

**CRITICAL ANALYSIS OF THE LAW ON DUTY OF CARE TO THE ENVIROMENT IN
SOUTH AFRICA: CHALLENGES AND PROSPECTS**

by

CHAUKE VUMBHONI

MINI-DISSERTATION

Submitted in Partial Fulfillment of the Requirements for the Degree of

MASTERS OF LAW

in

DEVELOPMENT AND MANAGEMENT LAW

in the

FACULTY OF MANAGEMENT AND LAW

(School of law)

at the

UNIVERSITY OF LIMPOPO

SUPERVISOR: Prof K.O Odeku

2017

DECLARATION

I declare that the mini-dissertation hereby submitted to the University of Limpopo for the degree of masters of development and management law has not been previously submitted by me for a degree at this or any other University, that it is my own work in design and execution and that all material contained therein has been duly acknowledged.

Name: Chauke Vumbhoni

Signature.....

Date...../...../.....

ACKNOWLEDGEMENTS

First and for most, I would like to thank God for his grace that sustained me to reach this point in my academic career, if it was not by his grace, I would not have made it this far. It is with great pleasure to also acknowledge the first rate tremendous guidance, assistance and supervision accorded to me by my supervisor, Prof K.O Odeku. Without his magnificent supervision this work would not be the way it is. I would also like to acknowledge my friend Simbarashe Roy Gundani, for his perpetual support and encouragement to further my studies and pursue this master's program. Special appreciation also goes to my parents, Mr Wilson Chauke and Mrs. Beauty Sindy Chauke for the love and support they gave me throughout this endeavor.

ACRONYMS

CAPCO- California Agricultural Pest Control Operators

CSIR- Council for Scientific and Industrial Research

DEA- Department of Environmental Affairs

DEA&T- Department of Environmental Affairs and Tourism

DNRW- Department of Natural Resources and Water

EIA- Environmental Impact Assessment

EIAR- Environmental Impact Assessment Regulations

ENI's- Environmental management inspectorate

EPAS- Environmental Protection Act of 1994

EU- European Union

LRTAP- Long Range Trans-Boundary Air Pollution

NEMA- National Environmental Management Act

NEMWA- National Environmental Management Waste Act

NGO's- Non-governmental organizations

POP's- Persistent Organic Pollutants

SCA- Supreme Court of Appeal

UK- United Kingdom

US – United States

WLD- Witwatersrand Local Division

WTO- World Trade Organization

Table of Contents

DECLARATION	i
ACKNOWLEDGEMENTS	ii
ACRONYMS	iii
ABSTRACT	vii
CHAPTER 1	1
INTRODUCTION AND BACKGROUND.....	1
1. INTRODUCTION.....	1
2. RESEARCH PROBLEM	3
2.1 Source of research problem	3
2.2 Background to the problem	4
2.3 Statement of the research problem.....	4
3. LITERATURE REVIEW	5
3.1 Analysis of the regulatory framework on duty of care	5
3.2 Duty of care: Perspectives from other jurisdictions	9
3.3 Non-Governmental Organizations and Case law	11
4. AIMS AND OBJECTIVES OF THE STUDY	14
4.1 Aim.....	14
4.2 Objective	14
5. RESEARCH METHODOLOGY	14
6. DEFINITION OF CONCEPTS	15
6.1 Environmental harm	15
6.2 Duty of care.....	15
6.3 General environmental duty	15
6.4 The Duty to Notify of Environmental Harm.....	15
7. SIGNIFICANCE OF THE STUDY	16
CHAPTER 2	17
ANALYSING THE LEGISLATIVE AND POLICY FRAMEWORK ON THE DUTY OF CARE	17
1. Introduction	17
1.1 The Constitution of the Republic of South Africa.....	17
1.2 The National Environmental Management Act	19

1.2.1 Duty of care.....	20
1.2.2 Environmental principles.....	23
1.3 The National Environmental Management Waste Act 59 of 2008.....	25
2. Conclusion.....	28
CHAPTER 3.....	29
1. Introduction.....	29
2. Analysis of Section 28 of NEMA.....	30
3. Challenges in implementing and enforcing section 28 of the NEMA.....	36
3.1 Challenges in enforcing and implementing section 28 of the NEMA.....	36
3.2 Significant pollution.....	37
3.4 Addressing environmental challenge: the approach of the Court.....	49
4. Other Challenges.....	51
4.1 Lack of awareness.....	51
4.2 Polluter pays principle.....	51
5. Conclusion.....	52
CHAPTER 4.....	53
COMPARATIVE ANALYSIS BETWEEN UNITED KINGDOM, AUSTRALIA AND SOUTH AFRICA ON DUTY OF CARE TO THE ENVIRONMENT.....	53
1. Introduction.....	53
2. The environmental duty of care in Australia.....	53
2.1 The law regulating the duty of care in Australia.....	54
2.2 Analysis of the duty of care to the environment.....	57
2.3 Comparing the duty of care in South Africa and Australia.....	60
3. United Kingdom.....	61
3.1 Introduction.....	61
3.2 Duty of Care in the UK.....	62
3.3 Enforcement of the Duty of Care in the UK.....	63
4. Duty of care in international law.....	64
4.1 The Precautionary Principle.....	65
5. Conclusion.....	68
CHAPTER 5.....	69
CONCLUSION AND RECOMMENDATIONS.....	69

1. Conclusion..... 69

2. Recommendations..... 70

ABSTRACT

Considering that South Africa is part of the world initiatives to ensure maximum protection of the environment for the sake of the present and future generations, if the environment is abused or degraded, there is need to sanction perpetrators accordingly. Reasonable measures should be taken to prevent harm from occurring to the environment or those harms that cannot reasonably be avoided or stopped, be minimized and steps taken to rectify such harm to the environment. Environmental care and management is principally recognised and regulated by the National Environmental Management Act 107 of 1998. This framework imposes a general duty of care for the environment (that is, every person has the duty to avoid pollution and environmental degradation). Both implementers and enforcers rely on this duty when enforcing environmental obligations. The duty of care has a retrospective effect, meaning that it is imposed on anyone who causes, has caused or may cause significant pollution or degradation to the environment. This study highlights the consequences for violating the duty of care as enshrined in NEMA particularly by people who are destroying the environment in the name of development. It argues for stringent implementation and enforcement mechanisms in order to bring perpetrators to justice. The study further deals with comparative analysis between South Africa, Australia and England where lessons are derived to help South Africa better its environmental laws and policies to ensure maximum protection of the environment.

