prevalent in the oil and gas industry. The continued cases of persistent oil spills on water and land in Nigeria is evidence of the failure of a system that presumably should be deeply rooted in the precepts of the rule of law. It is therefore expedient that alternative measures be explored to ensure compliance with enacted environmental laws. One suggestion is that such measures (deterrence) should be those in which the cost of non-compliance is greater than the cost of compliance.[179] Another suggestion made by the deterrence scholars is the institution of expressive function of enacted laws and prevention of agency capture.[180] This is particularly true because, unless a law is seen to be enforced, the necessary widespread compliance may not be achieved.

For the scholars who are of the view that the co-operative approach to enforcement is the most effective, they argue that rather than seek punishment for those who make best efforts to comply but fall short and those who flagrantly disregard enacted laws, discretionary powers should be given to regulatory agencies to provide flexibility to those regulated.[181] They argue that securing compliance is far more beneficial than punishing wrongdoing.[182] In Nigeria where the economic activities of regulated entities are required to ensure continued development, it may

---

[178] Zaelke *et al*, *supra* note 119 at 40.
[179] Rechtschaffen, *supra* note 148 at 1187; Seidenfeld & Nugent *supra* note 122 at 292.
[180] Rechtschaffen, *supra* note 148 at 1220-1222.
[181] Scholz, *supra* note 148 at 181.
[182] Rechtschaffen, *supra* note 148 at 1188.

perhaps be an exercise in futility to make an argument that stricter laws be made and enforced, as this may either stifle the industry or put the Nigerian economy in an undesired disadvantage.[183] It is therefore my considered opinion that a balance between these two approaches may ultimately lead Nigeria to the "promise land" of achieving sustainable development. This is premised on the conviction that each of these approaches can only be appropriate for a particular kind of regulated entity. A perpetual violator of rules will, of course, require the high-handedness associated with the deterrence-based approach. Such a violator will require the "harsh and legalistic treatment" associated with deterrence, while a complying entity with perhaps one or two "slips" will be approached in good faith and in the spirit of co-operation.[184] In explaining the advantages of having a mix of the two models, Scholz stated that a strict deterrence-based approach to enforcement is inadequate for the new social regulatory agencies. In his words:

> The inspector who walks through a factory and faithfully enforces each regulation may not detect or do anything about a more serious source of risk that happen to lie outside the rulebook; at the same time, he alienates the regulated enterprise and encourages non-cooperative attitudes.[185]

In some instances, a cooperative approach is most likely to achieve results as it helps avoid the associated problems of "under-inclusiveness" and "over-inclusiveness" in regulations

---

[183] A clear example is the withhold of about $40,000,000,000 (Forty billion dollars) investment in Nigeria by multinational oil companies based on the perceived uncertainty accompanying the Petroleum Industry Bill 2012 which proposed new fiscal/regulatory regimes for upstream and downstream petroleum industry in Nigeria. See Andrew Bowman, Challenges Ahead for Nigeria's oil and gas industry, Financial Times, July 24, 2012 cited in Dennis Otiotio, "An Overview of The Oil and Gas Industry in Nigeria" 1 at 8, online: <http://www.Academia.Edu/2654835/An_Overview_Of_The_Oil_And_Gas_Industry_In_Nigeria_by_Dennis_Otiotio>; <http://www.nigerialaw.org/Legislation/LFN/2012/The%20Petroleum%20Industry%20Bill%20-%202012.pdff> 1 at 12.

[184] Scholz, *supra* note 148 at 182.

[185] *Ibid.*

by giving regulated entities the liberty to ignore technical violations in situations where compliance would make no difference in the harm resulting from the violation.[186]

[186] See also, John T. Scholz, "Enforcement Policy and Corporate Misconduct: The Changing Perspective of Deterrence Theory" (1997) 60 Law and Contemporary Problems 253 at 263-265.

Chapter Three: Regulatory Regime for Oil Spills in the Nigerian Oil and Gas Industry

3.1. Part One: Overview of Select Laws and Agencies Regulating Oil Spills in the Nigerian Oil and Gas Industry

3.1.1. Introduction

This chapter undertakes a review of select laws and agencies regulating the oil and gas industry in Nigeria. Specifically, consideration is given to the key provisions of the statutes that deal with the regulation of oil spills. Earlier in chapter one, it was mentioned that the regulation of the oil and gas industry is within the ambit of the federal government. In Nigeria, although the various state governments have the power to make environmental laws applicable within the states,[187] in terms of oil spill regulation, such power does not extend beyond what may be considered mere general power to enforce compliance with environmental legislation. Legislation and creation of environmental agencies that purport to deal with the regulation of the oil and gas industry is exclusively within the purview of the federal government.[188]

Oil exploration and exploitation activities in Nigeria have relatively improved the lot of the nation. However, it has also worsened the living conditions of the people in the oil producing states.[189] Given that the development of oil and gas resource is bound to bring with it associated environmental problems, the need for stiffer enforcement of existing laws is required to ensure a safer environment for Nigerians. The current regime for the enforcement of oil spills has been questioned as to its efficacy in combating the enormous environmental challenge associated with

---

[187] See for example the enactment of environmental law creating the Lagos State Waste Management Authority (LAWMA) in Lagos.
[188] The Exclusive Legislative List contained in Schedule 1 of the Constitution of the Federal Republic of Nigeria 1999 confers jurisdiction over mines and minerals, including oil fields, oil mining, geological surveys and natural gas on the federal government.
[189] Akhakpe, *supra* note 2 at 82.

oil spills. The nature of the oil and gas industry operations necessitates appropriate enactment to regulate every activity relating to the development of oil and gas resources.[190] Indeed, the oil and gas laws in Nigeria which comprise of a system of standards and rules on corporate conduct that impose well defined obligations, penalties and corresponding rights regarding the continuity of the oil and gas businesses in the country, is currently inadequate in combating the enforcement issues facing it.[191]

The poor health of the environment of an oil producing region is a good indicator that there still exists a wide margin between the laws enacted and the enforcement of these laws. It is imperative therefore that this widening gap be closed if sustainable development is to be achieved in the long run. To this end, an examination of some specific laws regulating the Nigerian oil and gas industry will be the focal point for discussions in this part. Provisions that adequately deal with oil spill infractions and the possible ways in which these infractions are dealt with will be considered. A general review of what is in place in Nigeria will also be considered. This review will be undertaken in two parts. Part one of this chapter will undertake a review of select laws and agencies governing the framework of oil spills in Nigeria, while part two will examine the approaches to enforcement within the oil and gas industry in Nigeria. This chapter will be concluded by looking at the weaknesses inherent in the existing legal framework.

3.1.2. The Constitution of the Federal Republic of Nigeria 1999 (*CFRN* 1999)

The *CFRN* 1999 is the principal law regulating the enactment and enforcement of all laws in Nigeria. It is the lense through which all other laws are examined. Although it specifically does not contain provisions that relate to oil and gas spills, it does provide for the arm of

[190] Onyekachi Duru, "An Appraisal of the Legal Framework for the Regulation of Nigerian Oil and Gas Industry, with Appropriate Recommendations" 1 at 1 online: <http://ssrn.com/abstract=2137979>.
[191] *Ibid* at 2.

government vested with the powers to make laws regulating "mines and minerals, including oil fields, oil mining, geological surveys and natural gas"[192]. It is quite logical that the level of government constitutionally empowered to make laws regarding the aforementioned subject matters would have the powers to legislate on the laws regarding environmental infraction resulting from mines and minerals, oil fields, oil mining, geological surveys and natural gas. In the light of the foregoing, a review of the *CFRN* 1999 is merely necessary to the extent that it sets the pace as to who has jurisdiction over the environment and more particularly over energy resource development and its consequential impact on the environment.

One of the objectives of Part II of the *CFRN* 1999 (Fundamental Objectives and Directive Principles of State Policy) is to ensure a safe and improved environment for the citizenry. Section 20 clearly obligates the state to "protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria" By this provision, activities, including those aimed at achieving an economically vibrant state, must be carried out in a manner that achieves the purpose set out in section 20 of the *CFRN* 1999. This position is further strengthened by the provision of section 17 (2)(d) which forbids the exploitation of human or natural resources in any form other than for the good of the community. As heart-warming as the provision above may appear, it has been described as having serious defects. In fact, it may be correct to say that the single most important factor limiting the full implementation of the environmental protection laws and compensatory prescriptions is the *CFRN* 1999. Although for the first time in the history of Nigeria, the Constitution reflected environmental concerns,[193] those concerns are grossly inadequate to provide a remedy for victims of environmental pollution and degradation,

[192] Part I of Schedule II to the *CFRN* 1999.
[193] See S.20 of the *CFRN* 1999 Constitution.

especially those resulting from exploitation of natural resources in the oil-rich Niger Delta. This *CFRN* 1999 creates a list of matters exclusively reserved for the Federal Government, upon which the component states and local governments cannot legislate. Although the component states and local governments are not prohibited from setting up state environmental protection agencies, the reality is that the powers of these other tiers of government are quite limited, as it is expressly declared in Section 4 (5) of the *CFRN* 1999 that any provision of a law of a State House of Assembly that is inconsistent with a federal law shall to the extent of its inconsistency be null and void. Some of such matters upon which the component states cannot legislate include matters relating to mines and minerals (including oil fields, oil mining, geological surveys and natural gas. The legal implication of this is that only the Federal Government of Nigeria has authority to dictate the use of land and environmental management where such use relates to mining activities, since the ownership of minerals, such as oil, the grant of oil exploration and mining licences and the management of oil activities, are matters reserved for the federal government by virtue of the Exclusive Legislative List.[194] But unfortunately, the negative environmental fallouts of activities touching the use of oil as a natural resource take place in the states and localities such as the Niger Delta,

While section 20 of the *CFRN* 1999, at first sight, appears to give some hope for the environment by providing that "the State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria," the absurdity surrounding that provision is that it takes away the capability of the environmental activist or a person or community suffering from environmental pollution and degradation to be able to enforce this

[194] See Second Schedule to the *CFRN* 1999.

constitutionally declared obligation of the state and right of the citizens. It is provided in Section 13 that the provisions of chapter II of the Constitution (Fundamental Objectives and Directive Principles of State Policy) are not capable of being enforced in any court. In other words, those provisions are non-justiciable.

In critiquing the provisions of section 20 of the *CFRN* 1999, Fagbohun[195] argues that this provision is marred with defects as the wording of the section is very broad, making its interpretation cumbersome. More importantly, however, this provision falls under chapter II of the *CFRN* 1999, which is non-justiciable thus making the provision worthless since this provision lacks judicial enforcement.[196] Fagbohun also criticizes the provision on the basis that it attempts a "middle-ground between two extremes formulated by a system that is not desirous of initiating any serious environmental change the thrust of which may disturb its economic direction and strategies."[197] Thus, the much desired turning point supposedly heralded by the provision of section 20 has resulted in nothing but a mirage.

Also, section 12 establishes that international treaties which include environmental treaties ratified by the National Assembly of Nigeria should be implemented as law in Nigeria. This means that any treaty touching on the subject of the environment can be implemented in Nigeria, provided that the treaty has been ratified by the federal legislature. Sections 33 and 34, which provide for the fundamental human rights to life and human dignity respectively, have

---

[195] Olarenwaju Fagbohun, "Reappraising the Nigerian Constitution for Environmental Management," (2002) 1 AAU Law Journal 44 at 44.
[196] Section 6(6)(c) of the Constitution ousts the jurisdiction of the courts from considering any question as to whether or not the State has complied with the provisions of Chapter II of the Constitution.
[197] *Supra* note 192.

also been argued to be linked to the need for a healthy environment to give effect to these rights.[198]

3.1.3. The National Environment Standards Regulation Enforcement Agency (Establishment) Act 2007 (NESREA Act 2007): Background Purpose

The *NESREA Act* 2007 was enacted to replace the defunct Federal Environmental Protection Agency Act 1988 (*FEPA Act* 1988) and to establish NESREA as the lead environmental agency charged with the responsibility of protecting the Nigerian environment and ensuring compliance with enacted environmental laws. Consequent upon the criticisms levied on the defunct FEPA as to its failure to carry out effective enforcement of existing environmental laws, the *NESREA Act* 2007 was enacted to correct the visible drawbacks of the FEPA.[199] The established NESREA is charged with the following responsibility[200]:

> …protection and the 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.

This section empowers the NESREA to act for the environmental good of the country by ensuring a sustainable environment for Nigerians through the enforcement of existing environmental laws as well as regulations made pursuant to the *NESREA Act* 2007. Although the focus of this part of the chapter is to examine the provisions of the *NESREA Act* 2007, as they apply to enforcement of environmental regulations generally, it is instructive to state at this

---

[198] Environmental Law Research Institute Synopsis of Laws and Regulations on the Environment in Nigeria "Environmental law and policies in Nigeria", online: <http://www.elri-ng.org/newsandrelease2.html>.
[199] See Mohammed T Ladan, "Review of *NESREA Act* 2007 and Regulations 2009-2011: A New Dawn in Environmental Compliance and Enforcement in Nigeria", (2012) Law, Environment and Development Journal 116 at 120 online: <http://www.lead-journal.org/content/12116.pdf>.
[200] See section 2 of the *NESREA Act* 2007.

juncture that the *NESREA Act* 2007 provisions do not apply to the oil and gas industry in Nigeria. This Act, which can be described as rather general in nature, makes provisions for how other environmental infractions are to be dealt with while specifically excluding infractions arising from the development of energy resources in the country.[201] The wisdom in the exclusion of the provisions of the *NESREA Act* 2007 from its application to the oil and gas industry is yet to be seen, because this law is the most comprehensive piece of legislation ever enacted for the regulation of environmental pollution in Nigeria. The decision to exclude the *NESREA Act* 2007 from applying to pollution in the oil and gas industry may have been informed by political undertones and vested interest considerations of powerful lobbyists in the Nigerian oil and gas industry.

3.1.3.1.Relevant Provisions of the *NESREA Act* 2007

Under section 7 of the Act, the NESREA is empowered to ensure compliance with laws, guidelines, policies and standards on environmental matters. This is not limited to the provisions of the Act alone, but rather to all environmental matters with the exclusion of the oil and gas industry. Standards of environmental matters would include both the water quality and air quality standards in Nigeria. Subsection (b) of section 7 also empowers the agency to coordinate and liaise with stakeholders within and outside the country on matters bordering on environmental standards, regulations and enforcement, while section 7(c) empowers the agency to: "enforce compliance with the provision of international agreements, protocols, conventions and treaties on the environment, including climate change, biodiversity, conservation, desertification, forestry, oil and gas, chemicals, hazardous wastes, ozone depletion, marine and wild life, pollution,

[201] The *National Oil Spill Detection and Response Agency (Establishment) Act* 2006 is primarily dedicated to enforcing oil and gas related infractions. Section 7 (h) and 8 (g) of the *NESREA Act* 2007.

sanitation and such other environmental agreements as may from time to time come into force." Although the provisions of this Act do not empower the agency to enforce compliance with laws touching on oil and gas related infractions, one may argue that by virtue of this provision empowering it to implement international treaties ratified by the federal legislature, the agency may enforce treaties touching specifically on oil and gas infractions once such treaties have been ratified by the federal legislature. It is expedient to state that the provision of section 12 of the *CFRN* 1999 contemplates that only domesticated treaties (i.e. treaties re-enacted by the National Assembly of Nigeria) will have the force of law when it comes to enforcement. Thus, it is unclear whether or not a ratified but undomesticated international treaty touching on environmental law or the oil and gas industry specifically may be enforced by the NESREA by virtue of its section 7 mandate. Notwithstanding this grey side of the argument, however, one would argue that once an international treaty or convention signed by the executive has been ratified by the legislature, NESREA should be able to assume jurisdiction to enforce, whether or not that treaty relates to the oil and gas industry. Excluding the NESREA from exercising jurisdiction over oil and gas related pollution is perhaps one of the most significant weaknesses of the *NESREA Act* 2007. The agency by virtue of section 8(g) shall have powers to conduct public investigations on pollution and the degradation of natural resources except investigations on oil spills. This interesting provision contradicts the provision in the paragraph above by ousting the jurisdiction of the NESREA over oil spill investigations, notwithstanding the clear mandate of the agency which is to ensure an environmentally sustainable Nigeria. Section 29 which also stipulates that the agency "shall, in the face of pollution, co-operate with other government agencies for the removal of any pollution" excludes the removal of oil and gas related pollution. The *NESREA Act* 2007, by virtue of the provisions examined above, rather than

provide a coherent framework for monitoring compliance with environmental laws, may indeed create more confusion where its provision is strictly interpreted as ousting the jurisdiction of the Agency in oil and gas related offences.[202] It is rather interesting that Nigeria's principal environmental agency is under the provisions discussed above prohibited from supervising or participating in the clean-up of any pollution resulting from oil and gas industry activities. Another rather startling provision of the *NESREA Act* 2007 is in section 30 which expressly prohibits officials of the NESREA from entering and searching any oil and gas facilities, even with a warrant issued by a court.[203] This section further inhibits the Agency from enforcing any environmental regulations in the oil and gas sector. Instead of simply declaring that the oil and gas sector is outside of the Agency's purview, the *NESREA Act* 2007 gives the Agency the power to enforce environmental regulations in the oil and gas sector but robs it of the ability to actually do so.

3.1.4. The National Oil Spill and Detection Agency (Establishment) Act 2006 (*NOSDRA Act* 2006): Background and Purpose

In view of the heightened environmental degradation in the oil producing region of Nigeria and the enormous spills occurring as a result of the development of energy resource in this area, it became imperative to establish a framework for an urgent response to address this menace of oil spills ravaging the oil producing region of Nigeria. The response to this was the enactment of the *NOSDRA Act* 2006. The NOSDRA was charged with the responsibility for preparedness, detection and response to all oil spillages in Nigeria.[204] Its objective as contained

---

[202] Fagbohun, *Supra* note 8 at 332.
[203] See Lisa Stevens, "The Illusion of Sustainable Development: How Nigeria's Environmental Laws are Failing the Niger Delta" (2011-2012) 36 Vermont Law Review 387 at 397.
[204] See section 1(1) of the *NOSDRA Act* 2006.

in the Act is to implement and coordinate the National Oil Spill Contingency Plan (NOSCP) for Nigeria.[205] According to the Act, implementing the NOSCP:

> shall require that the agency establish a vibrant national operational organization that ensures a safe, effective and timely response to major or disastrous oil pollution; establish mechanism to monitor and assist, or where necessary, direct the response to oil pollution events so as to save lives, protect the environment and clean up to the best practical extent of the impacted site possible.

Indeed, NOSDRA's mission is to ensure that there is zero tolerance for oil spill incidents on the Nigerian environment. Section 6 of the Act is very significant and instructive. It provides that the agency shall be "responsible for surveillance and ensure compliance with all existing environmental legislation and the detection of oil spills in the petroleum sector."[206] This provision confers jurisdiction on the NOSDRA for the implementation of environmental laws, specifically laws that deal with the oil and gas industry in Nigeria. Not only is NOSDRA charged with enforcing compliance with enacted environmental laws in the oil and gas sector, it is also charged with monitoring the regulated industry so as to ensure compliance with enacted legislation. Notwithstanding this mandate, various reports have shown that the NOSDRA is far from fulfilling its mandate. According to a recent report[207] the agency has recorded about 3,725 oil spills between January 2006 and July 2010. Out of these spills, about 495 of them occurred between January and July 2010.[208] The report by Vanguard Newspaper,[209] also indicated that multinational oil companies such as Shell, Agip and the Pipelines and Product Marketing Company Limited (PPMC) are considered the worst culprits in terms of the number of oil spills. In view of this prevalent oil spills, one begins to wonder when, if ever, the NOSDRA will ever

---

[205] Section 5 of the *NOSDRA Act* 2006.
[206] Section 6 (1) (a).
[207] See Rotimi Ajayi, "Environmental Degradation: Review of NOSDRA Act Now" online: <http://www.vanguardngr.com/2011/10/environmental-degradation-review-of-nosdra-act-now/>.
[208] *Ibid.*
[209] *Ibid.*

stand up to its responsibility of nurturing and sustaining "a zero tolerance for oil spill incident in the Nigerian Environment"

3.1.4.1.Relevant Provisions of the *NOSDRA Act* 2006

The preceding paragraphs discussed the purpose of the *NOSDRA Act* 2006. This section will review provisions in the Act that relate to the enforcement of environmental law in the face of an oil spill incident. Aside from discussing the provisions of section 5, which deals with the objectives of the provisions of the Act, and section 6(1), which discusses the functions of NOSDRA, one important provision worth discussing is that of section 6(2)(3) which provides as follows:

> (2) An oil spiller is by this Act to report an oil spill to the Agency in writing not later than 24 hours after the occurrence of an oil spill, in default of which the failure to report shall attract a penalty in the sum of five hundred thousand naira (₦500, 000.00) for each day of failure to report the occurrence. (3) The failure to clean up the impacted site, to all practical extent including remediation, shall attract a further fine of one million naira.

This provision empowers the agency to impose penalties upon an oil spiller for failure to report an oil spill incident and clean up an impacted site to a reasonable extent. There is no other provision in the Act that specifically imposes fines for an oil spill incident; only failure to report an incident is punishable. This provision is particularly concerning, as an oil spiller who would have assumed an obligation to report an oil spill incident may prefer to pay the fine of one million naira (₦1,000,000) (approximately CD$5,000) rather than engage in the clean-up process. This situation then removes deterrence and fosters an environment where the law is observed more in its breach than in compliance. This alludes to the argument of proponents of the deterrence-based theory of environmental enforcement that regulated entities, as rational profit maximizers, will only obey the law when it is in the firm's best economic interest to do

so.[210] Violations will therefore occur when the perceived benefits of noncompliance exceed the anticipated cost of sanctions. A clear example of this position was seen in a recent oil spill incident in Nigeria where a fine of one million naira was imposed on Nigeria Agip Company Limited over its failure to immediately contain, recover and clean-up oil spill-impacted sites at its gas plant in Rivers State.[211] This is indeed a laughable fine and makes a mockery of the polluter-pays principle embedded in most environmental statutes in Nigeria because such a fine is not deterrent enough to forestall subsequent oil spills and cover-ups.

It is indeed concerning that despite the huge mandate given to the NOSDRA to effectively respond to oil spill incidents in Nigeria, it is not empowered to impose fines or other penalties on companies for their disastrous acts of oil spillage save for the provisions regarding reporting of an oil spill incidence and the clean-up exercise. One begins to wonder if indeed the statute is "worth its teeth" in view of the enormous challenges of oil spill incidents and the resultant environmental degradation facing Nigeria.

3.1.5. The Environmental Impact Assessment Act (*EIA Act*), CAP E12 LFN 2004:

Background

The *EIA Act* is a very important piece of legislation in the environmental law framework of Nigeria. It primarily deals with considerations of the environmental impact (both positive and negative) of major public and private projects on the environment. The EIA process has been described as a "formal process by which a proposed activity with potentially significant environmental, social and economic costs is studied with a view to evaluating its impacts, examining alternative approaches and developing measures to prevent or mitigate the negative

---

[210] Timothy F Malloy, "Regulation, Compliance and the Firm" (2003)76 Temple Law Review 451 at 453-455.
[211] *Supra* note 207.

impacts."[212] Another definition of the EIA process considers it as "the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made."[213] This definition imports the essence of the precautionary principle which is one of the rationales for environmental protection. The purpose of the EIA generally, therefore, is to ensure that decision makers have before them adequate information necessary for considering the consequential impact of a developmental project before granting approval that such project be proceeded with. The following has been recognised as the rationale for the adoption of the EIA process in Nigeria:[214]

> 1. To achieve Reactive pollution control through measures responding to identified local problems (usually air, water, or soil pollution), with solutions considered to be technical matters to be addressed through closed negotiation of abatement requirements between government officials and the polluters.
> 2. To ensure Proactive impact identification and mitigation through impact assessment and project approval/licensing, still focused on biophysical concerns (though now integrating consideration of various receptors) and still treated as a largely technical issue with no serious public role (but perhaps expert review)
> 3. To achieve Integration of broader environmental considerations in project selection and planning through environmental processes with consideration of socioeconomic as well as biophysical effects, obligatory examination of alternatives, aiming to identify the best options environmentally as well as economically, and public reviews (that reveal expert conflicts and uncertainties, and consequently the significance of public choice).
> 4. To achieve Integrated planning and decision making for sustainability, addressing policies and programmes as well as projects, cumulative and global effects, with review and decision processes devoted to empowering the public, recognizing uncertainties and favouring precaution, diversity, adaptability, and so on, expecting positive steps towards sustainability.

---

[212] Allan Ingelson and Chilenye Nwapi, "Environmental Impact Assessment Process for Oil, Gas and Mining Projects in Nigeria: A Critical Analysis" (2014) 10:1 Law, Environment and Development Journal 1 at 3, online: http://www.lead-journal.org; see also section 1 (a) of the *EIA* Act.

[213] See the homepage of International Association of Impact Assessment, online <http://www.iaia.org/>.

[214] See The Rational for the Adoption of the EIA as a Policy in Environmental Management in Nigeria, online: <https://comfortasokoroogaji.wordpress.com/2011/09/19/the-rational-for-the-adoption-of-the-eia-as-a-policy-in-environmental-management-in-nigeria/>.

Reiterating the fact that the purpose of this section is to review the *EIA Act* in the light of enforcement of its provisions as a means of mitigating the devastating effect of oil and gas activities on the Nigerian environment, it is not the intention here to give in-depth consideration to EIA activities within other industries in Nigeria. Only the oil and gas industry will be considered and more specifically oil spill pollution in the oil and gas industry.

3.1.4.1 Relevant Provisions in the *EIA Act*

Section 2(1) provides that no project within the private and the public sector shall be undertaken without prior consideration of their effects on the environment at an early stage. Subsection 2 further provides 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 Act." Also, subsection 4 requires a proponent of a project to apply in writing to the EIA agency before embarking on the proposed project. This is to ensure that the proposed activity is subjected to an EIA at the planning stage of the project. Although the set out provisions require that the assessment of a project in the energy sector be adequately considered to determine its impact on the environment before the required "go-ahead" is given for the project, one question that recurs is whether or not a comprehensive impact assessment of projects is usually carried out in light of the continued devastating effects of oil and gas projects in the Niger Delta. If the answer to this question is "yes", why then do the regulatory authorities give approvals to projects that eventually produce catastrophic consequences on the Nigerian environment? The answer to this question may not be found in the law or existing legislation, but from government and its agencies.

Section 7 provides that comments shall be received from interest groups, members of the public, or experts in relevant discipline, on an EIA before a final decision on the project is

reached. This provision proposes to make the EIA process more participatory by receiving comments, as it were, from interested parties thereby creating an opportunity for local communities who are most likely to be affected by the adverse externalities of the proposed projects to have an input regarding the desirability of the project vis-à-vis its impact on the environment. Another instructive provision of the *EIA Act* is section 13 which expressly provides for situations where an EIA is required, while section 14, on the other hand, provides for cases where an EIA is not required. Section 14 provides that an EIA will not be carried out on projects which the President or the Council is of the opinion that the environmental effects are minimal.

