

**AN ANALYSIS OF THE NIGERIAN REGULATORY FRAMEWORK FOR WATER
POLLUTION CONTROL – LESSONS FROM SOUTH AFRICA**

QUALIFICATION MASTER OF LAWS (LLM) IN ENVIRONMENTAL LAW

AKINRINMADE, AKINTUNDE O.I

2017

**AN ANALYSIS OF THE NIGERIAN REGULATORY FRAMEWORK FOR WATER
POLLUTION CONTROL – LESSONS FROM SOUTH AFRICA**

BY

AKINRINMADE, AKINTUNDE O.I

**MINI-DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF LAWS IN
ENVIRONMENTAL LAW IN THE FACULTY OF LAW AT THE UNIVERSITY OF
PRETORIA**

SUPERVISORS: MS MELAINE MURCOTT & PROF. OLUSESAN OLIYIDE

ABSTRACT

This mini-dissertation titled 'An analysis of the Nigerian regulatory framework for water pollution control - Lessons from South Africa' examines the regulatory framework for water pollution control in Nigeria and considers whether the regulatory regime imposes adequate and effective liability and compensation that discourage water pollution, and if not how it can be improved particularly with inspiration drawn from South African law. Water is the source of life for humans, plants and animals. Bad, polluted water makes life unbearable for humans, plants and animals. The Nigerian Constitution imposes an obligation on the state to ensure the improvement and protection of the Nigerian environment generally and to safeguard air, water and land in Nigeria in particular. Oil exploration and exploitation as well as many other human activities have resulted in environmental degradation in Nigeria and these have occasioned serious adverse socio-economic consequences and threatened sustainable growth and development in the country. The pollution of water resources in Nigeria is therefore of great concern. If left unattended, it will certainly continue to bring terrible consequences. This mini-dissertation examines the regulatory framework for water pollution control in Nigeria and South Africa against the backdrop of a sustainable development paradigm which incorporates key principles of international environmental law such as the preventive principle, the polluter pays principle, the doctrine of trusteeship and the notion of strict liability. It then proffers recommendations for improving the regulatory framework for water pollution control in Nigeria.

DECLARATION BY STUDENT

I declare that the mini-dissertation hereby submitted to the University of Pretoria, for the degree of Master of Laws in Environmental Law has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged



AKINRINMADE, AKINTUNDE O.I

23 June 2017

DATE

DECLARATION BY SUPERVISOR

IMelanie Jean Murcott..... as the supervisor.

I agree to the submission of this mini-dissertation.



22 June 2017

MS MELAINE MURCOTT

DATE

DEDICATION

To Almighty God, the one who saw me through the good and the hard times at the University of Pretoria; the one who made it possible for me to move on even when I was almost losing hope.

ACKNOWLEDGEMENT

This work could not have been done without the grace of the Most High; so, first to him I owe all gratitude.

Second to my parents, Mr. and Mrs. Akinrinmade I want to say no amount of words can express how grateful I am for all the love and support you showered on me. You provided every single thing I needed even before I asked. I pray that you both will live long to reap the fruit of your labour. To my siblings Pelumi and Mosope I thank you so much for being there.

To my supervisor Ms. Melanie Murcott whose invaluable lectures on environmental law assisted me to form the basis of this dissertation; thank you for your support, patience and jokes. This would not have been easy without your help. I thank all staff members of the Law Library (University of Pretoria) for your time and assistance in helping me with the necessary materials.

And to every friend I made in the University of Pretoria, I say a big thank you for making my stay pleasant. Hope I make you all proud; meet you at the top.

TABLE OF CONTENTS

Abstract	3
Declaration by student	4
Declaration by supervisor	5
Dedication	6
Acknowledgement	7
Table of contents	8
TOPIC	9
CHAPTER ONE	
INTRODUCTION	10
CHAPTER TWO	
OVERVIEW OF THE LAWS GOVERNING WATER POLLUTION CONTROL IN NIGERIA	23
CHAPTER THREE	
OVERVIEW OF THE LAWS GOVERNING WATER POLLUTION CONTROL IN SOUTH AFRICA	41
CHAPTER FOUR	
THE EXTENT TO WHICH NIGERIA CAN DRAW FROM SOUTH AFRICA TO IMPROVE ON ITS REGULATORY FRAMEWORK FOR WATER POLLUTION CONTROL	56
BIBLIOGRAPHY	66

**AN ANALYSIS OF THE NIGERIAN REGULATORY FRAMEWORK FOR WATER
POLLUTION CONTROL – LESSONS FROM SOUTH AFRICA**

CHAPTER ONE

INTRODUCTION

This study explores the Nigerian regulatory framework for water pollution control. Its purpose is to consider whether the Nigerian regulatory framework for water pollution imposes adequate and effective liability and compensation provisions, and if not, how it can be improved with reference to South African law. In this chapter, I will explain key concepts, specifically the meaning of ‘the environment’ and ‘pollution’. I will illustrate how nationally and internationally, environmental law calls for water pollution law that gives effect to sustainable development and other key principles of environmental law including the preventive principle, the doctrine of public trusteeship, the polluter pays principle and incorporating aspects of strict liability. I will also give a brief introduction into water pollution causes, issues and its effects in South Africa and Nigeria to illustrate the relevance of this study and the need for a strong regulatory framework in both countries to respond to water security issues. Finally I will set out the structure of my study.

The environment is complex of physical, chemical and biological factors which sustain life.¹ It comprises of land, air and water – all of which emerge from or are a part of ‘nature’.² Water is thus an aspect of the environment. This is confirmed in environmental legislation in both South Africa and Nigeria. In South Africa the National Environmental Management Act 107 of 1998 (NEMA) defines the environment to be the surroundings within which humans exist and made up of land, water and the atmosphere.³ In Nigeria the National Environmental Standards and Regulations Enforcement Agency Act 25 of 2007 (NESREA Act) defines the environment to include water, air, land and all plants, human beings or animals living therein.⁴

¹ MT Okorodudu Law of Environmental Protection (1998) 584.

² Okorodudu (note 1 above) 583.

³ Sec 1 of NEMA.

⁴ Sec 37 of NESREA Act.

We live in nature and interact with it every day in our actions of eating, drinking and breathing.⁵ We depend on nature for the materials and resources to meet our physical needs.⁶ Every human activity takes place in ‘the environment’ – in nature.⁷ Thus for human survival on earth, the environment must be secured at an appropriate level of life-sustaining quality and should not be allowed to fall below that level capable of sustaining living organisms.⁸ This has been recognized in international environmental law. For instance the preamble to the Declaration of the 1972 Stockholm conference on human environment demonstrates the relationship between the environment and fundamental human right to life. In the first preamble it states that, both aspects of man’s environment, the natural and man-made are essential to his well-being and to the enjoyment of basic human rights even the right to life itself.

Principle 1 provides:

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.

Principle 21 imposes a duty on states to protect their environments:

States have, in accordance with the Charter of the United Nations and the principles of International law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction and control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

These principles emerging from the Stockholm declaration remain crucial given the degradation of the environment, which is one of the most severe problems facing the human race today.⁹ This degradation has had a damaging effect on nature and thus

⁵ D Scholsberg ‘Preconceiving Environmental Justice: Global Movements and Political Theories’ (2004) Environmental Politics 1 3.

⁶ ‘Natural Resource Conservation- Background Information’ <http://www.smithlifescience.com/NaturalResources.html> (accessed 7th July 2015).

⁷ AT Ekubo ‘Aspects of Aquatic Pollution in Nigeria’ (2011) 3 Research Journal of Environmental and Earth Science 673 673.

⁸ Okorodudu (note 1 above) 584.

⁹ G Oludayo ‘Environmental Pollution And Challenges of Environmental Governance In Nigeria’

on people's quality of life, bringing about infringements of human rights. The right to a healthy environment as well as rights to access to water and other basic needs are threatened by severe pollution.¹⁰ In particular, water, an aspect of the environment is a necessity which must be preserved and conserved for our sustenance in this world.¹¹

In Nigeria under the NESREA Act pollution is defined as:-¹²

Man-made or man-aided alteration of chemical, physical or biological quality of the environment beyond acceptable limits and 'pollutants' shall be construed accordingly. It is regulated by the Constitution of the Federal Republic of Nigeria, 1999 (Nigerian Constitution), NESREA Act, Water Resources Act 101 of 1993 (WRA), River Basins Development Authorities Act 35 of 1987 (RBDAA), Nigeria Mining and Minerals Act 34 of 1999 (NMMA), Oil In Navigable Water Act 34 of 1968 (ONWA), Petroleum Act 28 of 1988 (PA), Harmful Waste (Special Criminal Provisions) Act 1988 (HWA), Nigerian National Policy on Water Supply and the various States Water Boards Acts. Relevant aspects of the legislation regulating water pollution control in Nigeria will be discussed in chapter two of the study.

The problem that this study identifies is that the regulatory framework in place to ensure that water resources are protected and polluters are held accountable for their deeds is weak and inadequately enforced.¹³ For instance in Nigeria the WRA provides that for any offence committed under the WRA, the offender shall be liable to a fine of two thousand naira (equivalent to one hundred rand) or a term not exceeding six months imprisonment or both.¹⁴ I will argue that provision like this are not stringent enough to ensure effective water pollution control.

In South Africa, under NEMA, pollution is defined to be:-¹⁵

any change in the environment caused by substances, radioactive or other waves, or noise, 'odours, dust or heat, emitted from any activity, including the storage or

(2012)*British Journal of Arts and Social Sciences* 26 3.

¹⁰ See secs 24 and 27 of the Constitution of the Republic of South African, 1996.

¹¹ V Shiva 'Water Wars' *South End Press* (2002) 21.

¹² Sec 37 of NESREA Act.

¹³ H Ijaiya 'The Legal Regime of Water Pollution in Nigeria' (2013) 4 *The Department of Public Law, Rivers State University of Science and Technology, Port-Harcourt* 140 19.

¹⁴ Sec 18 WRA.

¹⁵ Sec 1 of NEMA.

treatment of waste or substances, construction and the provisions of services whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being.

Pollution is regulated in South Africa principally by the environmental right and right to access basic water in the Constitution of the Republic of South Africa, 1996 (the South African Constitution). Legislation gives effect to these rights, including; the National Water Act 36 of 1998 (NWA), the NEMA, the National Environmental Management Waste Act 59 of 2008 (NEMWA), the Water Services Act 108 of 1998 (WSA), the Mineral and Petroleum Resources Development Act 28 of 2002 (MPRDA) and the Health Act 63 of 1977 (HA). I will discuss relevant provisions in this legislation in chapter three of the study. This study reveals that in South Africa, the regulatory framework for water pollution control is comprehensive, but inadequately implemented.¹⁶ Given its comprehensive nature, despite challenges related to implementation, South African law offers a good basis for comparison to Nigerian laws.

Despite the regulatory frameworks in place in Nigeria and South Africa, water pollution is a serious problem. It threatens the health and well-being of humans, plants and animals.¹⁷ For instance in South Africa the issue of acid mine drainage (AMD) which involves highly acidic water flowing from old mining areas into water resources, poses a threat to water security at a national level.¹⁸ AMD also poses a threat to infrastructure, people's livelihoods and economic activity of the country.¹⁹ The threat of AMD to water security was evident when the Federation for a Sustainable Environment approached the court as a matter of urgency seeking an order declaring failure of the respondent to provide access to potable water for more

¹⁶ C Smith (2013) 'The role of mining in the South African economy' www.sablog.kpmg.co.za/2013/12/role-mining-south-african-economy.html (accessed 12th October 2015).

Sec 1 of the National Water Act 36 of 1998 (NWA) defines pollution to be 'the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it less fit for any beneficial purpose of which it may reasonably be expected to be used, or harmful or potentially harmful to the welfare, health or safety of human beings, to any aquatic or non-aquatic organisms to the resource quality or to property.'

¹⁸ L Feris & LJ Kotzé 'The Regulation of Acid Mine Drainage In South Africa: Law And Governance Perspective' (2014) *PER/PELJ* 2106. See also *Federation for Sustainable Environment and Another v. Minister for Water Affairs and others* (35672/12)(2012) ZAGPPHC 128 para 4.

¹⁹ Feris & Kotzé (note 18 above) 2106.

than seven full days.²⁰ AMD contaminated the water supply of a community in Carolina, imposing an additional burden on the local municipality to supply clean water to the community, and depriving communities in the area of drinking water for an extended period. As will appear from chapter 3, the regulatory framework in place offers various tools to hold those responsible or liable for such pollution, and to require government to take action when polluters fail to do so.²¹

In Nigeria, human activities like oil exploration and exploitation raise a number of environmental issues such as depletion of biodiversity, water pollution and air pollution.²² Both urbanization and industrialization have contributed to the scale of pollution.²³ The petroleum industry plays an integral part in the economy of Nigeria, but is also the main source of water pollution.²⁴ The question therefore is how to maintain the balance between economic objectives of this industry and still preserve our waters for the benefit of the present and future generations. Water pollution occurs as a result of petroleum activities such as drilling, which brings about oil spills, and the transportation of oil to the various refining stations through onshore and offshore leaking pipelines.²⁵

The Baruwa Community of Lagos, Nigeria, have had their right to clean and safe water supply taken away from them because of serious water pollution by the oil industry. Because of the oil leaks village wells have become inaccessible.²⁶ The wells are a potential fire hazard. Clean, safe water is scarce, due to pollution caused by the pipelines running across the village.²⁷ Water is distributed via water tankers which offload at different locations in the village at exorbitant prices charged by the

²⁰ *Federation for Sustainable Environment and Others v. Minister of Water Affairs and Others* (2012) ZAGPPHC 140 para 6.

²¹ Feris & Kotzé (note 18 above) 2111

²² JA Adelegan 'The history of environmental policy and pollution of water sources in Nigeria (1960-2004): The way forward' Department of Civil Engineering University of Ibadan 1 3.

²³ Adelegan (note 22 above) 3.

²⁴ Ekubo (note 7 above) 676

²⁵ OB Adedeji 'Aquatic Pollution in Nigeria: the Way Forward' (2011) *Advances in Environmental Biology* 5 (8) 2024-2028.

²⁶ Pollution: Lagos communities urge FG to repair NNPC pipeline leakage <https://www.today.ng/news/nigeria/176909/pollution-lagos-communities-urge-repair-nnpcpipeline-leakage> (accessed 28th February 2017).

²⁷ Pollution: Lagos communities urge FG to repair NNPC pipeline leakage <https://www.today.ng/news/nigeria/176909/pollution-lagos-communities-urge-repair-nnpcpipeline-leakage> (accessed 28th February 2017).

water merchants, inhabitants of the community have to search for alternative sources, often far away and polluted.²⁸ The people of the community live with the smell of petrol. Medical experts have diagnosed health complications. Most of these cases have been directly linked to the water contamination problem.²⁹ Children have rashes and suffer from watery eyes while the elderly suffer from chest infection, dizziness and skin irritation.³⁰

The dredging of oil by oil companies in Nigeria has also caused salty water from the Gulf of Guinea to penetrate the fresh water creeks of the Niger Delta region of Nigeria where other villagers get their drinking water. These villagers are now forced to spend several hours in their canoes in search of potable water.³¹ In the case of *NNPC v. Sele*, the plaintiff, a representative of the Ogbe-Udu community, sued for damages arising from a crude oil spill from the pipeline of NNPC, the defendant.³² The oil spill had polluted and damaged crops, fishing ponds and fresh water wells in the Ogbe-Udu community of Effurum Delta state. The plaintiff, acting on behalf of the community, claimed twenty million naira as adequate compensation to the community for losses sustained.³³ The court ordered that NNPC pay the plaintiff fifteen million naira (equivalent to seven hundred and fifty rands) as special damages and three million naira (equivalent to one hundred and fifty thousand rand) as general damages to restore the environment.³⁴ This order made by the court is inadequate to restore the environment and no order was made to clean up the spill. With the emergence of environmental consciousness capturing the attention of the world today,³⁵ urgent attention is required to address the issue of water pollution, at the national level, through the improvement on, and the creation of environmentally friendly water pollution control law and policies that will foster sustainable

²⁸ Pollution: Lagos communities urge FG to repair NNPC pipeline leakage <https://www.today.ng/news/nigeria/176909/pollution-lagos-communities-urge-repair-nnpipeline-leakage> (accessed 24th October 2016).