CHAPTER 1

INTRODUCTION AND BACKGROUND

1. INTRODUCTION

South Africa is part and parcel of the world initiatives to ensure maximum protection of the environment for the sake of the existing generation and the future generation which are yet to come.¹ In its bid to promote conservation of the environment, it imposes a duty to everyone who has caused or may cause significant harm to the environment to “take reasonable measures to prevent such harm from occurring, continuing or recurring, or, in so far as such harm to the environment is authorized by law or cannot reasonably be avoided or stopped, to minimize and rectify such harm to the environment”.² Such a duty is principally recognised by the National Environmental Management Act of 1998 (NEMA) and it is known as the duty of care.³

According to Gilder et al,⁴ the NEMA Act “Is based on the international environmental law principles of sustainable development and integrated environmental management”.⁵ This framework Act imposes a general duty of care for the environment “that is, every person has the duty not to pollute and degrade the environment”.⁶ Both implementers and enforcers depend upon this environmental duty of care when enforcing environmental obligations. This duty has a retrospective effect. The duty is imposed on every person who causes or has caused significant pollution or environmental degradation.⁷

Without limiting the generality of this duty,⁸ NEMA is more specific on the bearers of this duty, which includes “an owner of land or premises, a person in control of land or premises

¹ Sands P Principles of International Environmental Law (Cambridge University Press Cambridge 2003) 253.

² Section 28 of the National Environmental management act 107 of 1998. See also section 24 (b) of the Constitution of the republic of south Africa.

³ Section 28 of Act No. 107.1998 of National Environmental Management Act.

⁴ Andrew Gilder, Olivia Rumble and Business Dladhla.

⁵ <https://www.ensafrica.com/news/Environment-South-Africa?id=843&STitle=environmental%20ENSight> accessed 07/04/2016.

⁶ Section 28 of NEMA.

⁷ See foot note 4 above.

⁸ Section 28 subsection 1 of Act 107. 1998. National Environmental Management Act.

or a person who has a right to use the land or premises”.⁹ The NEMA was influenced by section 24 of the Constitution¹⁰ which makes provisions of the right to an environment that is not harmful to one’s health or well-being; and also to have the environment protected, for the sake of the present generation and the upcoming generation.¹¹ Section 24 of the Constitution¹² is the main statutory provision relating to the protection of the environment.¹³ It allows the promotion of justifiable economic and social development and imposes a duty to the public to prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable development and use of natural resources.¹⁴

The duty of care also has its roots in international law. According to principle 1 of the Stockholm Declaration it is stated that “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 both Stockholm Principle 21 and Rio”.¹⁵ Principle 2 of the Stockholm establishes a State’s responsibility to ensure that activities within its control do not cause harm to areas beyond the jurisdictions of South Africa.¹⁶

In South Africa the duty of care is contained in section 28 of the NEMA, and this duty gives an obligation to everyone who causes, has caused or who is likely to cause significant pollution or degradation to the environment to take reasonable measures to prevent or stop such harm to the environment, in the event that such a person fails to comply with the provisions of section 28 of the NEMA, the Act imposes liability on such person which may be in form of civil and criminal penalties where in the environmental perpetrator has to pay a certain amount of money to remedy the harm done to the

⁹ Section 28 subsection 2 of the National environmental management Act 107 of 1998.

¹⁰ Section 24 of the Constitution of the Republic of South Africa 1996.

¹¹ *Ibid.*

¹² *Ibid.*

¹³ Gilder A. Rumble O and Dhladhla B, Environment - South Africa: www.ensafrika.com/news/Environment-South-Africa. accessed on the 07/04/2016.

¹⁴ See foot note 8 above and section 24 b (I), (ii) and (iii) of the South African Constitution Act 108 of 1996.

¹⁵ The Rio Declaration on Environment and Development 1992.

¹⁶ Handl G. *declaration of the united nations conference on the human environment (Stockholm declaration), 1972 and the rio declaration on environment and development, 1992* page 4.

environment or convicted and sentenced accordingly. However, there is a challenge when it comes to the enforcement of the environmental duty of care as there are certain individuals with financial means to pay off such penalties and continue to harm the environment. This however defeats the whole purpose of the duty of care as contained in NEMA. Therefore, measures need to be taken in order to ensure maximum compliance of the duty. These measures may include increment of the fines to environmental perpetrators and or holding the perpetrators criminally accountable.

2. RESEARCH PROBLEM

2.1 Source of research problem

South Africa has a plethora of legislation regulating environmental protection and conservation. However, environmental damages continue to increase resulting to irreparable harm to the natural environment.¹⁷ It is pertinent to point out that the application of the duty of care as contained in NEMA has been thwarted by people destroying the environment in the name of development, which is the traditional view of development wherein environmental protection is sacrificed because of economic gain.¹⁸ In South Africa the problem may be attributed to the lack of cooperative governance by the three spheres of government by failing to ensure the enforcement of rules and bylaws that promote the duty of care.¹⁹

These problems have resulted in environmental harm because the duty of care is not being observed by various stakeholders more especially corporations that conduct business which have devastating effects on the environment. The duty of care calls for application of the environmental principles and in actual fact if these principles are applied

¹⁷ Feris L "Sustainable Development in Practice: *Fuel Retailers Association of Southern Africa v Director-General Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province, and Others*" 2008 *Constitutional Court Review* 235.

¹⁸ Feris L "Environment" in Currie I & De Waal J (eds) *The Bill of Rights Handbook* (Juta Cape Town 2006) 521-522.

¹⁹ Bray E "Focus on the National Environmental Management Act: Co-operative Governance in the Context of the National Environmental Management Act 107 of 1998" 1999 *South African Journal of Environmental Law and Policy* 1.

to the letter, it will ensure that the environment is protected from being harmed or damaged.

2.2 Background to the problem

There are number of laws promulgated to regulate and protect the environment. Environmental Impact Assessment Regulations (EIAR) were promulgated in 1997 which partially resulted in a more proactive approach to mitigating and managing any potential adverse impacts on the environment as a result of developmental processes. However, the Constitution of Republic of South Africa is regarded as the main statutory provision for environmental protection. The Constitution influenced the promulgation of the NEMA which is the principal regulator of the environment as it stands and it contains the Duty of care to the Environment. The NEMA came to provide guidance to individuals, institutions and government when making decisions concerning the environment. It is described as one of the most progressive developments in environmental law.

In addition the NEMA puts forward a range of core environmental principles which include, co-operative governance, duty of care enforcement mechanisms and integrated environmental management in the process of strengthening this framework law, other various environmental management acts have been promulgated, which includes the promulgation of the “National Environmental Management Waste Act in 2008 promulgated to regulate all laws that relate to waste management, the Environmental Conservation Act 73 of 1989 and the Environmental Protection Act 1994”.