Although other sections of the *EIA Act* specify procedures for carrying out the EIA process, these procedures will not be discussed under this heading.[215] One section worth mentioning is section 60 of the Act which creates a legal liability for the contravention of its provisions. Specifically, it states that "any person who fails to comply with the provisions of this Act shall be guilty of an offence under this Act and liable on conviction, in the case of an individual, to N100,000 fine or to five years' imprisonment and in the case of a firm or corporation to a fine of not less than N50,000 and not more than N100,000." It is rather absurd, to say the least, that an individual guilty of an offence under this Act may be imprisoned for 5 years or liable to pay a fine of N100,000 (approximately CD$500) while a company that is found guilty is only liable to pay a maximum fine of N100,000. It again brings to bear the lack of deterrence and the weaknesses of the enforcement mechanisms in Nigerian environmental laws.

[215] For more on the EIA process, see the provisions of section 15 of the *EIA Act*. This section will also not discuss the review and mediation process. For more on that, please see the provision of sections 33-37 of the *EIA Act*.

3.1.5 Petroleum Act CAP P10 LFN 2004: General Overview

The *Petroleum Act* and the regulations made thereunder, regulates primarily oil and gas activities in Nigeria. The Act vests in the state the ownership and control of all petroleum.[216] Aside from the general provisions under the Act that deals with licences for operating a refinery and distribution of petroleum products, one provision that is worth mentioning is section 9(1)(b) which empowers the Minister of Petroleum to make regulations which spans across the grant of licenses and leases under the Act. The *Petroleum (Drilling and Production) Regulation* 1969[217] which was issued pursuant to this Act in one of its provisions states as follows:

> The licensee or lessee shall adopt all practicable precautions including the provision of up to date equipment approved by the Director of Petroleum Resources to prevent pollution of inland waters, rivers, water courses… by oil mud or other fluid… which might contaminate the water or water bank or shoreline which might cause harm or destruction to fresh water or marine life, and where any such pollution occurs or has occurred, shall take prompt steps to control and, if possible, end it.

This provision has majorly been criticised for its vagueness and the lack of legal duty it imposes upon the operator, as all the operator is required to do is to take steps to control the pollution arising from its activities.[218] It does not in any way impose a mandatory obligation on the licensee and neither does it clearly define what needs to be done in ensuring this pollution control. Another important section crucial for this review is the section that specifies offences for the contravention of the provisions of this Act. Section 13 generally provides that any person that carries out activities specified under this Act without the requisite licence is guilty of an offence and upon conviction to a term of six months imprisonment or a fine of two thousand naira or both. This provision reinforces the need for stricter laws to combat oil and gas pollution. A fine

---

[216] Section 1 (1) of the *Petroleum Act*. The state here means Nigeria.
[217] See Regulation 25.
[218] Yinka Omorogbe, *Oil and Gas Law in Nigeria* (2001: Malthouse Press, Lagos) 1 at 136.

of two thousand naira (C$10) as stipulated in this act will most likely not deter a person from contravening the provisions of this Act, but will pose an incentive to environmental pollution.

3.1.6 The Oil Pipelines Act CAP O7 LFN 2004 (*OPA*): General Overview

The *OPA* was one of the foremost laws on oil pollution in Nigeria. Enacted in 1956, this Act contains model provisions that, where effectively used, could protect the Nigerian environment from the impacts of oil and gas developments.[219] The *OPA* and the regulations made pursuant to it govern the grant of permits and licences for the establishment and maintenance of pipelines incidental and supplementary to oilfields and oil mining and for ancillary purposes. The Act permits a person to make an application to the Minister[220] in accordance with the provisions of this Act or any regulations made pursuant to the Act for the grant of a permit to survey the route for an oil pipeline for the transport of mineral oil, natural gas, or any product of such oil or such gas to any point of destination to which such person requires such oil, gas or product to be transported for any purpose connected with petroleum trade or operations.[221] In order to effectively protect the environment from oil spills and pollution arising therefrom, there is the need to regulate the transportation of oil and gas through pipelines; hence, the import of this Act and the sections thereunder. Although most of the provisions under this Act generally discusses how permits and approvals for the operation of an oil pipeline are to be obtained, a keynote section in this legislation is section 7(4) which provides that only a person who is licenced to construct, maintain or operate an oil pipeline shall operate the oil pipeline.

---

[219] Olubayo Oluduro, *Oil Exploitation and Human Rights Violations in Nigeria's Oil Producing Communities* (2014: Intersentia Publishing, UK) 1 at 137.
[220] "Minister" is defined in section 2 of the *OPA* as the minister for the time being charged with responsibility for matters incidental to oilfields and oil mining. This is, in present-day terms, the Minister of Petroleum and Natural Resources.
[221] Section 4 (1) of the *OPA.*

Where a pipeline is constructed, maintained or operated by any person who is not licenced, that person is guilty of an offence and upon conviction liable to a term of imprisonment not exceeding two years or to a fine not exceeding one thousand naira or to both such imprisonment and fine.[222] This section is meant to criminalize the conduct stipulated in section 7(4) by placing a term of imprisonment for offences committed pursuant to this section. Although the monetary fine can best be described as paltry (note that N1,000 is the equivalent of just a little over CD$5), the term of imprisonment appears to make up for the laughable monetary fine prescribed by the Act as penalty for contravention.

Section 9 provides for objections to the grant of licence where such grant may injuriously affect a person's land or interest in land. This provision limits objections of the grant of a licence to only those who own or have an interest in land, thereby excluding those who may not own the land through which the oil pipeline passes but who might be adversely affected in the event of an oil spill or any other consequential effects of oil pipeline activities. Section 11(5), on the other hand, imposes a civil liability on any person who owns or is in charge of an oil pipeline, thereby making the person liable to pay compensation to anyone who suffers economic or physical injury as a result of a break or leakage in the pipelines. Although this section does not remedy the objection requirement which is unavailable to any person, except owners of or people with interest in the land, this compensatory provision provides some sort of comfort to any person who suffers injury as a result of spillages from the pipelines. Commentators have stated that section 11(5) is indeed highly commendable as it creates "strict liability for the license

[222] Section 7(5) of the OPA.

holder."[223] In other words, the claimant need not establish negligence on the part of the licence holder, but the very fact that a leakage occurred from the pipeline operated by the owner creates the liability.

Another pertinent provision in the *OPA* is that which provides that the grant of licenses must be done in accordance with regulations concerning public safety and prevention of land and water pollution.[224] Impliedly therefore, grant of licenses to construct and operate pipelines must reinforce prevention of pollution on both land and water.

3.1.7 Summary

In this section, some select laws regulating oil spills in the Nigerian energy sector were discussed. The review was not meant to be an exhaustive review of the select laws under this head but rather a general overview of the laws in place in Nigeria for the specific purpose of regulating oil and gas related infractions, specifically, oil spill pollution. The review of the relevant sections touching on enforcement in the select laws were considered. One recurring theme in the legislation reviewed is the existence of the fundamental principles for environmental protection. Principles such as the polluter pays, precautionary principle and the sustainable development theory were clearly evident in these laws. Indeed, some of the penalties applicable for infractions of the provisions of the laws cannot be described as evidently deterring in nature, nevertheless, one still sees an effort in creating liability for environmental offences and making polluters either pay or clean up the pollution arising from various oil spills. The effectiveness of these laws in achieving its purpose is of course the crux of the discussion in

[223] *Supra* note 220 at 138.
[224] See section 17(4).

Chapter 5 of this thesis. We now turn to the approaches to environmental enforcement within the oil and gas industry.

3.2 Part Two: Approaches to Enforcement in the Nigerian Oil and Gas Industry

This part deals with various approaches used in achieving enforcement and compliance with laws regulating the oil and gas sector in Nigeria. As mentioned in Chapter Two of this thesis, the broad enforcement mechanisms used in dealing with environmental infractions and particularly oil and gas related infractions are the deterrence approach and the cooperative approach to environmental enforcement. This part will consider methods of achieving compliance with existing laws. Generally, the Nigerian environmental protection laws provide for a wide range of enforcement mechanisms.[225] Spanning across inspection, search, seizure, arrest, sealing, and recourse to courts for civil penalties and criminal sanctions for environmental violations, this part will focus on the identified approaches.

3.2.1 Inspection and Searches

Inspection and search are some of the approaches to environmental enforcement in the oil and gas sector in Nigeria. The requirement to carry out a search and inspection on an oil facility is provided for in most legislation regulating the oil sector in Nigeria. Its primary function is to enforce compliance with applicable laws by regulated industries and individuals alike. Described as one of the most important approaches to environmental enforcement, it ensures that the regulator knows who and when an environmental statute has been violated in order to be able to

[225] See the provisions of the *NESREA Act* 2007, *NOSDRA Act* 2006, and *EIA Act* etc. that makes provision for inspection, arrest, sealing and seizure as well as civil and criminal prosecutions. See also Joseph Ijaiye, "Rethinking Environmental Law Enforcement in Nigeria" (2014) 5 Beijing Law Review 306 at 311, online: <http://www.scirp.org/journal/blr http://dx.doi.org/10.4236/blr.2014.54029>.

take appropriate actions against such violators.[226] Officials authorized and empowered by the relevant statute may request for and examine any mandatory licence, permit, certificate or other document, as well as any appliance, device or other items used by a regulated entity in ensuring compliance.[227] The *NESREA Act* 2007, for example, empowers any of its officials to enter and search a premises with a warrant issued by a court.[228] Of course this power to search and inspect a premises is employed where there is a suspected violation of an environmental statute or where the authorized officer has a reasonable ground to believe that an offence has been committed contrary to the provisions of the act or regulations made thereto. Although this provision equips authorised agents with powers to search and inspect a facility, NESREA agents are by this provision precluded from searching an oil and gas facility notwithstanding a reasonable belief that an offence pursuant to any environmental law may have been committed.

3.2.2. Sealing and Seizure

The power to seal up premises and seize any article is provided for under the *NESREA Act* 2007. An authorized agent is empowered under the *NESREA Act* 2007[229] "to seize and detain for such a time as may be necessary for the purpose of this Act any article by means of or in relation to which he reasonably believes any provision of this Act or the regulation has been contravened." Seizure may also be employed in order to put a stop to further pollution or take away the polluting substance from circulation.[230]

---

[226] *Ibid* at 312.
[227] *Ibid.*
[228] See section 30(1) (a).
[229] Section 30(1) (f) (g).
[230] *Supra* Ijaiye note 225 at 312.

3.2.3. Arrest

This is an act of restraining the freedom of a person. Considered as one of the most used means of ensuring environmental compliance, authorized agents are empowered to arrest any person who is believed to have committed an offence under any subsisting environmental law in Nigeria[231]

3.2.4. Criminal Prosecution and Civil Penalties

Criminal prosecution and civil penalties are veritable tools in ensuring compliance with environmental laws. In the oil and gas industry in Nigeria, it may indeed be regarded as a viable method of enforcing oil and gas statutes. Civil penalties, imposes monetary fines on persons who have committed an infraction under an environmental statute. Almost all the statutes on the environment in Nigeria make provisions either for criminal prosecution, civil penalties or both, for offences committed pursuant to the respective laws. For instance, under the *NESREA Act* 2007,[232] there is a fine of N200,000 or a term of imprisonment not exceeding one year where a person violates the provision of a regulation made pursuant to section 20(1) of the Act. Although these provisions are meant to ensure compliance with the provisions of the statutes and to further strengthen industry's adherence to enacted laws, lack of enforcement and the fact that some of the fines and terms of imprisonment are so paltry that they make a mockery of the polluter-pays

---

[231] *Ibid*. For example, the provisions of section 30 (1) (a) (f) of the *NESREA Act* 2007 which empowers an officer to enter and search a premises with a warrant issued by the court and also to seize an detain any article in relation to which he reasonably believes any provision of this Act or the regulations has been contravened can be implied to empower officials to arrest operators who have contravened the provisions of the act.

[232] Section 20(3) (4). Other provisions in the *NESREA Act* 2007 such as sections 21(3), 22(3) (4), 23(3) (4), 31 provides for both terms of imprisonment upon conviction for an infraction made pursuant to the act and a fine. The *NOSDRA Act* 2006 also provides for penalties in the face of infractions of the provision of the act. Section 6(2) of the act provides that an oil spiller shall report an oil spill incidence to the agency not later than 24 hours after the occurrence of an oil spill. Failure to report shall attract a penalty five hundred thousand for each day of the failure to report the occurrence. Subsection (3) on the other hand imposes a fine of one million naira for failure to clean up the impacted site to all practical extent.

principle, which is embedded in most of the statutes, makes this viable tool of environmental enforcement a mere illusion in Nigeria.

3.3. Weakness of the Current Framework

The enforcement approach within the Nigerian oil and gas industry is marred with several defects. In the preceding sections and chapters of this thesis we have identified that the Nigerian economy is largely reliant on the oil and gas resources and invariably largely susceptible to the whims and caprices of the multinational oil companies (MNOCs) who believe in their prowess to dictate the fortunes and tide of the Nigerian economy. Indeed, an industry that provides the country with about 90 percent of its total export earnings and 82 percent of its recurrent revenue becomes a decisive industry and will wittingly or unwittingly dictate the tides of environmental enforcement in the oil and gas industry.[233]

One other defect of the enforcement and compliance regime within the oil and gas industry in Nigeria can be aptly described as information and administrative shortcomings.[234] The lack of comprehensive information to effectively measure and access the extent of damage of oil pollution within the energy sector and the fact that agencies and agents charged with the responsibility of monitoring environmental compliance either lack the technical know-how or are starved of funds to effectively carry out their mandate due to existing bureaucracies within the respective agencies are equally responsible for the current state of environmental enforcement in

---

[233] See Zephaniah Edo, "The Challenges of Effective Environmental Enforcement and Compliance in the Niger Delta Region of Nigeria" (2012) 14:2 Journal of Sustainable Development in Africa 262 at 271, online: <http://www.jsdafrica.com/Jsda/Vol14N6Fall2012B/PDF/The%20Challenges%20of%20Effective%20Environmental%20Enforcement.Zephy%20Obazee.pdf>.

[234] Oludayo Amokaye, "Environmental Pollution and Challenges of Environmental Governance in Nigeria" (2012) British Journal of Arts and Social Science 26 at 35-36, online: <http://www.bjournal.co.uk/paper/BJASS_10_1/BJASS_10_01_03.pdf>.

Nigeria.[235] Nigeria can be described as a country that has in place enough environmental protection laws which should ordinarily achieve effective compliance. However, the lack of clarity in most of these laws and the disjointed mode of ensuring compliance makes it almost impossible to achieve compliance with existing environmental laws especially within the oil and gas industry.

It has also been argued that there is in existence inadequate policies operative in Nigeria for harmonising and monitoring the relationship between environmental management and sustainable development.[236] This gap leads to poor enforcement of the environmental legislation in Nigeria. Most of the enforcement strategies, approaches and mechanisms are either very shallow or poorly implemented. For instance, the creation of the provision for inspection and seizure in the *NESREA Act* 2007 would have had a laudable effect in achieving environmental compliance if only oil and gas facilities were included as subject to inspection. The *NESREA Act* 2007, however, clearly ousts the jurisdiction of the lead environmental enforcement agency – NESREA - over inspection of oil facilities without there being an equivalent provision for such inspection in the *NOSDRA Act* 2006.

Another challenge to effective enforcement is the lack of focus in the enforcement mechanism. In a published newspaper article, goats were reported to have been arrested by the Osun State Waste Management Agency for violating environmental laws.[237] One would expect that focus should be directed at persons (humans and regulated entities) responsible for environmental violation rather than animals. Corruption and bad governance in Nigeria cannot

---

[235] *Ibid.*
[236] Ijaiye s*upra* note 225 at 315.
[237] See "Five Goats Arrested in Osun" The Sun Newspaper (Nigeria 12 January 2013) online: <http://sunnewsonline.com/new/osun-five-how-arrested-goats-survived-in-detention/>.

be divorced from the continued lack of adequate enforcement of environmental laws.[238] Given that the menace of corruption has eaten deep into the fabric of the nation, enforcement of environmental laws is sometimes based mostly on rewards to be obtained by agencies/agents for turning a blind eye to some major environmental infractions.

3.4. Conclusion

Under this part, we have considered carefully, but not exhaustively, the various approaches to environmental enforcement within the oil and gas industry in Nigeria. The chapter also looked at laws regulating the energy sector in Nigeria and some of its enforcement provisions as it relates to oil spill pollution; Inherent weaknesses in the enforcement mechanism generally were also briefly highlighted. Although the review in this part was not meant to be exhaustive, it is just a modest attempt at considering what is currently in place in Nigeria when compliance to existing environmental laws are considered.

[238] Ijaiye, *supra* note 225 at 315.

Chapter Four: Regulatory Regime for Oil Spills in Alberta Oil and Gas Industry

4.1 Part One: Overview of Select Laws and Agencies Regulating Oil Spills in Alberta

4.1.1. Introduction

The focus of this chapter is to examine the nature and scope of the regulatory regime for oil spills in the Alberta oil and gas industry. As mentioned in Chapter One of this thesis, because of the devolution of governmental powers in Canada, both the federal government and each of the provinces and territories have legislative powers to make environmental laws and specifically laws in relation to the natural resources within the province. In other words, apart from the *Canadian Environmental Protection Act* (*CEPA*)[239] and the *Canadian Environmental Assessment Act* (*CEAA*)[240] which only applies to environmental issues federally, the various provinces and territories have their respective environmental statutes with minor variations to suit the environmental needs of the specific province and the natural resources found therein.[241]

Generally, the history of the Alberta oil and gas industry dates back to the early twentieth century when scientists and researchers explored the possibility of extracting usable oil from the sticky confines of the Athabasca tar sands.[242] These enquiries were spurred by a prevalent crisis of the shortage of conventional crude oil sources which was an aftermath of the First World War.[243] Considering the perceived need, the development of the oil sands into usable oil and fuel began in earnest in the province. This development also presented the Province of Alberta with

---

[239] SC 1999, c-33.
[240] SC 2012, c-19.
[241] See for example the various definitions of environment as contained in provincial environmental laws of Alberta, Ontario, Nova Scotia and British Columbia. Although these definitions not specifically related to oil and gas defines key terms which delineates the application of some environmental standards and specifies applicable standards for environmental harm. These laws are basically contextually the same with slight modifications to the words used in defining key terms.
[242] Paul Chastko, *Developing Alberta's Oil Sands: From Karl Clark to Kyoto* (2004: University of Calgary Press) 1 at 1.
[243] *Ibid.*

an opportunity to diversify its economy from the once prevalent agriculture to oil and gas where the existence of sustainable growth was most assured.[244]

There is indeed no doubt that the boom in the oil industry in Alberta has been influenced by a favourable regulatory framework.[245] While production and exploration activities of oil sands result in a vibrant economy, they also create significant environmental impact. "Flared and vented gas", "critical sour wells" (containing high levels of poisonous hydrogen sulphide gas), odour, noise, oil spills, habitat impact and ground water contamination are all potential hazards of the development of this natural resource.[246] Given that the development of oil sands into usable fuels is bound to bring with it environmental challenges, the Alberta government being empowered with exclusive jurisdiction over the development of natural resources within the province in 1930,[247] has been questioned on the efficacy of the current regulatory framework to cope with the increasing pace of development and the attendant environmental challenges of large scale oil development.[248] To this end, the environmental aspect of oil and gas industry activities in Alberta, as regulated by provincial environmental legislation specific to the oil and gas industry, will be considered.[249]

---

[244] *Ibid* at 2.
[245] See Nickie Vlavianos, "The Legislative and Regulatory Framework for Oil Sands Development in Alberta: A Detailed Review and Analysis" CIRL Occasional Paper 21 1 at 1 online: <http://prism.ucalgary.ca/bitstream/1880/47188/1/OP21Oilsands.pdf>.
[246] R Harris and A Khare, "Sustainable development Issues and Strategies for Alberta's Oil Industry (2002) 22 Technovation 571 at 575, online: < http://ac.els-cdn.com.ezproxy.lib.ucalgary.ca/>.
[247] *Supra* note 242 at xvi.
[248] Scholarly articles and commentary on whether or the Alberta government is doing enough in the regulation of oil and gas development within the province have emerged see for instance Dan Woynillowicz & Chris Severson-Baker, "Down to the Last Drop The Athabasca River and Oil Sands" (2006) Pembina Institute Paper 1-16, online: <http://www.strategywest.com/downloads/LastDrop200603.pdf>.
[249] A J Hudec and J R Paulus, "Current Environmental Regulation of the Alberta Oil and Gas Industry and Emerging Issues" (1989-1990) 28 Alta L Review 171 at 171.

The primary focus of this chapter is on the regulatory aspect of oil spills in the oil industry in Alberta. Therefore, only select laws regulating this aspect of environmental pollution will be reviewed.[250] It is important to note, however, that the Alberta Energy Regulator (AER), currently operating as a single regulator for the oil and gas industry, regulates the development of oil, natural gas, oil sands, and coal within Alberta's borders.[251] This regulation is done mainly through AER's two key functions: "adjudication and regulation, and information and knowledge."[252] There are also several other governmental agencies involved in the regulation of the oil and gas industry in Alberta. Focus will, however, remain on the identified laws which shall be discussed shortly. The essence of this review is to consider how these provincial laws ensure regulatory and industry compliance with its provisions in the face of oil spill pollution.[253]

The review to be undertaken in this chapter will be in two parts. Part one will review select laws and agencies governing the regulatory framework for oil spill pollution in Alberta. The focus will remain on the provisions intended to empower these statutes to ensure compliance. Agencies established by these statutes, their roles and key environmental standards put in place in ensuring effective environmental enforcement and compliance will be considered. Part two of this chapter will then consider the enforcement techniques adopted by established regulatory agencies in ensuring compliance with statutory provisions. Finally, this chapter will

---

[250] This chapter will review sections dealing with oil spill pollution in the following laws: *Environmental Protection and Enhancement Act, Responsible Energy Development Act, Oil and Gas Conservation Act* and *Pipeline Act*.
[251] See <https://www.aer.ca/about-aer/who-we-are>.
[252] See "How does the AER Regulate the Oil and Gas Industry?" online: <https://www.aer.ca/about-aer/spotlight-on/unconventional-regulatory-framework/how-does-the-aer-regulate-the-oil-and-gas-industry>.
[253] It is important to clarify that though the primary focus of this thesis remains enforcement and compliance, a review of the statutory framework in place in Alberta is necessary to put the discussions which will ensue in the comparative chapter (chapter 5) of this thesis in context.

conclude by looking at the weakness inherent in this regulatory framework in combating oil spill pollution in the industry.

4.1.2. Environmental Protection and Enhancement Act (EPEA) - Background

The Alberta *Environmental Protection and Enhancement Act* (*EPEA*), which came into force in September 1993, and regulations made thereunder changed the corporate attitude towards environmental regulation within the oil and gas industry in Alberta. The *EPEA*, which carries with it heavy fines for noncompliance with its provisions, expressly prohibits anyone from carrying on activities which may impact the Alberta environment without having obtained the requisite approvals from the regulatory agencies concerned. Section 60 of the EPEA specifically provides that "no person shall knowingly commence or continue any activity that is designated by the regulations as requiring an approval or registration or that is redesignated under section 66.1 as requiring an approval unless that person holds the required approval or registration". The Act, which is divided into eleven parts,[254] provides stricter guidelines, broader powers of prosecution and more severe penalties in the event of noncompliance with its provisions.[255] Not only can corporations be held liable for noncompliance under the *EPEA,* individuals within the corporation may also be subject to fines or imprisonment for noncompliance.[256] It is important to state that the *EPEA* established frameworks in a single act that adopted an integrated approach towards the protection of natural resources by combining

---

[254] Part one: administration; part two: environmental assessment process, approvals and registrations; part three: activities requiring notice; part four: environmental appeals board; part five: release of substances; part six: conservation and reclamation; part seven: portable water; part eight: hazardous substances and pesticides; part nine: waste minimization, recycling and waste management; part ten: enforcement; part eleven: miscellaneous provisions.
[255] For example, section 228 provides that a person who commits an offence under section 60, 87, 108(1), 109 (1) or 227(a) (d) (f) (h) is liable in case of individual to a fine of more than $100,000 or to imprisonment for a period of not more than 2years or to both fine and imprisonment. In case of corporations, a fine of not more than $1,000,000 is imposed for contravention.
[256] *Ibid.*

provisions of eight separate acts into a single piece of legislation.[257] Thus, the *EPEA* provides a comprehensive regulation for environmental protection in Alberta.

4.1.2.1 The *EPEA* and its Purpose

The purpose of the *EPEA* is to ensure "the protection, enhancement and wise use of the environment."[258] In achieving this purpose, the *EPEA* recognises the following:

> (a) the protection of the environment is essential to the integrity of ecosystems and human health and to the well-being of society; (b) the need for Alberta's economic growth and prosperity in an environmentally responsible manner and the need to integrate environmental protection and economic decisions in the earliest stages of planning; (c) the principle of sustainable development, which ensures that the use of resources and the environment today does not impair prospects for their use by future generations; (d) the importance of preventing and mitigating the environmental impact of development and of government policies, programs and decisions; (e) the need for Government leadership in areas of environmental research, technology and protection standards; (f) the shared responsibility of all Alberta citizens for ensuring the protection, enhancement and wise use of the environment through individual actions; (g) the opportunities made available through this Act for citizens to provide advice on decisions affecting the environment; (h) the responsibility to work co-operatively with governments of other jurisdictions to prevent and minimize transboundary environmental impacts; (i) the responsibility of polluters to pay for the costs of their actions; (j) the important role of comprehensive and responsive action in administering this Act.[259]

This provision specifically recognises some of the environmental principles mentioned in Chapter Two of this thesis. It recognises principles such as the sustainable development theory, the polluter-pays principle and the precautionary or the prevention principle of environmental protection. Built around these founding environmental law principles, the *EPEA* is geared towards ensuring an environmentally sustainable Alberta. Specifically, it is tilted towards

---

[257] See Martin Kaga, "Provincial Regulation of Natural Resource Exploitation" (2002) Can-U S L J 357 at 364. The acts combined are: the [Albertan] Agricultural Chemicals Act, Beverage Container Act, Clean Air Act, Clean *Water Act*, *Ground Water Development Act*, *Hazardous Chemicals Act*, *Land Surface Conservation and Reclamation Act*, Litter Act, as well as selected portions of the *Department of the Environment Act*.
[258] See section 2 of the *EPEA*
[259] *Ibid*.

encouraging oil and gas industry operators to adopt safer technologies in carrying out oil exploration and exploitation activities. In reviewing the *EPEA* therefore, consideration will be given to parts two, four, five, and ten as applicable to oil spill pollution in Alberta.