²⁹ Pollution: Lagos communities urge FG to repair NNPC pipeline leakage <https://www.today.ng/news/nigeria/176909/pollution-lagos-communities-urge-repair-nnpipeline-leakage> (accessed 2nd March 2017)

³⁰ Pollution time bomb-Nigeria <http://www.righttowater.info/rights-in-practice/rights-based-approach-for-practitioners/pollution-time-bomb-in-nigeria/> (accessed 14th October 2016).

³¹ Adedeji (note **Error! Bookmark not defined.** above) 2025.

³² *NNPC v. Sele* (2004) ALLFWLR (pt 223) 1859 CA.

³³ NNPC (note 32 above) 403 para C-D.

³⁴ NNPC (note 32 above) 403 para D-E.

³⁵ For instance the Noumea convention for the protection of natural resources and environment of the South Pacific Region 1986.

development.³⁶ As appears from a number of legal instruments, the concept of sustainable development has emerged as a crucial approach for the integration of social equality, economic development and environmental protection.³⁷ The 'three pillars' of sustainable development are economic development, social development and environmental protection.³⁸ These three pillars of sustainable development are important and need to be pursued simultaneously, and with equal effort to ensure the protection of the environment.

At a national level, in South Africa, the Constitution provides that everyone has a right to an environment that is not harmful to their health or well-being and to have the environment protected for the benefit of the present and future generations through reasonable legislative and other measures that, among other things, 'secure ecological sustainable development and use of natural resources while promoting justifiable economic and social development'.³⁹ The Constitutional Court in South Africa, interpreting the concept of sustainable development as provided for in the environmental right, in *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province*, stated that:⁴⁰

The role of the courts is especially important in the protection of the environment and giving effect to the principle of sustainable development. The importance of the protection of the environment cannot be gainsaid. Its protection is vital to the enjoyments of the other rights contained in the Bill of Rights; indeed, it is vital to life itself. It must therefore be protected for the benefit of the present and future generations. The present generation holds the earth in trust for the next generation.

³⁶ The term sustainable development was coined by the World Commission on Environment and Development (WCED) and defines the term to be a development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

³⁷ W Scholtz & J Verschuuren 'Regional Cooperation and Sustainable Development' *Regional Environmental Law* 1 1. At an international level the significance of sustainable development was recognized in the case of *Gabcikovo-Nagymaros* see *Hungary v. Slovakia (Gabcikovo Nagymaros Case)* (1997) ICJ Rep 7 para 140. At a regional level the African Charter for Human and People's Rights provides that all people shall have the right to a satisfactory environment that is favourable to their development See Art 24 African Charter for Human and People's Rights.

³⁸ M Kidd *Environmental Law* (2011) 16.

³⁹ Sec 24 of South African Constitution.

⁴⁰ *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province* CCT 67/06 [2007] ZACC 13 para 102.

The trusteeship position carries with it the responsibility to look after the environment.

It is the duty of the Court to ensure that this responsibility is carried out.

The Nigerian Constitution on the other hand does not provide for a right to a clean and healthy environment. However, the Nigerian laws on the protection of the environment are supposed to be consistent with the National Policy on the Environment (NPE) pursuant to which the Federal Environmental Protection Agency (FEPA) now NESREA was established. The NPE states that:

The legal framework as a component of the national environmental policy should be designed as an instrument that recognizes the need to achieve a balance between environment, development and socio-economic considerations.⁴¹

The effect of the NPE ought to be to use legislation as a means of environmental protection towards achieving sustainable development in the domestic sphere:

- a. to secure a quality of environment adequate for good health and well-being;
- b. conserve and use the environment and natural resources for the benefit of present and future generations;
- c. restore, maintain and enhance the ecosystems and ecological processes essential for the functioning of the biosphere to preserve biological diversity, and the principle of optimum sustainable yield in the use of living natural resources and ecosystems;
- d. raise public awareness and promote understanding of essential linkages between the environment, resources and development; and encourage individual and community participation in environmental improvement efforts; and
- e. co-operate in good faith with other countries, international organisations and agencies to achieve optimal use of transboundary natural resources and effective prevention or abatement of transboundary environmental degradation.⁴²

Sustainable development constitutes a global recurring theme for environmental and economic governance and is a feature of South African and Nigeria Environmental legislation.⁴³ An effective and coherent regulatory framework for the conservation and preservation of water must give effect to sustainable development both in South

⁴¹ See sec 8.0 titled Legal Arrangements of the National Policy on the Environment (Revised edition).

⁴² See NPE publication pg 3.

⁴³ Scholtz & Verschuuren (note 37 above) 2.

Africa and Nigeria. Sustainable development poses important questions as to how economic growth is conceived and managed through incentives and regulation. The examination of the regulatory framework for water pollution control and sustainable development principles in Nigeria shows that Nigeria needs to integrate the principles of sustainable development into the country's policies and programmes for water pollution control in order to reverse the damage to water resources.⁴⁴

In spite of the fact that the country has embraced the concept of sustainable development, Nigeria is far from pursuing the normative goals and objectives contained in the NPE.⁴⁵

In addition to the concept of sustainable development, pollution control must be regulated in terms of other emerging principles of environmental law, which give effect to sustainable development. These include the preventive principle, the doctrine of public trusteeship, the polluter pays principle and the notion of strict liability.

In terms of the preventive principle, states are required to prevent damage to the environment and to reduce, limit or control activities that might risk such a damage.⁴⁶ The principle is thus aimed at the prevention of pollution and environmental degradation. An obligation of prevention also emerges from the international responsibility not to cause significant damage to the environment extra-territorially.⁴⁷ The preventive approach seeks to avoid harm to the environment irrespective of whether or not there is transboundary impact or international responsibility.⁴⁸ Both Nigeria and South Africa law include duties to prevent pollution in their environmental legislation.⁴⁹

⁴⁴ MO Erhun 'The Contribution of the Minerals and Mining Industry to Poverty Alleviation and Sustainable Development in Nigeria – A Legal Perspective' (2015) *Journal of Energy Technologies and Policy* 96 100.

⁴⁵ Erhun (note 44 above) 101.

⁴⁶ Lluís Paradell-Trius 'Principles of International Environmental Law: An Overview' (2000) *RECIEL* 93 97.

⁴⁷ See the Trail-Smelter Arbitration 1931-1941, 3 U.N.R.I.A.A 1905. This is a case that involved trans-frontier pollution and the source of the pollution was a Canadian Aluminium smelting plant which emitted fumes that damaged wheat crops belonging to farmers in the United States. The case laid down important principles of customary international law to the effect that states must not allow their territory to be used for activities that will damage the interests of other states.

⁴⁸ Paradell-Trius (note 46 above) 97.

⁴⁹ Sec 20 of Nigerian Constitution & Sec 24 of South African Constitution.

The foundational principle upon which the notion of public trusteeship is based is that state governments must manage and protect certain natural resources for the sole intergenerational benefit of their citizens.⁵⁰ The doctrine entails a duty towards the environment, the duty to conserve resources, the duty to protect and preserve resources, and a duty towards other people, including future generations, in respect of these resources.⁵¹ In this sense the doctrine of public trusteeship vests the state authority with the necessary power to regulate access and use resources for the benefit of current and future generations.⁵² This fiduciary responsibility can, depending on the context and provisions of a specific statute, lead to the conclusion that a natural resource should be regarded as public property.⁵³ The fiduciary responsibility in essence boils down to the responsibility to protect and preserve the resource and manage resource use in a sustainable and equitable manner for the benefit of current and future users.⁵⁴ The doctrine of public trusteeship comprises the distinctive element of protecting intergenerational interests by promoting conservation, preventing pollution and ecological degradation, securing ecologically sustainable development, and justifying economic and social development.⁵⁵ The doctrine of public trusteeship is recognized under the Nigerian Constitution,⁵⁶ and in South Africa under the NEMA.⁵⁷

The polluter pays principle (PPP) requires that the cost of pollution should be borne by those responsible for causing the pollution.⁵⁸ Its main objective is to hold those responsible for environmental degradation to account and deter them from committing further acts of pollution.⁵⁹ The PPP is an important cornerstone of environmental law and has assumed a prominent position in international

⁵⁰ E Van der Schyff 'Stewardship Doctrines of Public Trust: Has the Eagle of Public Trust Landed on South African Soil?' (2013) South African Law Journal 369 372.

⁵¹ Van der Schyff (note 50 above) 371.

⁵² Van der Schyff (note 50 above) 379.

⁵³ Van der Schyff (note 50 above) 379.

⁵⁴ Van der Schyff (note 50 above) 382.

⁵⁵ Van der Schyff (note 50 above) 383.

⁵⁶ Sec 20 Nigerian Constitution.

⁵⁷ Sec 2 (4)(o) of NEMA.

⁵⁸ D Pallangyo Environmental Law in Tanzania Law Environment and Development (LEAD) Journal International Environmental Law Research Centre (2007) 26 at 38 available at www.lead-journal.org/content/07026.pdf (accessed 17 October 2016).

⁵⁹ Vito, D. and Reibstein, R. Polluter Pay Principle http://www.eoearth.org/article/Polluter_pays_principle (accessed on the 22 August 2016).

environmental policy.⁶⁰ The PPP was included in the Rio Declaration, which provides that:

national authorities should endeavour to promote the internalisation 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.⁶¹

The principle integrates environmental protection and economic activities, by ensuring that the full environmental and social costs associated with pollution and environmental harm are reflected in the ultimate market price for a good or service.⁶²

The principle is provided for in South African law for instance by section 2(4)(p) of the NEMA which embodies the PPP and provides that:

The costs of remedying pollution, environmental degradation and consequent health effects must be paid for by those responsible for harming the environment.

Moreover the NWA and NEMA impose extensive liability for polluters.⁶³ Although the PPP has been adopted in Nigeria,⁶⁴ cases reveal that there is still the cry for better laws imposing obligations in respect of clean-up, compensation and other applications of the PPP as evident in the Niger Delta region of Nigeria.

The doctrine of strict liability as applicable to environmental law arises when an environmental damage results from abnormally dangerous activities. Here, even without any element of fault in the form of negligence or intent on the part of the polluter, such polluter may be held liable and responsible for certain environmental loss arising from the activities undertaken.⁶⁵ If a corporation is permitted to carry on a hazardous or inherently dangerous activity for its profit, the cost of any accident arising on account of such hazardous or inherently dangerous activity must be absorbed by the corporation.⁶⁶ This obligation by the corporation to bear the cost of restoring the environment equally makes its shareholders liable in the event of an

S E Gaines 'The Polluter Pays Principle: From Economic Equity to Environmental Ethos', Texas International Law Journal (1991) 460 466.

⁶¹ Principle 16 Rio Declaration.

⁶² Gaines (note 60 above) 469.

⁶³ Sec 19 of NWA and Sec 28 of NEMA, the provisions of these sections are discussed in detail below.

⁶⁴ Sec 18 of WRA.

⁶⁵ <http://www.lexuniverse.com/environment-laws/us/Doctrine-of-Strict-Liability.html> (accessed 25th October 2016).

⁶⁶ GP O'Hara 'Minimizing Exposure to Environmental Liabilities for Corporate Officers, Directors, Shareholders and Successors' (1990) *Santa Clara High T L.J* 1 6.

environmental damage, as courts have repeatedly imposed liability on officers, employees and shareholders.⁶⁷ In order to sustain an environmental damage claim under the doctrine of strict liability, the aggrieved party must be able to satisfy that the activity in question is highly risky and abnormally dangerous one.⁶⁸ Therefore, the objective of the notion of strict liability is to make the polluter liable for the damage caused even in the absence of fault. If polluters have to pay for the environmental damage caused whether negligently or intentionally, they will cut back pollution. Strict liability in environmental law results in prevention of damage and makes the causer of environmental damage pay for remedying the damage caused. The notion of strict liability is recognized under the NEMWA,⁶⁹ and in Nigeria under the HWA.⁷⁰

Against the backdrop of a sustainable development paradigm that incorporates the preventive principle, the doctrine of public trusteeship, the PPP and the notion of strict liability, the aim of this study is to analyse the adequacy of the regulatory framework for water pollution control in Nigeria and to compare it with the regulatory framework of South Africa. To the extent that the Nigerian regulatory framework is inadequate, this study considers, in chapter four, what Nigeria can learn from the South African regulatory framework. For instance, the study seeks to investigate to what extent the Nigerian regulatory framework for water pollution control holds polluters liable, and how to strengthen the regulatory framework. As the state is the custodian of water resources, it is responsible for the sustainable management of water and thus, in addition to polluters, is responsible for managing any pollution.⁷¹ The reason for selecting South Africa as a basis for comparison is that it possess a relatively comprehensive regulatory framework for water pollution control while Nigeria possess a weak regulatory framework for water pollution control and as such can draw inspirations from the South African regulatory framework for water pollution control.

⁶⁷ O'Hara (note 66 above) 5.

⁶⁸ <http://www.lexuniverse.com/environment-laws/us/Doctrine-of-Strict-Liability.html> (accessed 25th October 2016).

⁶⁹ Sec 38(4) of NEMWA & sec 39 (1)(a) of NEMWA.

⁷⁰ Sec 12 (a)(b) of HWA & sec 6 of HWA.

⁷¹ Sec 20 of the Nigerian Constitution.

In the second and third chapters of the study, I outline and evaluate the regulatory frameworks for water pollution control in Nigeria and South Africa respectively by highlighting and discussing various sections in the legislation. The fourth chapter of the study will discuss the problem with the Nigerian regulatory framework and to what extent Nigeria can draw from South Africa to improve on its water pollution control regulatory framework. I will also proffer recommendations in chapter four to overcoming the barriers to effective water pollution control in South Africa and Nigeria. Having set the scene, I now turn to outline the Nigerian regulatory framework for water pollution control.

CHAPTER TWO: OVERVIEW OF THE LAWS GOVERNING WATER POLLUTION CONTROL IN NIGERIA

2.1 Introduction

Chapter one outlines some of the potential dangers that water pollution poses to the environment if not controlled. Given these dangers, it is the duty of the states to deploy adequate policies and measures for the protection of water resources. The Nigerian government does so under a regulatory framework aimed at managing water pollution. Water is continually abused and degraded despite the existence of this regulatory framework, however. The aim of this chapter is to discuss and evaluate the regulatory framework for water pollution control in Nigeria. The regulatory framework for water pollution control in Nigeria is made up primarily of the Nigerian Constitution, the NESREA Act and the WRA which will be the focus of this chapter. This chapter will also outline some of the secondary legislation for water pollution control in Nigeria as well as relevant water policies.⁷² The regulatory framework shall be evaluated and discussed based on the principles outlined in chapter one, including the overarching principle of sustainable development and related principles such as the principle of prevention of harm to the environment, the polluter pays principle, public trusteeship and the tool of strict liability.