2.3 Statement of the research problem

In South Africa, the law protects the environment as a public trust which has to be conserved and protected for the benefit of all people. In the event that the environment is subjected to harm the law makes it possible for the perpetrators to be held accountable through criminal sanctions and civil penalties. The law also requires the perpetrators to take specified measures and also to compensate the state as well as other third parties for expenses incurred as a result of the actions.²⁰ Laws and regulations have been passed

²⁰ Nel G. Associate: Cullinan and Associates, *Environmental Law liability* page 1. 2007.

since 1996 to protect the environment, one of which is NEMA that contains the duty of care. However, the duty of care as enshrined in NEMA is being violated by people destroying the environment in the name of development. This duty is also being violated by those who are supposed to protect it. This was revealed in the landmark case held in the Pretoria Regional Court, (*State v Stefan Frylinck and Mpofu Environmental Solutions CC Regional Division of North Gauteng. Judgment on 6 April 2011 (unreported)*) where Stefan Frylinck, an environmental consultant representing Mpofu Environmental Solutions, was found guilty of providing incorrect or misleading information to the Department of Environmental Affairs (DEA) in a basic environmental impact assessment. Frylinck was acquitted of the charge of fraud

The charges against Frylinck and Mpofu originated from the planned construction of the Pan African Parliament in Midrand. In 2009, the DEA stopped the construction of the complex when it was discovered that construction was causing serious damage to a wetland on the site. Environmental Management Inspectors laid criminal charges against Frylinck who compiled the basic environmental assessment on which the decision to allow building was based for not pointing out the existence of a wetland to authorities.

The criminal offence of which Frylinck was found guilty of carried a maximum penalty of 2 years' imprisonment or R40, 000 under the 2006 Environmental Impact Assessment (EIA) regulations. These penalties have since been increased in the 2010 EIA regulations to R1 million or one-year imprisonment. This case points out the challenge that exists in South Africa, since it highlights that even though environmental laws, assessors and enforcers are in place, perpetrators are continuously going to find a way to break these laws, since they are at some point assisted by those who are supposed to deter them from harming the environment.

3. LITERATURE REVIEW

3.1 Analysis of the regulatory framework on duty of care

The main statutory provision of a right relating to environmental protection is section 24 of the Constitution. This section provides that everyone has a right to a clean environment

that is not harmful to his or her well-being and to have the environment protected for the benefit of the current generation and others which are yet to come. It influenced the promulgation of NEMA.

In order to understand the full scope of the duty of care, the concepts of enforcement and compliance in terms of environmental law must be understood. Enforcement may be defined as: -

“the range of procedures and actions employed by a State, its competent authorities and agencies to ensure that organizations or persons, potentially failing to comply with environmental laws or regulations, can be brought or returned into compliance and/or punished through civil, administrative or criminal action”.²¹

The concept of compliance is also defined as: -

“the state of conformity with obligations, imposed by a State, its competent authorities and agencies on the regulated community, whether directly or through conditions and requirements in permits, licenses and authorizations”.²²

The two concepts give meaning to the duty of care since it creates a legal obligation for everyone in the country to comply with it, and through its enforcement people would take reasonable measures to ensure that the environment is protected since NEMA imposes penalties for people who violate such duty.

NEMA imposes a general duty on all persons to take reasonable measures to avoid, or to minimize and rectify, significant harm caused to the environment.²³ This means that everyone has to comply with this law. Furthermore, the authorities have powers to issue directives to regulate and address actual or potential pollution or degradation. Failure to

²¹ Zaelke, D.; Kaniaru, D. & Kružíková, E. *Making Law Work: Environmental Compliance and Sustainable Development* Vol. I and Vol. II, Institute for Governance and Sustainable Development, (2005).

²² *Ibid.*

²³ *Ibid.*

comply with a directive is now an offence.²⁴ This is contained in section 28 (4) of the NEMA that provides that:

“The Director-General or a provincial head of department may, after consultation with any other organ of state concerned and after having given adequate opportunity to affected persons to inform him or her of their relevant interests. Direct any person who fails to take the measures required under subsection (1) to (a) Investigate, evaluate and assess the impact of specific activities and report 25 thereon: (b) Commence taking specific reasonable measures before a given date; (c) diligently continue with those measures; and (d) complete them before a specified reasonable date: Provided that the Director-General or a provincial head of department may. If an urgent action is necessary for the protection of the environment, issue such directive and consult and give such opportunity to inform as soon thereafter as is reasonable”.²⁵

The duty of care also calls for environmental impact assessments to be carried out, according to Li, “While EIAs in developing countries are based on the same set of principles; their implementation often falls considerably short of international standards. They frequently suffer from insufficient consideration of impacts, alternatives and public participation. In the worst case, they are not conducted at all.”²⁶ The consequences of failure to perform their duties, will give rise to more environmental perpetrators which will negatively impact South Africa’s economy. South Africa’s gross domestic product also depends on tourism. Environmental pollution and degradation can affect the tourism industry like it did in Malaysia. ²⁷

In terms of NEMA section 28(14)²⁸ a person found in violation of the said section is liable to pay a fine of a million rand, alternatively could be sentenced to imprisonment for a year

²⁴ (section 28(14) of the NEMA). And see foot note 14 above.

²⁵ *Ibid.*

²⁶ Li, J.C. Environmental Impact Assessments in Developing Countries: An Opportunity for Greater Environmental Security? (2008).

²⁷ Sejarah Ringkas Penubuhan Jabatan Alam Sekitar (1975-1995), Jabatan Alam Sekitar, Kementerian Sains, Teknologi dan Alam Sekitar Malaysia, 15 April 1995.

²⁸ NEMA 107 of 1998.

or a combination of both. An amendment to NEMA was also inserted to ensure that there was clarity when it comes to pollution that occurred before NEMA was passed; and also to occasions when such pollution arose at a different time from the actual activity that caused the contamination and to pollution that may arise following an action that changes pre-existing contamination (NEMA section 28(1A)). As it stands, a defense that argues that the pollution is historic, indirect or underlying no longer stands in court, as such the responsibility to take reasonable steps remains.

The amendments to NEMA are more illuminated when one takes into account section 34 which provides for firms (companies and partnerships) and their directors (including board members, executive committees) to be held accountable, in their personal capacities for crimes committed against the environment.