4.1.2.2.Oil Spill Provisions in the *EPEA*

4.1.2.2.1. Part two of the EPEA - Environmental Assessment Process, Approvals and Registration

a. Environmental Assessment Process

This part of the Act contains provisions that deals with environmental assessment (EA). The purposes of the EA process as provided for by the *EPEA* is to support environmental protection and sustainable development goals as well as integrate environmental protection and economic decisions plans at the earliest stages of a "proposed activity"[260] so as to predict the environmental consequences of a proposed activity and to assess plans to mitigate any adverse impact resulting therefrom.[261] The purpose of the EA process in Alberta is to achieve three major goals,[262] namely, gather information which is made available to government and the public by the proponent of his understanding of the proposed activity and the resulting consequences; ensure public involvement by providing stakeholders likely to be affected by the proposed activity with an opportunity to express concerns and provide advice to industry regulators and the proponents on the activity concerned; and lastly to promote sustainable development. The EA process will not only ensure the collating of adequate information for the

[260] Proposed activity is defined under section 39(e) of the *EPEA* as an activity that has not commenced; an activity that is being carried on for which an approval or registration, other than a renewal, is required but has not been obtained.
[261] Section 40 (a) – (c) of the *EPEA*.
[262] Environmental Assessment Program, Alberta's Environmental Assessment Process, online: <http://environment.gov.ab.ca/info/library/6964.pdf>.

consideration of the activity's impact in the general plans for the Alberta environment, but will also structure ways to consider the impact of the proposed activity on the economy. The EA process is, therefore, another way of making industry regulators rethink the option of granting approvals to projects without having ascertained the likely impacts of those projects. According to the Supreme Court of Canada in *Friends of the Oldman River Society v. Canada (Minister of Transport),*[263] the EA process is, "in its simplest form, a planning tool that is now generally regarded as an integral component of sound decision-making." Primarily focused on large industrial projects,[264] the EA process, apart from equipping industry regulators with first-hand knowledge of the impacts associated with an intended project, the EA process furnishes the public with information and provides opportunity for their participation and input.[265] The report, which is the outcome of the EA process in Alberta, provides significant detail on the nature of the project contemplated, the likely impacts as well as potential benefits. It also recommends measures to mitigate the likely side-effects of the proposed project.[266]

Some other important sections in part two of the *EPEA* are the powers of the Director to request for EA or further EA both under section 41 and sections 43 and 44. The *EPEA* equips the Director with discretionary powers in ascertaining whether or not further EA is required, if in his opinion there are "potential environmental impacts" of a proposed activity.[267] Considering the fact that proponents of a project, especially in the oil and gas industry, need to comply with the

---

[263] (1992)1 S.C.R. 3.
[264] Generally, only large scale activities such as oil sands plants, large recreation developments, industrial plant sites, oil mining projects etc. requires the EA process. These projects are considered to be under the mandatory activity requiring the EA. See Schedule 1 and section 1 of the *Environmental Assessment (Mandatory and Exempted Activities) Regulation*, Alta. Reg. 111/93 for the listing of mandatory activities.
[265] Section 40(d) *EPEA.*
[266] Dallas Johnson, et al "Improving cumulative effects assessment in Alberta: Regional strategic assessment" (2011) 31 Environmental Impact Assessment Review 481 at 481.
[267] See Section 41 of the *EPEA.*

provisions of the *EPEA* by obtaining the requisite permits before commencing activities on a proposed project, an EA process is therefore a condition precedent to the grant of licences and permits necessary to begin operations.[268] Note also that the *EPEA* recognises that some proposed activity may trigger the EA process under the federal environmental impact assessment or provincial or territorial impact assessment regimes.[269] It is also important to note that aside from this part of the *EPEA*, which provides for the EA process, there are regulations[270] made pursuant to the *EPEA* that provide guidelines on the EA process and how it should be done. Prominent among these regulations are the *Environmental Assessment Regulation*,[271] the *Environmental Assessment (Mandatory and Exempted Activities) Regulation*,[272] and the *Environmental Protection and Enhancement (Miscellaneous) Regulation*.[273]

b. Approvals, Registrations and Certificates

This portion of part two of the *EPEA* provides for the permits, approvals, registrations and certificates needed for the commencement of any proposed activity. This part makes it an offence for a person to "knowingly" commence or continue an activity that requires an approval or registration without holding the requisite approval.[274] It therefore imposes upon a project proponent the duty to obtain necessary approvals and registration before the commencement of

---

[268] It is important to note that under the EA process in Alberta, the Director must in his opinion ascertain that the environmental impact assessment report is complete; only then will he give the requisite directions/advise to the industry regulators concerned that the proposed activity has complied with the EA process, thus the issuance of a permit to begin operations may be granted.

[269] A proposed activity that is likely to affect federal jurisdiction or provincial jurisdiction will most likely be subject the federal assessment process. See A R Lucas and T Meadows, "Alberta Regulatory Controls" in *Canadian Environmental Law: Commentary* (Butterworths Canada) 2nd ed comm 1-3 at comm 8:4.

[270] This thesis is not primarily focused on regulations made pursuant to the *EPEA* but may cite provisions in some of the regulations necessary to further explain some aspects of the *EPEA* as the writer deems necessary.

[271] Alta. Reg. 112/1993.

[272] Alta. Reg. 111/1993.

[273] Alta. Reg. 118/1993.

[274] Section 60 *EPEA.*

any activity on a project. Oil and gas companies are therefore obligated to ensure compliance with this part of the Act before commencement of any operations. Note, however, that this section does not preclude a proponent from carrying on activities or taking steps in ensuring compliance with the EA process under the first part discussed.[275]

The *EPEA* and the regulations made thereunder categorise activities which require approvals, registrations or notice and the key aspects of the process for obtaining an approval, a registration and providing notice. Under the *Activities Designation Regulation*,[276] there are three categories of activities requiring approval or registration. Schedule 1 of the regulation provides for designated activities that require approval, Schedule 2 provides for the activities that require registration while Schedule 3 provides for activities for which notice must be issued to the Director.[277] The *EPEA* also equips the Director with discretionary powers to reassign an activity, for the purposes of environmental protection, which is ordinarily designated as requiring a notice or registration to one requiring approval.[278] Once the necessary requirements have been complied with, the Director may issue an approval or refuse to issue an approval.[279] Refusal by the Director to issue an approval may be made on several grounds: indebtedness to the government is one of the grounds for which the refusal to issue an approval may be sustained. Also, the Minister has the discretion to direct that no approval be given to a proposed activity if he considers such activity as one that is not in the best interest of the public.[280]

---

[275] See Sections 61, 62 of *EPEA*. Not until the EA process is complete will the proponent be issued the necessary approvals and permits.
[276] Alta. Reg. 276/2003.
[277] Director here has the same definition provided for under the *EPEA*.
[278] See sections 66.1 (1) and 66.2 (2) of the *EPEA*; *supra* note 32 at comm 8:11.
[279] Section 68(1) *EPEA*.
[280] Section 64(1) *EPEA*.

4.1.2.2.2. Part Four of the EPEA – Environmental Appeals Board (EAB)

a. Establishment and Functions of the EAB

The EAB, which was established pursuant to part four of the *EPEA*,[281] is designed to ensure that the administration of the *EPEA* deals fairly with all parties affected by environmental approvals and enforcement matters, made by the Alberta Environment and Parks.[282] The EAB is structured in such a way that it provides a level-playing field for affected citizens and industry alike.[283] The *EPEA* also provides for a notice section which stipulates that a holder of an approval or a person who submitted a statement of concern, and is directly affected by the decision of the Director to issue or amend an approval, may file a notice to appeal. This appeal must however be filed within seven days after receipt of a copy of an enforcement order, one year after receipt of a reclamation certificate and 30 days after the receipt of notice of a decision in any other case.[284] Filing of a notice to appeal must be done by someone who is considered "directly affected" by the decision of the Director under the *EPEA* or associated regulations.[285] Thus, a party interested in filing a notice of appeal must show that the decision of the Director affects him directly before such notice of appeal may be accepted. This part also provides for a privative clause[286] which empowers the Minister or the EAB with exclusive and final decision-

[281] Section 90(1).
[282] See Message from the Chair EAB, online: <http://www.eab.gov.ab.ca/message.htm>.
[283] *Supra* note 269 at comm 8:32.
[284] Section 91(4) *EPEA.*
[285] In *Gerald M Ross v. Director Alberta Environmental Protection*, Appeal No. 94-003, May 24 1994 1 at 4, the EAB stated that for a person to be directly affected and therefore qualified to file a notice of appeal under the *EPEA*, the person must have "a substantial interest in the outcome of the approval that surpasses the common interest of all residents who are affected by the approval."
[286] Section 102 of the *EPEA.*

making power to do anything which this part of the Act has authorised it to do such that decisions of the EAB or the Minister is final and not reviewable.[287]

4.1.2.2.3. Part Five of the EPEA – Release of Substances

a. Division One - Release of Substances Generally

The release of substances into the atmosphere is an intricate part of development globally. As the desire for development increases, so also does the release of substances into the atmosphere. In Canada, over a century of economic growth and industrialisation has produced a legacy of contamination.[288] Poisonous chemicals, by-products of mining, oil and gas activities and many other industrial activities have remained on the soil long after the activities from which they emanate has ended. These toxins not only affect human health; the environment also bears the brunt of these associated fallouts from this development.[289]

Considering that the Canadian province of Alberta is the hub of a large number of oil and gas related activities, it is imperative that the province has in place laws that can effectively regulate the release of these dangerous substances into the atmosphere. Part five of the *EPEA* therefore regulates the releases of substances generally into the atmosphere. Section 108(1)[290] prohibits knowingly releasing substances into the environment in an amount or concentration that exceeds the limit prescribed by an approval or the regulations. The implication of this section is that notwithstanding an approval to release substances, such approval must be

[287] It is however important to note that notwithstanding the full privative clause in this part of the *EPEA*, the courts have reiterated that no statute may oust the jurisdiction of the courts completely from the interpretation of the statute or its review. Thus, in subjecting the decisions of the EAB to review, the courts considers a number of factors as laid down by the supreme court in *Pushpanathan v Canada (Minister of Citizenship & Immigration)* (1998) 1 SCR 982.
[288] See the National Round Table on the Environment and the Economy (NRTEE), *Cleaning up the Past and Building the Future: A National Brownfield Redevelopment Strategy for Canada* (Ottawa, NRTEE, 2003) 1at 1.
[289] Canadian Council of Ministers of the Environment (CCME), Recommended Principles on Contaminated Sites Liability, PN 1361 (Winnipeg CCME, 2006) 1 at 1;
[290] *EPEA.*

implemented within the confines of the prescribed limit. The *EPEA* also prohibits the wilful release of substances into the atmosphere that may cause adverse effects.[291] Here, there is an outright prohibition of releases of substances where there is no approval or permit authorizing such release. Another important section under this part of the *EPEA* is the duty to report release.[292] Under this section, there is a responsibility on the part of a person who releases or causes the release of substance likely to cause adverse effects into the environment to report such release to the director, the owner of the substance, where the person reporting is not the owner, and other persons as listed under subsections (a) – (e) of section 110(1) of *EPEA*.

Note also that a person who is responsible for the release of substances likely to cause adverse effects on the environment is required to take remedial measures as soon as practicable (i.e. as soon as he becomes aware of the release) to repair, remedy and confine the effects of the substance(s) and restore the environment to satisfactory condition.[293] The Director may also issue an environmental protection order directing the person responsible for the release of substance to take measures that the director may, in his opinion, consider necessary to abate the adverse effect of the substance release.[294]

Apart from the provisions mentioned above, another important provision in this part of the *EPEA*[295] is the provision relating to the powers granted to an inspector, investigator or the Director to make an emergency protection order where there is the release of a substance into

---

[291] See section 109(1).
[292] Section 110(1).
[293] Section 112(1) *EPEA*.
[294] Such measures includes the investigation of the situation, measure the rate of the release or (and) the ambient concentration of the substances; take remedial steps towards effects of the substance on the environment as well as restore the affected area to the satisfaction of the director. See section 113 generally and specifically subsection (3) of the *EPEA*.
[295] Section 114.

the environment likely to cause, is causing or has caused significant adverse effects. The inspector, investigator or Director may also take any emergency measures which are considered necessary for the protection of both human life and the environment.[296] The implication of these sections is that where faced with dire situations in relation to substance releases, the *EPEA* permits not only the director, but also an investigator or inspector to take emergency responses to abate the consequences of such release such that human life and the environment are prioritised.

b. Contaminated Sites – Division Two

One of the major challenges of sustainable development in urban areas is linked to years of historic land contamination.[297] People would prefer not to deal with these lands and as such, these lands have remained abandoned for years on. These contaminated sites, otherwise known as brownfields in Alberta, have been defined as "an abandoned, underutilized property where past actions have resulted in actual or perceived contamination…"[298] Another definition of brownfields is that adopted by the city of Edmonton. It defined brownfields as a site rendered un-utilised by past activities on the land which have caused environmental soil/ground water contamination.[299]

---

[296] Section 115.

[297] See Robert K Omura, "Strategies for Cleaning up Contaminated Sites in Alberta" (2013) CIRL Occasion Paper 41 at vii.

[298] *Ibid* at 3. This definition is the most widely accepted definition given by the National Roundtable on the Environment and the Economy. Another definition of Brownfields is that of the United States Environmental Protection Agency through the Comprehensive Environmental Response and Liability Act (CERCLA). It defined it as "real property, the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."

[299] New Brunswick Brownfield Development Working Group, Final Report of the New Brunswick Brownfield Development Working Group: Options and Recommendations for Facilitating Brownfield Redevelopment in New Brunswick, Appendix "B" (Fredericton: New Brunswick Brownfield Development Working Group 2007 at 1-2.

Part Five of the *EPEA* deals generally with contaminated sites. Its application to these sites is not concerned with the when or the how a substance became present in the contaminated site, it applies generally to all contaminated sites.[300] In Alberta, the framework for the management of sites that are deemed contaminated is designed to achieve three policy goals which are: pollution prevention, health protection and productive use.[301] Since one of the purposes of the *EPEA* is to support and promote the protection and wise use of the environment, prompt and proactive prevention of substance release is essential to curbing site contamination.[302] To this end, the *EPEA* empowers the Director to designate an area as a contaminated site where, in his opinion, a substance that may cause or is causing adverse environmental effect is present in that site.[303] This designation may be made irrespective of whether or not a reclamation certificate or a remediation certificate has been issued in respect of the contaminated site.[304] A person responsible for a contaminated site is required to prepare a remedial action plan for the Director's approval.[305] This plan must state concisely the remedial steps and cost implications proposed by the person responsible for the contaminated site.[306] The essence of the remedial plan is to ensure that appropriate steps are taken towards restoring sites that are contaminated and make them available for future re-use.

---

[300] Section 123.
[301] Alberta Government Contaminated Sites Policy Framework, October 2014 1 at 3, online: <http://esrd.alberta.ca/lands-forests/land-industrial/documents/ContaminatedSitesPolicy-C-Oct31-2014.pdf>
[302] *Ibid* at 4.
[303] Section 125(1).
[304] Section 125(2).
[305] Section 128(1).
[306] Aside from the provisions discussed others include the powers of the director to make an environmental order to the person responsible for the contaminated site. See sections 129-130.

4.1.2.2.4. Part Ten of the EPEA – Enforcement

"The measurement of the effectiveness of any environmental law is compliance by the community under regulation".[307] Where there is non-compliance, regulators must respond either by reviewing the enforcement techniques in place or ensure stricter enforcement and compliance of existing provisions. This part generally focuses on environmental enforcement provisions in the *EPEA*. It covers provisions on investigations and inspections,[308] enforcement orders[309] and civil remedies.[310] Notable in this part of the *EPEA*, are sections that deal with offences and penalties. A person who knowingly provides false or misleading information pursuant to a requirement under the *EPEA* or knowingly contravenes a term or condition of an approval, enforcement order, protection order, or expressly contravenes some specific sections as listed under section 227(j), will be held guilty of an offence under the Act.[311]

The fines prescribed for offences committed under this Act vary. In the case of an individual offender who contravenes the provisions stipulated in section 228(1), he is liable to a fine of not more than a hundred thousand dollars or to imprisonment for a period of not more than two years or to both fine and imprisonment, while in the case of a corporate offender, the guilty party is liable to a fine of not more than one million dollars.[312] Under this Act, a director, officer or agent of the offending company, who directed or authorised the commission of the offence is also guilty of the offence and will be held liable to the punishment prescribed for the

[307] M Doelle & C Tollefson, *supra* note 138 at 343.
[308] See generally sections 195-209.
[309] See sections 210-215.
[310] See sections 216-225 generally.
[311] See section 227(a-j).
[312] See section 228(1) (a) (b). Subsection 2 and 3 also specifies liabilities accruable for contravening the provisions of the *EPEA.*

offence irrespective of whether or not the company has been prosecuted.[313] One of the upsides of this section is that directing minds of a company get to act responsibly knowing that they may be held liable for any act committed by the company.

Another aspect of enforcement under the *EPEA* is the use of administrative penalties.[314] Administrative penalties requires that a person who contravenes certain provision of this Act pays a certain amount for each contravention. These penalties allow government officials to issue a relatively modest financial penalties for environmental contraventions that are regarded as minor without incurring the expense of a full blown investigation, prosecution and trial.[315] Another important section under this part of the *EPEA* is the provision for the liability of directors and officers of a corporation such that where any offence is committed by the corporation, the directing minds of the corporation are held liable for such contravention.[316] The mere fact that directors and officials of a corporation may be held accountable and liable for the contravention of the provisions of the Act may also act as a catalyst towards effective enforcement of the provisions in the *EPEA.*

4.1.3. Responsible Energy Development Act (*REDA*) – Background

The *REDA* established the Alberta Energy Regulator (AER) which became a single regulator in 2013 taking on the regulatory functions related to energy development which were previously held by Alberta Environment and Sustainable Resource Development (ESRD).[317] Following this, the AER became responsible for the protection of the environment in the course of energy development in Alberta and also ensuring the "safe, efficient, orderly, and

---

[313] Section 232.
[314] Section 237.
[315] S Wood & L Johannson, "Six Principles of Smart Regulation" (2008) 46 Osgoode Hall L J 345 at 356.
[316] Section 232.
[317] See AER website online: <www.aer.ca/documents/about-us/AER_Brochure.pdf>; section 2(1) (a) of the *REDA*.

environmentally responsible development of hydrocarbon resources over their entire life cycle."[318] For the purposes of reviewing the provisions of the *REDA* as it relates to enforcement in the face of infractions by the oil and gas companies, focus shall primarily be on part five which provides specifically for the enforcement of the provisions in the *REDA.*

4.1.3.1.Part Five of the REDA – Enforcement

Part five of the *REDA* is divided into three divisions. Division one provides for inspections and investigations, Division Two provides for administrative penalties while Division Three provides for general matters and regulations. Aside from the enforcement provision in the *REDA*, the AER is also empowered to consider and decide applications made pursuant to Acts such as the *EPEA*, *Water Act*, *Mines and Minerals Act*, amongst others, and to make enforcement directions pursuant to these Acts.[319]

a. Division One – Inspections and Investigations

Under section 69(1) of the *REDA*, the Regulator[320] has the powers and functions relating to inspections, investigations and other compliance and enforcement matters under energy resource enactments.[321] This means that the Regulator is empowered to inspect energy facilities and ensure that the provisions of the *REDA* are followed. The Regulator also has the powers to conduct inspections and investigations pursuant to the *REDA* or under any energy resource

[318] *Ibid.*
[319] See section 2(2) of the *REDA.*
[320] Also known as the AER.
[321] Energy resource enactments here is defined under section 1(j) of the *REDA* as the following acts: the *Coal Conservation Act, Gas Resources Preservation Act, Oil and Gas Conservation Act, Oil Sands Conservation Act, Pipeline Act* and the *Turner Valley Unit Operations Act*.

enactment or specified enactment where a company is found contravening the provisions of the *REDA*.[322]

b. Division Two – Administrative Penalties

Under the *REDA*, the Regulator may require a person who contravenes the provisions of the Act to pay an administrative penalty in an amount determined by the Regulator.[323] The Regulator shall issue a notice and serve the notice upon a person who is required to pay for the penalty stating the grounds upon which the penalty is imposed.[324] It is important to note that under the *REDA* a person liable for an administrative penalty is guilty for each day the contravention continues and liable to pay the maximum of the penalty prescribed for each day or part of day on which the contravention continues. A person who pays an administrative penalty in respect of a contravention will not be charged either under the energy resource enactment for an offence in respect of the same contravention or non-compliance as described in the administrative penalty notice.[325] Implicit in this is that the person who has already paid an administrative penalty will be precluded from being charged a second time for the same offence. The fact that the *REDA* has enforcement provisions that specify when its provisions are deemed contravened, and also provides for punishment including administrative penalties to which parties guilty of such contravention are liable ensures enforcement and compliance to its provisions and other energy enactments.

[322] Section 69(2).
[323] Section 70.
[324] See section 71(1) (2).
[325] See sections 72, 73.

4.1.4. Oil and Gas Conservation Act (*OGCA*) – Purpose

The *OGCA* was enacted for a number of purposes. According to the provisions of section 4 (a) (b) of the *OGCA*, one of the reasons for enacting the Act is to ensure the preservation and conservation of oil and gas resources in Alberta and to secure the safe and efficient practices in the locating, spacing, drilling, equipping, constructing, completing, reworking, operating and maintenance of operations in the production of oil and gas or the storage or disposal of substances. Apart from this purpose of the *OGCA*, section 4 (f) thereof highlights another purpose for which the *OGCA* was passed into law, that is, for the control of pollution above, at or below the surface in the course of drilling operations in oil wells in areas where the Regulator[326] has jurisdiction. The essence of clearly stipulating its purpose is to ensure that industry operators understand the expectations of the Act as regards oil and gas exploration activities even though the Act intends to ensure the efficient, orderly and economic development of oil and gas resources in Alberta.[327] Therefore, for the purposes of this review, this section will consider the provisions that deal with oil and gas related contraventions and the enforcement mechanism in ensuring compliance with the provisions set out in the Act.

4.1.4.1.Part Five of the OGCA – Rules

This part of the *OGCA* authorises the Regulator to make rules for the purposes of any application made pursuant to this Act and to also make rules that may specify directions as to how activities made pursuant to this Act may be conducted. The Regulator is, in furtherance of this part, empowered to make rules that prohibit the drilling of natural resources in the province

[326] Regulator here means the AER- see the interpretation section 1(1) (vv.1).
[327] Section 4 (c).

without adequate measures to confine these natural resources from spilling.[328] Rules regarding the location of wells and the method of operation may also be made by the Regulator so as to ensure that the lives, property, wildlife etc. are adequately protected from the effects of natural resource exploration.[329]

4.1.4.2.Part Seven of the OGCA – Production

One important provision under this part of the *OGCA* is section 41 (1) which talks about the escape of oil, gas, water or any other substance. The section provides that the Regulator may take steps necessary or expedient in the interest of the public to prevent or control the flow or escape of any substance (oil, gas, water) from an oil facility. This power ensures adequate response to any oil and gas spill incidents in order to ensure the safety of humans as well as fauna and flora likely to be affected by these incidents.

4.1.4.3.Part Fifteen of the OGCA – Provisions of General Application

Section 96 (1) authorises inspection of oil facilities by any person authorized by the Regulator. Where there is any form of obstruction or prevention to an authorized person from carrying out this duty, any person responsible for this obstruction shall be guilty of an offence.[330] The inspection of oil and gas facilities ensures compliance with stipulated conditions especially with regards to carrying out oil and gas exploration activities since operators are more likely to adhere to specified rules than face stiff penalties in the face of contravention.

Section 104 (1) (a) also provides that in the face of an escaped substance, where it appears to the Regulator that the escaped substance may not otherwise be contained and cleaned up forthwith, the Regulator or any authorized representative of his may give directions to the

[328] Section 10 (1) (x).
[329] See section 10 (a) (aa).
[330] Section 96 (4).

licensee or the approval holder or the operator of the well to take steps necessary to clean up and contain the escaped substance. The Regulator or his authorized representative may enter into the area and carry out activities necessary to expedite the clean-up process of such escaped substance.[331] Aside from the foregoing provisions, this part also deals with enforcement of orders made pursuant to the *OGCA*. Section 105 (1) empowers the Regulator to take any steps and employ any person for the enforcement of the orders made. It also empowers the Regulator to take any measure to control, prevent the escape of oil and gas or any other substance from a facility.[332] Any contravention of the provisions of this Act by any person makes the person guilty of an offence and liable in the case of a corporation to a fine of not more than $500,000 (five hundred thousand dollars) while in the case of an individual to a fine of not more than $50,000 (fifty thousand dollars).[333] These fines, as well as the imprisonment provisions made under this part for each day the contravention continues, compel compliance with the provisions set out in this Act with regards to oil and gas exploration in Alberta.[334]

4.1.5. Pipeline Act - Application

The *Pipeline Act* is applicable to pipelines within the province of Alberta.[335] For the purposes of reviewing the provisions of this Act, like the Acts reviewed in the sections above, consideration will be given to provisions tilted in the direction of enforcement in relation to sustainable pipelines practices.

---

[331] Section 104 (1) (b).
[332] Section 105 (1) (e).
[333] Section 110 (1) (a) (b).
[334] Section 110 (3).
[335] Section 2 of the *Pipeline Act*.

4.1.5.1.Part Three of the Pipeline Act – Powers and Duties of the Regulator

The Regulator under this part is empowered to inquire into and examine matters relating to the observance of safe and efficient practices in the operation and construction of pipelines.[336] This provision empowers the Regulator either on its own or under the instruction of the Lieutenant Governor to carry out these investigations. This, of course, is to ascertain the compliance levels of operators in the industry when it comes to pipeline construction and operations.[337] Prior to the foregoing provision is the provision for inspections by the Regulator or his authorized representative of pipelines and routes of proposed pipelines.[338] Similar to the section 4 provision, this provision has the effect of ascertaining the compliance levels of industry operators.

4.1.5.2.Part Four of the Pipeline Act – Licences

This part specifies general provisions that deal with obtaining approvals and directions, on the construction of pipelines and the use to which such licences shall be put. One very important provision under this part of the Act however, deals with the discontinuation and abandonment of a pipeline. This section provides that a licensee shall, on the directions of the Regulator, discontinue or abandon a pipeline where it is considered necessary by the Regulator that such discontinuation or abandonment is in the best interest of the public or the environment.[339] The fact that a licensee abandons or discontinues a pipeline on the instruction of

[336] See section 4 (b).
[337] See section 4 (d).
[338] Section 5 (1).
[339] Section 23 (1) (2).

the Regulator does not absolve the licensee from liability for the costs associated with the discontinuation or abandonment.[340]

4.1.5.3.Part Six of the Pipeline Act – General Provisions

Section 35 (5) provides for reporting requirement on the part of a licensee in the event of breakage in a pipeline transmitting oil, while section 36 provides for clean-up of spills arising from any of such breakage. The essence of these sections is to ensure adequate response to pipeline breakage and spills arising therefore since the Regulator and any of his authorised agents can act in response to a breakage and a spill.

4.1.5.4.Part Eight of the Pipeline Act – Miscellaneous

This part provides for offences and penalties made pursuant to this Act. Here, a person who is guilty of an offence under this Act is liable in the case of a corporation to a fine of not more than $500,000 (five hundred thousand dollars) while in the case of an individual to a fine of not more than $50,000 (fifty thousand dollars).[341]

4.1.6. Conclusion

The review of the various laws above is not in any way exhaustive. Neither is it in any way as detailed as the contents of those pieces of legislation would require. However, due to the limitation in size and time associated with this thesis, it is expedient to confine the review of relevant statutes to a cursory analysis. As earlier stated, this statutory review is geared towards identifying the provisions that deal with enforcement and compliance and how same is being administered to ensure effective enforcement and compliance which is the focus of this thesis. This review was intended to further strengthen the arguments made in Chapter Two of this thesis

[340] See section 25, 26.
[341] Section 54 (1).

where we discussed the rationale for environmental protection and the various enforcement and compliance mechanisms. Indeed, under section 2 of the *EPEA*, which specifies the purpose of the Act, it is clear that the Act espouses the sustainability theory of environmental protection. The fact that this section reiterates the essence of environmental protection and also stresses the importance of preventing and mitigating the environmental impact of energy resource development, reinforces the precautionary principle of environmental law. The principles of environmental protection discussed in Chapter Two of this thesis is therefore a recurring theme in the statutes discussed above. The *OGCA*, *REDA* and the *Pipeline Act* also stipulate the precautionary principle of environmental law. One of the merits of the precautionary principle, according to proponents, is implicit in the environment assessment process provided for in the *EPEA*.[342] Aside from the environmental assessment process provided for under that Act, the legislation as well as the other statutes[343] discussed above provide for enforcement provisions which stipulate penalties and fines for contraventions made pursuant to each of the statutes. The philosophy behind the imposition of fines and penalties is nothing less than the polluter-pays principle of environmental protection which requires the polluter to bear the expense of preventing, controlling, and cleaning up of pollution arising from his acts or omissions.[344] Essentially, these provisions reinforce the need for environmental protection and ways to ensure that operators in the oil and gas sector comply with set standards and guidelines so as to minimise environmental hazards especially oil spills, which is the primary focus of this thesis.