2.2 The Nigerian Constitution

The Nigerian Constitution does not include a right to water of certain quality or quantity, nor does it provide for a self-standing right to a healthy environment.⁷³ However, the Nigerian Constitution makes provision for the protection of the environment including water. It provides as an objective and directive principle of state policy, that:-⁷⁴

The state shall protect and improve the environment and safeguard the water, air and land, forests and wild life of Nigeria.

⁷² Other legislation include RBBDA PA ONWA NMA and HWA.

⁷³ E P Amechi 'Litigating Right to Healthy Environment in Nigeria: An Examination of the Impacts of the Fundamental Rights (Enforcement Procedure) Rules 2009, In Ensuring Access to Justice for Victims of Environmental Degradation' *Law Environment and Development Journal* (2010) 320 324.

⁷⁴ Section 20 Nigerian Constitution.

This provision was introduced in the Nigerian Constitution in 1999. It arguably gives effect to the preventive principle by providing that, the state shall protect, improve and safeguard the environment.⁷⁵ However it does not directly impose obligations on private bodies or citizens to do so, nor does it confer a justiciable right to a healthy environment on private bodies or citizens. Before 1999, there were no constitutional provisions concerning the environment. In Nigeria, concern for the environment was almost nonexistent until the Koko incident.⁷⁶ The Koko incident occurred in 1988 when a ship load of toxic nuclear waste materials was dumped on a farm in Koko town near the Sapele river of Delta State, Nigeria.⁷⁷ The toxic materials were imported illegally from Italy by a corrupt contractor who had no regard for the dangerous nature of the toxic nuclear wastes or for the health of the local inhabitants of the village where it was dumped.⁷⁸ This event directly led to the creation of the FEPA (now replaced by NESREA).⁷⁹ Since then, in response to the Koko incident, several other pieces of legislation for water pollution control have been enacted.

The Nigerian Constitution also now provides that the exploration of natural resources in any form whatsoever for reasons other than the good of the community shall be prevented.⁸⁰

Under the second schedule, part 1, item 64, of the Nigerian Constitution, the federal government of Nigeria has exclusive jurisdiction on primary water matters from sources affecting more than one state as may be declared by the National Assembly. In relation to water management, the Nigerian Constitution further grants exclusive legislative powers to the federal government of Nigeria such as fishing in rivers and lakes in item 29 and maritime shipping and navigation in item 36 of part 1, second schedule of the Nigerian Constitution.

⁷⁵ Section 20 Nigerian Constitution.

⁷⁶ SF Liu 'The Koko Incident: Developing International Norms for the Transboundary Movement of Hazardous Waste' (1992) 8 *Journal of Natural Resources & Environmental Law* 121 at 131.

⁷⁷ As above.

⁷⁸ As above

⁷⁹ MT Okorodudu 'Legal Developments 2009-2011' (2012) *IUCN Academy of Environmental Law e-Journal Issue* (1) 170 171.

⁸⁰ Sec 17(2) (d) of Nigerian Constitution.

Thus, although the Nigerian Constitution contains some provisions addressing the management and protection of Nigeria's water resources, it does not contain a right to water or a healthy environment, and constitutional protection of Nigeria's water resources is limited. Protection of Nigeria's water resources could be enhanced by the introduction of justiciable rights to water and a healthy environment, as well as by the imposition of obligations on private bodies and citizens to protect the nation's water resources.

2.3 The NESREA Act

The NESREA Act is a major part of the regulatory framework for the protection of Nigeria's environment.⁸¹ The NESREA Act repealed the Federal Environmental Protection Agency Act of 1988 (FEPA Act) in 2007. The NESREA Act was established in line with section 20 of the Nigerian Constitution.⁸² The NESREA Act establishes an Agency for the protection of Nigeria's environment.⁸³ This Agency is then tasked with:-

the protection and development of the environment, biodiversity conservation and sustainable development of Nigeria's natural resources in general and environmental technology, including coordination and liaison with relevant stakeholders within and outside Nigeria on matters of enforcement of environmental standards, regulations, rules, laws, policies, and guidelines.⁸⁴

The NESREA Act contains, in part II, the enforcement powers of the Agency.⁸⁵ Section 7 of the NESREA Act enumerates the functions of the Agency. The Agency shall enforce compliance with the provisions of international agreements, protocols, conventions and treaties on the environment and such other agreement as may from time to time come into force.⁸⁶ In relation to water pollution control, the NESREA Act provides that the Agency shall enforce compliance with policies, standards,

⁸¹ M T Ladan 'Review of NESREA Act 2007 and Regulations 2009-2011: A New Dawn in Environmental Compliance and Enforcement in Nigeria' *Law Environment and Development Journal* 118 121.

⁸² Ladan (note 81 above) 120

⁸³ Sec 1(1) of NESREA Act

⁸⁴ Sec 2 of NESREA Act

⁸⁵ Sec 7 (a-m) of NESREA Act

⁸⁶ Sec 7(c) of NESREA Act.

legislation and guidelines on water quality, environmental health and sanitation including pollution abatement.⁸⁷ The Agency is required to specifically enforce compliance with guidelines and legislation concerning the sustainable management of the ecosystem and the development of the Nigeria's natural resources.⁸⁸

The Agency is armed with a wide range of powers with a view to ensuring its operations are effective. The Agency can 'prohibit processes and the use of equipment or technology that undermine environmental quality'.⁸⁹ The Agency can conduct public investigations,⁹⁰ and make proposals to the Minister for review of existing guidelines and standards on the environment.⁹¹ With the approval of the Minister, the Agency can establish programmes for setting standards and regulations for the prevention, reduction and elimination of pollution and other forms of environmental degradation in the nation's air, land, oceans, seas and other water bodies.⁹² The NESREA Act, specifically excludes the Ministry of Environment from enforcing compliance in the oil and gas industry.⁹³

If any person obstructs an officer in the performance of his duty he will be liable to a minimum fine of two hundred thousand naira (equivalent to ten thousand rand) or to a term of imprisonment of one year or to both fine and imprisonment, and an additional fine of twenty thousand naira for each day the offence continues.⁹⁴ Where the person obstructing is a sole corporate body, it shall, upon conviction, be liable to a fine of two million naira (equivalent to one hundred thousand rand) and an additional fine of two hundred thousand naira (equivalent to ten thousand rand) for each day the offence continues.⁹⁵

In relation to water pollution, the NESREA Act provides that the Agency shall in collaboration with other relevant agencies, make regulations for the purpose of

⁸⁷ Sec 7(d) of NESREA Act.
⁸⁸ Sec 7(e) of NESREA Act.
⁸⁹ Sec 8(d) of NESREA Act.
⁹⁰ Sec 8(g) of NESREA Act.
⁹¹ Sec 8(k) of NESREA Act.
⁹² Sec 8(o) of NESREA Act.
⁹³ Sec 7(g) of NESREA Act.
⁹⁴ Sec 31 of NESREA Act.
⁹⁵ Sec 31 of NESREA Act.

enhancing water quality and protecting public health.⁹⁶ When making proposals for regulations and standards, the Agency shall take into consideration the use and value of public water.⁹⁷ The Agency is specifically empowered to make regulations and standards for the protection and enhancement of the quality of land resources and natural watershed, including prevention of flood and erosion.⁹⁸ The NESREA Act prohibits the discharge of harmful quantities of any hazardous substance into the air or upon the land and the waters of Nigeria, except where such discharge is permitted or authorized under any law in force in Nigeria.⁹⁹ Any person who is found guilty of discharging hazardous substance into the air or upon the land and waters of Nigeria is liable upon conviction to a fine not exceeding one million naira (equivalent to fifty thousand rand) or a term of five years imprisonment.¹⁰⁰ In the case of a body corporate, it shall, upon conviction, be liable to a fine not exceeding one million naira and an additional fifty thousand naira (equivalent to two thousand five hundred rands) for every day the offence persist.¹⁰¹

For effective enforcement of environmental standards, rules and regulations, the Minister is empowered to make regulations for the general purposes of giving full effect to the functions of the Agency.¹⁰² This power given to the Minister under the NESREA Act has brought about the promulgation of twenty-four regulations. The regulations promulgated that relate to water pollution include the NEMPCOIMR, the NECMAPR and the NESGQCR 2011.¹⁰³ These regulations are structured into 13 parts. I will discuss the regulations that relate to water pollution.

The purpose of the NEMPCOIMR is to minimize pollution from the mining and processing of coal, ore, and industrial mineral.¹⁰⁴ Part 2 of the regulations require

⁹⁶ Sec 23(1) of NESREA Act.

⁹⁷ Sec 23(2) of NESREA Act.

⁹⁸ Sec 26(1) of NESREA Act The legislature has also translated the concept of sustainable development into reality through the enactment of subsidiary regulations under the NESREA Act some of which include National Environmental (Mining and Processing of Coals, Ores, and Industrial Minerals) Regulations (NEMPCOIMR) 2009, National Environmental (Coastal and Marine Area Protection) Regulations (NECMAPR) 2011 and National Environmental (Surface and Ground water Quality Control) Regulations (NESGQCR) 2011.

⁹⁹ Sec 27(1) of NESREA Act.

¹⁰⁰ Sec 27(2) of NESREA Act.

¹⁰¹ Sec 27(3) of NESREA Act.

¹⁰² Ladan (note 81 above) 127.

¹⁰³ Ladan (note 81 above) 128.

¹⁰⁴ Reg 1 of NEMPCOIMR.

that new development in mining processing techniques apply cleaner production technologies to minimize pollution to the highest degree possible.¹⁰⁵ Part 3 of the regulations deals with matters relating to permits, emergency response plan, and polluter pays principle.¹⁰⁶ Part 5 deals with matters relating to industrial waste-water monitoring and reporting requirements.¹⁰⁷ Part 6 of the regulations, covers the duty of the Agency to ensure compliance, enforcement notices, and mode of delivery and suspension of notice by ensuring the modification, suspension or approval for cause, if such activity will likely result in probable harm to the environment and threat to public safety.¹⁰⁸ Part 7 and 8 cover offences and penalties under effluent limitation by serving improvement notice where it has reasonable cause to believe that such activity may likely violate the provisions of the regulation.¹⁰⁹ The improvement notice must contain the person responsible,¹¹⁰ and stipulate the duration of the notice.¹¹¹ Where a person fails to carry out the requirements of the improvement notice such a person commits an offence under the NEMPCOIMR.¹¹² Such a person if found guilty is liable to a fine of two hundred thousand naira (equivalent to ten thousand rands) or a term of imprisonment not exceeding one year,¹¹³ and where the person committing the offence is a body corporate, it will be liable to a fine of five hundred thousand naira (twenty five thousand rands) and ten thousand naira (equivalent to five hundred rands) for everyday the offence continues.¹¹⁴ The schedules to the NEMPCOIMR deal with effluent limitation standards, polluter pays principle, emergency response plan and emission limits for specific pollutants.¹¹⁵ The NEMPCOIMR gives effect to the principle of strict liability and the PPP.

The purpose of the NECMAPR is to provide a regulatory framework for preserving the natural ecological conditions of the estuarine system and beaches, so as to

¹⁰⁵ Reg 2 of NEMPCOIMR.

¹⁰⁶ Reg 10-14 of NEMPCOIMR.

¹⁰⁷ Reg 18 of NEMPCOIMR.

¹⁰⁸ Reg 23-27 of NEMPCOIMR.

¹⁰⁹ Reg 33(1) of NEMPCOIMR.

¹¹⁰ Reg 33(2) of NEMPCOIMR.

¹¹¹ Reg 33(3) of NEMPCOIMR.

¹¹² Reg 34(1) of NEMPCOIMR.

¹¹³ Reg 34(2) of NEMPCOIMR.

¹¹⁴ Reg 34(3) of NEMPCOIMR.

¹¹⁵ MT Ladan 'Minieral Resources Law and Policy in Nigeria' (2014) *Prof Ladan's Law and Policy Review Research Work Papers* 17.

safeguard their natural productivity and their biological, economic and aesthetic values.¹¹⁶

The purpose of the NESGQCR is to restore, enhance and preserve the physical, chemical and biological integrity of the nation's surface and groundwater and to maintain existing water use.¹¹⁷

Any person who violates the regulations made under section 23 (1) of the NESEREA Act either by pollution that occurs through the mining and processing of coal, ore, and industrial mineral, or by polluting the natural ecological conditions of the estuarine system and beaches or the polluting of the nation's surface and groundwater commits an offence and is liable on conviction to a fine not exceeding fifty thousand naira (equivalent to two thousand five hundred rands) or to imprisonment for a term not exceeding one year or both fine and imprisonment. The offender is liable to an additional fine of five thousand naira (equivalent to two hundred and fifty rands) for every day the offence persists.¹¹⁸ Where the offender is a body corporate it shall, upon conviction, be liable to a fine of five hundred thousand naira (equivalent to twenty five thousand rands) and ten thousand naira (equivalent to five hundred rands) for every day the offence persists.¹¹⁹

The NESREA Act gives effect to the preventive principle by prohibiting the discharge of harmful quantities of hazardous substances,¹²⁰ and to the PPP by providing that anyone found guilty of discharging harmful substances is liable upon conviction to a fine of one million naira (equivalent to fifty thousand rand).

Although the NESREA Act contains provisions relating to protection and development of the environment, the NESREA Act does not have specific provisions for removal and clean-up sites affected by pollutants from substances caused by oil exploration and other activities. Protection and development of Nigeria's environment can be enhanced by providing for the removal and clean-up of sites affected by oil exploration activities.

¹¹⁶ Reg 1 of NECMAPR.

¹¹⁷ Reg 1 of NESGQCR.

¹¹⁸ Sec 23(3) of NESREA Act.

¹¹⁹ Sec 23(4) of NESREA Act.

¹²⁰ Sec 27(1) of NESREA Act.