In terms of the section, liability also extends to managers, agents, or employees who deliberately omit to perform an allocated task while acting on the employer's instructions. In such circumstances, the offence must be listed under schedule 3 of NEMA and the person concerned must have failed to take all reasonable steps to avert the harm or commission of the offense considering his or her personal circumstances.²⁹

Other countries also have the duty of care as part of their legislative framework design. In Australia, the law regulating the duty of care is the Environmental Protection Act 1997 and this study will also look at the Environmental Protection Act of 1994 (EPA of 1994) which is the provincial legislation of Queensland. The EPA of 1994 contains a general environmental duty in section 319 (1) ,³⁰ which provides that "A person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practical measures to prevent or minimise the harm." This provision is similar to the duty of care under section 28 of the NEMA which also provides for the duty of care.

In the United Kingdom, the Westminster City Council contends that, "enforcement ensures that those individuals and/or businesses that spoil the environment are made

²⁹ Section 28(14) of the NEMA.

³⁰ section 319, sub-section 1 of the Environmental Protection Act 1994.

accountable for their actions. The Environmental Protection Act 1990, Clean Neighborhoods and Environment Act (CNEA) 2005 and the Control of Pollution (Amendment) Act 1989, introduced powers and tools for local authorities to help tackle local environmental issues such as fly-tipping³¹ and waste.³² In ensuring that the environment is protected, the Westminster City Council adopted an approach that works with residents and businesses to ensure compliance, and this is primarily done through information and advice”.³³

In South Africa, local authorities include traditional leaders such as *Indunas* (Chiefs) who deal with matters arising amongst community members on daily bases (particularly in rural areas). Should they be granted powers and tools to help deal with environmental issues as it is done in the UK, this could be beneficial. Traditional authorities are more actively involved with community members than any other authorities in South Africa. This in itself can be used as a great tool to deal with pollution and degradation caused to the environment at a local level, particularly in rural areas. Furthermore, if all local authorities can adopt the strategy of giving information and advice to residents and businesses in South Africa, this could help improve the level of compliance, because every citizen will be in position to know what step to take when the right contained in section 24 of the Constitution is violated and the consequences of tempering with such a right.

3.2 Duty of care: Perspectives from other jurisdictions

In Australia Queensland Government, they also have undertakings to meet environmental obligations and duties.³⁴ The Environmental Protection Act 1997 lay out obligations and

³¹ Fly-tipping is an offence under Section 33 of the Environmental Protection Act (EPA) 1990 Section 33 states that a person shall not deposit controlled waste or knowingly cause or permit controlled waste to be deposited in or on any land, without an environmental permit authorizing the deposit.

³² Westminster City Council. 2016. Waste Enforcement Policy 2016: www.advicelocal.org.uk accessed on the 26/05/2012.

³³ Ibid.

³⁴ Department of environment and heritage protection: Meeting environmental obligations and duties: www.ehp.qld.gov.au/management/planning/guidelines/legislation/general_environmentalduty.html.(2015) Accessed 02/07/2016.

duties to protect the environment. It also sets out enforcement mechanisms to be utilized in case offences or acts of non-compliance are identified.³⁵

According to Young et al, an environmental duty of care offers landholders flexibility in return for increased responsibility.³⁶ “While complying with the duty of care is mandatory, duty holders can choose how they comply”. They see efficiency benefits arising from a common-law environmental duty of care approach as compared to environmental regulation due to:

- Greater flexibility resulting in lower compliance costs; and
- The onus of proof shifting from government to the landholder.

In Queensland there are two primary duties relating to the protection of the environment that apply to everyone namely:

- **General environmental duty**, which means “a person must not carry out any activity that causes or is likely to cause environmental harm, unless measures to prevent or minimize the harm have been taken; and”
- **Duty to notify of environmental harm**, “which is to inform the administering authority and landowner or occupier when an incident has occurred that may have caused or threatens serious or material environmental harm”.³⁷

The duty to notify of environmental harm is particularly pointed out to the administering authorities who have been enlightened of the incidents that may have or threatened serious or material environmental pollution or degradation. As to whom does the duty to notify apply to, under which circumstances the duty may apply, the person whom to notify

³⁵ See foot note 16 above.

³⁶ Young, M., Shi, T., and Crosthwaite, J. Duty of Care: An instrument for increasing the effectiveness of catchment management. Department of Sustainability and the Environment: Victoria. (2003).

³⁷ See foot note 16 above.

and the period of the notification about the incident is catered for by the duty to notify of environmental harm.³⁸

According to Shepherd and Martin, the duty of care is a legal term with a long history in the common law, notably within the tort of negligence. This has led to policy proposals that a duty of care should be incorporated into natural resource management legislation which have been subsequently enacted in several states. It is for the same reason that NEMA contains the environmental duty of care in order to ensure people and authority take reasonable measures to protect the environment and take reasonable measures to remedy the damage and finally imposes liability upon those who fail to comply with the environmental duty.³⁹

3.3 Non-Governmental Organizations and Case law

Non-governmental organizations (NGO's) also play a significant role in relation to environmental protection. This is seen in the case of Director: Mineral Development, *Gauteng Region and Sasol Mining v SAVE the Vaal environment*.⁴⁰

The parties - were First Appellant: Director: Mineral Development, Gauteng Region, and Second Appellant: Sasol Mining Respondent: 'Save'

Facts of the case - During May 1996 Sasol Mining urgently needed to extend its coal mining activities into an area comprising three farms in the Sasolburg district that fronted the Vaal River. The farms were situated between the Letaba Weir and the Barrage. It had been established that the only feasible manner of mining for coal in that area was by open-cast mining. Sasol Mining accordingly applied to the Director: Mineral Development, Gauteng Region for a mining license in terms of s 9 of the Minerals Act 50 of 1991. Save, and a number of other property owners in

³⁸ Sherman k. *This guideline provides information regarding the duty to notify the Department of Environment and Heritage Protection of certain events, including those that may cause serious and material environmental harm*, under ss. 320 to 320G of the Environmental Protection Act 1994.

³⁹ Shephard M and Martin P. *The multiple meanings and practical problems with making a duty of care work for stewardship in agriculture* MqJICEL, Vol 6. (2009).

⁴⁰ *Director: Mineral Development, Gauteng Region and Sasol Mining v SAVE the Vaal environment*. 1999 2 SA 709 (SCA).

the affected area, were united in their opposition to the development and exploitation of coal reserves by open-cast mining in the area under discussion.

Their concerns were primarily of an environmental nature, inter alia, (a) the (at least) partial destruction of a wetland of nearly 1000 ha in extent that filtered and naturally purified in excess of 2 million cubic meters of water that flowed into the Vaal Barrage; (b) removal of the overburden would establish conditions for the large-scale generation of acid mine drainage; (c) threats to fauna and flora, including various red data species; (d) constant noise, light, dust and water pollution; (e) the destruction of conditions conducive to the recreational industry on the Vaal; (f) the adverse effects on property values in the area. While the mining license was still under consideration Save raised the contention with the Director that they were entitled to be heard in opposing Sasol's application for a mining license.