---

[342] See section 40 of the *EPEA*, "The precautionary principle articulates a basis for taking action in cases with insufficient scientific understanding, including extreme complexity, especially when outcomes are irreversible and or Widespread"- P L Defur & Michelle Kaszuba "Implementing the Precautionary Principle" (2008) The Science of Total Environment 155 at 155. This is actually the essence of the environmental assessment procedure under the EPEA as it provides policy makers with a basis for making an informed decision.
[343] The *REDA*, *OGCA* and the *Pipeline Act* enforcement provisions.
[344] *Supra* note 71 at 3.

4.2. Part Two: Enforcement Approaches in the Alberta Oil and Gas Industry

Introduction

This part of this chapter deals with enforcement techniques employed in achieving industry compliance in the oil and gas industry in Alberta. Various enforcement mechanisms are used to deal with environmental infractions within the oil and gas industry in Alberta. Given that the two broad enforcement mechanisms have been sufficiently discussed in Chapter Two of this thesis,[345] this section will only discuss the techniques used in Alberta to ensure compliance with existing provisions in the environmental legislation dealing specifically with oil and gas.

In Alberta, a variety of techniques are applied to ensure compliance with environmental legislation. These enforcement mechanisms generally span across both criminal and administrative sanctions for environmental infractions. The most used techniques to ensure compliance with laws in Alberta include administrative penalties, orders, warnings and prosecutions.[346] The subsequent paragraphs will discuss these techniques one after the other and thereafter, consideration will be given to the Alberta Energy Regulator (AER) enforcement approach and the Environmental Appeals Board. Consideration will be given to how matters brought before the Board are effectively adjudicated in cases where the provisions of the *EPEA* are contravened.

The AER, which is currently considered a "one-stop-shop" for energy developments in Alberta, was singled out for analysis in this section because it primarily regulates energy

---

[345] In chapter two, the two major enforcement mechanism dealt with are the deterrence and the cooperative theory of environmental enforcement. Although the approaches to be discussed hereunder are offshoots of the two major enforcement and compliance mechanism, considerations will be given to the specifics of the environmental laws dealing with the oil and gas offences in Alberta.

[346] See "Enforcement and Compliance" online: <http://esrd.alberta.ca/lands-forests/land-management/compliance-enforcement/default.aspx.

activities in the province. Ranging from the application process to the exploration, construction and development, abandonment, reclamation, and remediation activities, the AER through its enforcement approach ensures that energy development is carried out in an environmentally sustainable manner while at the same time providing economic benefits to Albertans.[347]

4.2.1. Environmental Enforcement Techniques in Alberta

As stated in the preceding paragraph, the techniques used in achieving environmental compliance within the oil and gas industry in Alberta span across administrative penalties, warnings, orders and prosecution. These will now be discussed seriatim.

4.2.1.1.Administrative Penalties:

These are financial penalties imposed upon an offender or someone who contravenes environmental legislation by an environmental regulator.[348] They were introduced in Alberta in 1995 through the enactment of the *EPEA*[349] and they vest government officials with the powers to issue modest financial penalties for minor environmental infractions without having to go through the time and expense involved in a full blown investigation, prosecution and trial.[350] Prior to the introduction of administrative penalties into the context of environmental regulation, environmental law enforcement revolved largely around an option between either the voluntary industry compliance or the extremity of criminal or quasi-criminal prosecution, with the latter reserved only for the most egregious cases.[351] Administrative penalties were indeed one of several inventive tools of environmental enforcement introduced primarily to get away from the

---

[347] See the AER webpage on "Who We Are and What We Do" online: <http://www.aer.ca/about-aer/who-we-are>.
[348] Chilenye Nwapi "Legal and Policy Responses to Environmental Offences in Relation to Alberta Oil Sands" (2012) 115 CIRL Resources 1 at 2.
[349] See section 237(1) of the *EPEA*. Also the Administrative Penalties Regulations Alta Reg. 23/2003 made pursuant to the EPEA also stipulates offences for which administrative penalties may be imposed. Administrative penalties are also provided for under part 5 section 70 of the *REDA*.
[350] *Supra* note 315 at 356.
[351] *Ibid* at 357.

unsatisfactory binary choice of the two major enforcement mechanisms - deterrence and cooperation. Administrative penalties do away with the need for formal court proceedings altogether which may essentially reduce enforcement costs for governments, regulated firms, and interested third parties while simultaneously increasing the level of enforcement of environmental laws.[352]

Research indicates that administrative penalties have a credible deterrent effect at a very modest administrative cost.[353] In Alberta for instance, the AER is empowered to issue administrative penalties against industry operators for environmental infractions. The AER may issue an administrative penalty under at least 10 different pieces of environmental and energy legislation.[354] Although penalty sums differ under each piece of legislation, all penalties are based on the seriousness of the offences and their impacts on public safety, the environment, or production of the energy resource.[355] Although administrative penalties have been considered effective in achieving compliance, regulated industries have criticized the scheme because of its recognition of environmental offences as absolute liability offences, as government may impose fines without proving the elements of the offence.[356] The issue of double jeopardy is also another concern. Some jurisdictions may still go ahead and prosecute the offences for which

---

[352] *Ibid*.
[353] R M Brown, "Administrative and Criminal Penalties in the Enforcement of Occupational Health and Safety Legislation" (1992) 30 Osgoode Hall L.J. 691 at 692.
[354] These include the legislation already reviewed in part one of this chapter, i.e., the *EPEA*, *REDA*, *OGCA* and the *Pipeline Act*.
[355] See web page on Administrative Penalties, online: <http://www.aer.ca/compliance-and-enforcement/administrative-penalties>. According to Alberta Environment Compliance Assurance Annual Report for the year 2014/2015 1 at 2, a total of 31 administrative penalties were issued resulting in the sum of $1,529,993.09 – online: <www.aep.alberta.ca/.../documents/ComplianceAssuranceReport%202014-2015-Aug2015.pdf>.
[356] *Supra* note 353 at 357.

administrative penalties have been issued as the payment of an administrative penalty may not bar prosecution for the same offence.[357]

4.2.1.2.Warning letters

These are issued for offences that are considered much less serious than the ones for which administrative penalties are issued.[358] As the name implies, a warning letter does not impose a fine or any other punishment on individuals or companies who have contravened the provisions of the statute. It is merely a rebuke describing the contravention for which it is issued and prompting industry operators to comply with set out provisions in order to avoid a stiffer punishment. Usually issued to first time offenders, warning letters form part of the compliance history of the person to whom it is made out and will be duly considered in subsequent contraventions.[359]

4.2.1.3.Orders

They are described as remedial tools which are used in situations where there is an urgent need to act so as to forestall adverse environmental effect.[360] Orders are generally meant to compel compliance and where necessary require actions to prevent subsequent contraventions. Orders may be combined with either prosecution or administrative penalties where necessary, and failure to comply may also result in additional charges.[361]

---

[357] *Ibid*. In Alberta however by virtue of section 237(3) of the *EPEA*, a person upon whom an administrative penalty has been imposed is unlikely to face criminal prosecution for the same offence.
[358] The Alberta Environment in its 2014/2015 Alberta Environment Compliance Assurance Annual Report, 31 warning letters were issued in the year under review.
[359] Chilenye Nwapi, "Environmental Sentencing Policy in Alberta: A Critical Review" (2015) 15 CIRL Occasion Paper 1 at 11.
[360] See Nwapi *supra* note 348 at 3.
[361] *Ibid*.

4.2.1.4.Prosecutions

Generally, where serious environmental harm has occurred, prosecutions can begin either by way of a criminal code or by proceeding under the applicable federal or provincial regulatory provisions.[362] In Alberta, the trend used to be that prosecutions were to be considered as a last resort but in recent times, there have been changes to such enforcement culture. Rather than seen as a last option, environmental prosecution is now considered as an enforcement tool in itself available for use where considered appropriate.[363] According to Alberta Environment, in the 2014/2015 fiscal year, "four investigations resulted in charges laid under legislation administered the Alberta Environment and Sustainable Resource Development (AESRD)" while there were twenty-eight counts made pursuant to the *EPEA*.[364] Of these charges laid, nine prosecutions were concluded of infractions made under the AESRD while there were 11 convictions obtained pursuant to the *EPEA.*[365] Considering the fact that prosecutions impose stiffer penalties on environmental offenders, it is considered as an effective form of deterring environmental offenders.

4.2.2. The Alberta Energy Regulator (AER) – Purpose and Functions

The AER was established under the *REDA*. Its mandate includes regulating energy resource development within Alberta through a safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources over their entire life cycle.[366] This requires that the AER develop and implement an enforcement mechanism that will ensure compliance

---

[362] Doelle & Tollefson *supra* note 138 at 358.
[363] Nwapi, *supra* note 348 at 3.
[364] *Supra* note 359 at 11. Legislation administered by the AESRD include *Natural Resources Conservation Board Act* (NRCBA), *Alberta Land Stewardship Act*, *Public Lands Act*, and *EPEA.*
[365] *Ibid at* 12.
[366] See <http://www.aer.ca/rules-and-regulations/bulletins/aer-bulletin-2014-01>.

with the provisions of *REDA* and other accompanying natural resource enactments. To this end, the AER carries out its mandate through the Compliance Assurance Program.

4.2.2.1.The AER Compliance Assurance Program

This program was developed to ensure "the fair and responsible discovery, development, and delivery of Alberta's energy resources."[367] This program uses education, prevention and enforcement activities to facilitate efficient and effective compliance. Ultimately, its goal is to ensure compliance with written requirements, monitored and enforced by the AER on behalf of all Albertans.[368] According to Directive 019 (Compliance Assurance)[369] of the Energy Resources Conservation Board (ERCB/Board) now known as the AER, the scope of the Compliance Assurance Program (CAP) is to ensure that the discovery and the development of Alberta's resources is carried out in a manner that is environmentally responsible for the general interest of Albertans. This mandate is carried out through the use of three key tools of "education, prevention and enforcement". This is to ensure compliance with all written, enforced and monitored requirements for and on behalf of all Albertans. The CAP ensures that resource development activity is conducted in a manner that protects public safety, minimizes environmental impact, ensures effective conservation of resources, and ensures stakeholder confidence in the regulatory process.

4.2.2.2.Components of the AER Compliance Assurance Program

Basically, the CAP has a risk assessment matrix against which the activities of regulated industries are measured against each AER requirement. Risk levels of industry operators are

---

[367]See online: <http://www.aer.ca/compliance-and-enforcement/compliance-assurance>.
[368] *Ibid.*
[369] See Directive 019 – Compliance Assurance 1 at 1, online: <https://www.aer.ca/rules-and-regulations/directives/directive-019>.

determined on either a high or low risk level based on the effect of the activity of the regulated industry on health and safety, environmental impacts, resources conservation and stakeholder confidence in the regulatory process.[370] According to Directive 019, AER requirements on equity, orderly and efficient development and data collection are risk assessed using the stakeholder confidence column in the risk matrix. If the assessment result on all of the above areas is minimal, the noncompliance is considered low risk. If the effect on these areas is more significant, the noncompliant event is considered high risk.[371] This risk rating of an AER requirement is predetermined, and once the facts of a given noncompliant event are considered established, the ERCB (now AER) staff have no discretion in applying a different risk rating. We now turn attention to how the AER deals with risks that are considered low or high risk.

4.2.2.2.1. Low Risk Activity/Event[372]

The processes followed in concluding that an activity is low risked include the prevention notices and enforcement actions both for individual events and for persistent noncompliance. Under the low risk process, the first step is the issuance of a Notice of Low Risk Noncompliance. Where the activity continues past the stipulated time required by the AER for the regulated industry to come into compliance, a Low Risk Enforcement Action will be issued. Where a Low Risk Enforcement Action is not complied with, the AER will escalate enforcement action in line with the framework described in Directive 019. Before the escalation is made, however, a senior personnel in the AER will contact the licensee/regulated entity. This contact is meant to discuss why the licensee has failed to comply with the initial action and also open up discussions on how the continuing infractions may be rectified. A low risked noncompliance licensee is required to

[370] *Ibid* at 2 &3, online: <https://www.aer.ca/compliance-and-enforcement/compliance-assurance>.
[371] *Ibid* at 3.
[372] *Ibid* at 4.

develop and implement a written action plan that explains why the noncompliant activity happened or give reasons for the failure of the previous action plan and how it intends to improve its compliance level. Where a licensee fails to improve its low risk noncompliance ratings after a further assessment by the AER, the licensee will be subject to some enforcement consequences including noncompliance fees, self-audit or inspections, third-party audits or inspections, partial or full suspension, suspension and/or cancellation of permit, licence, or approval.[373]

4.2.2.2.2. High Risk Activity/Event

Under the high risk event/activity, the AER's response is usually based on the circumstances of the case and the licensee's compliance history.[374] Thus, the high risk process may result in the issuance of either a Notice of High Risk Noncompliance, High Risk Enforcement Action, High Risk Enforcement Action (Persistent Noncompliance), High Risk Enforcement Action (Failure to Comply), or High Risk Enforcement Action (Demonstrated Disregard).[375] These compliance categories are used by the AER for administering and tracking enforcement and identifying licensees that are persistently noncompliant. Once a high risk noncompliant activity is discovered, the AER will issue a High Risk Enforcement Action. Some cases may however require that a Notice of High Risk Noncompliance be issued first rather than issuing a High Risk Enforcement Action. This is because the AER needs all available information to determine the extent of noncompliance. Note also that the AER has the sole discretion on the issuance of a Notice of High Risk Noncompliance. If a decision on the issuance of a High Risk Enforcement Action is made by the AER, instead of Notice of High Risk

---

[373] See Directive 019 – Compliance Assurance 1 at 10, online: <https://www.aer.ca/rules-and-regulations/directives/directive-019>.
[374] *Ibid* at 4.
[375] *Ibid.*

Noncompliance, reasons and justification for that decision will be provided and documented. Where a licensee under this head is deemed persistently noncompliant, necessary consequential actions will be taken by the regulator in accordance with the outlined framework of Direction 019. Aside from these enforcement tools set out above, the AER may also use tools such as administrative penalties, restricting operations, and shutting down facilities. Prosecution is also an option available to the AER to deal with a significant noncompliance under both the energy resource enactments and other specified enactments.

4.2.3. The Weakness of the Current Framework: An Examination of the Environmental Appeals Board (EAB) and the Appeal Process under the Responsible Energy Development Act (REDA)

The EAB, as described in the first part of this chapter, deals with appeals arising out of the provisions of the *EPEA*, while the *REDA* makes provisions for its specific appeal process. Although this concluding section of this chapter reviews the weaknesses in the current enforcement framework for the oil and gas industry in Alberta, we shall be considering also the weakness in the appeal process provided for under these two enactments. The reason for this consideration is because the *EPEA* and regulations made pursuant to it primarily regulates the Alberta environment generally while the AER created by the *REDA*, which is a one-stop-shop for energy development, regulates the oil and gas sector generally in Alberta. The AER also administers the provisions of other laws including the energy enactments and the *EPEA.*

4.2.3.1. The EAB and the Appeal Process under REDA

Aside from the general weaknesses that commentators have identified with a single regulator regime in place in the oil and gas industry in Alberta, one persistent and recurring issue that is most concerning to stakeholders in the industry is the appeal procedure under the *REDA*

and the EAB. The creation of the AER generally limits the reach of the EAB. Since the AER has the power to grant licences and permits for oil and gas related projects under it, such permits granted by the AER cannot be subject to an appeal procedure under the EAB.[376] This is because the *REDA* has specific appeal procedures which must be followed when an applicant is challenging any decision made by the AER pursuant to the *REDA*.

The EAB is ordinarily empowered to review decisions made pursuant to the *EPEA*, the *Water Act*, and the *Climate Change and Emissions Management Act* etc.[377] With the enactment of the *REDA* and the establishment of the AER, however, some jurisdiction within the ambit of the EAB has automatically, as a result of the creation of the AER, been transferred to the AER. Specifically, under the *EPEA*, a party with standing may appeal to the EAB against the issuance of an approval, permit, preliminary certificate or water licence under the *Water Act* for an oil and gas project.[378] A person is deemed to have standing to appeal once (1) he is the applicant for the approval, or (2) a person who submitted a "statement of concern" in relation to the matter and who is directly affected by the decision.[379] With the establishment of the AER, however, any approval relating to oil and gas projects must be obtained in line with the provisions of the *REDA* and the AER, thereby, automatically ousting the jurisdiction of the EAB to hear appeals arising therefrom. Section 2 of the *REDA* provides as follows:

> 2(1) The mandate of the Regulator is (a) to provide for the efficient, safe, orderly and environmentally responsible development of energy resources in Alberta through the Regulator's regulatory activities, and (b) in respect of energy resource activities, to regulate (i) the disposition and management of public

---

[376] See generally, Nigel Bankes "Bill 2 and its Implications for the Jurisdiction of the Environmental Appeals Board" (November 9, 2012) ABlawg 1-4 online: <http://ablawg.ca/wp-content/uploads/2012/11/Blog_NB_Bill2_Jurisdiction_EAB_Nov2012.pdf>.
[377] See <http://www.eab.gov.ab.ca/role.htm>.
[378] Section 91 of the *EPEA*.
[379] Section 91(1) (a) (i) of the *EPEA*.

> lands, (ii) the protection of the environment, and (iii) the conservation and management of water, including the wise allocation and use of water, in accordance with energy resource enactments and, pursuant to this Act and the regulations, in accordance with specified enactments. (2) The mandate of the Regulator is to be carried out through the exercise of its powers, duties and functions under energy resource enactments and, pursuant to this Act and the regulations, under specified enactments, including, without limitation, the following powers, duties and functions: (a) to consider and decide applications and other matters under energy resource enactments in respect of pipelines, wells, processing plants, mines and other facilities and operations for the recovery and processing of energy resources; (b) to consider and decide applications and other matters under the Public Lands Act for the use of land in respect of energy resource activities, including approving energy resource activities on public land; (c) to consider and decide applications and other matters under the Environmental Protection and Enhancement Act in respect of energy resource activities; (d) to consider and decide applications and other matters under the Water Act in respect of energy resource activities; (e) to consider and decide applications and other matters under Part 8 of the Mines and Minerals Act in respect of the exploration for energy resources; (f) to monitor and enforce safe and efficient practices in the exploration for and the recovery, storing, processing and transporting of energy resources; (g) to oversee the abandonment and closure of pipelines, wells, processing plants, mines and other facilities and operations in respect of energy resource activities at the end of their life cycle in accordance with energy resource enactments; (h) to regulate the remediation and reclamation of pipelines, wells, processing plants, mines and other facilities and operations in respect of energy resource activities in accordance with the Environmental Protection and Enhancement Act; (i) to monitor energy resource activity site conditions and the effects of energy resource activities on the environment; (j) to monitor and enforce compliance with energy resource enactments and specified enactments in respect of energy resource activities.

These provisions clearly oust the jurisdiction of the EAB to hear appeals arising from the legislation identified in the section above, where such appeals deal with the development of oil and gas resources. Indeed, it triggers the provision of section 24 of the *REDA* which empowers the regulator (AER) with the jurisdiction previously exercised by the EAB. Also, section 25 of the *REDA* has the implication of further circumscribing the reach of the EAB to review applications which were once reviewable by it. Section 25 provides as follows:

> "Except to the extent that the regulations provide otherwise, an application, decision or other matter under a specified enactment in respect of an energy

> resource activity must be considered, heard, reviewed or appealed, as the case may be, in accordance with this Act and the regulations and rules instead of in accordance with the specified enactment."

The combined effect of the provisions of section 24 and 25 is to abolish appeals to the EAB for decisions in relation to energy resource activities that are brought within the ambit of the *REDA* notwithstanding that these activities also touch on the provisions on the Alberta environment in general.[380] With this jurisdictional shift, the EAB by the creation of the AER is no longer empowered to consider violations to the provisions of the *EPEA* or the *Water Act* since energy resource development is now within the purview of the AER, violations of the provisions of any energy enactments, may only be considered by the AER in accordance with the appeal procedure under the *REDA*. The enforcement mechanism implicit in the *EPEA* through the EAB process is not strengthened by the creation of the AER and its appeal process as it does not expand the appeal process, the standing issues nor does it ensure a "creative and purposive interpretation" of its provisions by the AER when it comes to a review of its decisions.[381]

4.2.3.2.The EAB and the Issue of Standing

An appeals board usually follows the provisions of its establishing statute when it comes to issues of standing as the statute establishing the board will specify how an appeal should be commenced and by whom. The rules governing standing requirements under the EAB provide in general terms that an appeal may be commenced by the person who applied for the relevant statutory approval, permit or licence and by "any person who previously submitted a statement of

---

[380] *Supra* note 376.
[381] *Supra* note 376; C Chiasson, "Single Energy Regulator Bill a poor deal for Alberta's Environment" online: <https://environmentallawcentre.wordpress.com/2012/11/01/single-energy-regulator-bill-a-poor-deal-for-albertas-environment/>

concern … and who is directly affected by the … decision"[382] By implication, anyone (environmental organization or a public interest intervener) must first of all establish that it has filed a statement of concern and that it is directly affected by the activity or proposed activity. Public interest organizations have however explored alternatives to gain access to the EAB arguing to the effect that the EAB still has the jurisdiction to entertain an appeal even where the organization cannot establish that it is directly affected provided the public interest organization can establish that it meets the tests for public interest standing developed by the ordinary courts.[383] This approach has proven unsuccessful for public interest litigants as the EAB has generally taken a rather narrow approach to interpreting the term "directly affected" as provided for in the *EPEA*.[384] In *Bildson v Acting Director of North Eastern Slopes Region, Alberta Environmental Protection*,[385] the then EAB stated the general rule as regards standing as follows:

> The Board has long made it clear that an appellant bears the overall burden of proving, by a preponderance of the evidence, that it is "directly affected" by the decision being appealed. This rule generally has three components: the first, regarding which party bears the burden of proof (the appellant); the second, regarding the standard of certainty that must be achieved (preponderance of the evidence); and, the third, regarding the substantive standard which must be proven (that the appellant is "directly affected").

According to the courts, the appellants must prove that he is indeed "directly affected" by the activity. This means that an appellant cannot claim to have a derivative standing based on the fact that other persons are affected by the impugned project nor can he claim to have standing based on a general interest or desire to prevent any environmental harm resulting from the project

---

[382] See the provisions of section 91 of the *EPEA*.
[383] N Bankes, S Mascher & M Olzinski "Can Environmental Laws Fulfil their Promise? Stories from Canada" (2014) Sustainability 6024 at 6040, online: <http://www.mdpi.com/journal/sustainability>.
[384] See the following cases where the EAB gave a narrow approach to the interpretation of public interest standing: *Alberta Wilderness Association v Alberta (Environmental Appeal Board)*, 2013 ABQB 44; *Water Matters Society of Alberta et al v Director, Southern Region, Operations Division, Alberta Environment and Water, re: Western Irrigation District and Bow River Irrigation District* (10 April 2012), Appeal Nos. 10-053-055 and 11-009-014-D (AEAB).
[385] Appeal No. 98-230-D

which is the subject matter of his application.[386] Thus, the EAB reaffirmed its position and stated that it would not grant standing to an appellant simply because the appellant shared "the abstract interest of all Albertans in generalized goals of environmental protection."[387] Also when the EAB assesses the directly affected status of an individual or a group, as the case may be, the EAB considers the usage of the area where the project will be located and how the project will impact the environment and the consequence on the person's use of the area.[388] The closer these elements are connected (their proximity), the more likely the person is directly affected. According to the EAB, the consequential effect of the activity on the appellant does not have to be unique. However, the effect needs to be more than a general effect on the public at large. "It must be personal and individual in nature."[389] The restriction according to the EAB of who can, or cannot sue under the *EPEA* by the legislature was for a specific reason which the EAB cannot expand. According to the EAB in *Water Matters Society of Alberta et al.* v. *Director, Southern Region, Operations Division, Alberta Environment and Water, re: Western Irrigation District and Bow River Irrigation District*, the Board stated that "If the legislature had intended for any member of the public to be allowed to appeal, it could have used the phrase "any person" in describing who has the right to appeal. It did not; it chose to restrict the right of appeal to a more limited class."[390]

The effect of this restriction however is to limit the categories of persons who can challenge the authority of a regulatory approval granted pursuant to the *EPEA*. Anyone who

---

[386] See *Bildson* at paragraphs 21 and 22.
[387] *Ibid*.
[388] *Bildson* at paragraph 33; *Alberta Wilderness Association et al. v. Director, Southern Region, Environmental Management, Alberta Environment*, re: Eastern Irrigation District (30 August 2011), Appeal No. 10-038-043-ID1 (A.E.A.B.).
[389] *Supra* note 383 at 6041.
[390] 10 April 2012, Appeal Nos. 10-053-055 and 11-009- 014-D (A.E.A.B.).paragraph 109.

chooses to challenge any approval must prove that he is indeed affected (physically) by the approved project. This does not in any way do justice to the objectives of EABs generally since they are meant to foster a purposive interpretation of environmental statutes. Where their jurisdiction is strictly limited by the issue of standing, one begins to wonder at what will become the fate of an individual who will be affected by an approved activity but finds it difficult to tie the proximity of the effect of the proposed activity to himself. This is another limitation to the enforcement and compliance mechanism which the EAB would have offered to persons affected by the adverse impacts of energy development considering how challenging it is to proof that one is indeed directly affected by the decision to authorise an energy resource development.

4.2.3.3. The AER's Appeal Process under the *REDA* and the Issue of Standing

The appeal process under the *REDA* is provided for under Part Two of the Act. Accordingly, applications made pursuant to an energy resource enactment or a specified enactment in respect of an energy resource activity must be made to the Regulator.[391] Of particular interest is the provision of section 32 which provides that "a person who believes that the person may be directly and adversely affected by an application may file a statement of concern with the Regulator in accordance with the rules." This section raises the question of who can challenge an approval granted to a proposed energy activity under the *REDA*. Here, the standing requirement to challenge any application for a proposed energy resource development stipulates that only those who are directly and adversely affected by the proposed activity are eligible to submit a statement of concern. This means that the requirement of being directly and adversely affected does not confer the assurance that a hearing will be made. This is because

[391] Section 30 of the *REDA*. Regulator means the AER.

section 33(1) empowers the Regulator with the discretion of whether or not to conduct a hearing based on the statement of concern filed. Where the Regulator decides to conduct a hearing, the hearing is done in accordance with the provisions of the rules made pursuant to the *REDA.*[392] This standing requirement, like that of the EAB, further limits the reach of public interest participants in challenging the decisions of the Regulator as regards some energy projects. Despite the position of the court as regards citizens in Alberta having rights to provide input on public decisions that may affect their rights and interests, the *REDA* has, with its standing requirements, circumscribed the reach of challenging energy resource decisions by only allowing those directly and adversely affected to file a statement of concern and by also equipping the Regulator with discretion such that it is his choice to decide whether or not a hearing is required to be conducted.[393]

The issue of standing ties closely with the issue of award of costs. Commentators, including Ecojustice, have stated that "standing is made truly meaningful when interested parties can be assured that they will be compensated for the costs associated with their participation. As such, the inclusion of clear and defensible cost rules is critical for making the legal system accessible to all Canadians."[394] Unlike the now defunct Energy Resources Conservation Board (ERCB) whose cost provisions are clear, the *REDA* is silent on this issue.