2.4 The WRA

The WRA vests on the federal government of Nigeria the duty to regulate, develop and license all water operators in Nigeria.¹²¹ This includes planning, development, and usage of Nigeria's water resources, protection, and management of water resources, ensuring quality, quantity, distribution, use and management of water.¹²²

The WRA provides that any person may take water without charge for domestic purpose,¹²³ and for the purpose of fishing or for navigation.¹²⁴ A person who possesses a statutory right of occupancy to any land may take or use water from the underground water source without charge for domestic purpose.¹²⁵ Any person or public authority can acquire a right to use or take water from any watercourse or groundwater for any purpose, provided it is in accordance with the provisions of the WRA.¹²⁶ The WRA provides that the diversion, storage, pumping or use on a commercial scale of any water shall be carried out in accordance with a license issued pursuant to the WRA.¹²⁷ Any person in breach of this provision commits an offence.¹²⁸ The WRA provides that for an application of the grant of a license for the use of any water, for the purposes of storage, diversion and commercial scale shall be made to the Minister in such form and manner, and must be accompanied by such relevant information and document the Minister may prescribe from time to time.¹²⁹ The Minister shall, before issuing a license, consider the allocation of usable water in the particular area, and may cancel or modify any licence for the diversion and use of water for the purpose of accommodating the needs of another user of water to which that licence relates.¹³⁰

The Minister is given very wide powers on water regulation, including to issue licenses for water, use of water for commercial scale, operation, and repair of any

¹²¹ Sec 1 of WRA.
¹²² Sec 1 of WRA.
¹²³ Sec 2(a)(i) of WRA.
¹²⁴ Sec 2(a)(ii) of WRA.
¹²⁵ Sec 2(a)(iii) of WRA.
¹²⁶ Sec 3 of WRA.
¹²⁷ Sec 9(1) of WRA.
¹²⁸ Sec 9(2) of WRA.
¹²⁹ Sec 10 of WRA
¹³⁰ Sec 11(b) of WRA

borehole or hydraulic work.¹³¹ The Minister may, define places from which water may be taken or used, define the amount of water which may be taken by any person, prohibit temporarily or permanently the use of water that is hazardous to health.¹³² The Minister may revoke the right to use water where such right overrides the public interest, and license any drilling operations and regulate the place, depth, manner of construction of borehole or well.¹³³ The WRA provides that the Minister shall in the discharge of his duties, have the power to regulate the activities on water, which may likely affect the quality and quantity of the water resource.¹³⁴ The Minister is also empowered to refuse a license, where the activity for the application of such license is likely to interfere with the quality of the water resource.¹³⁵ The Minister in the discharge of his powers and duties is to make provision for the adequate supply of suitable water for animals, irrigation, domestic and non-domestic use, safe disposal of sewage,¹³⁶ and prevention from pollution.¹³⁷ The Minister may make regulations generally for the proper administration of the WRA.¹³⁸

Any person who commits an offence under the WRA is liable upon conviction to a fine not exceeding two thousand naira (one hundred rands) or to a term of imprisonment for a period not exceeding six months or to both such fine and imprisonment, and, in the case of a continuing offence, an additional fine not exceeding hundred naira (five rands) for every day that the offence continues.¹³⁹ What constitutes an offence under the WRA includes any activity that interferes with the quality or quantity of water,¹⁴⁰ and the failure or refusal to use a license granted under the WRA.¹⁴¹

¹³¹ Sec 13 of WRA.

¹³² Sec 4(c) of WRA.

¹³³ Sec 11 of WRA.

¹³⁴ Sec 8(d) of WRA.

¹³⁵ Sec 11(a) of WRA.

¹³⁶ Sec 5(b) of WRA.

¹³⁷ Sec 20 of WRA defines water pollution to be any direct or indirect alteration of the physical, thermal, chemical, biological or radioactive properties of any water or groundwater so as to render such water or groundwater less fit for any beneficial purpose for which it is, or may reasonably be used, or to cause a condition which is hazardous or potentially hazardous to public health, safety, welfare to animals, birds, wildlife, fish or aquatic life, or to plants.

¹³⁸ Sec 19 WRA.

¹³⁹ Sec 18 of WRA.

¹⁴⁰ Sec 11(a) of WRA.

¹⁴¹ Sec 11(c) of WRA.

Although the WRA contains some provisions relating to the management of water resources, the WRA arguably does not give proper effect to any of the international environmental law principles outlined above as it only imposes an inadequate and ineffective liability and compensation provision for any pollution cause to water resources.¹⁴²

Under the WRA, the liability that exists for polluters is seen in sections 18 and 24 of the WRA. These provisions make it an offence to perform any activity that is likely to interfere with water quality or quantity, including pollution. The penalty is limited to a fine of two thousand naira or six months imprisonment. These liability provisions in the WRA are not strong enough to combat water pollution issues in Nigeria. The provisions of the WRA were made primarily to manage water use and not the genuine interest to reduce water pollution. There is a need to enhance the regulatory mechanism in order to ensure and stimulate water pollution prevention in Nigeria by the imposition of stricter liability and compensation provisions.

2.5 Other Legislation

2.5.1 The RBDAA

The RBDAA, set up eleven River Basins Authorities to assist the Federal Ministry of Water Resources. These Authorities are authorized: to undertake comprehensive development of both surface and underground water resources for multi-purpose use with particular emphasis on the provision of irrigation infrastructure and the control of floods and erosion and for water-shed management,¹⁴³ to construct, operate and maintain dams, dykes, polders, wells, boreholes, irrigation and drainage systems, and other works necessary for the achievement of the Authority's functions,¹⁴⁴ to supply water from the Authority's completed storage schemes to all users for a fee to be determined by the Authority concerned, with the approval of the Minister,¹⁴⁵ to construct, operate and maintain infrastructural services such as roads and bridges linking projects sites, provided that such infrastructural services are included and

¹⁴² Sec 18 and 24 of WRA.

¹⁴³ Sec 4(a) of RBDAA.

¹⁴⁴ Sec 4(b) of RBDAA.

¹⁴⁵ Sec 4(c) of RBDAA.

form an integral part of the list of approved projects,¹⁴⁶ to develop and keep up-to-date comprehensive water resources master plan, identifying all water resources requirements in the Authority's area of operation, through adequate collection and collation of water resources, water use, socio-economic and environmental data of the River Basin.¹⁴⁷ In relation to water pollution control the RBBDA provides for the comprehensive development of surface and underground water. The RBBDA gives effect to the doctrine of public trusteeship by providing for river basins authorities to preserve and manage water resource use in a sustainable and equitable manner.¹⁴⁸

2.5.2 The PA

The principal act governing the oil industry and its operations is the PA. The PA grants the Minister of petroleum resources the power to make regulations providing generally for matters relating to licenses or leases granted under the PA including those for the preventing of pollution of water courses and the atmospheres.¹⁴⁹ The PA gives effect to the preventive principle by empowering the minister to make regulations for matters relating to pollution prevention of water resources.¹⁵⁰

The Minister has exercised this power to make the following regulations: the Petroleum (Drilling and Production) Regulations (PDPR) and the Petroleum (Refining) Regulations (PRR).

Under the PDPR, the holder or lessee of petroleum licence is to adopt all 'practicable precautions' for the prevention of pollution of water courses.¹⁵¹ The PRR requires the manager of a refinery to take reasonable measures to prevent and control pollution of the environment.¹⁵² The regulations however, do not make direct provisions on the prevention (and impacted site remediation) of pollution of water courses and the

¹⁴⁶ Sec 4(d) of RBDAA.

¹⁴⁷ Sec 4(e) of RBDAA.

¹⁴⁸ Sec 4(e) of RBDAA.

¹⁴⁹ Sec 9(b)(iii) of PA.

¹⁵⁰ Reg 25 of PDRP.

¹⁵¹ Reg 25 provides that the licensee or lessee shall adopt all practical precautions, including the provision of up-to-date equipment approved by the Director of Petroleum Resources, to prevent the pollution of inland waters, rivers, water-courses, the territorial waters of Nigeria and where any such pollution occurs or has occurred, shall take prompt steps to control and, if possible, end it.

¹⁵² Reg 43(3) of PRR.

atmosphere.¹⁵³ Where any person contravenes the provisions of the PRR such person is punishable by a fine of hundred naira (equivalent of five rands) or to a term of imprisonment for six months.¹⁵⁴

2.5.3 The ONWA

The ONWA is the first law to deal solely with the industrial waste generated by oil production. It is concerned with the discharge of oil from ships.¹⁵⁵ The discharge of oil is prohibited within seaward limits of territorial waters of Nigeria and all other inland waters.¹⁵⁶ Those limits are navigable by sea-going ships. The ONWA makes punishable such discharge with a fine of two thousand naira (equivalent to one hundred rands).¹⁵⁷ The ONWA empowers the harbour authority to appoint a place for the discharge ballast water from vessels, which have carried a cargo of petroleum and such a discharge shall not constitute an offence.¹⁵⁸ The ONWA is concerned with territorial waters of Nigeria. Considering the nature of oil pollution, a question that may arise is what of the near sea outside the territorial waters of Nigeria or those oil terminal outside the prohibited sea areas; how would such navigable waters be protected from oil pollution? These questions were answered adequately by the Oil Terminal Dues Act (OTDA),¹⁵⁹ which makes the provisions of section 3 of the ONWA applicable in any area within which any oil terminal is situated even if it is situated outside the limits of the territorial waters of Nigeria. Therefore, any discharge, escape, from a pipeline, tank, and vessel or as a result of any operation for evacuating oil, from any such oil terminal is an offence and the owner is guilty of an offence under section 3 of the ONWA.

The ONWA is directly applicable to prohibited areas (within Nigerian territorial waters) and designated prohibited areas (outside Nigerian territorial waters), and is indirectly applicable through the OTDA in any area within which any Nigerian oil

¹⁵³ However, ONWA which domesticated International Convention for the Prevention of Pollution of Sea by Oil 1954 to 1962 made detailed provisions for the prevention of pollution of water courses and the sea.

¹⁵⁴ Reg 45 of PRR.

¹⁵⁵ Sec 3 of ONWA.

¹⁵⁶ Sec 3(2)(a) of ONWA.

¹⁵⁷ Sec 6 of ONWA.

¹⁵⁸ Sec 3(3) of ONWA.

¹⁵⁹ Sec 6 of OTDA.

terminal is situated even if outside the territorial waters of Nigeria. The ONWA gives effect to the preventive principle by providing for the prohibition of discharge of oil from ships.¹⁶⁰

2.5.4 The HWA

The HWA prescribes criminal prosecution for dumping of harmful wastes in Nigerian territorial waters or its inland waterways. It provides that any person who, without lawful authority carries, deposits causes to be carried, deposited or is in possession for the purpose of depositing or dumping, any harmful waste on any land or in any territorial waters or contiguous zone or Exclusive Economic Zone of Nigeria or its inland waterways shall be guilty of a crime under the HWA.¹⁶¹ A person shall be deemed to have deposited or dumped harmful waste if he deposits or dumps the harmful waste, whether solid, semi-solid or liquid, in such circumstances, or for such period that such person may be deemed to have abandoned it where it is deposited or have brought it to the place where it is so deposited or dumped for the purpose of its being disposed of.¹⁶²

The HWA provides for a punishment of life imprisonment for offenders as well as the forfeiture of land or anything used to commit the offence.¹⁶³ The HWA provides for the punishment accordingly, of any conniving, consenting or negligent officer where the offence is committed by a company.¹⁶⁴ The HWA defines the civil liability of any offender, by providing that where any damage has been caused by any harmful waste which has been deposited or dumped on any land or territorial waters any person who deposited, dumped the harmful waste shall be liable for the damage except where the damage was due wholly to the fault of the person who suffered it or was suffered by a person who voluntarily accepted the risk thereof.¹⁶⁵ Such offender would be liable to persons who have suffered injury as a result of the offenders act.¹⁶⁶

¹⁶⁰ Sec 3 of ONWA.

¹⁶¹ Sec 2(a) of HWA.

¹⁶² Sec 3(a-b) of HWA.

¹⁶³ Sec 6 of HWA.

¹⁶⁴ Sec 7 of HWA.

¹⁶⁵ Sec 12(1)(a-b) of HWA.

¹⁶⁶ Sec 12 of HWA.

The HWA gives effect to the PPP by providing that the where waste has been dumped on any territorial water the person who dumped such waste shall be liable for the damage.¹⁶⁷ Although, the HWA provides a very stringent sentence of life imprisonment and in addition the forfeiture of any aircraft, vehicle or land connected with or involved with the violation. It has however been observed that there had never been a decided case of any person whether natural or artificial, prosecuted pursuant to the provision of this Act.¹⁶⁸ It is not possible to conclude that no hazardous waste had found its way into Nigeria as contemplated by the Act since its enactment.

2.5.5 The NMMA

The NMMA vests control of all properties and minerals in Nigeria in the State and prohibits unauthorised exploration or exploitation of minerals.¹⁶⁹ All lands in which minerals have been found in commercial quantities shall from the commencement of the NMMA be acquired by the federal government in accordance with the LUA.¹⁷⁰ Property rights in mineral resources shall pass from the government to the person by whom the mineral resources are lawfully won, upon their recovery in accordance with provisions of the NMMA.¹⁷¹ The NMMA provides that no person shall, in the course of exploration or mining, carry out operations, in or under any area held to be sacred or permit injury or destruction of any tree or other thing which is the object of veneration.¹⁷² The NMMA provides that any licensee or lessee who causes injury or damage to any area, tree or thing shall pay fair and adequate compensation to the persons or communities affected by-injury or damage.¹⁷³ The Minister shall establish an Environmental Protection and Rehabilitation Fund for the purpose of guaranteeing the environmental obligations of Holders of Mineral titles as provided

¹⁶⁷ Sec 12(1)(a-b) of HWA.

¹⁶⁸ NC Chinwe 'Legal Framework for the Regulation of Waste in Nigeria' (2010) *An International Multi-Disciplinary Journal* 491 498.

¹⁶⁹ Sec 1 of NMMA.

¹⁷⁰ Sec 1(1) of NMMA.

¹⁷¹ Sec 1(3) of NMMA.

¹⁷² Sec 98(1) of NMMA.

¹⁷³ Sec 98(3) of NMMA.

under the Act.¹⁷⁴ The trustees appointed by the Minister shall operate the fund in accordance with the provisions of the Trustees Investment Act or amendments thereof.¹⁷⁵

The NMMA provides that any person who conducts exploration or mines minerals or carries out quarrying operations that is not in accordance with the provisions of the NMMA, knowingly makes a statement which is false or misleading when making application for mineral title, removes, possesses or disposes of any mineral contrary to the provisions of the NMMA commits an offence.¹⁷⁶ The NMMA provides that any mineral title holder who is guilty of an offence is liable to have such persons licence revoked and on conviction at the first instance, to a fine not less than twenty million naira (equivalent to one million rand), and imprisonment of not less than five years, if the offence is a continuing one, whether or not it is a first offence, the person convicted shall, in addition, be liable to a fine of twenty thousand naira (equivalent to one thousand rand) in respect of each day during which the offence continues.¹⁷⁷

The NMMA gives effect to the principle of PPP by providing that any licensee who causes injury or damage to the environment shall pay fair compensation to the persons or community affected by the damage.¹⁷⁸

2.6 Relevant Water Policies and Authorities in Nigeria

The Nigerian government subscribes, in theory, to the concept of sustainable development as evident in its incorporation into the NPE, discussed above. In furtherance to the objectives of the NPE, certain policies have been formulated to ensure sustainable development based on proper management of the environment in Nigeria. In addition, a number of authorities are conferred with powers in relation to the protection and management of water resources.

¹⁷⁴ Sec 121(1) of NMMA.

¹⁷⁵ Sec 121(3) of NMMA.

¹⁷⁶ Sec 131(1)(a-d) of NMMA.

¹⁷⁷ Sec 133 of NMMA.

¹⁷⁸ Sec 98(3) of NMMA.

2.6.1 The National Water Policy

To increase safe water supply especially domestic in the country, the Federal government enacted a water policy in 2000 for the purpose of meeting the national economic target of improving from 40% in 2000 to 60% by the year 2003, expansion of service coverage to 80% of the population by 2007 and by 2011, 100% sustaining coverage. The supply was to ensure good quality, affordability, free access for all.¹⁷⁹

2.6.2 The National Water Policy Document of 2004

Water abstraction for public water supply is guided by the National Water Policy. In order to meet Nigeria's water supply demand, the policy objectives had been drawn and the guiding principles for implementation. The formulation of the water resources policy was guided by; The Millennium Development Goals (MDGs) and the resolutions of various conferences, conventions and meetings based on the International trends and agreements in water policy. The international trends and agreements in water policy highlighted the fact that water management and development should be conducted on a participatory basis with decision making occurring at the lowest appropriate level.¹⁸⁰

2.6.3 The Federal Ministry of Water Resources

This ministry is charged with the responsibilities of policy advice and formulation, data collection, monitoring and co-ordination of water resources development at the National level.¹⁸¹

2.6.4 The River Basin Development Authorities (RBDAs)

These authorities are charged with the development, operation and management of reservoirs for the supply of bulk water and other uses in their areas of jurisdiction.