In March 1997 the Director informed Save that he was not obliged to hear their concerns at that stage, nor was he prepared to do so. In May 1997 he issued a mining license to Sasol Mining in respect of the envisaged open-cast mine. Save successfully took the Director's decision to issue the mining license on review in the Witwatersrand Local Division (WLD). The Director and Sasol Mining accordingly took this decision on appeal to the Supreme Court of Appeal (SCA).

The issue - Was the *audi alteram partem* rule applicable to the Director's consideration of the criteria for granting a mining license set out in s 9(3) of the Minerals Act.

Judgment -The court rejected the appellants' arguments that the *audi rule* was not applicable or that it was strictly related to the literal meanings of the items listed in s 9(3) (a)–(e). Instead the court held that the items enumerated in s 9(3) involved environmental issues. For example, s 9(3) (b) provided that the Director should only issue the mining license if satisfied that the applicant had the necessary ability and provision to rehabilitate the disturbance of the surface. Parliament could not have intended to exclude such a fundamental principle as the *audi* rule simply on

the basis that the criteria the Director needed to take into account were enumerated in a manner that did not specifically refer to the environment.

Environmental NGOs were very active and in the year 1999 the extent of the Constitutional environmental right was tested in a landmark court case that was prosecuted by an NGO (Save the Vaal Environment). *In Director: Mineral Development, Gauteng Region and Sasol Mining v SAVE 1999 2 SA 709 (SCA)* the court held that the inclusion of the environmental right in the set of fundamental human rights indicated that environmental considerations must be given appropriate recognition and respect in administrative processes.

Civil society has shown itself willing and able to utilize the range of legal and administrative tools at its disposal, including, engaging actively in the legislated public participation process required for, using administrative and court processes to obtain information relevant to environmental issues using the Access to Information.⁴¹ It requires the administrative officials to perform their duties in a just and responsible manner by approaching to the courts under the Promotion of Administrative Justice Act.⁴²

PAJA provides that whosoever feels that his or her right to a just administrative action has been tempered with, can request for reason to justify such an unjust administrative action. This is provided for in section 5⁴³ of PAJA which gives effect to the Constitutional imperative in section 33(2) for written reasons in the following terms:

“Any person whose rights have been materially and adversely affected by administrative action and who has not been given reasons for the action may, within 90 days after the date on which that person became aware of the action or might reasonably have been expected to have become aware of the action, request that the administrator concerned furnish written reasons for the action”.⁴⁴

⁴¹ Access to Information Act No. 2 of 2000.

⁴² Promotion of Administrative Justice Act (No. 3 of 2000).

⁴³ *Ibid.*

⁴⁴ *Ibid.*

The importance of the right to reasons in the environmental context is illustrated in the case of *Administrator, Transvaal and The Firs Investments (Pty) Ltd v Johannesburg City Council, 1971 (1) SA 56 (A)*. This case was concerning opposition to the then-controversial proposal to rezone a residential area to business, in order to enable the establishment of what today is the Firs Shopping Centre in northern Johannesburg. On the question of reasons, Chief Justice Ogilvie Thompson said the following:

“The Administrator would have been well advised to state the reasons for his decision for just as the failure of a party to testify on a matter within his knowledge may, under certain circumstances, give rise to an inference against him, so may the failure to give reasons for the decision constitute an adverse element in assessing the conduct of the person making that decision. In particular the failure to furnish reasons may add color to an inference of arbitrariness”.⁴⁵

4. AIMS AND OBJECTIVES OF THE STUDY

4.1 Aim

The aim of the study is to analyze the law regulating the duty of care to the environment from being harmed and degraded, and to assess the challenges encountered with regard to the enforcement of the duty.

4.2 Objective

The objective of the study is to hold accountable people who degrade the environment by enforcing the laws regulating the duty of care to the environment and bring those who cause harm to the environment to face justice.

5. RESEARCH METHODOLOGY

The research methodology will be non-empirical qualitative approach. The research will be majorly library based and will rely on the library materials that include but are not limited to: textbooks, reports, legislations, regulations, charters, policies,

⁴⁵ Rabie, A. "Environmental Law in search of an Identity," *Stell LR* (2): 202. (1991).

amendments to the legislation, journals, academic journals, government gazette, Constitution, international and national instruments.

6. DEFINITION OF CONCEPTS

6.1 Environmental harm - is any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance.⁴⁶

6.2 Duty of care - The responsibility or the legal obligation of a person or organization to avoid acts or omissions (which can be reasonably foreseen) to be likely to cause harm to others.⁴⁷ Duty of care comes under the legal concept of negligence, and negligence belongs to the domain of common law. Common law is also known as judge-made law as the decision about guilt is decided using legal precedence and community attitudes and expectations. That is, there hasn't been an Act of Parliament passed defining what is legal or illegal but rather the decision is based on what is considered appropriate or not appropriate at a particular time in history.⁴⁸

6.3 General environmental duty⁴⁹ – which means a person, must not carry out any activity that causes or is likely to cause environmental harm, unless measures to prevent or minimize the harm have been taken.

6.4 The Duty to Notify of Environmental Harm - is a legal requirement that ensures that the administering authority and other relevant persons are made aware of incidents that may have caused or threaten serious or material environmental harm.⁵⁰

⁴⁶Environmental Protection Act 1994: *The duty to notify of environmental harm* Approved by: Enquiries: Kathrin Sherman Permit and License Management Director, Strategic Compliance Ph: 13 QGOV (13 74 68) Department of Environment and Heritage Protection Fax: (07) 3330 5875 Date: 7 October 2015.

⁴⁷ See footnote 22 above.

⁴⁸Williams s, Protection of the environmental law:

www.sielearning.tafensw.edu.au/MCS/CHCAOD402A/chcaod402a_csw/knowledge/duty_of_care/duty_of_care.html. Accessed 14/04/2016

⁴⁹ The State of Queensland (Department of Environment and Heritage Protection) 2016.

⁵⁰ Department of Environment and Heritage Protection: Meeting environmental obligations and duties 2015.

7. SIGNIFICANCE OF THE STUDY

The mini-dissertation analyses the concept of the duty of care to the environment and expose the challenges being faced in the enforcement of this duty. The environment is in a deteriorating phase whereby it is being exploited to satisfy the ever demanding human needs without rehabilitation⁵¹. The duty of care therefore demands that measures must be taken to ensure protection of the environmental using instruments like the Rio and Stockholm Declaration⁵² and also enforce this duty of care to the environment and to promote sustainable development.