4.3. Conclusion

Under this part, an attempt has been made at discussing the relevant provisions of the *EPEA*, *REDA*, *OGCA* and the *Pipeline Act* as they touch on environmental enforcement of their

---

[392] See sections 34, 35 of *REDA.*
[393] *Kelly v. Alberta* (*Energy Resources Conservation Board*), 2011 ABCA 325
[394]See online: <http://www.ecojustice.ca/what-reda-means-for-albertans>.

provisions relating to oil and gas activities. Also discussed were the enforcement approaches used in the Alberta oil and gas industry in ensuring compliance with stipulated laws. This was not an exhaustive consideration of what is in place in Alberta but rather an attempt at examining the framework available in ensuring compliance with existing environmental laws. This chapter also considered the weaknesses inherent in the enforcement process as provided for under the *REDA* and the *EPEA*. Specifically, the issue of standing in challenging regulatory approvals was considered.

It is pertinent to state that one obvious weakness inherent in the statutory framework reviewed is the issue of standing in challenging a decision on an approval to commence an energy resource development. It has been reiterated in this section that the issue of standing is one of the drawbacks of the enforcement and compliance mechanism in the Alberta environmental regulatory framework. Since the provisions of the legislation reviewed limits the challenge of the decisions made pursuant to it to only persons who are directly affected, and since there is a narrow interpretation of the term "directly affected," the proof of which is burdensome, one wonders how the appeal process under the REDA and the EAB will, if ever, reduce the effects of energy resource development and strengthen compliance with set out provisions especially in the face of oil spill pollution.

Chapter Five: Comparative Appraisal of the Regulatory Frameworks and Enforcement Mechanisms Applicable under the Alberta and Nigerian Regimes

5.1.Regulatory Framework and Enforcement Regimes in Nigeria and Alberta Compared

5.1.1. Introduction

This chapter draws comparisons between the regulatory and enforcement frameworks in Alberta and Nigeria. Enforcement mechanisms discussed in Chapter 2 and those specifically discussed in Chapters 3 and 4 will be considered. In other words, this chapter compares the key enforcement mechanisms available for the protection of the environment against oil and gas related pollution. Whereas there are several enforcement mechanisms already discussed in the preceding chapters of this thesis, only the enforcement mechanisms highlighted in Chapters 2, 3 and 4 will be considered. Thereafter, this chapter will discuss the components and indicators of an effective environmental enforcement system in the comparative jurisdictions. This chapter will conclude by critically appraising the deficiencies inherent in the enforcement regimes within the jurisdictions under comparison.

In Chapter Two of this thesis, it was mentioned that the two major enforcement and compliance mechanisms in the comparative jurisdictions are the deterrence based approach and the cooperative based approach. We also considered, in Chapters Three and Four, approaches to enforcement which may be described as offshoots of this two broad branches of enforcement and compliance mechanisms. In carrying out this comparative analysis, two methods of comparative analysis discussed in Chapter One[395] of this thesis will be applied, that is, the normative and the

[395] See "Research Methodology" in chapter one of this thesis.

functional approaches to comparison. The normative approach to comparative analysis is used to basically classify and compare laws based on their usefulness or appropriateness to a given situation or problem.[396] Understanding the normative approach used in this chapter therefore requires that a comparison of the enforcement mechanisms and approaches used in both Alberta and Nigeria be drawn so as to show, through analysis, the strengths and weaknesses of the enforcement approaches in one jurisdiction as compared to those in the other and how to improve the less effective regime by drawing on the identified strengths in the more effective regime. The functional approach, on the other hand, considers the effects of rules and laws within a system and not only the laws and the legal institution.[397] Thus, having identified oil spill pollution as a common problem in both the Alberta and Nigerian oil and gas industry, some practical solutions to contain this menace will be considered.

5.1.1. An Overview of Enforcement and Compliance Indicators in the Comparative Jurisdictions

It has been said that "one significant method of measuring the effectiveness of an environmental regulation is compliance by the regulated community."[398] Enforcing enacted rules is key to achieving environmental compliance. Within the oil and gas industry in the comparative jurisdictions, one important indicator that enacted rules are being enforced is that those rules are being complied with. Different definitions for enforcement has been advanced – Castrilli[399] defined enforcement as the activities that generally compel compliance with set rules, while Duncan defined the term as "any government or private intervention taken to determine or

---

[396] See Giuseppe Monateri, *supra* note 38 at 307-8.
[397] Ralf Michaels, *supra* note 39 at 4.
[398] M Doelle & C Tollefson, *supra* note 138 at 343.
[399] Joseph Castrilli, *supra* note 138 at 344;

respond to noncompliance."[400] Another definition of enforcement describes it as "the range of procedures and actions employed by a state, its competent authorities and agencies to ensure that organizations or persons potentially failing to comply with environmental laws or regulations can be brought or returned into compliance and/or punished through civil, administrative or criminal action."[401] Indeed, enforcement is much more than merely prescribing punishment after the fact, it includes the process of creating binding standards for liability and accountability for ensuring compliance.[402] Compliance, on the other hand, can be described as a person's behaviour that fits within the confines of explicit rules.[403] It can also be described "as the state of conformity with obligations imposed by a state, its competent authorities and agencies on the regulated community, whether directly or through conditions and requirements in permits, licences and authorizations."[404] The existence of the basic components of an effective enforcement regime ensures compliance within a regulated community. It is therefore imperative that a framework be developed against which enforcement and compliance regimes in the comparative jurisdictions can be measured. Environmental enforcement should not only be limited to the traditional command and control enforcement mechanism of either taking defaulters to court or shutting down a facility, regulators may adopt a persuasive educative style to stimulate compliance.[405] A combination of varying approaches to environmental enforcement may be adopted to ensure that the regulated entity complies with stipulated rules. To this end, effective administrative practices

---

[400] L F Duncan, *supra* note 139 at 328.
[401] UNEP's Enforcement of Environmental Law: Good Practices from Africa, Central Asia, ASEAN Countries and China 1 at 1, online: <http://www.unep.org/delc/Portals/119/publications/enforcement-environmental-laws.pdf>.
[402] *Supra* note 139 citing Duncan at 328.
[403] R B Mitchell, "Compliance Theory: A Synthesis" (2006) 2 RECIEL 327 at 328, online: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9388.1993.tb00133.x/pdf>.
[404] *Supra* note 400.
[405] Carolyn Abbot, *Enforcing Pollution Control Regulation: Strengthening Sanctions and Improving Deterrence* (Canada: Hart Publishing, 2009) 1 at 4.

and availability of means for civil society to become involved in the enforcement process are important to achieving environmental compliance. There is a need to, therefore, strengthen the three areas of regulatory compliance- administrative, civil and criminal - to achieve an optimal level of compliance.[406]

A recurring theme in this thesis is that environmental regulation begins with the enactment of laws, laws that prescribe environmental quality standards and also stipulate penalties for contravening these prescribed rules. Therefore, laws generally established through a process of extensive participation have been adjudged to increase the probability of voluntary compliance.[407] Also, generalization of environmental laws has been viewed as ineffective in achieving effective compliance.[408] For a law to be effective in ensuring compliance, this law must be "precisely stated" so as to enable quick and effective response to infractions.[409] In this section therefore, consideration will be given to some key enforcement and compliance indicators within the oil and gas industry in the comparative jurisdictions.

Enforcement and compliance indicators may be aptly described as pointers within a regulatory framework suggestive of the compliance levels of the regulated communities to stipulated rules. UNEP has also described it as indicators "designed for measuring/evaluating the performance of environmental compliance and enforcement action for the purpose of improving the effectiveness of such action by making information about action taken and the results achieved known."[410] There is a general consensus that for any enforcement framework to be

---

[406] *Supra* note 400.
[407] *Supra* note 138 & 139.
[408] *Supra* note 138 & 139.
[409] *Supra* note 138 & 139.
[410] Wanhua Yang, "Environmental Compliance and Enforcement Measurement and Indicators" being a presentation made at the Second Africa-Asia Inter-Regional Expert Meeting on Enforcement of Environmental Law: Ensuring

considered effective, it must be evaluated regularly to ensure that there is considerable progress in the reduction of illegal activities and that there is a steady progress towards meeting the policy goals of a regulatory body.[411] An effective environmental regulatory regime should therefore include the following:[412]

a. Political and institutional commitment to enforcement;
b. A compliance strategy;
c. Imposition of legally binding standards to provide a clear, consistent definition of compliance;
d. Mechanisms to promote voluntary compliance, to deter violators and to prevent environmental damage;
e. Mechanisms to determine compliance and detect violations;
f. An alternative array of sanctions and penalties; and
g. An evaluation process to enable review and revision of compliance strategies premised on compliance and protection objectives.[413]

Based on the criteria listed above, an attempt will be made at comparing the current environmental enforcement regimes in both Nigeria and Alberta to determine whether or not what is currently in place is adequate or effective in combating oil spill pollution which has been reiterated as a common menace in both jurisdictions. The above measuring standards will now be considered in turn.

Compliance and Enforcement through Partnership 1-4December 2015, online: <http://www.unep.org/delc/Portals/119/events/ece-measurement-%20indicators.pdf>.

[411] International Network for Environmental Compliance and Enforcement (INECE) Principles of Environmental Compliance and Enforcement Handbook 1 at 104, online: <http://inece.org/principles/PrinciplesHandbook_23sept09.pdf>.

[412] See Duncan, *supra* note 139 at 329.

[413] This thesis adopts the Duncan indicators because most environmental scholars and works reviewed in the course of this research project consider an effective environmental regime to, as a matter of necessity, have in place the above listed indicators. See generally Olarenwaju Fagbohun, "Mournful Remedies, Endless Conflicts and Inconsistencies in Nigeria's Quest for Environmental Governance: Rethinking the Legal Possibilities for Sustainability" online: <http://nials-nigeria.org/PDFs/Prof%20Fagbohun%20Final.pdf>. M Doelle & C Tollefson (Chapter 5 on Enforcement and Compliance) supra note 138 at 344.

5.1.2. Enforcement and Compliance Indicators – Nigeria vs Alberta

5.1.2.1. Political and Institutional Commitment to Enforcement

One key component that is indicative of an effective environmental enforcement and compliance regime is a visible commitment within existing political and institutional bodies to environmental enforcement. There must be a clear indication that regulatory bodies are committed to enforcing stipulated rules and regulations. The existing rules must not only exist on paper, there must be a commitment by the regulatory bodies and willingness to enforce enacted rules. In Nigeria, the existing legal and institutional framework developed to address oil spill pollution is inadequate in view of the devastating state of the oil-rich regions of the country. Notwithstanding the array of laws and agencies designed to combat the consistent oil spill pollution arising from energy resource development, the menace of oil spill remains ever present in the country. This means that a political and institutional commitment to enforcement requires much more than the government's powers to enact and prescribe specified conduct within a society, it requires commitment to implement and sustain sound policies through the government's desire to ensure and enhance not only good governance but the opportunity for the society to enjoy the inherent dividends of good governance which includes environmental protection.[414] The most obvious lack of political and institutional will to enforce environmental legislation is found in the *CFRN* 1999. One of the objectives of Part II of the *CFRN* (Fundamental Objectives and Directive Principles of State Policy) is to ensure safe an improved environment for the citizenry. Section 20 clearly obligates the state to "protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria." Although the

[414] See the inaugural lecture delivered by Prof Olarenwaju Fagbohun at the Nigerian Institute of Advanced Legal Studies (NIALS)on the topic "Nigeria's Quest for Environmental Governance" (2012), published in the Nation's Newspaper in Nigeria. Online: <http://thenationonlineng.net/nigerias-quest-for-environment-governance-2/>.

component states and local governments are not prohibited from setting up state environmental protection agencies, or passing legislation related to environmental protection, the reality is that the powers of these other tiers of government are quite limited, as it is expressly provided in Section 4 (5) of the *CFRN* 1999 that any provision of a law of a State House of Assembly that is inconsistent with a federal law shall to the extent of its inconsistency be null and void. Some of such matters upon which the other levels of government cannot legislate include matters relating to mines and minerals (including oil fields, oil mining, geological surveys and natural gas). The legal implication of this is that only the Federal Government of Nigeria has authority to dictate the use of land and environmental management where such use relates to mining activities, since the ownership of minerals, such as oil, the grant of oil exploration and mining licences and the management of oil activities are matters reserved for the federal government by virtue of the Exclusive Legislative List.[415] Although the *CFRN* 1999 advocates enacting laws to "protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria", it ironically takes away the legitimacy required to enforce this state environmental objective by providing in section 13 that the provisions of Chapter II of the *CFRN* 1999 are not capable of being enforced in a court of law. In other words, they are non-justiciable provisions.

In Alberta, on the other hand, there are enacted laws for the purpose of environmental protection. Here, there is in existence the political will to enforce environmental legislation geared towards environmental conservation. Section 92A of the *Constitution Act* 1867 (the Constitution Act) provides that "In each province, the legislature may exclusively make laws in relation to: (*a*) exploration for nonrenewable natural resources in the province; (*b*) development,

[415] See Second Schedule to the Constitution of the Federal Republic of Nigeria 1999.

conservation and management of nonrenewable natural resources." Generally speaking, this part of the Constitution Act does not provide for any derogatory powers of the federal Parliament, but makes the power of the province to make laws relating to exploration for nonrenewable natural resources exclusive. It is by virtue of this constitutional enablement that Alberta has enacted legislation such as the *EPEA* and the *REDA*, both of which have provisions indicative of a strong political will to enforce environmental laws relating to oil spill pollution.[416]

5.1.2.2.Compliance Strategy

Every effective environmental enforcement regime ought to have in place a compliance strategy. It should have a plan, an approach to achieving compliance with set standards. In Alberta, there is in existence a Compliance Assurance Program (CAP) developed by the single energy regulator – AER for the province to ensure "the fair and responsible discovery, development, and delivery of Alberta's energy resources."[417] This compliance strategy adopts education, prevention, and enforcement activities to facilitate efficient and effective compliance. Ultimately, its goal is to ensure compliance with written requirements monitored and enforced by the AER on behalf of all Albertans.[418]

Comparing the above-mentioned compliance strategy in Alberta to what is in place in Nigeria, there is currently no compliance strategy developed by the NOSDRA, an agency charged with the responsibility of responding immediately to oil spill pollution. There is also no similar program developed in Nigeria under the NESREA – a principal agency for environmental regulation in the country. The CAP in Alberta clearly stipulates that resource development

[416] See, for instance, S. 2 (1) (a) and (b) which provide for a clear mandate of the Regulator.
[417]See online: <http://www.aer.ca/compliance-and-enforcement/compliance-assurance>.
[418] *Ibid.*

activity within the province should be conducted in a manner that protects public safety, minimizes environmental impact, ensures effective conservation of resources, and ensures stakeholder confidence in the regulatory process.[419] The clarity of this compliance strategy in force in Alberta makes it easy for the Regulator to effectively assess the compliance level of a regulated entity. It is clearly a different scenario in Nigeria, as there exists no clear standard for measuring the compliance of a regulated entity. Another important aspect of the compliance strategy in force in Alberta is the clear definition of the components of the strategy. The CAP is comprised of a risk assessment matrix against which the activities of regulated industries are measured against each AER CAP requirement. The risk levels of industry operators is assessed either on a high or low level based on the effect of the activity of the operator on health and safety, environmental impacts, resources conservation and stakeholder confidence in the regulatory process.[420] Where an assessment result indicates a minimal risk level, when assessed in relation to health and safety, environmental impacts, resources conservation and stakeholder confidence in the system, the noncompliance level is considered low risk. If the effect on these areas is more significant, the noncompliant event is considered high risk.[421] Note that these risk ratings are predetermined, and once the facts of a given noncompliant event are considered established, the officials at the AER have no discretion in applying a different risk rating. They must apply the risk rating encapsulated in the CAP. This invariably ensures uniformity in the process as regulated entities are confident that the ratings upon which their activities will be assessed cannot just be manipulated or changed at will. This is of course not the case in Nigeria,

---

[419] See Directive 019 – Compliance Assurance 1 at 1, online: <https://www.aer.ca/rules-and-regulations/directives/directive-019>.
[420] *Ibid* at 2 &3, online: <https://www.aer.ca/compliance-and-enforcement/compliance-assurance>.
[421] *Ibid* at 3.

since there is no compliance strategy in force, there is no guide as to what the regulatory entities might be up against. The lack of a prescribed system where the activities of the regulated might be measured makes effective environmental enforcement within the energy sector in Nigeria a herculean task.

In Alberta, the AER in 2013 issued an order under section 22 of the *OGCA* against Plains Midstream Canada (PMC) for contravening the rules put in place to ensure that energy development in Alberta is done in a responsible and safe manner.[422] This order will require a full scale audit of PMC's operations and will invariably impose restrictions on PMC to obtain further approvals for any of its operations in Alberta. In the words of Jim Ellis, the Chief Executive Officer of AER, "until the company can demonstrate that it can operate within Alberta's rules and requirements, every single interaction with the Alberta Energy Regulator will be subject to extra scrutiny while we conduct a full audit of its operations."[423]

5.1.2.3. Imposition of Legally Binding Standards to Provide a Clear, Consistent Definition of Compliance

Another indication that there is in place an effective enforcement and compliance regime is the clear imposition of legally binding standards to provide a clear and consistent definition of compliance. A good example that this is lacking in Nigeria can be traced to the provisions of section 20 of the *CFRN* 1999 which provides that the state shall "protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria." Considering that this definition stems from the paramount legislation in the country, one would expect that

[422] See AER News Release of 2013-07-04, online: <https://www.aer.ca/about-aer/media-centre/news-releases/news-release-2013-07-04>.
[423] *Ibid.*

this grundnorm would have the force of law and encourage compliance in line with its mandate. But this provision cannot be enforced in the Nigerian courts as it falls under Chapter II of the *CFRN* 1999, which is non-justiciable thus making the provision worthless as it lacks judicial enforcement.[424] Commentators have criticized the provision on the basis that the so-called attempt at including in the principal statute a provision designed to enhance environmentally safe procedures in development has failed to achieve its much desired purpose.[425] What use is a statute if its provisions are not legally binding? Another provision worth considering in light of this indicator is the provision of section 7 of the *NESREA Act* 2007, which empowers NESREA to ensure compliance with laws, guidelines, policies and standards on environmental matters. As general as this provision reads, subsection (g) of the same section ousts the jurisdiction of the NESREA over oil and gas related waste, while subsection (j) provides that the NESREA shall enforce environmental control measures through registration, licensing and permitting systems other than in the oil and gas sector. Clearly, these provisions and others alike[426] restrict the enforcement powers of NESREA over any oil and gas pollution. It is rather strange that the primary environmental regulatory body in Nigeria should lack the jurisdiction to carry out environmental law enforcement on oil and gas related activities, consequently leaving only NOSDRA with the responsibility of regulating oil spill pollution in the oil and gas industry in Nigeria. Although the NOSDRA is primarily charged with regulation of oil spill pollution, the provisions in the NOSDRA Act, however, make enforcement difficult to achieve. Take, for instance, the provisions of Section 6 of the *NOSDRA Act* 2006, which states that the agency shall

---

[424] Section 6(6)(c) of the Constitution ousts the jurisdiction of the courts from considering any question as to whether or not the State has complied with the provisions of Chapter II of the Constitution
[425] Fagbohun, *supra* note 195 at 44.
[426] See section 7(l), 8(l) (m), (n) (s) 30(4).

be "responsible for surveillance and ensure compliance with all existing environmental legislation and the detection of oil spills in the petroleum sector."[427] In spite of this provision of Section 6, the *NOSDRA Act* 2006 does not specifically impose fines on regulated entities for an oil spill incident nor does it explicitly state how it intends to carry out its mandate as provided for under section 6(1). The only fines provided for in the NOSDRA are fines imposed upon an oil spiller for failure to report an oil spill incident and clean up an impacted site to a reasonable extent.[428] This is not the case in Alberta where the *REDA*, which created the AER, imposes specific fines and penalties for contravention of its provisions. Although the AER primarily regulates oil and gas activities, the *EPEA* still has general powers over environmental pollution within the province, which includes oil and gas specific pollution. Under the *EPEA*, section 108 proscribes release of substance into the environment in excess of the approval for release granted, while section 109 (1) (2) provides that:

> (1) No person shall knowingly release or permit the release into the environment of a substance in an amount, concentration or level or at a rate of release that causes or may cause significant adverse effect;
> (2) No person shall release or permit the release into the environment of a substance in an amount, concentration or level or at a rate of release that causes or may cause a significant adverse effect.

The import of these provisions is to ensure that releases (including oil spills) into the Alberta environment without a requisite permit or authorization will attract liability under the *EPEA*. This is however not the case under the *NESREA Act* 2007, as it is expressly stated that oil and gas related infractions are not within the jurisdiction of the NESREA. Similarly, the provisions of section 6 of the *NOSDRA Act* 2006, which purports to regulate oil spill in Nigeria, although stipulates a duty to report oil spill release, that obligation only attracts sanctions where "an oil

[427] Section 6 (1) (a).
[428] See section 6(2) (3).

spiller" fails to report a spill. This is contrary to the situation under section 110 of the *EPEA* which not only imposes a duty to report a spill on operators but also gives a "police officer or employee of a local authority or other public authority, who is informed of the release or who investigates a release of a substance into the environment that may cause, is causing or has caused an adverse effect…", the powers to "…immediately notify the Director of the release unless the police officer or employee has reasonable grounds to believe that it has been reported by another person."[429] This is, however, not the case under section 6(2) of the *NOSDRA Act* 2006. The implication of section 6(2) of the *NOSDRA Act* is that where the oil spill happens, and the oil spiller does not report it, the NOSDRA may not be able to detect the spill early enough, if at all, and the consequences of the spill will continue unabated leading to years of unending environmental degradation within the region that is the victim of the unfortunate spill or release.[430]

5.1.2.4. Mechanisms to Promote Voluntary Compliance, to Deter Violations and to Prevent Environmental Damage

An effective environmental regime should have in place mechanisms that are capable of promoting voluntary compliance with rules and deterring violations so as to prevent environmental damage. A statute that lacks the mechanism required to ensure compliance and the required deterrent effect necessary to prevent future violations makes a mockery of the essence and the existence of the statute. For environmental statutes to be considered effective and adequate, these statutes have to be seen as not mere words or letters, but as letters the

[429] See subsection (3) of section 110 of the EPEA.
[430] *Wiwa v. Shell* available online at. *http://ccrjustice.org/home/what-we-do/our-cases/wiwa-et-al-v-royal-dutch-petroleum-et-al*

violation of which attracts appropriate sanctions. In Chapter Two of this thesis, we discussed the two major environmental enforcement mechanisms of deterrence and cooperation. These mechanisms must be seen at work in the provisions of the statutes regulating oil spill pollution. The deterrence based approach, which is predominantly concerned with coercing compliance through maximal detection and sanctions for violating legal rules, ensures that regulated entities comply with standards put in place by the regulatory authorities for environmental infractions.[431] Although almost all environmental laws in Nigeria tilt in this direction, their provisions are inadequate in ensuring compliance. In the energy sector, the various laws specifying penalties for oil and gas infractions are inadequate for ensuring effective deterrence. A recently published article in one of the widely read newspapers in Nigeria reported a fine of one million naira imposed on the Nigerian Agip Oil Company for spilling oil in Obrikom Omoku area of Rivers State and for contravening the provisions of the Act.[432] The statutory fine of one million naira (approximately CD$4,800) is usually the ceiling of the fines imposed by NOSDRA. This fine drew flak from several interest groups, who argued that the fine was not deterrent enough to dissuade further pollution.[433] Imposing stiffer economic penalties for oil spillage is therefore required to deter violations in Nigeria. A one million naira fine is not commensurate with the level of degradation and environmental hazards caused by oil spills and a paltry fine of one million naira cannot deter oil companies from continued spillage.

Comparing the situation in to Nigeria to what is obtainable in Alberta under the *REDA*, the AER imposes stiff penalties for contravention of the provisions of the Act and the regulations

---

[431] Scholz, *supra* note 148 at 179.
[432] See the provision of section 6(2) (3); *supra* note 207.
[433] See the comments made by Senator Olubukola Saraki on the fine imposed on Agip in Rotimi Ajayi, *supra* note 207.

made thereunder. Although there is no specific benchmark for fines imposed for contravention of the provisions of the *REDA*, the Act expressly provides for administrative penalties[434] which impose fines in an amount determined by the Regulator (AER) when a person contravenes the provisions of the Act. It strengthens the deterrence mechanisms inherent in the statutes as the regulated communities, uncertain as to how much fine they may be liable to pay as administrative penalties, may be tempted to act within explicit rules.[435] Nigeria lacks this mechanism in its environmental regulatory regime, and this makes enforcement challenging as the NOSDRA can only impose fines as stipulated in the Act; it does not have the powers to impose a fine above the prescribed limit unlike the existence of administrative penalties in *REDA* which provides AER with the leeway to impose stiff penalties in the face of any contravention in line with the provisions of the Act. It is important to also mention at this point that although the *REDA* does not specify a fine to be imposed for the contravention of its provisions, the *EPEA* provides for fines. Section 228 (1) (a) provides that any contravention to the provision of the Act may incur in the case of an individual, liability of CD$100,000 or a two year term of imprisonment or both fine and imprisonment, and in the case of a corporation, to a fine of CD$1,000,000.[436] Not only will a corporation be liable to a fine, the directors and officers of the corporation may also incur liability for the offence. Section 232 of the *EPEA* provides as follow:

> "where a corporation commits an offence under this Act, any officer, director or agent of the corporation who directed, authorised, assented to, acquiesced in or participated in the commission of the offence is guilty of the offence and is liable to the punishment provided for the offence, whether or not the corporation has been prosecuted for or convicted of the offence."

---

[434] See part 5, section 70 of the REDA.
[435] Section 71(4) of REDA.
[436] See also subsection (2) and (3). Note also that section 231 of the EPEA provides that every person who is guilty of an offence under this Act is liable on conviction for each day or part of day on which the offence occurs or continues.

This provision therefore ensures that a company's directing mind critically considers the effects of its operations on the environment before granting approval for such operations to be proceeded with as liability is accruable not only to the company but also to the directing minds of the company.