¹⁷⁹ K E Chukwu 'Water Supply Management Policy in Nigeria: Challenges in the Wetland Area of Niger Delta' (2015) *European Scientific Journal* 303 312.

¹⁸⁰ Chukwu (note 179 above) 312.

¹⁸¹ Chukwu (note 179 above) 312.

2.6.5 The National Water Resources Institute

This institute is responsible for manpower training, research, development and studies under the National Water Supply Training Network in the water supply sector.

2.6.6 The State Water Agencies

These agencies are responsible mainly for urban, semi urban and rural water supplies. In some States separate agencies exist for rural water supplies and urban and semi-urban water supplies.

2.6.7 The Local Government Authorities

Local government authorities are responsible for the provision of potable water to rural communities.

2.7 Conclusion

This chapter has described the Nigerian regulatory framework for water pollution control. In describing the Nigerian Constitution in this chapter it was observed that the weakness of the Nigerian Constitution is that there is no explicit provision for the right to water and a healthy environment. Another weakness that was also identified in this chapter is that there is no provision in the NESREA Act for the removal and clean-up of sites affected by oil exploration activities. In describing the WRA the weakness identified is that the provisions relating to liability and compensation are weak and not strict enough to curb water pollution and do not serve as a deterrence to subsequent pollution activities. The chapter briefly mentioned other legislation and water policies on water pollution to identify the attempts by the legislative arm of government and government itself to combat the scourge of water pollution. In describing the HWA, the chapter identified that any person convicted for a crime under the HWA shall be liable to life imprisonment, this can be said to be a major strength of the measures in place to tackle water pollution control in Nigeria.

The environmental impact of water pollution has created a challenge which government at all levels must address in order meet the developmental goals of today, and sustain the environment for future generations. There is, therefore, a

need for 'sound environmental management practices and policies to complement economic development.'¹⁸²The next chapter of the study highlights, evaluates and discusses the regulatory framework for water pollution control in South Africa. The reason for this comparative analysis is to consider how to fix the problems and weaknesses with the regulatory framework in Nigeria that this chapter tentatively identified.

¹⁸² S Simpson & O Fagbohun *Environmental Law and Policy* (1998) 349.

CHAPTER THREE: OVERVIEW OF THE LAWS REGULATING WATER POLLUTION CONTROL IN SOUTH AFRICA

3.1 Introduction

South Africa possess a comprehensive regulatory framework for water pollution control. In this chapter, I look into the regulatory framework to observe their strengths and advantages of South Africa's regulatory framework for water pollution control, to serve as a benchmark for the Nigerian regulatory framework for water pollution control. Weakness in the regulatory framework are also be highlighted. In South Africa, the regulatory framework for water pollution control primarily comprises the South African Constitution, the NEMA and the NWA which will be the focus of this chapter. This chapter will also consider other secondary legislation for water pollution control in South Africa.¹⁸³

3.2 The South African Constitution

In contrast with the Nigerian Constitution, the South African Constitution contains a justiciable right to water and a right to a healthy environment. These rights impose obligations on the state and on private bodies and citizens to protect the environment.

Section 27 of the South African Constitution provides that everyone has the right to have access to sufficient water and that the state should take reasonable measures to ensure the progressive realisation of this right. In *Federation for Sustainable Environment and Others v. Minister of Water Affairs and Others*,¹⁸⁴ the applicants invoked their right to water when they approached the court by way of urgency, seeking an order declaring the failure of the respondent to provide access to potable water for more than seven days. The applicants' water supply was polluted as a result of AMD. The court held that in recognition of this right, the state was enjoined to take reasonable measures towards ensuring the realization of the rights

¹⁸³ Other legislation include WSA MPRDA NEMWA and HA.
¹⁸⁴ *Federation* (note 20 above) 140.

highlighted in section 27.¹⁸⁵ Thus the court ordered that steps be taken to ensure that portable water can once again be supplied through the water supply services within 72 hours. Litigation of this kind in response to polluted water would not be possible in Nigeria.¹⁸⁶ This is because most people are impacted by environmental degradation in Nigeria are denied access to justice because of the burdensome procedural rules or injustices in the legal and court systems,¹⁸⁷ including a lack of justiciable rights to water or an environment not harmful to health or well-being.

Section 24 of the South African Constitution provides that everyone has a right to an environment which is not harmful to their health or well-being and to have the environment protected for the benefit of present and future generations.¹⁸⁸ The state is also required to take reasonable measures towards ensuring the realization of this right. Such measures must, amongst other things, prevent pollution and ecological degradation, and secure ecologically sustainable development and use of natural resources while promoting justifiable and economic and social development.¹⁸⁹ By doing so South Africa has elevated the status of environmental protection because the constitution has provided for certain higher orders and protective guarantees of rights to the environment.¹⁹⁰ Environmental rights in Nigerian on the other hand need to be constitutionalized in order to enhance its constitutional protection of the environment and strengthen its regulatory framework for water pollution control.

The South African Constitution gives constitutional recognition to the principle of sustainable development. In *Fuel Retailers v. Director General of Environmental Management Department of Agriculture*, the court held that the concept of sustainable development is a concept which embraces the promotion of development that requires the protection of the environment whilst the environment cannot be protected if development does not pay attention to the costs of

¹⁸⁵ *Federation* (note 20 above) para 17.

¹⁸⁶ Amechi (note 73 above) 331.

¹⁸⁷ Amechi (note 73 above) 323.

¹⁸⁸ Secs 24(a) & (b) South African Constitution

¹⁸⁹ Sec 24 (b) (i) (ii) (iii) South African Constitution.

¹⁹⁰ Louis J. Kotze 'The Conceptual Contours of Environmental Constitutionalism' (2015) *Widener Law* 187 190.

environmental destruction.¹⁹¹ Moreover, it gives effect to the preventive principle by providing that the environment has to be protected for the benefit of the present and future generations and imposing a duty on the state to put in place reasonable legislative and other measures that prevent pollution. The key legislative measures enacted are addressed next.

3.3 The NEMA

To give effect to section 24 of the South African Constitution, the government promulgated the NEMA as the general framework legislation for the protection of the environment in South Africa.¹⁹² The NEMA creates a platform for cooperative environmental governance by establishing institutions that will promote cooperative governance and enforcement of environmental management laws.¹⁹³ The NEMA entrenches a number of environmental management principles that give effect to sustainable development.¹⁹⁴ These principles recognize, amongst others, the doctrine of public trusteeship and the polluter pays principle as crucial components of South African environmental governance.¹⁹⁵

The NEMA entrenches the principle of public trust by providing that the environment is held in public trust for the people and the environment must be protected as the people's common heritage.¹⁹⁶ The doctrine of public trust vests the state authority with necessary power to regulate access and use of resources for the benefit of current and future generations.¹⁹⁷ The significance of this environmental principle is to serve as a guideline which organs of state must exercise when taking decisions in terms of any statutory provisions concerning the environment, and such decision must ensure that development is socially, environmentally and economically sustainable.¹⁹⁸ The NEMA provides that the cost of remedying pollution and

¹⁹¹ *Fuel Retailers v. Director General of Environmental Management Department of Agriculture* (2007) ZACC 13 para 44.

¹⁹² Sec 2 of NEMA.

¹⁹³ Sec 3 of NEMA.

¹⁹⁴ *Fuel Retailers v. Director General of Environmental Management Department of Agriculture* (2007) ZACC 13 para 61.

¹⁹⁵ Sec 2(4) of NEMA.

¹⁹⁶ Sec 2(4)(o) of NEMA.

¹⁹⁷ Van der Schyff (note 50 above) 379.

¹⁹⁸ *Sasol Oil (Pty) Ltd and Another v Metcalfe NO* (17363/03) [2004] ZAGPHC 25 para 15.

environmental degradation must be paid for by those responsible for the harm to the environment and thus recognizes PPP.¹⁹⁹

The NEMA provides for unexpected, sudden and uncontrolled release of a hazardous substance, which causes, has caused or may cause significant harm to the environment, human life or property.²⁰⁰

The NEMA imposes a duty of care on polluters in that it provides that anyone who causes, has caused or may cause degradation to the environment must ensure that such person must prevent such degradation from occurring or minimize and rectify such pollution or degradation to the environment.²⁰¹ This provision is aimed at giving effect to PPP by providing that reasonable measures, such as investigating, evaluating and assessing the impact of pollution on the environment, containing and preventing the movement of pollutants and eliminating any source of pollution, be taken by the person who has caused significant damage to the environment to prevent pollution from occurring.²⁰² Particularly in Section 2 (4) (p) of the NEMA, which provides that the costs of remedying pollution, environmental degradation and consequent health effects must be paid for by those responsible for environmental pollution.

The NEMA provides for vicarious liability of controlling officers of corporation, by providing that a person who is or was a director of a firm at the time of the commission by that firm of an offence under any provision listed in schedule 3 shall himself or herself be guilty of the said offence and liable on conviction to the penalty specified in the relevant law.²⁰³ A person is guilty of an offence under the NEMA if that person unlawfully or negligently commits an act which causes significant pollution or degradation to the environment.²⁰⁴ A person is guilty of an offence under the NEMA if that person unlawfully commits any act which detrimentally affects the environment,²⁰⁵ and fails to comply with a directive issued in terms of the NEMA.²⁰⁶

¹⁹⁹ Sec 2(4)(p) of NEMA.

²⁰⁰ Sec 30(1)(a) of NEMA.

²⁰¹ Sec 28(1) of NEMA.

²⁰² Sec 28 (3) of NEMA.

²⁰³ Sec 34(5-8) of NEMA.

²⁰⁴ Sec 49A(1)(e) of NEMA.

²⁰⁵ Sec 49A(1)(f) of NEMA.

²⁰⁶ Sec 49A(1)(g) of NEMA.

Any person convicted of any offence under the NEMA is liable to a fine not exceeding ten million rand or to imprisonment for a period not exceeding ten years or both fine and imprisonment.²⁰⁷ This liability provision of the NEMA is stricter and more stringent than the NESREA Act because any person convicted of an offence under the NESREA is liable to a fine of fifty thousand rands or a term of five years imprisonment.

The NEMA unlike the NESREA is a stronger and more comprehensive statute aimed at water pollution control because the NEMA provides for environmental governance and sustainable management of the eco- system by providing that anyone who causes pollution or degradation to the environment must take reasonable measures to prevent such pollution or degradation from occurring while the NESREA Act prohibits discharge of harmful substances upon any land or water in Nigeria. The advantage of the provisions of the NEMA unlike the NESREA Act is that they are more extensive, impose an obligation to take reasonable measures to prevent pollution from occurring and impose greater liability provisions for pollution activities by providing that the cost of remedying pollution and degradation be paid for by those responsible for the harm to the environment.

3.4 The NWA

The NWA is an important part of the regulatory framework for water pollution control in South Africa. The NWA was signed into law with a view to regulating the manner in which people of South Africa access and use water and providing for just and equitable utilization of the water resources.²⁰⁸ The NWA is based on a constitutional right of access to clean water and recognizes that water is a natural resource and belongs to everyone.²⁰⁹ The NWA provides that as the public trustee of the nation's water resources the National Government must ensure that water is protected, managed, developed and controlled in a sustainable and equitable manner for the benefits of all persons and in accordance with the South African Constitution.²¹⁰

²⁰⁷ Sec 49B(1) of NEMA.

²⁰⁸ Sec 2 of NWA.

²⁰⁹ Sec 21 of NWA.

²¹⁰ Sec 1 (3) of NWA.

The rationale for the protection of water resources was clearly stated by Kotzé and Bosman as the need to preserve and conserve water in a water-stressed country like South Africa.²¹¹ Kotzé and Bosman point out:

The sustainability of water provision, and the costs associated with the prevention and remediation of pollution of South African water resources by individuals and industry alike, is an ever-continuing concern in a country with an average rainfall is far below international norms.

This rationale is in accordance with the South African Constitution, which guarantees a constitutional right of access to water for every citizen.²¹²

The minister under the NWA may determine the quantity of water which an authority can issue.²¹³ The minister makes regulations for limiting the purpose and manner of water use.²¹⁴ The NWA states that for the use of water found underground on the property of another, a license will be required by the applicant if the owner of the land consents.²¹⁵ Another purpose of the NWA is to reduce and prevent the pollution of water resources.²¹⁶ Under the NWA water pollution is defined as:-²¹⁷

the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it less fit for any beneficial purpose of which it may reasonably be expected to be used, or harmful or potentially harmful to the welfare, health or safety of human beings, to any aquatic or non- aquatic organisms to the resource quality or to property.

The purpose of the NWA in relation to water pollution control is to ensure that South Africa's water resources are protected, used, conserved, managed and controlled in such a manner as to ensure pollution prevention and degradation of water resources.²¹⁸ It provides that the owner of a land or occupier must take all reasonable measures to ensure that such person prevents pollution from

²¹¹ L Kotzé & C Bosman 'A Legal Analysis of the Proposed Waste Discharge System in Terms of the South African Environmental and Water Law Framework' (2006) *Obiter* 128 136.

²¹² Sec 27 of the South African Constitution states, amongst others that: '(1) Everyone has the right to have access to – (a) health care services, including reproductive health care; (b) sufficient food and water; and (c) social security including, if they are unable to support themselves and their dependants, appropriate social assistance. (2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of these rights'.

²¹³ Sec 23(1) of NWA.

²¹⁴ Sec 26(1)(a) & (b) of NWA.

²¹⁵ Sec 24 of NWA.

²¹⁶ Sec 2(h) of NWA.

²¹⁷ Sec 1 of NWA.

²¹⁸ Sec 2(h) of NWA.

occurring.²¹⁹ This provision is aimed at giving effect to PPP. In *Harmony Gold Mining Co Ltd v Regional Director: Free State Department of Water Affairs and Forestry and Another* the court held that the provisions imposing obligation to take reasonable anti-pollution measures were wide enough to require Harmony to take such measures, not only in its own mine but also on the facts of the case, in the mines of other companies.²²⁰ The reasonable measures that may be taken include measures to cease, modify or control any act or process causing the pollution and to comply with any prescribed waste standard or management practice.²²¹ Any person who fails to take reasonable measures required may be directed by a catchment management agency to commence taking specific measures before a given date and complete them before the given date.²²² If a person fails to comply or complies inadequately with any given directive, the catchment management agency may take the measures it considers necessary to remedy the situation.²²³ The catchment management agency may recover all cost incurred from taking measures necessary to remedy the situation from any person who is or was responsible for the pollution, the owner of the land at the time of the pollution, the person in control of the land at the time when the activity was performed and any person who negligently failed to prevent the activity.²²⁴ In comparison to the WRA, this provision of the NWA is a good provision as it compels polluters to take reasonable measures to control any act or processes causing pollution as well as enable the incidents of liability to be clear on whom it falls on.