The study will therefore promote and advance the need to enforce the duty of care by the three spheres of Government to ensure that pollution and environmental harm are kept to a minimum and that reasonable measures are taken to prevent this harm. Lessons from other jurisdictions will also be considered in this study so that South Africa can learn good lessons on how to enforce the duty of care to the environment.

⁵¹ Kidd M "Removing the green-tinted spectacles: The three pillars of sustainable development in South African environmental law" *2008 South African Journal of Environmental Law and Policy* 85-102.

⁵² Article 11 of the Stockholm Declaration gave recognition to the environment and called on States not to take any steps to promote environmental protection without duly taking into account the effects on development policy.

CHAPTER 2

ANALYSING THE LEGISLATIVE AND POLICY FRAMEWORK ON THE DUTY OF CARE

1. Introduction

In this chapter the main focus will be paid to legislation policy framework regulating the duty of care within the Republic of South Africa. Due to the environmental harm caused by human activities in the name of development, legislative policy framework had to be promulgated in order to stop environmental harm from occurring, recurring or continuing to occur. Some of the pieces of legislation include:

- “The Constitution of the Republic of South Africa of 1996.
- The National Environmental Management Act 107 of 1998.
- The National Environmental Management Waste Act 59 of 2008.
- The Environmental Conservation Act 73 of 1989.
- The Environmental Protection Act 1994”.

1.1 The Constitution of the Republic of South Africa

The Constitution of the Republic of South Africa under section 24⁵³ provides the following:

Everyone has the right-

- (a) “To an environment that is not harmful to their health or well-being;
- (b) To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-
 - (i) prevent pollution and ecological degradation;

⁵³ Section 24 of the Republic of South Africa 1996.

- (ii) Promote conservation; and
- (iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

The Constitution of the Republic of South Africa is the highest law of the land, thus every person has to follow its provisions. Section 24 of the Constitution states that every person has a right to an environment that is not harmful to their health or well-being; this is a right that places a positive obligation upon the state to take reasonable legislative and other measures to ensure maximum protection to the environment for the benefit of the current generation and the future generation.

Section 24 of the Constitution is also in support of the principle of intergenerational Equity. The principle provides that “humans ‘hold the natural and cultural environment of the Earth in common both with other members of the present generation and with other generations, past and future. It means that we inherit the Earth from previous generations and have an obligation to pass it on in reasonable condition to future generations”.⁵⁴ Section 24 (b) states that every person has a right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures and this is what the principle of intergenerational Equity advocates for.

Therefore, the entrenchment of the environmental right in section 24 of the Constitution ensures that all government conducts, including individual conduct that impacts negatively on the environment, must comply with the Constitutional right to a safe and healthy environment.⁵⁵ Although it is not specifically mentioned in section 24, but the implication of the duty of care to the environment has been highlighted in NEMA which derived its enactment and validity from the Constitution, in particular section 24.

In order to achieve environmental protection and conservation as stipulated in section 24, the state has to take reasonable legislative and other measures that prevent pollution and

⁵⁴ Beder, S, Costing the Earth: Equity, Sustainable Development and Environmental Economics, *New Zealand Journal of Environmental Law*, 4, 2000, 227-243.

⁵⁵ Currie and De Waal. *The bill of rights handbook* (2005) (5th ed) 522-523.

ecological degradation. A number of principles have been enacted to prevent environmental pollution.

Furthermore, sustainable development must also be ensured by the state in order to achieve the provisions of section 24. In terms of NEMA, sustainable development is defined as the integration of social, economic, and environmental factors into planning, implementation, and decision-making so as to ensure that development serves present and future generations.⁵⁶ This means that the present generation has a duty to make use of the available resources in a way that they will be preserved for the future generations to come. In other words, the upcoming generation must also find the environment in a habitable state.

1.2 The National Environmental Management Act

Section 24 of the Constitution of the Republic of South Africa lead to the enactment of the NEMA which is a framework statute that:

- “Provides for co-operative governance and decision making in matters affecting the environment.⁵⁷
- It is based on the international environmental law principles of sustainable development and integrated environmental management.⁵⁸
- Provides for listed activities that trigger the requirement for prior environmental authorisation for which an environmental impact assessment (EIA) is required, which includes specific public participation procedures.⁵⁹
- It is the origin of the enforcement and compliance mandate of the environmental management inspectorate (EMIs).⁶⁰

⁵⁶ Section 1(xxix) of NEMA.

⁵⁷ Chapter 3 of the NEMA, *Procedures for Co-operative governance*.

⁵⁸ Chapter 1 of NEMA, *National Environmental Management Principles*.

⁵⁹ Section 24 (1) of NEMA (Environmental Authorisations) which provides that:(1) In order to give effect to the general objectives of integrated environmental management laid down in this Chapter, the potential consequences for or impacts on the environment of listed activities or specified activities must be considered, investigated, assessed and reported on to the competent authority or the Minister responsible for mineral resources, as the case may be, except in respect of those activities that may commence without having to obtain an environmental authorisation in terms of this Act.

⁶⁰ Chapter 7 of the NEMA, *Compliance, Enforcement and Protection*.

- It further imposes a general duty of care to the environment (that is, every person has the duty to avoid pollution and environmental degradation) as provided in section 28. Both civil parties and the government rely on this duty when enforcing environmental obligations. The duty of care has retrospective effect, meaning that it is imposed on anyone who causes, has caused or may cause significant pollution or degradation to the environment”.⁶¹

1.2.1 Duty of care

The guiding philosophy of section 28, which deals with the duty of care and remediation of environmental damage, is based on the fact that legal responsibility is placed upon any person who causes harm to the environment.

Section 28(1)⁶² imposes a legal responsibility to all persons who have caused significant pollution or degradation to the environment. This act does not leave behind the pollution or degradation caused in the past, or the environmental harm currently caused or that which may be caused in the future. An obligation to prevent such pollution from occurring, recurring or continuing to occur is being passed by the environmental authorities in respect of the current generation and the future generation yet to come. Section 28 of the NEMA obliges the person responsible for causing harm to the environment to take reasonable measures to minimise and rectify such pollution or degradation caused to the environment.

One may wonder as to what does "pollution or degradation" mean. The Act defines pollution as "any change in the environment caused by (i) substances; (ii) radioactive or other waves; or (iii) noise, odours, dust or heat, emitted from any activity, including the storage or treatment of waste or substances, construction and the provision 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 or on the composition, resilience and

⁶¹ Section 28 of the NEMA, *Duty of care and remediation of environmental damage*, which provides that (1) Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimize and rectify such pollution or degradation of the environment.