5.1.2.5.Mechanisms to Determine Compliance and to Detect Violations

An effective and efficient environmental enforcement regime must have in place a reliable mechanism for determining compliance and detecting contraventions. One of the best ways to determine compliance and detect violation is through the conduct of inspections and investigations into the operations of energy resource developers. The regulator must be empowered to visit and inspect oil facilities as well as equipment to ensure that prescribed standards are being complied with. Under the *REDA*, the Regulator (AER) is empowered to carry out inspections, investigations and other compliance and enforcement activities under the energy resource enactments and specified enactments.[437] This power ensures that visits to oil facilities can be carried out as often as it is considered necessary to ensure compliance with stipulated rules. The AER has in place comprehensive requirements that an energy company must satisfy before an application for a license or permits necessary for its operations can be approved.[438] Where an application is deemed deficient, there are processes employed by the AER to identify and address necessary concerns before a final decision is made.[439] Upon the approval of a project, the AER has in place strict requirements necessary to ensure that energy projects are constructed and operated safely. AER's field inspectors inspect construction, operation, and

[437] Section 69(1).
[438] See Inspections and Audits page on the AER website, online: <http://www.aer.ca/compliance-and-enforcement/inspections-and-audits>.
[439] *Ibid.*

abandonment operations within the oil and gas industry so as to ensure that operators are complying with the rules.[440] The inspection activities carried out by the AER are usually prioritised based on three criteria referred to as the "OSI" (operator, sensitivity and inherent risk).[441] Based on these key criteria, the operations of an oil and gas company is measured. The history of a company's level of compliance determines the thoroughness with which its operations may be inspected.[442]

The Nigerian inspection regime is not the same as Alberta's. Although the *NOSDRA Act* 2006 does provide for inspections and surveillance to ensure compliance with all existing environmental statutes and also to detect oil spills as this occurs in the oil industry, it has failed to provide a comprehensive framework for carrying out these inspection activities.[443] Even though the NOSDRA is empowered to implement the NOSCP, which *prima facie* provides for a comprehensive "plan to establish the mechanism to monitor and assist or where expedient direct the response, including the capability to mobilize the necessary resources to save lives, protect threatened environment, and clean up to the best practical extent of the impacted site", there is no standard for measuring industry operators' compliance with the provisions of the Act or the NOSCP. Although the NOSCP provides for three different tiers of oil spills clean-up

---

[440] *Ibid.*
[441] *Ibid.*
[442] A clear indication of this is the order granted by AER against PMC. See above.
[443] See sections 5 and 6 of the *NOSDRA Act* 2007. Section 18(1) established a National Control and Response Centre which is empowered to act as a response coordinating centre for oil spillages within the country as well as 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, this control centre has failed to explicitly it intends to carry out its required mandate of surveillance considering that there is no guide within which officials may carry out this duty.

implementation,[444] there is no specificity as to how these clean-up implementation regime will be made applicable to oil spills generally. Indeed, Tier One provides that operational type spills which are less than or equal to 7 metric tonnes (50 barrels), that may occur at or near a company's own facility, as a consequence of its own activities will require an individual company under the oil pollution preparedness, response and co-operation (OPRC) to provide resources to respond to this size of spill.[445] Tier Two on the other hand provides that a larger spill, greater than 7 metric tonnes (50 barrels) but less than 700 metric tonnes (5000 barrels), in the vicinity of a company's facility where resources from another company, industry and possible government response agencies in the area can be called in, on a mutual aid basis.[446] The company will participate in local co-operatives such as the Clean Nigeria Associates (CNA) where each member pools its Tier 1 resources and has access to any equipment which have been jointly procured for this co-operative initiative.[447] Tier Three provides that the large spill, greater than 700 metric tonnes (5000 barrels), where substantial further resources will be required and support from a National (Tier 3) or International Co-operative Stockpile, like the Oil Spill Response Limited (OSRL), may be necessary. Such operation is subject to government control and direction.[448] It is important to recognize that a spill which receives a Tier 3 response may be close to, or remote from company facilities. The implication of these tiers is to ensure and strengthen adequate monitoring and clean-ups of oil spills in Nigeria. However, the tiers tend to trivialise the offence of oil spills in Nigeria as the categorisation of spills and when response is

---

[444] See Adati Ayuba Kadafa *et al*, Oil Spillage and Pollution in Nigeria: Organizational Management and Institutional Framework (2012)2:4 Journal of Environment and Earth Science 22 at 25 online: <www.iiste.org/Journals/index.php/JEES/article/download>.
[445] *Ibid*, online: <www.nosdra.org.ng>
[446] *Ibid.*
[447] *Ibid.*
[448] *Ibid.*

required enables operators to avoid reporting oil spills or taking proactive steps at ensuring clean-ups since the threshold of 7 metric tonnes may not have been reached. It is indeed concerning that laws regulating the safety of the environment from oil operations in Nigeria and agencies charged with the responsibility of overseeing oil spill incidents do not stipulate ways by which the agency might measure compliance with industry standards. Where there is no means of assessing the compliance level of industry operators and detecting violations of prescribed standards, it is almost impossible to either ensure compliance or mitigate violation of stipulated standards.

5.1.2.6. An Alternative Array of Sanctions and Penalties

Effective environmental regulations should not only provide for one type of sanction for violations, there should be various options available to treat environmental infractions. In Chapter Four of this thesis, a review of the various enforcement approaches was considered. We did consider alternative sanctions and penalties for contravention of the provisions of an environmental regulation. The Alberta Regulator may either impose administrative penalties, issue warnings or orders or prosecute the violator depending, of course, on the nature of the infraction and whether or not it falls under high or low risk under the CAP. In Nigeria, sanctions and penalties usually span across inspections, seizures, arrests, civil and criminal prosecutions. This array of sanctions has proved largely ineffective as there has been little or no impact made in the reduction of oil spill incidents in the Nigerian environment.

5.1.2.7. An Evaluation Process to Enable Review and Revision of Compliance Strategies Premised on Compliance and Protection Objectives

An efficient regulatory regime may be judged by the existence of an evaluation process that enables a review and revision of the compliance strategies within the system. It is necessary that there is in place a review mechanism by which enforcement and compliance regimes are evaluated. Nigerian legislation has provisions that govern the oil and gas industry that appear quite sufficient and designed to safeguard the environment and the resources therein. This has, however, failed to sufficiently provide for adequate monitoring which is required to assess the effectiveness of an environmental regulatory regime. This is unlike Alberta where there are clear standards for effectively measuring the compliance level of the regulated community. In Nigeria, the existence of numerous pieces of legislation duplicating the roles of one enforcement agency and another makes effective monitoring of environmental compliance difficult to achieve.[449] The location of the oil companies, the terrain, the accessibility, revenue, manpower and the availability of qualified personnel for the monitoring agency further restrict the ability and efficiency of monitoring by the regulatory agencies. In Alberta, on the other hand, effective monitoring and evaluation of compliance strategies appears relatively easy to achieve considering the existence of the CAP program initiated by the AER and the enforcement ladder approach whereby industries' compliance is measured against an established framework. It is therefore safe to assume that measuring the compliance and enforcement indicators applicable in the jurisdiction under review reveals clearly that the environmental enforcement regime in place in Alberta is more effective in achieving regulatory compliance than what is currently in place in

[449] E I Elenwo, & J A Akankali, "Environmental Policies and Strategies in Nigeria Oil and Gas Industry: Gains, Challenges and Prospects. Natural Resources" (2014) Scientific Research Journal 884 at 893, online: <http://dx.doi.org/10.4236/nr.2014.514076>.

Nigeria, especially considering the graduated enforcement approach in place in Alberta. Even though the *NOSDRA Act* 2006 has in place a lofty objective of creating a graduated system of response to oil spill, the practicability of that plan is yet to be seen. There is no evidence that the so-called three tiers response mechanism created under the NOSCP is working.[450]

5.2. The Rule of Law, Corruption and Environmental Enforcement in Nigeria and Alberta

Law can be described as "society's architecture for achieving our common purposes and common aspirations, including sustainable development."[451] Law allows a society to choose its future by specifying acceptable conduct made in the past, applicable in the present, in order to make society take a particular form in the future.[452] The rule of law, on the other hand, ensures the "adherence to constitutional supremacy, recognition that government and the governed are equal before the law, acknowledgement that government itself is limited by the law and cannot engage in any arbitrary exercise of power, and recognition that individuals are endowed with certain inalienable rights that cannot be denied even by legitimately constituted governments."[453] A system built upon the rule of law must ensure that laid down rules are complied with. An effective environmental enforcement regime is therefore only achievable in a system where the rule of law thrives. The compliance indicators considered in the preceding sections of the chapter all emphasise compliance with stipulated rules. It is only a system that is absolutely reliant on the supremacy of the law that can operate an effective and efficient environmental regulatory

---

[450] *Supra* note 442.
[451] *Supra* note 119 at 30.
[452] *Ibid.*
[453] Lal Kurukulasuriya, (UNEP Chief) "The Role of the Judiciary in Promoting Environmental Governance and the Rule of Law" a paper prepared for Global Environmental Governance: the Post-Johannesburg Agenda 23-25 October 2003 Yale Center for Environmental Law and Policy New Haven, CT 1 at 3, online: <http://www.yale.edu/gegdialogue/docs/dialogue/oct03/papers/Kurukulasuriya%20final.pdf>.

regime. In Nigeria, for example, though the existing environmental laws appear sufficient in regulating and curbing the menace of oil spills and other environmental pollution within the energy sector, these laws have been seen to lack the force of law as oil spills and environmental degradation have continued unabated.[454] Compliance with these existing laws have remained a challenge to the regulators within the industry. It is safe to assume that the existing laws in place lack the efficacy necessary for the rule of law to thrive within the system. Enforcement of existing rules and compliance with these stipulated rules are therefore core aspects of the rule of law. Vital for the implementation and enforcement of environmental laws therefore is an independent and impartial judiciary and judicial process.[455]

Considering the rule of law in Alberta and Nigeria in the light of the indicators discussed, one prevalent theme within the Nigerian environmental regulatory regime is the fact that existing laws lack the requisite force of law to ensure compliance. Under Nigerian environmental laws, the existence of the polluter-pays principle, the precautionary principle and the sustainable development theory in most statutes regulating the oil industry has been described as mostly impracticable.[456] One author has described the reason for this impracticability as follows:

> "the Nigerian oil and gas sector is usually a joint venture between the Nigerian government and the core investing corporate entity, it is therefore, often very difficult for the government interest, mostly represented by the Nigerian National Petroleum Corporation (NNPC) to channel parts of her own share of the oil revenue in ensuring compliance to environmental standards and guidelines of the Industry."[457]

---

[454] See the 2013 report by Green Cross and Blacksmith Institute, "World's worst pollution hazards report focuses on 10 most polluted places", online: Green Cross < http://www.gcint.org>.
[455] *Supra* note 451 UNEP's World Congress publication 1 at 3.
[456] Theresa O Okenabirhie, "Polluter Pays Principle in the Nigerian Oil and Gas Industry: Rhetorics or Reality?" online: Centre for Energy, Petroleum and Mineral Law and Policy <http://www.dundee.ac.uk/>.
[457] *Supra* note 447 at 891. Note that in Alberta, it is a different scenario as the energy industry is private unlike Nigeria where the federal government owns the NNPC.

Indeed, it is difficult to ensure that the oil companies comply with existing regulations as the government of the day is careful not to provoke operators in the oil industry responsible for a large part of its economic development and the influx of foreign exchange. The existing political and institutional framework in Nigeria also makes the functionality of the rule of law almost impossible. Marred with bureaucratic obstacles, compliance with environmental laws is almost an impossibility.[458]

Another inhibition to the applicability of the rule of law in environmental regulations in the oil industry in Nigeria is corruption. The prevalence of corruption in the democratic fabric of Nigeria runs deep such that the applicability of existing laws is sometimes based on the common statement "what is in it for me?" Regulatory agencies and its officials saddled with the responsibility of ensuring environmental compliance within the oil and gas industry would rather turn a blind eye than carry out their responsibilities once there are gains accruable in the form of bribes. A number of causes are responsible for corruption in the Nigerian environmental sector. They range from tribalism, nepotism, "insufficient legislation, lack of respect for the rule of law, weak democracy, wide authority given to public officials, minimal accountability and transparency, poor enforcement, low levels of professionalism, and perverse incentives."[459]

In Alberta, there is little or no impactful corruption in the enforcement of environmental regulations within the oil and gas industry. The government of Alberta has been able to ensure that the rule of law reigns supreme in its society. Admittedly, there will be cases where some environmental laws are not effectively enforced within the energy sector in Alberta, but the compliance level, when compared with what is currently obtainable in Nigeria, especially with

---

[458] *Supra* note 447 at 894.
[459] Svetlana Winbourne "Corruption and the Environment" (2002) Management Systems International 1 at 2, online: <http://pdf.usaid.gov/pdf_docs/Pnact876.pdf>.

operations in the Niger Delta region, is a much better option. This therefore strengthens the urgent need to ensure that effective enforcement and compliance strategies are put in place so as to ensure that the existence and the workability of the rule of law in the society is sustainable. Sustainable development cannot be achieved in the absence of effective environmental governance. In the words of Fagbohun, "sound environmental policies, effective environmental laws and a well-functioning judicial system that adequately performs its functions are the key constituents that can bring about efficacy, tangible environmental improvement and meaningful positive movement towards the ultimate goal of sustainable development."[460]

5.3. Lessons from the Alberta Enforcement and Compliance Regime

This thesis has considered the regulatory regime for oil spills in the Alberta oil and gas industry and a critical appraisal of the existing environmental enforcement mechanisms, and compliance approaches. Here, a consideration of the possible lessons that may be drawn from what is in existence in Alberta will be considered in the light of those available in Nigeria. An attempt has been made to draw comparisons between the environmental enforcement regimes in the comparative jurisdictions. This section considers the strengths of the Alberta regime as a guide to improving what is currently obtainable in Nigeria.

The environmental enforcement regime in Alberta has in place robust environmental laws and well equipped agencies charged with the responsibility of enforcing the laws and ensuring compliance. Considering the provisions of the *EPEA* and the *REDA*, it is evident that environmental enforcement under these laws is more stringent than what is obtainable in Nigeria. The enactment of the *REDA* and the creation of the AER as a single regulator for energy projects

---

[460] *Supra* note 412.

in Alberta is perhaps one of the most important lessons that might perhaps be learnt from Alberta. The AER charged with the responsibility of ensuring that the development of energy resources within Alberta is done through a safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources over their entire life cycle,[461] has adopted enforcement mechanisms geared towards achieving this mandate. The fact that as a single regulator the AER is empowered to enforce the provisions of other energy enactments as well as specific enactments necessary in energy resource development makes enforcement within the oil and gas industry in Alberta easier to achieve.[462] The Compliance Assurance Program developed by the AER as one of the means of specifying industry standards and measuring compliance with these standards ensures that energy resource development in the province is done in an environmentally sustainable way. It is suggested that the single regulator regime operated in Alberta be incorporated into the environmental policies of the energy sector regime in Nigeria regardless of the existence of agencies such as, the Ministry of Petroleum and Natural Resources, the NNPC, the NOSDRA and the Department of Petroleum Resource (DPR), which is primarily charged with the statutory responsibility of ensuring compliance with petroleum laws,

---

[461] See <http://www.aer.ca/rules-and-regulations/bulletins/aer-bulletin-2014-01>.

[462] There are commentaries as to the inefficacy of the AER as a single regulator in achieving the objectives of sustainable development, i.e. protecting the environment in the face of energy resource development. Some have criticised the AER as a single regulator that ultimately removes environmental checks and balances and shifts the AER role to simply one of permitting rather than one responsible for ensuring adequate environmental checks and balances. See generally N Bankes, Bill 2 and its Implications for the Jurisdiction of the Environmental Appeals Board" online: <http://ablawg.ca/wpcontent/uploads/2012/11/Blog_NB_Bill2_Jurisdiction_EAB_Nov2012.pdf>; C Chiasson, "Single Energy Regulator Bill a poor deal for Alberta's Environment", online: <https://environmentallawcentre.wordpress.com/2012/11/01/single-energy-regulator-bill-a-poor-deal-for-albertas'environment/>; V Himmelsbach, "The Pros and Cons of Bill 2" online: <http://www.canadianlawyermag.com/4582/The-pros-and-cons-of-Albertas-Bill-2.html>.

regulations and guidelines in the energy sector.[463] In order to carry out this responsibility, the DPR engages in activities such as monitoring of operations at drilling sites, producing wells, production platforms, crude oil export terminals, refineries, storage depots, pump stations, retail outlets, any other locations where petroleum is either stored or sold, and all pipelines carrying crude oil, natural gas and petroleum products.[464] In spite of these seemingly glorious objectives of the DPR, what we have seen prevalent is a continuous environmental degradation in the oil-rich Niger Delta region of Nigeria. Indeed, the Nigerian environmental regime has remained dysfunctional and ineffective in combating the challenge of oil and gas pollution. This is perhaps attributable to the fact that the energy sector in Nigeria is not absolutely regulated by one agency, that is to say different agencies handle varying aspects of oil and gas development in Nigeria. Ranging from the grant of licenses and permits to clean up exercises of oil and gas induced environmental pollution, a large range of agencies have a bite into the decision-making process and the enforcement and compliance aspects of energy resource development in Nigeria. It is therefore crucial that Nigeria learns from the single regulator regime in place in Alberta to manage oil and gas development and environmental safety issues. One major advantage derivable from the single regulator regime is the formulation of a single, comprehensive policy applicable across board. Duplication of same duties among several agencies also results in waste of public funds because several agencies are performing the same functions with the result being ineffectiveness and waste of public funds.

---

[463] The author is primarily considering what is in place in Nigeria given the various regulatory agencies responsible for energy resource development and their obvious failures in ensuring compliance, Alberta and the AER is, in the author's opinion, a better alternative.

[464] *Ibid.*

Another aspect of the regime that is quite important and that has been discussed in Chapter Four of this thesis is the inclusion of administrative penalties in the *REDA* which is determined and administered by the regulator (AER). There is no provision in the *NOSDRA Act* 2006 where administrative penalties may be imposed for environmental infractions resulting from oil and gas operations in Nigeria. It may appear that the existence of fines within the various statutes regulating oil and gas in Nigeria may serve the same purpose as administrative penalties. These fines have, however, failed to achieve their purpose, as operators would most likely weigh the convenience of an oil spill or gas flaring against the possible fines and perhaps opt for payment of fines. Furthermore, prescribed sanctions would have to be pronounced by the courts. The bottlenecks involved in litigation means that these provisions relating to sanctions for oil spill may hardly ever be applied. On the other hand, the fact that the AER is charged with the responsibility of fixing the administrative penalty lends some caution to operators within the industry who are unsure of how much they might be asked to pay as administrative penalty for the infraction and the negative publicity fallouts that may accompany such administrative penalties.

5.4. Critical Appraisal of the Deficiencies in Environmental Enforcement Regimes in the Comparative Jurisdictions

In this part, an analysis of the deficiencies inherent in the environmental enforcement regimes in both Nigeria and Alberta will be made. This is only an attempt at critically appraising the drawbacks in the enforcement regimes of the comparative jurisdictions. This will by no means be an exhaustive appraisal of the deficiencies in the statutes and the agencies charged with the responsibility of regulating the operations within the oil and gas industry, but rather a review of some of the most important inhibitions to the enforcement of the provisions of these statutes.

We have generally talked about issues such as the lack of clarity in some of the environmental statutes particularly in Nigeria and the duplicity of agencies responsible for enforcing environmental legislation within the oil and gas industry in Nigeria. We have also considered corruption as an inhibition to environmental enforcement, so also have we considered the non-existence of the rule of law in ensuring environmental compliance. We have, in Alberta, considered the weakness inherent in the issue of standing when it comes to challenging energy projects approvals. The core of this section, therefore, will be consideration of the issue of standing as it affects enforcement of oil and gas provisions in both Nigeria and Alberta, especially in cases where civil or criminal suit is perhaps the only means of compelling operators to conform to stipulated standards within the industry.

5.4.1. The Issue of Standing in Environmental Suits in Nigeria and Alberta

Under the Alberta environmental enforcement regime, one major inhibition to environmental enforcement and compliance is the issue of standing, that is, who has the right to challenge a decision made by a regulator in respect of the failure to comply with approvals granted for energy resource development. The EAB, which deals with appeals proceeding from the provisions of the *EPEA* (the primary environmental regulator in Alberta), can only hear appeals where the applicant is the holder of the relevant statutory approval, permit or licence, or appeals by "any person who previously submitted a statement of concern … and who is directly affected by the … decision"[465] This means that before a person can successfully pursue a claim to challenge an approval for an energy resource development, one must show that he or she has filed a statement of concern and that he or she is directly affected by the activity or proposed

[465] See the provisions of section 91 of the *EPEA.*

activity. Under the *REDA*, on the other hand, the appeal procedure requires that an appeal on any of the decisions made in relation to oil and gas activity must be made to the Regulator (AER). Section 32 of the Act provides that "a person who believes that the person may be directly and adversely affected by an application may file a statement of concern with the Regulator in accordance with the rules." This touches on the issue of standing and who is by implication of this provision empowered to challenge an approval granted to a proposed energy activity under the *REDA*. The standing requirement under the *REDA* envisages that only those directly affected by the proposed activity can challenge the Regulator's decision of granting approval to the proposed project. Like the standing requirements provided for under the *EPEA*, this standing requirement limits the reach of public interest participants in challenging the decisions of the Regulator as regards some energy projects. Although the courts have recognized that citizens in Alberta have rights to provide input on public decisions that may affect their rights, the *REDA* has with its standing requirements circumscribed the reach of challenging energy resource decisions by only allowing those directly and adversely affected to file a statement of concern and by also equipping the Regulator with discretion such that it is its choice to decide whether or not a hearing was required to be conducted.[466]

In Nigeria, on the other hand, where there is no structured appeal process either under the *NESREA Act* 2007, *NOSDRA Act* 2006, DPR, *OPA, EIA Act, Petroleum Act* and other oil and gas statutes, aggrieved individuals must seek redress in courts when challenging a developmental process or an environmental infraction under the Acts. Here, the issue of standing is determined entirely under the principles of common law. Seeking redress in

[466] *Kelly v. Alberta* (*Energy Resources Conservation Board*), 2011 ABCA 325.

Nigerian courts requires that an applicant have the requisite standing to challenge the impugned decision. Also known as *locus standi* under the common law, the test for standing is that a person should have a "direct personal and proprietary relationship" with the subject matter of litigation. In other words, he must have suffered special damage peculiar to himself from the interference with the public right.[467] In Nigerian courts, there is still no clearly established right of standing beyond that which is traditionally recognized under the common law.[468] Following the Nigerian Supreme Court decision in *Fawehinmi v. Akilu*,[469] it was opined that the common law concept of locus standi has been broadened from what was obtainable in the earlier case of *Abraham Adesanya v. President of Federal Republic of Nigeria*.[470] Prior to the case of *Adediran* v. *Interland Transport*[471] only those directly affected and the Attorney General could bring an action that borders on public interest. With the *Adediran's* case, however, there was a recognition that private persons no longer require the Attorney General's consent to sue in respect of a public right as they can bring the action themselves. The import of this ruling on *locus standi* has, however, remained unclear in Nigerian jurisprudence as the courts seem to apply *locus standi* issue on a case by case basis.[472] Although the Supreme Court in *Owodunni v. Registered Trustees of the Celestial Church of Christ*[473] resonated its earlier decision that was more disposed to the restrictive approach of interpreting *locus standi* underscored by Bello JSC

---

[467] *Boyce v. Paddington Borough Council* (1903) I Ch. 109; *Gouriet v. Union of Post Office Workers* (1977) AC 729 (QB). By these cases, unless a litigant is able to demonstrate personal injury and loss, the matter was one within the realm of public law, and it is only the Attorney-General who has locus standi to institute action. The only exceptions to this rule were representative suits or a relator action.
[468] *Supra* note 119.
[469] (1982) 18 NSCC (pt. 11) 1265 at 130.
[470] (1981) 5 SC 112. In *Adesanya's case*, while Fatai Williams, CJN and Obaseki, JSC would appear to support a liberal interpretation of standing, Bello JSC with Idigbe and Nnamani JJSC opted for a restrictive interpretation.
[471] (1991) 9 NWLR (Pt 214) 155.
[472] J G Frynas, "Legal Chang in Africa: Evidence from Oil-Related Litigation in Nigeria" (1999) 43:2 Journal of African Law 121 at 134 online: <http://jstor.org/stable/3085547>.
[473] (2002) 6 SC (pt. 111) 60.

in *Adesanya's* case,[474] the courts have continued to rely on the test laid down in *Adesanya's* case, where Bello J.S.C defined the civil rights test by emphasizing that "standing will only be accorded to a plaintiff who shows that his civil rights and obligations have been or are in danger of being violated or adversely affected by the act complained of."[475] The position espoused by the court in *Adediran's* case is however very important as it implies that private persons and organisations could prosecute an oil and gas infraction. In *Douglas v. Shell*,[476] Douglas, an environmental rights activist, sought to compel the respondents to comply with the provisions of the *EIA Act* before commissioning their project (production of liquefied natural gas) in the volatile and ecologically sensitive Niger Delta region of Nigeria. The Federal High Court (per Belgore, CJ, as he then was) dismissed the suit on the grounds, *inter alia*, that the plaintiff had shown no legal standing to prosecute the action. Douglas argued that he had both a private interest in the suit as a native of the village affected by the oil and gas company's operations and public interest standing as an environmentalist. Upon appeal, the Court of Appeal ruled that the Federal High Court was in breach of some procedural rules and as such, the Federal High Court decision was set aside and the case was remitted to the Federal High Court for reconsideration by a different judge.

It is important to state that one would expect that an affected citizen would have the right to sue and enforce his rights in the face of the failure of a regulatory agency to enforce enacted laws. This is however not the case as vesting exclusive monopoly of environmental

---

[474] See generally O Fagbohun, "Public Environmental Litigation in Nigeria – An Agenda for Reform" in S Simpson and O Fagbohun (eds.) *Environmental Law and Policy* (Law Centre, Faculty of Law, Lagos State University: 1998) 1 at 115-158; G O Amokaye, *Environmental Law and Practice in Nigeria* (University of Lagos Press: 2004), 1 at 601-611; F Orbih, "Public Interest Litigation" paper presented at the Nigerian Institute of Advanced Legal Studies, Abuja, on 7 July, 2010 online: <www.nigerianlawguru.com/…/PUBLIC%20INTEREST%20LITIGATION.>.
[475] See generally *Abraham Adesanya v. President of Federal Republic of Nigeria* (1981) 5 SC 112.
[476] Unreported Suit No. FHC/L/CS/573/96 in the Federal High Court, Lagos Division.

enforcement in government have been argued as "short sighted and doomed to fail."[477] This is because there are a variety of factors influencing governments in choosing whether or not to pursue environmental enforcement actions. Citizen enforcement, on the other hand, has been described as one which brings with it competition in the realm of environmental enforcement. It enhances "governmental accountability for prosecutorial policy and compliance with environmental regulations by public and private bodies."[478] This important enforcement tool has, in some provinces in Canada, proven to be of important value.[479] In Alberta, however, the circumscription of who can or cannot sue to only those "directly affected" restricts the availability of this significant tool in environmental enforcement.

In liberalising the issue of standing under the comparative jurisdictions, it is important to consider environmental disputes differently from disputes within other areas of law. This is because the protection of the environment cannot be done or achieved by the environment itself, as it lacks the attributes of a human to initiate environmental actions. Only individuals committed to environmental protection can effectively prosecute an environmental claim. It is therefore vital that the rules, as regards standing in environmental litigation, be relaxed a little to give room for well-meaning individuals and public interest groups to initiate actions which will spur operators within the oil and gas industry to comply with specified standards. The fear of being sued may increase environmental compliance, as such, technicalities revolving around

---

[477] *Supra* note 138 at 414.
[478] *Supra* note 138 at 416.
[479] Provinces such as Ontario and Yukon have incorporated citizen enforcement in some of their environmental statutes. See for, example, the Ontario Environmental Bill of Rights and its Yukon and NWT equivalents. However, it has been suggested by Meinhard Doelle & Chris Tollefson, (*supra* note 138) that the citizen enforcement provisions in these Environmental Bill of Rights have been extremely circumscribed in both scope and application.

the issue of standing in both comparative jurisdiction should be dispensed with once it is evident that the action in question is justiciable and not frivolous.