The NWA provides for emergency incidents such as incidents where substances are likely to pollute or have a detrimental effect on a water resource.²²⁵ The NWA provides that the responsible person must ensure all reasonable measures to reduce the effects of the incident are taken.²²⁶ These measures must be necessary to minimize the effect of the incident.²²⁷ The advantage of this provision of the NWA is

²¹⁹ Sec 19 of NWA.

²²⁰ *Harmony Gold Mining Company Ltd v Regional Director: Free State Department of Water Affairs* (971/12) [2013] ZASCA 206 para 21.

²²¹ Sec 19(2)(a)–(f) of NWA

²²² Sec 19(3)(a)–(c) of NWA.

²²³ Sec 19(4) of NWA.

²²⁴ Sec 19(5)(a)–(d) of NWA.

²²⁵ Sec 20(1) of NWA.

²²⁶ Sec 20(2) of NWA.

²²⁷ Sec 20(6) of NWA.

that it enables the incidents of liability to be clear on whom it falls. While the incident is still fresh and the environment is in danger of being degraded, the “relevant authority”²²⁸ moves in quickly to contain and minimise the effects of the emergency incident, undertake clean-up procedures, and remedy the effects of the incident.²²⁹ The relevant authority may claim a refund of all reasonable costs from every responsible person jointly and severally.²³⁰ In *Lascon Properties (Pty) Ltd v Wadeville Investment Co (Pty) and Another*, the escape of water containing injurious matter from the mine was an issue.²³¹ The mines and works regulations prohibited the escape of such water without having been rendered harmless. The purpose of the regulation was to benefit the owner of land which might be polluted as a result of the actions of a mining company.²³² The court held that the legislature would not have imposed an obligation to prevent the escape of noxious water without intending that persons harmed are thereby entitled to be compensated by the person permitting the water to escape.²³³

The NWA provides for vicarious liability of controlling officers of corporation,²³⁴ in that it provides that person who is or was a director of a firm at the time of the commission by that firm of an offence under any provision listed in schedule 3 shall himself or herself be guilty of the said offence and liable on conviction to the penalty specified in the relevant law. This provision is important since it applies to any prosecution listed in schedule 3 of the NWA. The NWA provides that it is an offence to unlawfully commit any act which pollutes or is likely to pollute a water resource.²³⁵ It is an offence under the NWA to negligently or intentionally commit any act which detrimentally affects a water resource.²³⁶ Where a person fails to comply with the directive issued under the prevention and remedying effects of pollution, such person commits an offence.²³⁷ Any person guilty of an offence is liable on first conviction to a fine or imprisonment for a period not exceeding five years or to both.

²²⁸ Sec 20 of NWA is similar with Sec 30 of the NEMA.

²²⁹ Sec 30 (8) NEMA.

²³⁰ Sec 30 (9) NEMA.

²³¹ *Lascon Properties (Pty) Ltd v Wadeville Investment Co (Pty) and another* 1997 (4) SA 57 (W).

²³² Lacson (note 231 above) 583 B-C.

²³³ Lacson (note 231 above) 583 C-D.

²³⁴ Schedule 3 contain national and provincial legislature.

²³⁵ Sec 151(1)(i) of NWA.

²³⁶ Sec 151(1)(j) of NWA.

²³⁷ Sec 151(1)(d) of NWA.

In the case of a subsequent conviction, the offender is liable to a fine or imprisonment for a period not exceeding ten years.²³⁸

The NWA, unlike the WRA, gives effect to the preventive principle by providing that the owner or occupier of a land must take all reasonable measures to prevent pollution from occurring,²³⁹ and to the strict liability principle by providing that anyone responsible for damaging a water resource must take reasonable measure to reduce the effect of such incident.²⁴⁰

One may conclude that the regulatory framework and measures in place to tackle and control water pollution in South Africa under the NWA contain rigorous, sufficient and comprehensive liability provisions because they explicitly allow for polluters to be held liable for their negligent and intentional polluting acts. The NWA is a stronger and more comprehensive statute aimed at water pollution control than the WRA because the sanctions and penalties inherent in the NWA for water pollution control are more severe and are aimed at making polluters accountable so as to make water safe and clean for use,²⁴¹ as opposed to those contained in the WRA, which impose inadequate penalties and thus fails to hold polluters accountable.²⁴²

3.5 Other Legislation

3.5.1 The WSA

The WSA works alongside with the NWA. The WSA contains provisions which deal with the supply of water services including sanitation by municipal and local authorities. The specific objectives of the WSA include achieving the right of access to basic water supply and the right to basic sanitation services necessary to secure sufficient water and an environment not harmful to human health and wellbeing.²⁴³ In order to implement the objectives of the WSA, the legislation establishes several

²³⁸ Sec 151(2) of NWA.

²³⁹ Sec 19 of NWA.

²⁴⁰ Sec 20(2) of NWA.

²⁴¹ Sec 151(2) of NWA.

²⁴² Sec 18 and 24 WRA.

²⁴³ Sec 1(xix) of WSA.

water services institutions being the water service authorities, water service providers, water services intermediaries, water boards and water service committees.²⁴⁴ The WSA defines ‘water services’ as water supply services and sanitation services” and this includes:- ²⁴⁵

the collection, removal, disposal, or purification of human excreta, domestic waste- water, sewage, and effluent resulting from the use of water for commercial purposes.

The WSA provides that no person may dispose of industrial effluent in any manner other than that provided by the water services provider nominated by the water services authority having jurisdiction in the area in question.²⁴⁶ Under the WSA, the Minister may, from time to time, prescribe compulsory national standards relating to, the quality of water taken from or discharged into any water services which, provides for water for industrial use or controls a system through which industrial effluent is disposed of and circumstances when such provision or disposal can be limited and prohibited.²⁴⁷ The WSA provides that every Water Board must obtain a permit, authorisation or licenses from the relevant authority for abstracting water or discharging effluent.²⁴⁸

In 2001 regulations were passed prescribing the minimum standard as – ²⁴⁹

(1) the provision of appropriate education in respect of effective water use; and a minimum quantity of potable water of 25 litres per person per day or 6 kilolitres per household per month:-²⁵⁰

²⁴⁴ Sec 28 of WSA.

²⁴⁵ Sec 7 (1) of WSA.

²⁴⁶ Sec 7 (2) of WSA.

²⁴⁷ Sec 21(3) of WSA.

²⁴⁸ Sec 32(4) of WSA.

²⁴⁹ See Regulation 3 in Notice No 509 in Government Gazette No 7079 dated 8 of June 2001

²⁵⁰ See *Mazibuko v City of Johannesburg & ors* (2010) 4 SA 1 (CC) where it was contended that the Municipality of Johannesburg denied the applicants access to water by switching off free water supply and installing prepaid meters in the premises of the applicant. The case concerns two major issues: the first is whether the City’s policy in relation to the supply of free basic water, and particularly, its decision to supply 6 kilolitres of free water per month to every accountholder in the city (the Free Basic Water policy) is in conflict with section 27 of the Constitution or section 11 of the Water Services Act. The second major issue is whether the installation of pre-paid water meters by the first and second respondents in Phiri was lawful. After careful consideration of the issues, this judgment finds that the City’s Free Basic Water policy falls within the bounds of reasonableness and therefore is not in conflict with either section 27 of the Constitution or with the national

- (a) at a minimum flow rate of not less than 10 litres per minute;
- (b) within 200 metres of a household; and
- (c) with effectiveness such that no consumer is without supply for more than seven full days in any year.

The WSA gives effect to the idea of sustainable and equitable use of water by providing for a right to basic water supply and sanitation services necessary to secure water and the environment.²⁵¹

3.5.2 The HA

The HA provides that every local authority shall take all lawful, necessary and reasonably practicable measures to maintain its district at all times in a hygienic and clean condition to prevent the occurrence of any nuisance, any unhygienic condition, or any other condition which will or could be harmful or dangerous to the health of any person within its district or the district of any other local authority, to prevent the pollution of any water intended for the use of the inhabitants of its district, irrespective of whether such water is obtained from sources within or outside its district, or to purify such water which has become so polluted.²⁵²

The HA enables every local authority to take all lawful, practicable and reasonable measures to prevent the pollution of any water intended for the use of the inhabitants of its district irrespective of whether such water is obtained from sources within or outside its district or to purify such water which has become polluted.²⁵³ The HA also gives powers to the Minister to pass regulations in this matter in order to avoid conditions that pose a threat to human health, any person who contravenes or fails to comply with any of its provision including the prevention of water pollution is guilty of an offence under the HA,²⁵⁴ and is liable on conviction to a term of five years imprisonment or to both fine and imprisonment.²⁵⁵ The HA gives effect to the

²⁵¹ legislation regulating water services. Accordingly, the orders made by the Supreme Court of Appeal and the High Court were set aside.

²⁵² Sec 1(xix) of WSA.

²⁵³ Sec 20 of HA.

²⁵⁴ Sec 20(1)(c) of HA.

²⁵⁵ Sec 89(1) of HA.

²⁵⁵ Sec 89(2) of HA.

preventive principle by providing that all reasonable measures must be taken to prevent the pollution of any water intended for human use.²⁵⁶

3.5.3 The NEMWA

The NEMWA was enacted to deal with waste management and pollution issues arising from waste. The NEMWA provides for the identification of so-called 'investigation areas' by the Minister or Member of the Executive Council (MEC). Land which has been identified as 'investigation areas' is either land on which high-risk activities take place, or have taken place, and that may result in land contamination, or specified land that the Minister or MEC believes to be contaminated.²⁵⁷ A 'high-risk activity' is an activity which involves processes or substances which present a likelihood of harm to human health or the environment.²⁵⁸

The NEMWA places a responsibility on either the owner of land that is significantly contaminated, or a person who undertakes an activity which caused the land to be significantly contaminated, to notify the Minister of that contamination when such person becomes aware, or ought to have become aware, of that contamination.²⁵⁹ The NEMWA provides that notwithstanding the provision of section 36(1), the Minister or MEC may issue a written notice to a particular person identifying specific land as an investigation area if the Minister or MEC reasonably believes that the land is or is likely to be contaminated.²⁶⁰

A report of such contaminated site shall also be prepared by an independent person, at own cost, which is called site assessment report which must be submitted to the Minister or MEC within a period specified in the notice.²⁶¹ The objective of the site assessment is to ascertain whether the site is contaminated and to assess the risk such contamination presents to health or the environment.²⁶²

²⁵⁶ Sec 20 of HA.
²⁵⁷ Sec 36 (1) of NEMWA.
²⁵⁸ Sec 1 of NEMWA.
²⁵⁹ Sec 36(5) of NEMWA.
²⁶⁰ Sec 36(6) of NEMWA.
²⁶¹ Sec 37(1) of NEMWA.
²⁶² Sec 38(1) of NEMWA.

If contamination and remediation is required, then the Minister or MEC must declare the site to be a remediation site, and may make such remediation order as is necessary to 'neutralise that risk'.²⁶³ If remediation is not required, but the risk is such that requires monitoring or management, then the Minister or MEC may make an order regarding the measures to be taken.²⁶⁴ Unless otherwise directed, such orders must be complied with at the cost of the person to whom the order is issued.²⁶⁵ The remediation order must describe, 'the person who is responsible for undertaking the remediation'.²⁶⁶ The NEMWA gives effect to the principle of strict liability by providing for the person responsible for undertaking remediation of the environment,²⁶⁷ and the preventive principle by providing for site assessment to assess the risk such contamination to the environment.²⁶⁸ Anyone who disposes of waste at a facility that does not accept waste and negligently or intentionally causes spill or litter from a vehicle is guilty of an offence and liable to a fine of five million rand.²⁶⁹

3.5.4 The MPRDA

The MPRDA repealed the Minerals Act and provided for a set of regulations on water management and pollution control. The regulations provide that the NWA shall apply to the water management and pollution control at all proposed or existing prospecting or mining operations,²⁷⁰ and an assessment of the impacts relating to water management and pollution control at proposed prospecting or mining operations,²⁷¹ and disposal of waste materials.²⁷² Where appropriate, such assessment must form part of the environmental impact assessment report and environmental management programme or plan.

²⁶³ Sec 38(2) of NEMWA.

²⁶⁴ Sec 38(3) of NEMWA.

²⁶⁵ Sec 38(4) of NEMWA.

²⁶⁶ Sec 39(1)(a) of NEMWA.

²⁶⁷ Sec 39(1)(a) of NEMWA.

²⁶⁸ Sec 38(1) of NEMWA.

²⁶⁹ Sec 68(2) of NEMWA.

²⁷⁰ See Reg 68(1) of the MPRDA R 527 Government Gazette No 26275 dated 23 April 2004.

²⁷¹ See Reg 68(2) of the MPRDA R 527 Government Gazette No. 26275 dated 23 April 2004.

²⁷² See Reg 69(2) of the MPRDA R 527 Government Gazette No. 26275 dated 23 April 2004.

The coming into force of the MPRDA was accompanied by a comprehensive set of regulations which include extensive environmental provisions. These regulations now provide for different details on how to implement the MPRDA. The Minister has made regulations on the use of water for mining and related activities aimed at the protection of water resources,²⁷³ these regulations contain measures to deal with water pollution that may result from mining activities. The MPRDA provides for a remedial measure that may be taken by the Minister in any mining, exploration or production operations or activities that may cause or results in ecological degradation, pollution or environmental damage.²⁷⁴ The Minister, in consultation with the Minister of Environmental Affairs and Tourism, may direct the holder of the relevant right or permit in terms of the MPRDA to investigate, evaluate, assess and report on the impact of any pollution or ecological degradation,²⁷⁵ take such measures as may be specified in such directive in terms of the MPDRA,²⁷⁶ complete such measures before a date specified in the directive.²⁷⁷ The MPRDA provide for offences,²⁷⁸ and penalties against anyone who contravenes the provision of the MPRDA.²⁷⁹ The MPRDA gives effect to the PPP by providing for remedial measures to be taken when pollution occurs from any mining or exploration activity.²⁸⁰

3.6 Conclusion

This chapter examined the primary regulatory framework for water pollution control in South Africa and made the following observations. In contrast with the Nigerian regulatory framework, the South African Constitution creates a constitutional mandate for everyone to be given access to sufficient water and an environment that is not harmful to health or well-being. The South African Constitution has constitutionalized the protection of the environment, which enhances and strengthens its regulatory framework for water pollution control. Further, the South African environmental legislation imposes detailed obligations on polluters in the

²⁷³ Sec 38(1)(e) of NEMWA.

²⁷⁴ Sec 45(1) of MPRDA.

²⁷⁵ Sec 45(1)(a) of MPRDA.

²⁷⁶ Sec 45(1)(b) of MPRDA.

²⁷⁷ Sec 45(1)(c) of MPRDA.

²⁷⁸ Sec 98(1)(a-c) of MPRDA.

²⁷⁹ Sec 99(1-2) of MPRDA.

²⁸⁰ Sec 45(1) of MPRDA.

NEMA, the general framework legislation for the protection of the environment in South Africa, by providing that the cost of remedying pollution and environmental degradation be paid for by those responsible for the harm done to the environment. Further, the NWA focuses on the reduction and prevention of the pollution of water resources by the imposition of rigorous, sufficient and comprehensive liability provisions to tackle water pollution and ensure sustainable utilization of water by providing that a person guilty of an offence under the NWA shall be liable to five years imprisonment upon first conviction and ten years imprisonment in the case of subsequent conviction.