⁶² Ibid.

productivity of natural and managed ecosystems, or on materials useful to people, or will have such an effect in the future." It has been noted that, taking into account the principles of NEMA and section 24 of the Constitution,⁶³ it would be anomalous to confine "significant" to harm to humans or damage to property rather than also encompassing any interference with ecosystems that is more than negligible or superficial.

Section 28(2)⁶⁴ points out the bearers of the duty of care and to whom the remediation may extend to. The section includes the owner of land or premises, a person in control of the land or premises, or a person who has the right to utilize the land or premises. The people pointed out by the act in question has a responsibility to ensure maximum protection of the environment when conducting activities that are likely to cause, significant pollution or degradation to the environment. If the damage has been caused, then they must make sure that they come up with ways to remedy the damage caused. In case the damage is continuing to occur they must they take measures to stop the harm from continuing to occur.

The NEMA does not define or clearly states what constitutes reasonable measures; section 28(3)⁶⁵ make an attempt to outline the measures that could be taken. These measures include: "investigation, assessment and evaluation of the environmental impact, educating employees and cessation, modification or control of any acts causing environmental harm, the containment or prevention of pollutants or the cause of

⁶³ Soltau F. *The National Environmental Management Act and Liability for Environmental Damage*, (1996) Early Stage Researchers Journal Global Audience pp 45-46.

⁶⁴Section 28 (2) of the NEMA, which provides that: Without limiting the generality of the duty in subsection (1), the persons on whom subsection (1) imposes an obligation to take reasonable measures, include an owner of land or premises, a person in control of land or premises or a person who has a right to use the land or premises on which or in which-

(a) any activity or process is or was performed or undertaken; or
(b) any other situation exists, which causes, has caused or is likely to cause significant pollution or degradation of the environment.

⁶⁵ Section 28 of the NEMA, which provides that: (3) The measures required in terms of subsection (1) may include measures to-

(a) investigate, assess and evaluate the impact on the environment;
(b) inform and educate employees about the environmental risks of their work and the manner in which their tasks must be performed in order to avoid causing significant pollution or degradation of the environment;
(c) cease, modify or control any act, activity or process causing the pollution or degradation;
(d) contain or prevent the movement of pollutants or the causing of degradation;
(e) eliminate any source of the pollution or degradation; or
(f) Remedy the effects of the pollution or degradation.

environmental degradation; the elimination of any source of such pollution or degradation; and the remedying of the effects of such pollution or degradation”.

It is noteworthy to include within these "reasonable measures" the requirement for an investigation, assessment and evaluation of the impact on the environment. This appears to be in line with South Africa's obligations under Article 14 of the Convention on Biological Diversity, which requires that each contracting party introduce procedures "requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity" and "introduce appropriate arrangements to ensure that the environmental consequences of its programmes and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account."

What constitutes reasonable measures will ultimately depend upon the circumstances of each case, taking into cognisance also the principles and provisions embodied in section 28 of NEMA. It is argued that a court might consider the import of the "Precautionary Principle" when deciding at what point the risks posed to the environment by a defendant conduct justifies the taking of further steps in assessing the question of what reasonable measures entail.⁶⁶ Section 28(4) confers the powers necessary to ensure that the Section 28(1) duty of care is discharged on the competent authority.

Should it happen that a person under this act is required to take rehabilitation or rather other remedial action on a land or another, reasonably requires access to, use of or a limitation on use of that land in order to effect rehabilitation or remedial work, but fails to acquire it on reasonable terms, the Minister may expropriate the necessary rights in respect of that land for the benefit of the person undertaking the rehabilitation or remedial work, who will then be vested with the expropriated rights; and or may recover from the person for whose benefit the expropriation was effected all costs incurred.⁶⁷

⁶⁶ See foot note 50 *Opcit.*

⁶⁷ Section 28 (6) of the NEMA.

Where the State is dilatory in this regard, section 28(12)⁶⁸ “grants any member of the public the right to apply to court for a *mandamus*⁶⁹ to compel the relevant Government official to take the steps envisaged in section 28 for enforcing the taking of preventative or remedial steps by those causing damage to the environment”.

Subsection 14 of the section in question deals with punishment to the offenders of the environment. If the authorities take a step and give a directive to ensure that an offender takes reasonable measures to address harm to the environment, failure to comply with such a directive is an offence in terms of section 28 (14) of the NEMA. “A person convicted of the section 28 (14) offences is liable to pay a fine of up to R1 million or imprisonment for up to one year, or to both”. “Section 28(14) is now listed as a Schedule 3 offence.⁷⁰ This means that unless it can be shown that all reasonable steps necessary to prevent the crime were taken, even an unintentional (but negligent) unlawful act or omission which causes significant pollution or degradation of the environment, can make a ‘director’ personally liable”.

1.2.2 Environmental principles

This Act also contains environmental law principles that seek to address crucial environmental issues, such as environmental pollution and degradation. Amongst those principles we find the Polluter pays principle and the precautionary principle.

1.2.2.1 *Polluter pays principle*

The principle was first set out by the Organisation of Economic co-operation and development in 1974.⁷¹ This principle is one of the most popular principles against environmental pollution. It provides that whoever is responsible for damage to the

⁶⁸ Section 28 (12) Any person may, after giving the Director-General, the Director-General of the department responsible for mineral resources or provincial head of department 30 days' notice, apply to a competent court for an order directing the Director-General, the Director-General of the department responsible for mineral resources or any provincial head of department to take any of the steps listed in subsection (4) if the Director-General, the Director-General of the department responsible for mineral resources or provincial head of department fails to inform such person in writing that he or she has directed a person contemplated in subsection (8) to take one of those steps, and the provisions of section 32(2) and (3) shall apply to such proceedings, with the necessary changes.

⁶⁹ A mandatory order that compels the government to take action.

⁷⁰ Nel, G. *Environmental Law and Liabilit.* (2007).

⁷¹ Pearce, D. *Blueprint int for a Green Economy* (1989).

environment should bear the costs associated with it. This means there is a positive duty placed upon every person who may or has caused pollution to the environment to pay for such damage. The main objective of the polluter pays principle is the preservation and protection of the environment. Section 2(4) (p) of the NEMA which embodies the principle provides that:

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

In simple terms this principle entails that it is the responsibility of the polluter to meet the costs of pollution control and prevention measures, irrespective of whether these costs are incurred as a result of the imposition of some charge on pollution emission, or are debited through some other suitable economic mechanism.⁷² The objective of this principle supports the notion of the environmental duty of care.