5.5. Conclusion

Based on a few parameters, we have, in this chapter, compared the regulatory regimes for environmental pollution resulting from oil spill in Alberta and Nigeria. We have also looked at the interaction between the rule of law, corruption and the enforcement and compliance regimes in both jurisdictions. Also attempted was a consideration of the weaknesses evidenced in both comparative jurisdictions and the possible lessons that might be learnt by Nigeria from the environmental enforcement regime in place in Alberta. The idea was to make the case for regulatory reforms in Nigeria and also to strengthen what is currently in place in Alberta so as to ensure an environment that is more sustainable for all.

Chapter Six: Conclusion and Recommendations

6.1 Introduction

The purpose of this research exercise is to examine, in comparative terms, Alberta and Nigerian laws relating to environmental pollution within the oil and gas industry, specifically oil spill pollution. In this thesis, we examined select environmental laws regulating oil and gas pollution within the comparative jurisdictions, especially the laws dealing specifically with oil spill pollution. Chapter One of this thesis was a general overview of the entire thesis. It considered the research problem, the methodology adopted in carrying out this research, the research question and the justification for choice of Alberta as a comparative jurisdiction. At the outset of this research, we stated that the Nigerian Niger Delta and the Canadian province of Alberta are both oil rich regions where there is seen to exist enormous carbon mining with significant impact on the environment. Indeed, this exploration and exploitation of oil and gas in these jurisdictions has birthed several environmental issues with the environmental concern being more severe in Nigeria. Considering that both jurisdictions are natural resource reliant and deal extensively with carbon mining, one wonders why there is more environmental degradation in the Nigerian environment than the situation in Alberta. With this background therefore, we thought it necessary to look to Alberta, which arguably is itself a work in progress, for more effective regulatory measures aimed at curbing the menace of oil spills in Nigeria.

Chapter Two of this thesis, which is divided into two parts, considered the theoretical structures upon which scholars have canvassed measures for environmental protection. Although it was acknowledged therein that there are several key environmental principles upon which the argument for environmental protection is made, only select principles were examined. The

polluter-pays principle, which seeks to allocate the costs of pollution and advocates that such costs be borne by those who cause pollution, was considered in the light of the laws regulating oil and gas pollution in the comparative jurisdictions. Indeed, considering this principle against the existing provisions of select statutes on oil and gas regulation revealed that although the polluter-pays principle runs through most environmental statutes, it has failed to achieve its purpose, as not only is the menace of oil spill pollution prevalent in the Nigerian oil and gas industry, this oil spill pollution has continued unabated. For instance, several provisions in the *NESREA Act* 2007 and the *NOSDRA Act* 2006 specify fines and other penalties for violation of their provisions; their provisions are intended to hold the polluter liable for his pollution and paying for such infractions. However, these provisions, with the paltry sums specified therein as fines, have seen more non-compliance than compliance.

The second theory considered was the precautionary principle, which seeks to promote proactive measures on the part of government policy makers by considering the potential cost of environmental pollution before granting approval to energy resource development. This theory is driven by prevention of environmental harm rather than its remediation. Running through this principle and evidenced in the laws in place in the comparative jurisdictions is the existence of provisions meant to provide policy makers with adequate information on the impacts of an energy resource development project before approving this resource development. In Nigeria, for instance, there is in place the Environmental Impact Assessment Act (EIA Act)[480] which is meant to provide adequate information on the pros and cons of proposed projects before approvals are granted. Notwithstanding the laudable provisions of this statute, it has also seen

[480] CAP E12 LFN 2004

more lack of enforcement than its application, as energy projects in the Niger Delta region continue to gain governmental approvals even in the face of enormous negative environmental consequences. Indeed, the *EIA Act* in Nigeria has provisions whereby communities likely to be impacted by the energy resource development may voice their concerns before approvals are granted. These provisions have continued to be flagrantly disregarded, and one cannot discount the impact of institutional corruption and nepotism in all of this. In Alberta, on the other hand, the situation is different, as proposed energy projects receive scrutiny from the communities where those resource developments are intended to be carried out. Although assessing the compliance levels with these laws may require that this thesis considers empirical data within the confines of the regulatory authorities, this may not be necessary as writers and environmental stakeholders have provided ample evidence to show that the regulatory atmosphere in Alberta fares far better than its counterpart in Nigeria.[481]

The last of the three principles considered in Chapter Two is the sustainable development theory which may be adequately described as the essence of all environmental protection principles, as all environmental protection principles are formulated towards ultimately achieving sustainable development that is, the equilibrium between human quest for economic development and the need to conserve nature. Although this sustainable development theory advocates for economic development which does not jeopardise the ability of future of generations to realise the full potential of environmental resources, the theory has been consistently and continuously sacrificed for economic development. In Nigeria, where oil and gas resources exploitation is responsible for a large chunk of the country's GDP and 80% of its

[481] See the discussions on the regulatory frameworks for Nigeria and Alberta in chapters 3 and 4 respectively of this thesis.

foreign exchange, policymakers are hesitant in taking drastic environmental decisions likely to impact the economic affairs of the nation.

The second part of Chapter Two was a modest attempt at examining, in general terms, the theoretical structures upon which the argument for environmental protection is made, its relationship with the rule of law and how a system where the rule of law is prevalent can propel a state towards achieving sustainable development. This relationship was assessed to determine how best to ensure compliance with stipulated laws since we have, in this thesis, posited that the existing legal and statutory framework in Nigeria is inadequate in ensuring effective environmental compliance. In the light of this therefore, this thesis examined the two major environmental enforcement mechanisms – the deterrence and the cooperative based approaches. Advocates of the co-operative approach argue that there should be some sort of distinction between those who make best efforts at complying with stipulated standards and those who flagrantly disregard these laws arguing that securing compliance is more beneficial than punishing wrongdoing hence, regulatory authorities should be granted flexibility in administering stipulated standards. The deterrence based approach, on the other hand, postulates that compliance with enacted rules can only be achieved where the laws are strict and violators are seen to be punished. Most of the environmental statutes in the comparative jurisdictions are deterrence based, but in Alberta the AER, which is the regulator for energy development projects, has developed a CAP which cleverly provides a nice blend of the two enforcement mechanisms where only severe violations attract severe consequences. The case is different in Nigeria as there is neither a program in place to measure the compliance levels of the regulated community nor is there in place a blend of the deterrence and cooperative based approaches to

enforcement. The chapter concluded by reiterating that perhaps a blend of this two approaches might be the panacea to the continued flagrant disregard of environmental laws in Nigeria.

Chapter Three discussed the regulatory regime for oil spills in Nigeria. Select laws such as the *NOSDRA Act* 2006, *NESREA Act* 2007, *EIA Act*, *Petroleum Act* and the *OPA* regulating oil and gas activities and the environmental pollution arising therefrom was considered. The provisions within these laws were discussed in light of achieving effective enforcement. Thereafter, a review of the enforcement approaches within the oil and gas industry in Nigeria was considered. Having considered previously in detail the two major enforcement mechanisms, offshoots of these mechanisms were considered in this chapter. Approaches such as inspections, searches, sealing, seizure, arrest, criminal prosecutions and civil penalties were considered. The chapter concluded by discussing the weaknesses inherent in this regime. One obvious weakness is the lack by the Nigerian governments of the will to regulate effectively the activities of the operators in this industry because of the economic gains accruable from the development of this natural resource by the operators in this industry.

Chapter Four of this thesis considered the regulatory regime for oil spills in Alberta. Select laws and agencies regulating oil and gas activities such as the *EPEA*, *REDA*, AER, *OGCA* and the *Pipeline Act* were considered. Only provisions touching on effective enforcement were considered. This chapter also reviewed the enforcement approaches adopted by the single energy regulator – AER. The chapter concluded by discussing the weaknesses inherent in this regulatory regime.

Chapter Five, which is the pivotal chapter of this thesis, attempted a critical review of the regulatory regimes for oil and gas in Nigeria and Alberta. A general overview of enforcement and compliance indicators was discussed in order to provide a yardstick for the comparison

between the two jurisdictions. The indicators discussed are primarily themes prevalent in most environmental law texts that an effective environmental enforcement regime should be seen to have. Thus, we adopted in this thesis, the indicators as framed by Duncan[482], a notable scholar on environmental compliance and enforcement. This chapter also critiqued the rule of law in relation to the environmental enforcement and compliance indicators within the jurisdictions under comparison.

6.2 Summary of the Main Issues in both Comparative Jurisdictions

Researching the regulatory regime for oil spill pollution within the Canadian province of Alberta and Nigeria, with a view to appraising comparatively the enforcement approaches prevalent in the two jurisdictions and perhaps revealing certain areas of convergence, peculiarities and differences in both jurisdictions, has been an interesting exercise. Having analysed the differences, similarities and the peculiarities in enforcement regimes in both jurisdictions in Chapters 3, 4 and 5, this section will therefore consider some unique findings made in the course of this research.

6.2.1. Nigeria – Environmental Enforcement and Regulatory Regime for Oil Spills

Understanding the environmental enforcement and regulatory regime in the Nigerian oil and gas industry, and specifically the regime for oil spills, require that we reiterate the framework for the regulation of oil and gas resources in Nigeria. In Nigeria, the regulation of the oil and gas industry is exclusively within the ambit of the federal government.[483] The *CFRN* 1999, which is the grundnorm regulating the enactment and enforcement of all laws in Nigeria,

---

[482] *Supra* note 139 at 329.

[483] The Exclusive Legislative List contained in Schedule 1 of the Constitution of the Federal Republic of Nigeria 1999 confers jurisdiction over mines and minerals, including oil fields, oil mining, geological surveys and natural gas on the federal government.

does not specifically discuss provisions that relate to oil spills. It, however, specifies the arm of government vested with the powers to make laws regulating oil and gas activities generally."[484] Since the federal level of government is constitutionally empowered to regulate the aforementioned subject matters, it is quite logical to expect that the federal government will also have the powers to effectively make laws and enforce provisions therein against oil and gas related infractions. However, the provisions of section 20 of Part II of the *CFRN* 1999 (Fundamental Objectives and Directive Principles of State Policy), which provides that the state shall ensure a safe and improved environment for the citizenry by protecting and improving the environment and safeguarding the water, air and land, forest and wild life of Nigeria, and section 17(2)(d) which forbids the exploitation of human or natural resources in any form other than for the good of the community, are not justiciable.[485] These provisions cannot be enforced in any court in Nigeria even in the face of grave environmental degradation as is currently seen to exist in the Niger Delta. It is important to state here that although state governments in Nigeria do have powers to make environmental laws,[486] such powers do not extend beyond what may be described as a mere general power to enforce compliance with environmental legislation, thereby leaving the federal government with the responsibility of enacting and enforcing laws regulating the oil and gas industry and invariably the consequential environmental fallouts. The *NESREA Act* 2007 was therefore enacted as the principal statute for environmental regulation in Nigeria. Laudable as the establishment of the NESREA and the *NESREA Act* 2007 is, it has failed to

---

[484] Part I of Schedule II to the *CFRN* 1999.
[485] Section 6(6)(c) of the Constitution ousts the jurisdiction of the courts from considering any question as to whether or not the State has complied with the provisions of Chapter II of the Constitution.
[486] See for example the enactment of environmental law creating the Lagos State Waste Management Authority (LAWMA) in Lagos

achieve its purpose of ensuring the protection and development of the Nigerian environment.[487] One of its visible drawbacks is the provisions of section 8(g) which state that the NESREA shall have powers to conduct public investigations on pollution and the degradation of natural resources except investigations on oil spills. This provision clearly ousts the jurisdiction of the NESREA over oil spill investigations notwithstanding the clear mandate of the agency which is to ensure an environmentally sustainable Nigeria.[488] Furthermore, section 29 of the *NESREA Act* 2007, which stipulates that the agency "shall, in the face of pollution, co-operate with other government agencies for the removal of any pollution," excludes the removal of oil and gas related pollution. Ousting the jurisdiction of the NESREA, the principal environmental agency, over oil and gas related pollution and exclusively granting jurisdiction over oil spills to NOSDRA has been widely criticised by environmental law scholars.[489] The fact that the NESREA lacks jurisdiction to regulate oil and gas begs the question of how the federal government expects the agency to fulfil its mandate of ensuring an environmentally sustainable Nigeria. The *NOSDRA Act* 2006, which primarily regulates oil spill infractions, contains provisions which demonstrate NOSDRA's commitment to ensuring a zero tolerance level for oil spills in Nigeria. Section 6 of the Act, which provides that the agency shall be "responsible for surveillance and ensure compliance with all existing environmental legislation and the detection of oil spills in the petroleum sector,"[490] fails to stipulate a provision making oil spill an offence; only provisions related to the failure to report an oil spill incident are containedin the statute.[491]

---

[487] See section 2 of the *NESREA Act* 2007
[488] *Ibid*.
[489] Fagbohun, *supra* note 8 at 332; See Stevens *supra* note 203 at 397.
[490] Section 6 (1) (a).
[491] Section 6(2) (3) of the *NOSDRA Act* 2006.

The *EIA Act* was also reviewed as a crucial statute which stems from one of the principles of environmental protection – the precautionary principle. This Act has, however, seen non-compliance as a norm. One crucial provision in this Act is section 2(1) which provides that no project within the private and the public sector shall be undertaken without prior consideration of their effects on the environment at an early stage. Subsection 2 further provides 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 Act." Also, subsection 4 requires a proponent of a project to apply in writing to the EIA agency before embarking on the proposed project. These provisions require that a proposed activity is subjected to an EIA at an early stage so as to determine the effects of the proposed project on the environment. However, the prevalent situation in Nigeria, as mentioned in Chapters Three and Five, is that either the required EIAs are not adequately conducted or these EIAs are constantly sabotaged by the regulated and the regulatory agencies alike.

We also considered the *Petroleum Act* which regulates oil and gas activities in Nigeria and provides conditions precedent to the grant of licences for the establishment of oil refineries. Section 9 (1) (b) of this Act empowers the Minister of Petroleum to make regulations which span across the grant of licenses and leases under the Act. Refinery projects must be carried out in such a way that the pollution of watercourses and the atmosphere is prevented.[492] One visible disadvantage inherent in this Act *vis-à-vis* environmental pollution is the lack of legal duty imposed upon the operator. This is because the above provision only requires the operator to take

[492] See Regulation 25 (*Petroleum (Drilling and Production) Regulation*) 1969.

steps necessary to control the pollution arising from its activities.[493] This Regulation does not impose a mandatory obligation on the licensee to adopt appropriate measures in mitigating pollution. The licensee is only advised to take steps to control, and if possible, end the pollution. Thus, where the control of the pollution is impossible, it can be inferred from this provision that this pollution may continue unabated.

The *OPA* was also considered in Chapters 3 and 5. This Act regulates the grant of permits for the operation of oil pipelines. Although, the provisions of section 7 is meant to effectively ensure that liability from damaged pipelines is borne by the licensee, violation of this provision only attracts a fine of not more than N2000 (approximately CD$10). This paltry sum provides incentives for defaulters to be negligent in observing the provisions of the Act rather than encouraging compliance or deterring their activities. Section 9, on the other hand, limits the category of those who may object to the grant of licenses to only those who own or have interest in the land, thereby limiting the ability of those who may be directly affected by the pipelines from objecting to the grant of licenses.

Notwithstanding the enforcement techniques and the provisions of environmental statutes in Nigeria meant to foster environmental protection, these techniques have remained largely ineffective in ensuring environmental compliance. Perhaps one reason for this is that either these provisions are mere words not worth more than the papers on which they are written or the regulators have chosen to turn a blind eye to these provisions.

---

[493] Omorogbe, *supra* note 218 at 136.

6.2.2. Alberta – Environmental Enforcement and Regulatory Regime for Oil Spills

Unlike Nigeria, the jurisdiction for oil and gas exploration and exploitation in Alberta is not exclusively within the purview of the federal government. The different provinces are empowered to regulate the natural resources within their territories.[494] The Alberta government therefore legislates and regulates the energy resource within its province. Further to this situation, various laws have been enacted to ensure a safe environment for the state in the course of the development of the resources within it. In Alberta, the *EPEA* is the major environmental statute regulating all environmental affairs within the province. Its purpose is to ensure "the protection, enhancement and wise use of the environment."[495] In line with this purpose, the *EPEA* recognises the already discussed principles of environmental protection. One important feature of the *EPEA* is the provision for environmental assessment (EA). Unlike in Nigeria where there is a separate Act that regulates the EA process, the inclusion of the EA process in the principal environmental statute in Alberta gives room for adequate "thought process" by policy makers and industry regulators having been furnished with the pros and cons of a proposed project. Therefore, only projects which are considered environmentally sustainable are granted approvals and the licenses necessary to commence business. Juxtaposing the *EPEA* with the *NESREA Act* 2007, one would discover enormous differences. Being the principal environmental statute in Alberta, the *EPEA* regulates some aspects of oil and gas activities and the pollution arising from this industry. Nigeria is quite different in that the *NESREA Act* 2007 has no application to the oil and gas industry. Furthermore, there is no provision for an appeals board

[494] Chastko, *supra* note 242 at 1.
[495] See section 2 of the *EPEA.*

under the *NESREA Act* 2007. Any challenge to any decision made by NESREA or violations of its provisions may only be challenged in the Nigerian courts.[496]

The EAB, which was established pursuant to Part IV of the *EPEA*,[497] was also examined. Designed to ensure that the administration of the *EPEA* deals fairly with all parties affected by environmental approvals and enforcement matters, the EAB is structured in such a way that it provides a platform for stakeholders to challenge the decision of the Minister on approvals granted for an energy resource development. One drawback in the EPEA though is that only those directly affected and those who have submitted a statement of concern in respect of the proposed activity may challenge the decision made pursuant to the provisions in this Act.

Another important aspect of the *EPEA* discussed is the enforcement approaches adopted in ensuring compliance. The use of administrative penalties[498] in achieving compliance with stipulated standards is instructive. The fact that authorised government officials can impose monetary penalties on violators for minor environmental infractions without recourse to a full-blown trial makes effective enforcement achievable. Under the Nigerian environmental framework, there is no such provision. Fines for the violation of the provisions of the *NESREA Act* 2007 are specified within the Act and the prescribed limit cannot be exceeded. Under the *EPEA*, liability is accruable to the directing minds of a company where there is contravention with the provisions of the Act unlike Nigeria where no similar provision is seen to exist in the *NESREA Act* 2007.

---

[496] Section 32 *NESREA Act* 2007.
[497] Section 90(1).
[498] Section 237 *EPEA.*

The provisions of *REDA* were also reviewed. The enactment of this Act established the AER as a single regulator for energy development projects.[499] Similar to the *NOSDRA Act* 2006, the *REDA* regulates energy projects development within the province and also has the mandate to implement specific energy resource enactments. Unlike its Nigerian counterpart, the *REDA* not only regulates oil spills, it also regulates all aspects of oil and gas resource development, thereby making conduct that is not in line with the provisions of the Act an offence punishable under the Act. Indeed, the enforcement provisions under the Act cover inspection and investigations as well as administrative penalties for violations of the provisions of the Act.

Also examined were the *OGCA* and the *Pipelines Act*. The *OGCA* was enacted for a number of purposes one of which was to ensure the preservation and conservation of oil and gas resources in Alberta and to secure the safe and efficient practices in the locating, spacing, drilling, equipping, constructing, completing, reworking, operating and maintenance of operations in the production of oil and gas or the storage or disposal of substances.[500] The *Pipelines Act,* on the other hand, was enacted to ensure the safe operation and construction of pipelines.[501] These laws are all tilted towards ensuring an environmentally sustainable Alberta. Implicit in them are provisions clearly specifying sanctions for contravention and remediation process in the face of violation. The enforcement techniques adopted in achieving compliance with stipulated standards was also considered. This thesis examined critically the AER Compliance Assurance Program (CAP). The CAP provides for a risk assessment matrix against which the activities of regulated industries are measured.[502] The risk levels of regulated

[499] Section 2(1) (a).
[500] 4 (a) (b) of the *OGCA.*
[501] See section 4 (b).
[502]Ibid at 2 &3, online: <https://www.aer.ca/compliance-and-enforcement/compliance-assurance>.

industries are measured on "high" or "low" based risk levels. Upon the assessment of a regulated entity, if the assessment result shows minimal impact, the noncompliance is considered low risk. Where, on the other hand, the result of the assessment shows a relatively more significant impact, the noncompliant event is considered high risk.[503] The effect of this categorisation is to ensure that different levels of non-compliance are dealt with proportionally. An erring company notorious for non-compliance will incur stiffer sanctions while a company striving towards compliance will be approached in a more conciliatory manner so as to further strengthen its efforts and commitment to compliance. Therefore, compliance is achieved not merely by the threat of being sanctioned but rather by the threat of increased monitoring and tougher inspection standards, where a regulated entity assessed as low risk is moved up the ladder to high risk.[504] The existence of the CAP therefore provides a step-by-step approach towards assessing a regulated entity's compliance with set standards. This is not the case in Nigeria where there is no guideline stipulating how an energy corporation's compliance level may be measured. This therefore stands out as one of the lessons that may be imported into Nigeria from Alberta.

6.3. Alternative Approaches to Environmental Enforcement in Nigeria

This research project focused primarily on the need for effective environmental enforcement and compliance in the Nigerian oil and gas industry. In order to achieve this, the thesis considered the legal and regulatory frameworks for oil and gas related pollution, specifically oil spill in Nigeria., It then compared the situation in Nigeria to the Canadian province of Alberta and highlighted areas of strength in the Alberta regime and how these areas

---

[503] *Ibid* at 3.
[504] See Abbot, *supra* note 404 at 28.

may be adopted in Nigeria to address the many weaknesses identified in the Nigerian framework. Having identified some startling flaws in the frameworks reviewed in the preceding chapters, we can safely conclude that what is currently in place in Nigeria is inadequate for ensuring compliance. This assumption is not meant to suggest that the framework in existence in Alberta is perfect, but rather to suggest that some regulatory techniques in place in Alberta may be adopted in Nigeria to further strengthen what is currently in place.

The enforcement approaches in Nigeria require some modification through law reforms. The laws in place currently regulating the oil and gas industry should be fortified with watertight provisions aimed at strengthening the enforcement techniques in place. One area where urgent reform is required is in the principal statute which forms the foundation of all other laws in Nigeria, that is, the *CFRN* 1999. The non-justiciability of the provisions of section 20 in Part II (Fundamental Objectives and Directive Principles of State Policy), which, in principle, places an obligation on the state to ensure a safe and clean environment, should be reconsidered and perhaps moved to Part IV (Fundamental Rights) of the Constitution. This part of the constitution provides for the fundamental rights of a Nigerian citizen classifying the right to a clean and healthy environment as a Part IV right will spur industry operators and regulators to act more responsibly, as any affected citizen may by this provision initiate legal actions to enforce a fundamental right. Thus, the obstacle of not having the requisite standing may, by virtue of the suggested inclusion and amendment, be eliminated thereby ensuring that oil and gas resource developers act responsibly and within the boundaries of the law. Although the regulation of oil and gas resources is exclusively within the purview of the federal government, the states and local communities bear most of the brunt of an unsustainable resource development. Oil spill pollution affects those at the grassroots far more than those in large cities. It is therefore

necessary that these people be given some sort of comfort by providing their respective state legislatures with the powers to make laws touching on oil and gas resource development and a clean environment.

This thesis also proposes the expansion of the jurisdiction of NESREA under the *NESREA Act* 2007 such that oil and gas activities may also be regulated by this principal environmental agency. In Alberta, the creation of the AER and the enactment of REDA did oust the jurisdiction of the *EPEA* over oil and gas activities and the infractions arising therefrom. This limitation is ameliorated by providing that the *REDA* enforces the provisions of the *EPEA*. It is therefore important that Nigeria establishes a well-structured body similar to the AER with its primary responsibility being the regulation of oil and gas development in a clean environment.

It is equally important to suggest that the *NOSDRA Act* 2006 needs some modification and clarity, the Act should specifically provide for an oil spill as a regulatory offence and not just the criminalization of the failure to report an oil spill incident. However, the impact of vandalism on oil spill, especially in Nigeria, should not be overlooked. Where sabotage is sufficiently proven to have cause a spill, the operator should be excused from criminal sanctions but be made to bear financial responsibility for the clean-up as it has failed to carry out adequate surveillance of its facility. Negligence, on the other hand, should be appropriately sanctioned. This will send a clear message to the regulated community that oil spill in itself is an offence which the Act will punish.

Furthermore, there should be the inclusion of administrative penalties in the statutes regulating oil spills and oil and gas infractions generally. The directing minds of errant corporations should also be held liable for violation of applicable environmental laws. Where a corporate director knows that there is a possible risk of being held liable and accountable for the

mistakes or the violation of laws by the company, such director or official will be moved to act responsibly and within the boundaries of the law.

One other method of ensuring effective enforcement of environmental laws within the oil and gas industry in Nigeria is perhaps the adoption of the AER's CAP as a yardstick for measuring the compliance levels of operators in the regulated industry. The categorisation of risks into low and high levels will improve compliance. The fact that an erring company, notorious for non-compliance, will be moved up the ladder and subjected to increased monitoring, imposition of stiffer penalties and higher standards, may spur such a company to act responsibly. Where there is in place an effective system of monitoring the compliance levels of the regulated community, there will invariably be an increase in compliance with applicable laws. Measuring the compliance level of the regulated community is key to achieving compliance. An operator that is aware of the implications of being moved from one non-compliant level to the next in the face of an assessment is more likely to be amenable to change than one that is very much aware that no such measuring standard exists for determining its compliance level.

It is pertinent to state at this juncture, however, that even in the face of enormous law reforms, where the rule of law is disregarded, the reforms will remain ineffective. It is crucial therefore, that there is a synergy between the law and respect for the law. The rule of law must prevail if any environmental reform must be of any effect in mitigating the continued environmental degradation prevalent in the Niger Delta region of Nigeria. Corruption must be curbed and the interests of the inhabitants of affected areas must gain paramountcy. The law must also be enforced irrespective of whose interest may be threatened. Constituted authorities must be seen to carry out the letters and spirit of the constitution. The health of the environment

must not be sacrificed for economic gains alone. The courts should be impartial and independent in order to effectively carry out its constitutional duties. That is the only way to achieve the much-sought-after effective environmental enforcement needed to ensure a sustainable Nigeria.

6.4. Suggestions for Further Research

This thesis is a moderate attempt at examining alternative approaches to environmental enforcement in the Alberta and Nigerian oil and gas industries. Weaknesses, particularly in the Nigerian system, were identified and suggestions for improvement were offered. It is indeed not exhaustive and is primarily focused on Nigeria. As re-emphasized in this thesis, its focus is not to explore the defects inherent in the Alberta regulatory and legislative framework for oil and gas resource but to draw out the visible upsides within it which the Nigerian government, policymakers, legal advisors and the academia may draw on to help improve what is currently in place. Although the focal point was primarily environmental enforcement, the thesis did consider other aspects of environmental law which impact environmental enforcement. To this end, this thesis is meant to serve as a quick reference guide to stakeholders within the industry.

Further research on this aspect of environmental enforcement may be made by building upon the existing framework established in this thesis. Indeed, this thesis did not consider smart regulation as a possible environmental enforcement alternative. Perhaps regulation by the regulated community and not the regulator may be worth exploring using Nigeria as a case study. It will be quite an interesting research to explore how effective the regulation by the regulated entities, rather than the regulator, will be in mitigating environmental pollution and reducing the level of environmental degradation currently experienced in Nigeria's Niger Delta.