The chapter looked into other legislation on water pollution control in South Africa to see how it has structured its regulatory framework for water pollution control to achieve its status. With reference to water pollution control, the South African regulatory framework provides for specific legislation to deal with issues like effluent discharge. In South Africa, the regulatory framework for water pollution control provides for the imposition of a duty of care and emergency incidents. This goes to show that in contrast with the Nigerian regulatory framework in South Africa is specific and comprehensive. The next chapter will consider to what extent Nigeria can draw from South Africa to improve its regulatory framework for water pollution control.

CHAPTER FOUR: DRAWING ON SOUTH AFRICAN REGULATORY FRAMEWORK TO IMPROVE NIGERIAN REGULATORY FRAMEWORK FOR WATER POLLUTION CONTROL

4.1 Introduction

In the preceding chapters of this study I highlighted and discussed the regulatory framework for water pollution control in Nigeria and South Africa and how they give effect to the emerging environmental law principles and sustainable development. In discussing the South African regulatory framework, I identified the strength and advantages inherent in the legislation that can serve as a benchmark for Nigeria. The focus of this chapter is to identify the weaknesses of the Nigerian regulatory framework and to know to what extent Nigeria can draw from South Africa to improve its regulatory framework for water pollution control. The chapter concludes with giving recommendations and conclusion to overcoming the barriers to effective water pollution control in South Africa and Nigeria.

The regulatory frameworks for water pollution control in South Africa and Nigeria create offences and penalties for water pollution in different manners. Water polluters are punished by imposing fines, to imprisonment or both.²⁸¹ In most cases, corporations pollute water in their activities and measures have been taken to punish corporate bodies as well as corporate officers.²⁸² In order to deter harmful acts and remedy damage as fully as possible, legal consequences are attached to those acts which cause injury.²⁸³ Therefore to redress the harm done to a party where a water pollution incident has occurred either through accident or by negligence, it is necessary for certain measures to be taken by the state having a responsibility to mitigate the accident and redress the harm done to the victim. Weaknesses of the Nigerian regulatory framework will be identified in the next part of this chapter.

²⁸¹ Sec 151 of NWA & Sec 18 of WRA.

²⁸² Schedule 3 contain national and provincial legislature.

²⁸³ A Kiss & D Shelton *International Environmental Law* (1991) 347.

4.2 Weaknesses the Nigerian Regulatory Framework for water pollution control

The first key weakness of Nigeria's regulatory framework for water pollution control is that although the Nigerian Constitution recognizes a number of fundamental rights, these do not include economic, social and cultural rights. There still exists the problem of environmental degradation due to the unwillingness to shift towards environmental responsible behavior, induced either by corruption, or economic benefits derived from activities of degrading industries in the form of revenue and employment opportunities or need to attract foreign investment.²⁸⁴ The Nigerian Constitution recognizes, within its fundamental objectives that the state shall protect and improve the environment and safeguard the water, air and land forest and wildlife of Nigeria.²⁸⁵ In order to enhance the protection of Nigeria's water resources, it is imperative that the protection of the environment and water of the Nigerian Constitution be made justiciable rights, so as to ensure effectiveness in promoting access to justice for victims of environmental degradation. This is because Nigeria's economy depends heavily on the petroleum industry and it is important to ensure the sustainable use and management of water resources. The Nigerian Constitution ought to be enhanced by affirming the right of every Nigerian to enjoy a clean and healthy environment and a right to access to clean water.²⁸⁶

A second weaknesses of the regulatory framework in Nigeria is that the repeal of FEPA, and its replacement with the NESREA Act, specifically excludes the Ministry of Environment from enforcing compliance in the oil and gas industry,²⁸⁷ which further inhibits government ability to ensure effective control of water pollution.²⁸⁸ This exclusion of the Ministry of Environment from enforcing compliance of the oil and gas industry creates a conflict of interest situation and most likely than not the environment gets the short end of the stick.

The NESREA Act provides that the Agency shall establish effluent limitations for new point sources which shall require the application of the best control technology

²⁸⁴ Amechi (note 73 above) 322.

²⁸⁵ Sec 20 of Nigerian Constitution.

²⁸⁶ Amechi (note 73 above) 327.

²⁸⁷ Sec 7(g) NESREA Act.

²⁸⁸ Okorodudu (note 79 above) 179.

currently available and implementation of the best management practices.²⁸⁹ This has been done with the enactment of regulations such as the NEMPCOIMR to govern the control of effluent arising from mining and mineral resources operations. The Agency shall also review effluent limitations for existing point sources which shall require the application of the best management practices, under circumstances as determined by the Agency, and shall include, schedules of compliance for installation and operation of the best practicable control technology as determined by the Agency.²⁹⁰

A third weakness of the regulatory framework is that the NESREA Act does not have specific provision for removal and clean-up of sites affected by pollutants from substances caused by oil exploration activities. The relevant section states:

The Agency shall co-operate with other Government agencies for the removal of any pollutant excluding oil and gas related ones discharged into the Nigerian environment and shall enforce the application of best clean-up technology currently available and implementation of best management practices as appropriate.²⁹¹

The reliance of the Agency on appropriate technology which it calls 'best-clean up technology' and 'best management practices' are not available locally in Nigeria. The reliance on this foreign technology and technical know-how seriously hamper efforts at the removal of pollutants and clean-up of affected sites.²⁹²

A fourth weakness is that the Nigerian regulatory framework generally lacks effective penalties and sanctions for violations of the provisions of water pollution legislation. For instance, under the WRA, water polluters are punished by an imposition of a fine not exceeding two thousand naira (equivalent to one hundred rands) or a term of imprisonment of six months.²⁹³ Also, under the NESREA Act, any person who is found guilty of discharging hazardous substance into the air or upon the land and waters of Nigeria is liable upon conviction to a fine not exceeding one million naira

²⁸⁹ Sec 24(1) of NESREA Act.

²⁹⁰ Sec 24(2) of NESREA Act.

²⁹¹ Sec 29 of NESREA Act.

²⁹² H Ijaiya & OT Joseph 'Rethinking Environmental Law Enforcement in Nigeria' (2014) *Beijing Law Review* 306 315.

²⁹³ Sec 18 of WRA.

(equivalent to fifty thousand rand) or a term of five years imprisonment.²⁹⁴ These sanctions for polluting water resources in Nigeria are grossly inadequate as they do not even come close to addressing the clean-up of sites affected by pollution and do not provide an incentive for subsequent water polluters. The provisions relating to sanctions inherent in the WRA does not provide for adequate redress to harm caused by water pollution.²⁹⁵

The government's failure to regulate the human rights impact of water pollution or ensure access to justice for victims of human rights abuses involving water pollution was illustrated by its response to the oil-bearing communities of Niger Delta region of Nigeria. The sanctions imposed did not require proper remediation and compensation.²⁹⁶ People living in Niger Delta region have to drink, cook with and wash in polluted water.²⁹⁷ They eat fish contaminated with oil and other toxins, if they are lucky enough to be able to still find the fish.²⁹⁸ The land they farm is being destroyed and yet neither the government nor the oil companies monitored the human impact of oil pollution.²⁹⁹

A fifth weakness of the regulatory framework in Nigeria is that there are some apparent overlapping constitutional responsibilities between the three tiers of government and between state governments, some of which have not been optimally managed.³⁰⁰ Although the Nigerian Constitution contains provisions addressing the management and protection of water resources by providing for the protection and improvement of the environment, the creation of regulation for the purpose of enhancing water quality in the NESREA Act and the development and licensing of all water operators in Nigeria, the Nigerian Constitution fails to provide for a right to a healthy environment, the NESRA Act does not provide for removal of clean-up of sites affected by pollutants from oil exploration and polluting activities and the WRA does not make provision for adequate compensation measure.

²⁹⁴ Sec 27 (2) NESREA Act.

²⁹⁵ A Musa & HY Bappah 'Issues and Challenges on Environmental Rights: The Nigerian Experience' (2014) American International Journal of Social Science 143 150.

²⁹⁶ As above.

²⁹⁷ As above.

²⁹⁸ As above.

²⁹⁹ As above.

³⁰⁰ Ijaiya (note 13 above) 17.

4.3 The Extent to which Nigeria can draw from South Africa to Improve its Regulatory Framework for Water Pollution Control

The South African Constitution provides for a right to have access to sufficient water, a right to a healthy environment and to have the environment protected for present and future generation. The Nigerian Constitution on the other hand does not explicitly provide for a right to access to sufficient water or a right to a healthy environment, and in order to achieve the guaranteeing of these rights, section 20 of the Nigerian Constitution should be made justiciable.³⁰¹ With reference to the South African Constitution, which specifically provides for the incorporation of constitutional environmental rights, the right enshrined under section 20 ought to be delisted and reenacted under the Fundamental Rights Enforcement Chapter of the Nigerian Constitution.

The NEMA provides for environmental governance and sustainable management of the eco-system by providing that anyone who causes pollution or degradation to the environment must take reasonable measures to prevent such pollution or degradation from occurring. The NESREA Act does not impose an obligation on persons who caused degradation to the environment to take reasonable measures to prevent such degradation from occurring. Therefore in order to improve and ensure an adequate regime for water pollution control in Nigeria an obligation to take reasonable measures should be adopted into the NESREA Act on anyone who causes environmental degradation to take steps to prevent such degradation from occurring. Such reasonable measure which must be taken by the person who has caused significant damage to the environment would be investigating, evaluating and assessing the impact of pollution on the environment, containing and preventing the movement of pollutants and eliminating any source of pollution.

In South Africa, the regulatory framework for water pollution control imposes an obligation in the NEMA and the NWA on the occupier or owner of a land to take reasonable measures to prevent water pollution from occurring or continuing. The

³⁰¹ Amechi (note 73 above) 334.

NWA provides for prevention and remedying effects of pollution.³⁰² Where the owner or occupier of such land fails to perform this duty, the relevant authority may take all necessary steps and measures to remedy the situation.³⁰³ The WRA operative in Nigeria does not impose an obligation on the owner or occupier of a land to take reasonable measures to prevent water pollution from occurring. These reasonable measures are measures to cease, modify or control any act or process causing the pollution; comply with any prescribed waste standard or management practice; contain or prevent the movement of pollutants; eliminate any source of the pollution and remedy the effects of any disturbance to the bed and banks of a watercourse.³⁰⁴ The WRA should impose these reasonable measures on the occupier or owner of a land to ensure the prevention of water pollution from occurring in order to enhance and possess an adequate and effective liability and compensation regime for water pollution control.

The NWA provides for the definition of a responsible person, who must ensure all reasonable measures are taken to reduce the effects of the incident such persons include; a person who is responsible for the incident, owns the substance involved in the incident, or was in control of the substance involved in the incident at the time of the incident.³⁰⁵ This definition is wide enough to cover persons who are in control of the substance causing the pollution to water resources and those who own the substance causing the pollution. The NWA imposes strict liability on these categories of persons and they are deemed to be responsible persons. The catchment agency may recover 'all reasonable costs incurred from every person jointly and severally liable'.³⁰⁶ The limitation of the WRA in relation to polluter liability is that there is no clear definition of responsible persons to enable ascertaining who should be held liable for polluting activities. As government and companies in Nigeria engage in the blame game and avoidance of responsibility for certain acts affecting the wellbeing of communities affected by water pollution, it is the communities that are left to

³⁰² Sec 19 of NWA provides that the owner of a land or occupier must take all reasonable measures to ensure that he prevents pollution from occurring.

³⁰³ Sec 20(4) of NWA.

³⁰⁴ Sec 19(2)(a-f) of NWA.

³⁰⁵ Sec 20(2) of NWA.

³⁰⁶ Sec 20(7) of NWA.

suffer.³⁰⁷ There should be included in the WRA a clear exposition of responsible persons so as to make it clear who is to be held accountable for pollution of water resources, as this will help to ensure an effective liability regime.

The regulatory framework for water pollution control in South Africa provides for the discharge of waste or trade effluent into a water resource.³⁰⁸ The discharger of such effluent must possess a permit and comply with its restrictions.³⁰⁹ The court may at this stage make an award of damages against the accused in favour of a person who suffered a loss as a result of the offence. There is also a provision for clean-up measures and recovery in emergency incidents.³¹⁰ This occurs where a polluting matter appears to be or has been present in any controlled waters.³¹¹ In these circumstances, the catchment management agency may undergo works and operations to remove or dispose of the polluting matter by taking necessary steps and measure to recover the cost from every person responsible.³¹² In order to strengthen the liability regime in Nigeria the WRA should incorporate provisions relating to clean up measures and recovery in emergency incidents.

The NWA provides for the establishment of a variety of water management institutions. The aim of establishing these institutions is to delegate water resource management to a more regional and localized level. This is to enable the involvement of stakeholders in water resources management and give effect to an integrated water resource management. The WRA does not recognize the need for stakeholder participation in policy, planning, and management decision.³¹³

In South Africa, under the NEMA,³¹⁴ and the NWA,³¹⁵ provision is made for measures to be taken to punish corporations and corporate officers that pollute water in their activities. The WRA fails to take necessary measures to prevent third parties, corporations and corporate officers from polluting water resources, by way of enforcing its existing laws.³¹⁶

³⁰⁷ Musa & Bappah (note 295 above) 149.

³⁰⁸ Sec 21(f)–(g) of NWA

³⁰⁹ Sec 21(2)(c) of NWA

³¹⁰ Sec 20 of NWA.

³¹¹ Sec 20(1)(b) of NWA.

³¹² Sec 20(6)(b) of NWA.

³¹³ Ijaiya (note 13 above)

³¹⁴ Sec 34(5-8) of NEMA.

³¹⁵ Schedule 3 contain national and provincial legislature.

³¹⁶ Musa & Bappah (note 295 above) 150.

In conclusion, Nigeria can draw inspiration from the South African law to improve and ensure an effective liability and compensation regime in its law for water pollution control by ensuring that the above highlighted provisions are incorporated into the reviewed regulatory framework for water pollution control so as to combat water pollution in Nigeria effectively. This study shall now proceed to give concluding remarks to overcoming the barriers to effective water pollution control in Nigeria and South Africa.

4.4 Overcoming barriers to effective water pollution control in Nigeria and South Africa

4.4.1 Conclusions

Having examined the regulatory framework for water pollution control in Nigeria, with reference to achieving effective liability and compensation provision and sustainable protection of water resources, the challenges that the Nigeria regulatory framework faces can be attributed to the following: ineffective penalties and sanctions inherent in the regulatory framework, no provision in the regulatory framework for removal of pollutants and clean-up site affected by oil exploration activities, absence of reliable data and information to guide policy makers in decision making. There is no provision in the constitution to affirm the right of every Nigerian to enjoy a healthy environment. The abundant regulatory framework and regulations that exist needs to be supported by an effective and robust framework for implementation so as to achieve the protection and sustainable use of water resources by incorporating into the Nigerian Constitution a constitutional mandate for the right to a healthy environment and the imposition of a detailed obligation on polluters in the NESREA Act and WRA.

There are sufficient regulatory tools in place to tackle and control water pollution in South Africa. There is a need to ensure that in case of water pollution, the polluter should be made to correct the wrong done and possibly restitution by engaging in cleaning activity to make the water clean and safe. Sustainable economic growth relies on the health of the natural environment including water bodies and the

benefits it provides. Presently South Africa's water resources are under severe threat, primarily as a result of mining practices. South Africa has a duty to halt any decline and reverse the damage that has been done over the years to water resources. As water is a scarce resource and if not well preserved there is a danger of not having clean water in years to come.