BIBLIOGRAPHY

LEGISLATION

Canada - Alberta

Activities Designation Regulation, Alberta Regulation 276/2003.

Canadian Environmental Protection Act, SC 1999, c-33.

Canadian Environmental Assessment Act, SC 2012, c-19.

Environmental Assessment Regulation, Alberta Regulation, 112/1993.

Environmental Assessment (Mandatory and Exempted Activities) Regulation, Alberta Regulation, 111/1993.

Environmental Protection and Enhancement (Miscellaneous) Regulation, Alberta Regulation, 118/1993.

Environmental Protection and Enhancement Act, RSA 2000, e-12.

Oil and Gas Conservation Act, RSA 2000, o-6.

Pipeline Act, RSA 2000, p-15

Responsible Energy Development Act, RSA 2012, r-13.3.

Nigeria

Associated gas Reinjection Act, 1979.

Constitution of the Federal Republic of Nigeria, 1999.

Environmental Impact Assessment Act, Laws of the Federation of Nigeria, CAP E12 2004

National Environment Standards Regulation Enforcement Agency (*Establishment*) *Act*, 2007.

National Oil Spill and Detection Agency (*Establishment*) *Act 2006*, 2015.

Oil Pipelines Act, Laws of the Federation of Nigeria, CAP O7 2004.

Petroleum Act, Laws of the Federation of Nigeria, CAP P10 2004.

Petroleum (Drilling and Production) Regulations, 1969 and the

JURISPRUDENCE

Canada - Alberta

Alberta Wilderness Association v Alberta (Environmental Appeal Board), 2013 ABQB 44

Bildson v Acting Director of North Eastern Slopes Region, Alberta Environmental Protection, Appeal No. 98-230-D.

114957 Canada Ltée (Spraytech, Société d'arrosage) v. *Hudson* (*Town*), [2001] 2 S.C.R. 241

Friends of the Oldman River Society v. Canada (Minister of Transport), [1992]1 S.C.R. 3.

Gerald M Ross v. Director Alberta Environmental Protection, Appeal No. 94-003, May 24 1994.

Imperial Oil Ltd. v. *Quebec (Minister of the Environment)*, [2003] 2 S.C.R. 624.

Kelly v. Alberta (*Energy Resources Conservation Board*), 2011 ABCA 325

Water Matters Society of Alberta et al v Director, Southern Region, Operations Division, Alberta Environment and Water, re: Western Irrigation District and Bow River Irrigation District (10 April 2012), Appeal Nos. 10-053-055 and 11-009-014-D.

Pushpanathan v Canada (Minister of Citizenship & Immigration) [1998] 1 SCR 982.

Nigeria

Abraham Adesanya v. President of Federal Republic of Nigeria (1981) 5 SC 112.

Adediran v. *Interland Transport* (1991) 9 NWLR (Pt 214) 155.

Abraham Adesanya v. President of Federal Republic of Nigeria (1981) 5 SC 112.

Douglas v. Shell, (Unreported) Suit No. FHC/L/CS/573/96.

Owodunni v. Registered Trustees of the Celestial Church of Christ (2002) 6 SC (pt. 111) 60.

Fawehinmi v. Akilu (1982) 18 NSCC (pt. 11) 1265.

Wiwa v. Shell

United Kingdom

Boyce v. Paddington Borough Council (1903) I Ch. 109

Gouriet v. Union of Post Office Workers (1977) AC 729.

SECONDARY MATERIAL: MONOGRAPHS AND COLLECTION OF ESSAYS

A C Pigou, *The Economics of Welfare* 2nd ed (London: Macmillan, 1924).

A R Lucas and T Meadows, *Canadian Environmental Law: Commentary* 2nd ed (Canada: Butterworths,)

A V Dicey, *Introduction to the Study of the Study of the Law of the Constitution* 3rd ed (London: Macmillan, 1889).

A V Dicey, *Lectures Introductory to the Study of the Law of the Constitution* ed by J W F Allison (London: Oxford University Press, 2013).

C C Jaegar, *et al*, *Risk, Uncertainty and Rational Action* (New York: Earthscan, 2001)

Carolyn Abbot, *Enforcing Pollution Control Regulation: Strengthening Sanctions and Improving Deterrence* (Canada: Hart Publishing, 2009).

Clifford Rechtschaffen & David L Markell, *Reinventing Environmental Enforcement and the State/Federal Relationship* (Washington: Environmental Law Institute, 2003).

D Zaelke , D Kaniaru & Eva Kruzikova eds., *Making Law Work: Environmental Compliance & Sustainable Development* vol 1 (London: Cameron May, 2005).

E Hughes, A R Lucas & W A Tillerman, *Environmental Law and Policy* 3rd ed. (Toronto: Emond Montgomery, 2003).

Giuseppe Monateri, Methods of Comparative Law (Cheltenham, UK: Edward Elgar Publishing Limited, 2012).

Holger Bonus, *Fair Principles for Sustainable Development: Essays on Environmental Policy and Developing Countries*, ed. by Edward Dommen, (London: Cambridge, 1993).

Joakin Zander, *The Precautionary Principle in Practice: Comparative Dimensions* (London: Cambridge University Press, 2010).

M Doelle & C Tollefson, *Environmental Law: Cases and Materials* 2nd ed (Canada: Carswell, 2013).

Michael Allen & Brian Thompson, *Cases & Materials on Constitutional and Administrative Law* 10th ed (USA, New York: Oxford University Press, 2011).

Nicholas De Sadeleer, *Environmental Principles: From Political Slogans to Legal Principles* (London: Oxford University Press, 2002).

Olarenwaju Fagbohun, *The Law of Oil Pollution and Environmental Restoration* (Lagos: Odade Publishers, 2010).

Olubayo Oluduro, Oil Exploitation and Human Rights Violations in Nigeria's Oil Producing Communities (UK: Intersentia Publishing, 2014).

Paul Chastko, *Developing Alberta's Oil Sands: From Karl Clark to Kyoto* (Canada: University of Calgary Press, 2004).

R Harding & E Fisher eds, *Perspectives on the Precautionary Principle* (Australia: The Federation Press, 1999).

S Simpson and O Fagbohun (eds.) *Environmental Law and Policy* (Lagos: Lagos State University, 1998).

Yinka Omorogbe, *Oil and Gas Law in Nigeria* (Lagos: Malthouse Press, 2001).

SECONDARY MATERIALS – ARTICLES

A J Hudec and J R Paulus, “Current Environmental Regulation of the Alberta Oil and Gas Industry and Emerging Issues” (1989-1990) 28 Alta L Review 171.

A Trouwborst, “Evolution and Status of the Precautionary Principle in International Law” (2002) 62 Kluwer Law International 285.

Adati Ayuba Kadafa *et al*, Oil Spillage and Pollution in Nigeria: Organizational Management and Institutional Framework (2012)2:4 Journal of Environment and Earth Science 22.

Allan Ingelson and Chilenye Nwapi, “Environmental Impact Assessment Process for Oil, Gas and Mining Projects in Nigeria: A Critical Analysis” (2014) 10:1 Law, Environment and Development Journal 1.

Boris N Mamlyuk, “Analysing the Polluter Pays Principle through Law and Economics (2009-2010) 18 South-eastern Envtl. LJ 39.

C Stone, "Is there a Precautionary Principle?" (2001) 31 Environmental Law Reporter 10790

Chilenye Nwapi “Legal and Policy Responses to Environmental Offences in Relation to Alberta Oil Sands” (2012) 115 CIRL Resources 1.

Clifford Rechtschaffen, “Deterrence vs. Cooperation and the Evolving Theory of Environmental Enforcement” (1998) 71 S. Cal. L. Rev. 1181.

Clifford Rechtschaffen, “Deterrence vs. Cooperation and the Evolving Theory of Environmental Enforcement” (1998) 71:1 Southern California L Rev 1181.

Dallas Johnson, et al “Improving cumulative effects assessment in Alberta: Regional strategic assessment” (2011) 31 Environmental Impact Assessment Review 481.

Dan Woynillowicz & Chris Severson-Baker, “Down to the Last Drop The Athabasca River and Oil Sands” (2006) Pembina Institute Paper 1.

David L Markell, “The Role of Deterrence-Based Enforcement in a "Reinvented" State/Federal Relationship: The Divide between Theory and Reality” (2000) 24 Harv Envtl L Rev 1.

David L. Markell, “The Role of Deterrence-Based Enforcement in a "Reinvented" State/Federal Relationship: The Divide between Theory and Reality” (2000) 24 Harv Envtl L Rev 1.

David Schneiderman, “A V Dicey, Lord Watson, and the Law of the Canadian Constitution in the Late Nineteenth Century”, (1998) 16 Law & History Rev 495.

Desta Mebratu, “Sustainability and Sustainable Development: Historical and Conceptual Review” (1998) Environmental Impact Assessment Rev 493.

E I Elenwo, & J A Akankali, “Environmental Policies and Strategies in Nigeria Oil and Gas Industry: Gains, Challenges and Prospects. Natural Resources” (2014) Scientific Research Journal 884.

Francis P Udoudoh, “Oil Spillage and Management Problems in the Niger Delta” (2011) 3 Journal of Environmental Management & Safety 141.

Harim M Osofsky, “Defining Sustainable Development after Earth Summit 2002” (2003) 26 Loy L A Intl & Comp L Rev 111.

Harry W Jones “The Rule of the Law and the Welfare State” (1958) 58:2 Columbia Law Rev. 143.

Ighodalo Akhakpe, “Oil-Environmental Degradation and Human Security in the Niger-Delta Region of Nigeria: Challenges and Possibilities”, (November 2012) 8 European Scientific Journal 77.

Iniaghe, O P, Godswill Okeoghene Tesi and Patrick Othuke Iniaghe “Environmental Degradation and Sustainable Development in Nigeria’s Niger Delta Region” (2013) 15 Journal of Sustainable Development in Africa 61.

J G Frynas, “Legal Chang in Africa: Evidence from Oil-Related Litigation in Nigeria” (1999) 43:2 Journal of African Law 121.

Jaako Husa “Methodology of Comparative Law Today: From Paradoxes to Flexibility” 1096 - 1117.

James Cameron & Juli Abouchar, “The Precautionary Principle: A Fundamental Principle of Law and Policy for the Protection of the Global Environment” (1991) 14 B C Intl Comp L Rev 1.

John C Reitz, “How to do Comparative Law” (1998) 46:4 The American Journal of Comparative Law 617.

John Robinson, “Squaring the circle? Some thoughts on the idea of Sustainable Development” (2004) 48 Ecological Economics 369.

John T Scholz, “Cooperation, Deterrence and the Ecology of Regulatory Enforcement” (1984) 18 Law & Society Review 179.

John T Scholz, “Cooperation, Deterrence and the Ecology of Regulatory Enforcement” (1984) 18 Law & Society Review 179.

John T. Scholz, “Enforcement Policy and Corporate Misconduct: The Changing Perspective of Deterrence Theory” (1997) 60 Law and Contemporary Problems 253.

Joseph Ijaiye, “Rethinking Environmental Law Enforcement in Nigeria” (2014) 5 Beijing Law Review 306.

K Harrison “Is Cooperation the Answer? Canadian Environmental Enforcement in Comparative Context” (1995) 14 J Poly Analysis & Management 221.

Lele M Sharachchandra, “Sustainable Development: A Critical Review” (1991) 19 World Development 607.

Lisa Stevens, “The Illusion of Sustainable Development: How Nigeria's Environmental Laws are Failing the Niger Delta” (2011-2012) 36 Vermont Law Review 387.

M R Grossman, “Agriculture and Polluter Pays Principle: An Introduction” (2006) 59 Oklahoma Law Review 1.

Marian Stockzkuwick “The polluter pays principle and State aid for environmental protection” (2009) 6 J European Envt’l & Plan L 171.

Mark Seidenfeld & Janna Satz Nugent “The Friendship of the People: Citizen Participation in Environmental Enforcement” (2005) 73 Geo. Wash. L. Rev. 269.

Martin Kaga, “Provincial Regulation of Natural Resource Exploitation” (2002) Can-U S L J 357.

Matthew D. Zinn, “Policing Environmental Regulatory Enforcement: Cooperation, Capture and Citizens Suits” (2002) 21 Stan Envtl LJ 81.

Mohammed T Ladan, “Review of *NESREA Act* 2007 and Regulations 2009-2011: A New Dawn in Environmental Compliance and Enforcement in Nigeria”, (2012) Law, Environment and Development Journal 116.

Nickie Vlavianos, “The Legislative and Regulatory Framework for Oil Sands Development in Alberta: A Detailed Review and Analysis” 21 CIRL Occasional Paper 1.

Nigel Simmonds, “Law as a Moral Idea” (2005) 55 U Toronto L J 61.

O A Emunedo, G O Anoliefo & C O Emunedo, “Oil Pollution and Water Quality in the Niger Delta: Implications for the Sustainability of the Mangrove Ecosystem” (2014) Global Journal of Human Social Science 9.

Olarenwaju Fagbohun, "Reappraising the Nigerian Constitution for Environmental Management," (2002) 1 AAU Law Journal 44.

Oludayo Amokaye, “Environmental Pollution and Challenges of Environmental Governance in Nigeria” (2012) British Journal of Arts and Social Science 26.

Onah R Ogri, “A review of the Nigerian Petroleum Industry and the Associated Environmental Problems” (2001) The Environmentalist 10.

P B Eregha & I R Irughe “Oil Induced Environmental Degradation in the Nigeria’s Niger-Delta: The Multiplier Effects” (2009) 11:4 Journal of Sustainable Development in Africa 160.

P L Defur & Michelle Kaszuba, “Implementing the Precautionary Principle” (2008) The Science of Total Environment 155.

P S Puttagunta, "The Precautionary Principle in the Regulation of Genetically Modified Organisms"(2000) 9 Health L Rev 10.

R Ballhorn, “The Role of Government and Policy in Sustainable Development” (2005) 1 McGill Intl J Sustainable Dev L & Poly 19.

R Harris and A Khare, “Sustainable development Issues and Strategies for Alberta’s Oil Industry (2002) 22 Technovation 571.

R M Brown, "Administrative and Criminal Penalties in the Enforcement of Occupational Health and Safety Legislation" (1992) 30 Osgoode Hall L.J. 691.

Ralf Michaels, “The Functional Method of Comparative Law” (2005) Duke Law School Legal Studies Research Paper Series 1.

Robert K Omura, “Strategies for Cleaning up Contaminated Sites in Alberta” (2013) 41 CIRL Occasion Paper 1.

Robert L Glicksman & Dietrich H Earnhart “Depiction of the Regulator-Regulated Entity Relationship in the Chemical Industry: Deterrence-Based V. Cooperative Enforcement,” (2007) 31 William & Mary Envtl L & Poly Rev 1.

Rodrigo Lozano, “Envisioning Sustainability Three-Dimensionally” (2008) 16 Journal of Cleaner Production 1838.

S J Mead “The Precautionary Principle: A Discussion of the Principle's Meaning and Status in an Attempt to Further Define and Understand the Principle” (2004) New Zealand J Envtl L 137.

S O Aghalino & B Eyinla, “Oil Exploitation and Marine Pollution: Evidence from the Niger Delta, Nigeria” (2009) Journal of Human Ecology 177.

S O Aghalino, “Oil Exploration and its Impact on the Nigerian Environment” (2001) 7 Kiabara Journal of Humanities 103.

S Wood & L Johannson, “Six Principles of Smart Regulation” (2008) 46 Osgoode Hall L J 345.

Susan L Smith, Ecologically Sustainable Development: Integrating Economics Ecology and the Law (1995) 31 Willamette L Rev 261.

Svetlana Winbourne “Corruption and the Environment” (2002) Management Systems International 1.

Timothy F Malloy, “Regulation, Compliance and the Firm” (2003)76 Temple Law Review. 451

Ursula Kettlewell, “The Answer to Global Pollution? A critical Examination of the Problems and Potential of the Polluter Pays Principle” (1992) 3 Colo. J. Int’l Envtl. L & Pol’y 430.

Zephaniah Edo, “The Challenges of Effective Environmental Enforcement and Compliance in the Niger Delta Region of Nigeria” (2012) 14:2 Journal of Sustainable Development in Africa 262.

SECONDARY MATERIALS – OTHERS

Government Papers & Special Report

Alberta Environment Compliance Assurance Annual Report 2014/2015.

Canadian Council of Ministers of the Environment (CCME), Recommended Principles on Contaminated Sites Liability, PN 1361 (Winnipeg CCME, 2006)

National Round Table on the Environment and the Economy (NRTEE), *Cleaning up the Past and Building the Future: A National Brownfield Redevelopment Strategy for Canada* (Ottawa, NRTEE, 2003) 1.

New Brunswick Brownfield Development Working Group, Final Report of the New Brunswick Brownfield Development Working Group: Options and Recommendations for Facilitating Brownfield Redevelopment in New Brunswick, Appendix “B” (Fredericton: New Brunswick Brownfield Development Working Group 2007.

Niger Delta Human Development Report (2006) by United Nations Development Programme (UNDP) Nigerian National Environmental Policy Document.

OECD Commentary on the Polluter Pays Principle as it relates to International Trade (2001) com/env/td (2001) 44/final

OECD Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies; *Council Document* C (72)128, 26.5.1972.

UNEP's Enforcement of Environmental Law: Good Practices from Africa, Central Asia, ASEAN Countries and China.**Websites**

"How does the AER Regulate the Oil and Gas Industry?" online: <https://www.aer.ca/about-aer/spotlight-on/unconventional-regulatory-framework/how-does-the-aer-regulate-the-oil-and-gas-industry>.

"Millennium Development Goals Factsheet," report on largest oil producers around the world, online: <http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom>. <http://www.aer.ca/rules-and-regulations/bulletins/aer-bulletin-2014-01> <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>.

AER News Release of 2013-07-04, online: <https://www.aer.ca/about-aer/media-centre/news-releases/news-release-2013-07-04>.

C Chiasson, "Single Energy Regulator Bill a poor deal for Alberta's Environment", online: <https://environmentallawcentre.wordpress.com/2012/11/01/single-energy-regulator-bill-a-poor-deal-for-albertas-environment/>

C Chiasson, "Single Energy Regulator Bill a poor deal for Alberta's Environment" online: <https://environmentallawcentre.wordpress.com/2012/11/01/single-energy-regulator-bill-a-poor-deal-for-albertas-environment/>;

Canadian encyclopedia on the economy of Alberta, online: <http://www.thecanadianencyclopedia.ca/en/article/alberta/>;

Dennis Otiotio, "An Overview of The Oil and Gas Industry in Nigeria" <http://www.Academia.Edu/2654835/An_Overview_Of_The_Oil_And_Gas_Industry_In_Nigeria_by_Dennis_Otiotio>

Directive 019 – Compliance Assurance 1 at 1, online: <https://www.aer.ca/rules-and-regulations/directives/directive-019>.

E I Elenwo, & J A Akankali, "Environmental Policies and Strategies in Nigeria Oil and Gas Industry: Gains, Challenges and Prospects. Natural Resources" (2014) Scientific Research Journal 884 at 893, online: <http://dx.doi.org/10.4236/nr.2014.514076>.

Environmental Assessment Program, Alberta's Environmental Assessment Process, online: <http://environment.gov.ab.ca/info/library/6964.pdf>.

Environmental Law Research Institute Synopsis of Laws and Regulations on the Environment in Nigeria, online: <http://www.elri-ng.org/newsandrelease2.html>.

F Orbih, "Public Interest Litigation" paper presented at the Nigerian Institute of Advanced Legal Studies, Abuja, on 7 July, 2010 online: <www.nigerianlawguru.com/…/PUBLIC%20INTEREST%20LITIGATION.>.

Green Cross and Blacksmith Institute, "World's worst pollution hazards report focuses on 10 most polluted places" (2013), online: Green Cross < http://www.gcint.org>.

Homepage of International Association of Impact Assessment, online <http://www.iaia.org/>.

Inaugural lecture delivered by Prof Olarenwaju Fagbohun at the Nigerian Institute of Advanced Legal Studies (NIALS)on the topic "Nigeria's Quest for Environmental Governance" (2012), published in the Nation's Newspaper in Nigeria, Online: <http://thenationonlineng.net/nigerias-quest-for-environment-governance-2/>.

International Network for Environmental Compliance and Enforcement (INECE) Principles of Environmental Compliance and Enforcement Handbook 1 at 104, online: <http://inece.org/principles/PrinciplesHandbook_23sept09.pdf>.

J G Frynas, “Legal Chang in Africa: Evidence from Oil-Related Litigation in Nigeria” (1999) 43:2 Journal of African Law 121 at 134 online: <http://jstor.org/stable/3085547>.

Jaako Husa “Methodology of Comparative Law Today: From Paradoxes to Flexibility” online: <http://ssrn.com/abstract=1967406>.

Jon M Van Dyke “The Evolution and International Acceptance of the Precautionary Principle”, (2004) online: <www.law.hawaii.edu/sites/www.law.hawaii.edu/files/content/Faculty/PrecautionaryPrinciple.pdf>

Lal Kurukulasuriya, (UNEP Chief) “The Role of the Judiciary in Promoting Environmental Governance and the Rule of Law” <http://www.yale.edu/gegdialogue/docs/dialogue/oct03/papers/Kurukulasuriya%20final.pdf>.

Lal Kurukulasuriya, (UNEP Chief) “The Role of the Judiciary in Promoting Environmental Governance and the Rule of Law” (2003) Yale Center for Environmental Law and Policy New Haven, CT 1 at 3, online: <http://www.yale.edu/gegdialogue/docs/dialogue/oct03/papers/Kurukulasuriya%20final.pdf>.

Marjolein, Van Asselt & Ellen Vos, “The Precautionary Principle and the Uncertainty Paradox” (submitted to the Journal of Risk Research), online: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.110.9670&rep=rep1&type=pdf>.

Muhammad Munir, “History and Evolution of the Polluter Pays Principle: How an Economic Idea Became a Legal Principle online: <http://ssrn.com/abstract=2322485>.

N Bankes, S Mascher & M Olzinski “Can Environmental Laws Fulfil their Promise? Stories from Canada” (2014) Sustainability 6024 at 6040, online: <http://www.mdpi.com/journal/sustainability>.

National Environmental Policy 2, online: <http://www.nesrea.org/images/National%20Policy%20on%20Environment.pdf>.

National Environmental Policy Document 1 at 2, online: <http://www.nigeriatradehub.gov.ng/Portals/0/Documents/National%20Policy%20on%20Environment.pdf>.

Nickie Vlavianos, “The Legislative and Regulatory Framework for Oil Sands Development in Alberta: A Detailed Review and Analysis” CIRL Occasional Paper 21 1 at 1 online: <http://prism.ucalgary.ca/bitstream/1880/47188/1/OP21Oilsands.pdf>.

Nigel Bankes “Bill 2 and its Implications for the Jurisdiction of the Environmental Appeals Board” (November 9, 2012) ABlawg 1-4 online: <http://ablawg.ca/wp-content/uploads/2012/11/Blog_NB_Bill2_Jurisdiction_EAB_Nov2012.pdf>.

Nigel Bankes, Bill 2 and its Implications for the Jurisdiction of the Environmental Appeals Board” online: <http://ablawg.ca/wp-content/uploads/2012/11/Blog_NB_Bill2_Jurisdiction_EAB_Nov2012.pdf>.

Niger Delta Human Development Report by United Nations Development Programme (UNDP), online: <http://hdr.undp.org/sites/default/files/nigeria_hdr_report.pdf>.

Nigeria/Alberta Relations, online: <http://www.international.alberta.ca/documents/Nigeria-AB.pdf>.

OECD Commentary on the Polluter Pays Principle as it relates to International Trade com/env/td (2001) 44/final online:<http://www.oecd.org/officialdocuments/publicdisplaydocument pdf/?cote=COM/ENV/TD(2001)44/FINAL&docLanguage=En>

OECD Polluter Pays Principle: Definition and Analysis, online: <http://www.oecd-ilibrary.org.ezproxy.lib.ucalgary.ca/>.

OECD Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies, online:

Olarenwaju Fagbohun, "Mournful Remedies, Endless Conflicts and Inconsistencies in Nigeria's Quest for Environmental Governance: Rethinking the Legal Possibilities for Sustainability" online: <http://nials-nigeria.org/PDFs/Prof%20Fagbohun%20Final.pdf>.

Onyekachi Duru, "An Appraisal of the Legal Framework for the Regulation of Nigerian Oil and Gas Industry, with Appropriate Recommendations", online: <http://ssrn.com/abstract=2137979>.

R B Mitchell, "Compliance Theory: A Synthesis" (2006) 2 RECIEL 327, online: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9388.1993.tb00133.x/pdf>.

Ronald B. Mitchell, "Compliance Theory: A Synthesis" (2006) 2 RECIEL 327,online: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9388.1993.tb00133.x/pdf>.

Roy E Cordato "Polluter Pays Principle: A proper Guide to Environmental Policy" online: <http://iret.org/pub/SCRE-6.PDF>1.

Svetlana Winbourne, "Corruption and the Environment" (2002) Management Systems International 1, online: <http://pdf.usaid.gov/pdf_docs/Pnact876.pdf>.

The Polluter-Pays Principle OECD Analyses and Recommendations, General Distribution OCDE/GD (92) 81 online: <http://www.tradevenvironment.eu/uploads/OCDE_GD_92_81.pdf>

The Rational for the Adoption of the EIA as a Policy in Environmental Management in Nigeria, online: <https://comfortasokoroogaji.wordpress.com/2011/09/19/the-rational-for-the-adoption-of-the-eia-as-a-policy-in-environmental-management-in-nigeria/>.

Theresa O Okenabirhie, "Polluter Pays Principle in the Nigerian Oil and Gas Industry: Rhetorics or Reality?" online: Centre for Energy, Petroleum and Mineral Law and Policy <http://www.dundee.ac.uk/>

Theresa Okenabirhie, "Polluter Pays Principle in the Nigeria Oil and Gas Industry: Rhetoric or Reality?" (2009) Centre for Energy, Petroleum and Mineral Law and Policy Dundee 1, online: <www.dundee.ac.uk/cepmlp/gateway/files.php?file=cepmlp_car13>.

Timothy O'Riordan, Andrew Jordan, "The Precautionary Principle, Science, Politics and Ethics" a working paper (CSERGE 1995 Working Paper PA 95-02), online: <http://cserge.ac.uk/sites/default/files/pa_1995_02.pdf>.

UNEP Report on Environmental Assessment of Ogoniland, online: <http://www.zaragoza.es/contenidos/medioambiente/onu/issue06/1130-eng-sum.pdf >.

UNEP's Enforcement of Environmental Law: Good Practices from Africa, Central Asia, ASEAN Countries and China <http://www.unep.org/delc/Portals/119/publications/enforcement-environmental-laws.pdf>.

UNEP's World Congress publication 1 at 3.

V Himmelsbach, “The Pros and Cons of Bill 2” online: <http://www.canadianlawyermag.com/4582/The-pros-and-cons-of-Albertas-Bill-2.html>.

Vito De Lucia, “Polluter Pays Principle”, The Encyclopedia of Earth, online: <http://www.eoearth.org/view/article/155292/>.

Wanhua Yang, “Environmental Compliance and Enforcement Measurement and Indicators” (2015), online: <http://www.unep.org/delc/Portals/119/events/ece-measurement-%20indicators.pdf>.

World Commission on Environment and Development, *Our Common Future*, U.N. Doc. A/42/427 (August 4, 1987), online: <http://www.un.org/en/ga/search/view_doc.asp?symbol=A/42/427>.