4.4.2 Recommendations

Pollution of water resources in Nigeria and South Africa occurs from different sources with effects which must be controlled, prevented and monitored. Strict enforcement of the regulatory frameworks in Nigeria and South Africa will reduce the current level of pollution to the environment, protect the water bodies and ensure an effective liability and compensation regime. It recommended that only regulations that are enforceable are actually implemented. If the existing enforcement capacity is deemed insufficient, the regulation should be abandoned. To this end this study proffers the following recommendations: political will,³¹⁷ education and research,³¹⁸ clean up and rehabilitation measures are required for effective control and prevention of water pollution.

Sometimes environmental offences are committed as a result of ignorance from the persons concerned. There is a need to ensure that proper environmental education is given to policy makers, offenders, judges and the public.³¹⁹ This important role of educating and making people aware of the dangers of water pollution and the environment will make them understand and value water and take action to improve water resources and the environment around them. Political commitment, efficient administrative implementation, and adequate compliance with the provisions of the system may ultimately result in achieving the overall objectives of the regulatory framework for water pollution control. Industries in Nigeria should recycle waste

³¹⁷ K Odeku 'Analysis of Water Pollution Control Laws in South Africa' (2014) *Mediterranean Journal of Social Sciences* 2572 2580.

³¹⁸ Adedeji (note 25 above) 2030.

³¹⁹ Amechi (note 73 above) 334.

water instead of dumping it for rain water to sweep the refuse into water resources.³²⁰

It is also recommended that in giving environmental education one brings to the consciousness of policy makers, offenders, judges and the public of the legal gateways to enforcing their fundamental right to a healthy environment.³²¹ In addition, section 20 of the Nigerian Constitution should be made justiciable. The section should also guarantee the right to a healthy and balanced environment as part of the fundamental human rights guaranteed by the Nigerian Constitution.³²² It is also recommended that the South African regulatory framework criminalise the knowing endangerment of people's lives by holders of permits that knowingly place another person in imminent danger of death or serious bodily injury by ignoring the conditions of their permits. Where an environmental crime such as water pollution has been committed, the responsible person must be forced to publicise such offence, its environmental consequences and penalties. Many corporations are sensitive about their prestige and will ensure that such offence does not reoccur.

In conclusion, the disequilibrium to water resources is caused by human activities, thus a radical and well-articulated regulatory framework directed towards protection of water resources to properly control the effect of human activities is imperative.³²³ Following the foregoing discussion in this study on the Nigerian and South African regulatory framework for water pollution control, it would be conclusive to say that the Nigerian regulatory framework for water pollution control does not impose adequate and effective compensation and liability provisions and this can be improved on by drawing inspiration from the South African regulatory framework for water pollution control

³²⁰ W Owa 'Water Pollution Sources Effects Control and Management' (2014) *International Letters of Natural Sciences* 1 5.

³²¹ Amechi (note 73 above) 334.

³²² Chapter IV of the Nigerian Constitution.

³²³ Simpson & Fagbohun (note 182 above) 80.

BIBLIOGRAPHY

Books, Book Chapters and Journal Articles

Adam, S 'Human rights and environmental protection in Nigeria' in JM Nasir et al (eds) Contemporary readings in governance, law and security: Essays in honour of (Sir) Mike Mbama Okiro, Inspector General of Police (2008) Constellation Publishers 321

Adati, A; Mohamad, K; Zakaria, P & Othman, F Oil Spillage and Pollution in Nigeria: Organizational Management and Institutional Framework (2012) 22 Journal of Environmental and Earth Science Volume 2 No 4

Adedeji, O Aquatic Pollution in Nigeria: The Way Forward (2011) 1 Advances in Environmental Biology Volume 5 No 8

Ajibola, W Sustaining a Preserved Environment in Nigeria: Workable Planning Laws and Regulations as Necessary Tool For Nation Building (2010) 1 Multidisciplinary Journal of Research Development Volume 15 No 5

Akinkugbe, J The History of Environmental Policy and Pollution of Water Resources in Nigeria (2004) 5 Department of Civil Engineering University of Ibadan.

Amechi E P Litigating Right to Healthy Environment in Nigeria: An Examination of the Impacts of the Fundamental Rights (Enforcement Procedure) Rules 2009, In Ensuring Access to Justice for Victims of Environmental Degradation Law Environment and Development Journal (2010) Vol 6 No 3

Amokaye, G Environmental Pollution and Challenges of Environmental Governance in Nigeria (2012) 26 British Journal of Arts and Social Sciences Volume 10 No.1

Barisere, R Inadequate Monitoring and Enforcement in the Nigerian Oil Industry: The Case of Shell and Ogoniland (2014) 181 Cornell International Law Journal Volume 47

Chinwe NC Legal Framework for the Regulation of Waste in Nigeria (2010) An International MultiDisciplinary Journal, Ethopia Vol 4 491

Du Plessis, A South Africa's Constitutional Environmental Right (Generously) Interpreted: What is in it for Poverty? (2011) South African Journal on Human Rights 27

Ekubo, A Aspects of Aquatic Pollution in Nigeria (2011) 3 Research Journal of Environmental and Earth Science Volume 6 673

Elmarie, V S Stewardship Doctrines of Public Trust: Has The Eagle of Public Trust Landed on South African Soil? (2013) 130 The South African Law Journal 369

Erhun, MO The Contribution of the Minerals and Mining Industry to Poverty Alleviation and Sustainable Development in Nigeria – A Legal Perspective (2015) Journal of Energy Technologies and Policy 96 Volume 5 Issue 8

Fagbohun, O (2010) The Law of Oil Pollution and Environmental Restoration Odade Publishers, Lagos

Feris, L & Kotzé, LJ The Regulation of Acid Mine Drainage In South Africa: Law And Governance Perspective (2014) 2105 Potchefstroom Electronic Law Journal Volume 17 No 5

Fung, M The Right to a Healthy Environment: Core Obligations Under the International Covenant of Economic, Social and Cultural Rights, (2006) 14 Willamette J. International Law & Dispute Resolution 97 104

Hubert, T Understanding the Existing Framework of Water Law and preparing for a new Law (1994) Eller Environmental Geology 6 264-B

Humby, T One Environmental System: Aligning the Laws on Environmental Management of Mining in South Africa (2015) 33 Journal of Energy and Resources Law 110

Ijaiya, H The Legal Regime Of Water Pollution In Nigeria (2013) 140 Journal of Public Law Vol.4 Department of Public Law, Rivers State University of Science and Technology, Port-Harcourt

H Ijaiya OT Joseph Rethinking Environmental Law Enforcement in Nigeria (2014) Beijing Law Review Vol 5 306

Kevin Ejike Chukwu Water Supply Management Policy in Nigeria: Challenges in the Wetland Area of Niger Delta (2015) European Scientific Journal Vol 11 303

Kidd, M (2011) Environmental Law (Juta Town)

Kiss A & Shelton D (1991) International Environmental Law Transnational Publications 347

Kotzé, L J & Bosman, C A Legal Analysis Of The Proposed Waste Discharge System In Terms Of The South African Environmental And Water Law Framework (2006) 128

Kotzé, L J A Legal Framework for Integrated Environmental Governance in South Africa and the North West Province (2006) (Wolf Publishers Netherlands)

Liu SF The Koko Incident: Developing International Norms for the Transboundary Movement of Hazardous Waste 8 Journal of Natural Resources & Environment Law 121

Ojukwu-Ogba, NM & Enabulele, AO The Legal Protection of Groundwater Resources in Nigeria (2009) MLJ Volume 3 Issue 2

Obinolu, A Water Quality Challenges and Impact (2013) International Letters of Natural Sciences Volume 4 No 44

Odeku, K & Nkosi, R Analysis of Water Pollution Control Laws in South Africa (2014) 2527 Mediterranean Journal of Social Sciences Volume 5 No 23

O'Hara, GP Minimizing Exposure to Environmental Liabilities for Corporate Officers, Directors, Shareholders and Successors (1990) Santa Clara High Technology Law Journal Volume 6 Issue 1

Okorodudu, M T (1998) Law of Environmental Protection Caltop Publications

Okorodudu M T Legal Developments 2009-2011 (2012) IUCN Academy of Environmental Law e-Journal Issue (1).

Olubayo, O Environmental Rights: A Case Study of the 1999 Constitution of the Federal

Republic of Nigeria. (2010) 255 MLJ Volume 4 Issue 2

Owa, W Water Pollution Sources Effects Control and Management (2014) International Letters of Natural Sciences Volume 3

Paterson, A & Kotzé, L J (2009) Environmental Compliance and Enforcement in South Africa: Legal perspectives (Juta Cape Town)

Scholsberg, D (2004) Preconceiving Environmental Justice: Global Movements and Political Theories Environmental Politics 1

Scholtz, W & Verschuuren, J Regional Cooperation and Sustainable Development (2015) Regional Environmental law 1 Cheltenham Edward Elgar Publishing Ltd

Shiva, V Water Wars (2002) Privatization, Pollution and Profit Cambridge: South End Press

Simpson, S & Fagbohun, O (1998) Environmental Law and Policy Law Centre
Faculty of Law Lagos State University

Strydom, HGA and King ND Fuggle and Rabie (2009) Environmental Management in
South Africa (Juta Cape Town)

Water Pollution Control - A Guide to the Use of Water Quality Management
Principles Edited by Richard Helmer and Ivanildo Hespanhol Published on behalf of
the United Nations Environment Programme, the Water Supply & Sanitation
Collaborative Council and the World Health Organization by E. & F. Spon.

WJ VOS (1978) Principles of South Africa Water Law Chapters 2, 3 and 5

Theses and Dissertation

Bosman Waste Disposal & Discharge – ‘Towards a Harmonized Regulatory
Framework for Sustainable Use of Water Resources’ (2000) Unpublished MSc
dissertation, Northwest University

JA Adelegan ‘The history of environmental policy and pollution of water sources in
Nigeria (1960-2004): The way forward’ Department of Civil Engineering, University of
Ibadan, Ibadan, Oyo State, Nigeria .

Internet Sources

Anonymous Centre for Human Rights, the University of Pretoria
<http://www.chr.up.ac.za> (accessed 4 June 2015)

C. Smith, 2013. The role of mining in the South African economy
www.sablog.kpmg.co.za/2013/12/role-mining-south-african-economy/ (accessed 12
October 2015)

D Pallangyo Environmental Law in Tanzania Law Environment and Development (LEAD) Journal International Environmental Law Research Centre (2007) 26 at 38 www.lead-journal.org/content_07026.pdf (accessed 17 October 2016).

'Natural Resource Conservation- Background Information'
<http://www.smithlifescience.com/NaturalResources.html> (accessed 7th July 2015)

O Adoga Nigerian Water Policy and Law: A Need for Global Compliance
<http://www.martindale.com/natural-resources-law/artice.html> (accessed 20 September, 2015)

Pollution: Lagos communities urge FG to repair NNPC pipeline leakage
<https://www.today.ng/news/nigeria/176909/pollution-lagos-communities-urge-repairnnpc-pipeline-leakage> (accessed 24th October 2016).

Pollution time bomb-Nigeria <http://www.righttowater.info/rights-in-practice/rights-basedapproach-for-practitioners/pollution-time-bomb-in-nigeria/> (accessed 14th October 2016)

Vito, D. and Reibstein, R. Polluter Pay Principle
http://www.eoearth.org/article/Polluter_pays_principle (accessed 22 August 2016)

Legislation

Nigeria

Constitution of the Federal Republic of Nigeria, 1999

Environmental Impact Assessment (EIA) Decree 1992

Federal Environmental Protection Agency Act 58 of 1988

Harmful Waste (Special Criminal Provisions) Act 42 of 1988

National Environmental Standards and Regulations Enforcement Agency Act 25 of 2007

National Oil Spill Detection and Response Agency (NOSDRA) Establishment Act 15 of 2006

Nigerian Mineral and Mining Act 34 of 2007

Oil in Navigable Waters Act 34 of 1968

Oil Terminal Dues Act 9 of 1960

Petroleum Act 24 of 2004

River Basins Development Authorities Act 2004

Water Resources Act 101 of 1993

South Africa

Constitution of the Republic of South Africa, 1996

Health Act 63 of 1977

Mineral and Petroleum Resources Development Act 28 of 2002

National Environmental Management Act 107 of 1998

National Water Act 36 of 1998

Water Services Act 108 of 1997

Waterworks Act of 1915

Table of Cases

Nigeria

Abacha v Fawehinmi 1994 NWLR (pt. 306) p.1

Allan Irou v Shell BP Suit No. W/89/91 Warri HC/26/11/73 (Unreported)

Centre For Oil Pollution Watch V. Nigeria National Petroleum Corporation (2013)
LPELR20075 (CA)

Chinda v Shell BP 1974 2 RSLR 1

NNPC v. Sele (2004) ALLFWLR (pt 223) 1859 CA.

Ogiale v Shell 19971 NWLR (pt 480) 148

Seismograph Service v Onokpasa 1972 1 ANLR (pt 1)

SERAC v. Nigeria 2001 AHRLR 60

Shell BP v Usoro 1960 SCNLR 121

Shell Development Petroleum Co v Tiebo VII 1996 4 NWLR (pt 445) 657

Shell v Farah 1995 3 NWLR (pt 382) 148

Uzoukwu v Ezeonu II 1 1991 6 NWLR (pt 200) p.708

South Africa

Escarpment Environment Protection Group and Another v Department of Water
Affairs and Others, In Re; Escarpment Environment Protection Group and Another v
Department of Water Affairs and Others 2013 ZAGPPHC 505

Federation for Sustainable Environment and Others v. Minister of Water Affairs and
Others (35672/12) (2012) ZAGPPHC 140

Harmony Gold Mining Co Ltd v. Regional Director Free State Dept of Water Affairs
and Forestry (971/12) [2013] ZASCA 206

Lascon Properties (Pty) Ltd v Wadeville Investment Co (Pty) Ltd and Another 1997
(4) SA 57 (W)

Lindiwe Mazibuko & ors v City of Johannesburg & ors 2010 (4) SA 1 (CC)

Minister of Water Affairs and Forestry v Stilfontein Gold Mining Company Limited and
Others 2006 ZAGPHC 47

Rainbow Chicken Farm (Pty) Ltd v Mediterranean Woollen Mills (Pty) Ltd 1963 (1)
SA 201 N

Robb v Maxwell 1925 SR 49

S v Makwanyane & Another 1995 (3) SA 391 (CC)

Trustees of the Time Being of the Lucas Scheepers Trust, IT 633/96 and Others v
MEC for the Department of Water Affairs, Gauteng and Others 2015 ZAGPPHC 211

International Cases

Hungary v. Slovakia (Gabcíkovo-Nagymaros Case) (1997) ICJ Rep 7

Trail-Smelter Arbitration 1931-1941, 3 U.N.R.I.A.A.A 1905

International Instruments

African Charter on Human and Peoples' Rights 1986

Convention for Co-operation in the Protection and Development of the Marine and
Coastal Environment of the West and Central African Region 1981

International Convention for the Prevention of Pollution by Ships 1973

International Convention on Civil Liability for Oil Pollution Damage 1969

International Convention on Economic, Social, and Cultural Rights 1966

International Convention on Oil Pollution Preparedness, Response and Co-operation
1990

Noumea Convention for the Protection of Natural Resources and Environment of the

South Pacific Region 1986

Oil Pollution Convention 1958

Stockholm Declaration 1972

United Nations Environment Programme (UNEP)