1.2.2.2 *Precautionary principle*

This principle simply entails that before a person can conduct any form of activity which may negatively affect the environment, such a person has to take precautionary measures in order to avoid causing environmental harm. It states that “if the environmental consequences of a particular project, proposal or course of action are uncertain, then the project, proposal or course of action should not be undertaken. It is sometimes possible in these circumstances to use predictive tools such as risk assessments, to make value judgements in the absence of full information”. In circumstances where there is lack of communication between project developers and interested and affected parties, the precautionary principle is often highly recommended.

Science and technology has calculated risk as the basis of its innovation since an over the top policy will jeopardise any progress and this is detrimental to the society as a whole. The precautionary principle and the polluter pays principle have significant impacts on South African environmental policy and legislation and it is deeply rooted within its structures. This would mean that in cases there are doubts about proposed projects,

⁷² Ball and Bell (n 4) at 97; Michael Purdue, integrated pollution control in the environmental protection act 1990: a coming age of environmental law? www.complydirect.com/packagingregs Accessed 02/09/2016

officials may apply the precautionary principle and formally delay development pending further investigation or evidence.

1.3 The National Environmental Management Waste Act 59 of 2008.

The National Environmental Management Waste Act (NEMA)⁷³ has as its objective the protection of health, well-being and the environment by providing reasonable measures for, inter alia, remediating land where contamination presents, or may present, a significant risk of harm to health or the environment.

The NEMA introduced producer responsibility as a new aspect for products that present an adverse impact on the environment. This related to the duty of care contained in section 28, NEMA and presents a producer's duty in relation to the product produced to include a financial or physical responsibility for the post-consumer stage of the product.⁷⁴

The NEMWA as a statutory instrument also takes into account international environmental law which recognizes the hierarchy of waste management. The hierarchy of waste management advocates for sustainable development which provides acknowledges the internationally recognised hierarchy of waste management, stating that sustainable development requires that “waste generation is avoided, or if it cannot be avoided, that it is reduced, re-used, recycled or recovered (which includes co-processing), and as a last resort treated (which includes incineration) and or safely disposed of”. The NEMWA Act Further requires that waste activities be licensed, and imposes an obligation on both generators and disposers to ensure proper disposal of waste. The Act also provides for setting national norms and standards, and specific waste management measures that include the licensing of waste management activities, identification of priority wastes, and prescribing measures for dealing with such wastes.

The Act briefly makes provision for:

- “A National Waste Management Strategy, Norms and Standards.”⁷⁵

⁷³ Act 59 of 2008, (NEM: WA).

⁷⁴ Gilder A, Rumble O and Dhladhla D, Environment – South Africa, <https://www.ensafrica.com/news/Environment-South-Africa>, accessed 01/07/2016.

⁷⁵ Part 2 of the National Environmental Management Waste Act.

- Institutional and Planning Matters.
- Waste Management Measures.⁷⁶
- Licensing Of Waste Management Activities.⁷⁷
- Waste Information.⁷⁸
- Compliance and Enforcement.”⁷⁹

This Act seeks, “to reform the law regulating waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation”.⁸⁰ This Act works hand in glove with NEMA as provided in section 5⁸¹ that it must be read along with NEMA unless in situations where the context of this act clearly states that NEMA is not applicable.

Furthermore, section 3⁸² of the act in question outlines the General duty of State which is to fulfil the rights contained in section 24 of the Constitution. The act provides “that the State, through the organs of state responsible for implementing this Act, must put in place uniform measures that seek to reduce the amount of waste that is generated and, where waste is generated, to ensure that waste is re-used, recycled and recovered in an environmentally sound manner before being safely treated and disposed of”⁸³. This is basically the shadow of what section 28 of the NEMA advocates for.

⁷⁶ Chapter 4 of the National Environmental Management Waste Act.

⁷⁷ Section 43 of The National Environmental Management Waste Act which provides the following:

a) importation and exportation of waste; b) where any activity is likely to generate waste; c) accumulation and storage of waste; d) collection and handling of waste; e) reduction, re-use, recycling and recovery of waste; f) trading in waste; g) transportation of waste; h) transfer of waste; i) treatment of waste; and j) disposal of waste.

⁷⁸ Chapter 6 of the National Environmental Management Waste Act.

⁷⁹ Chapter 7 of the National Environmental Management Waste Act.

⁸⁰ Preamble of the National Environmental Management Waste Act.

⁸¹ Section 5 of the National Waste Management Act, which provides that: This Act must be read with the National Environmental Management Act, unless the context of this Act indicates that the National Environmental Management Act does not apply.

⁸² Section 3 of the National Environmental Management Waste Act which provides: *General duty of State*

In fulfilling the rights contained in section 24 of the Constitution, the State, through the organs of state responsible for implementing this Act, must put in place uniform measures that seek to reduce the amount of waste that is generated and, where waste is generated, to ensure that waste is re-used, recycled and recovered in an environmentally sound manner before being safely treated and disposed of.

⁸³ *ibid*

Section 14 of the act, contains the General duty in respect of the waste management. It provides that a holder of waste must, within the holder's power, take all reasonable measures to avoid the generation of waste of waste and where such generation cannot be avoided, to minimise the toxicity and amounts of waste that are generated; reduce, re-use, recycle and recover waste; where waste must be disposed of, ensure that the waste is treated and disposed of in an environmentally sound manner; manage the waste in such a manner that it does not endanger health or the environment or cause a nuisance through noise, odour or visual impacts; prevent any employee or any person under his or her supervision from contravening this Act; and prevent the waste from being used for any unauthorised purpose.⁸⁴

There is a link between the act in question and the main environmental regulatory statute.⁸⁵ Section 19 of the NEMWA together with section 28 of NEMA "require reasonable measures to be taken in order to prevent "significant" pollution from occurring, continuing or recurring, and if it cannot be stopped, to minimise and rectify that pollution".

Besides the analysed legislation, there are environmental law principles which serve as a common purpose (environmental protection) with that of the environmental duty of care. These distinctive principles include the Polluter pays principle and the precautionary principle.

⁸⁴ Section 14 (1) of the National Environmental Management Waste Act.

⁸⁵ See foot note 26 *Opcit.*

2. Conclusion

This chapter outlined and analysed the legislative framework that govern environmental law (duty of care in particular) and from the analysis one can conclude that South Africa is one of the countries that has the best environmental laws. However, the challenge arises in the enforcement of these laws. This is validated by various cases including the case of *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd T/A Pelts Products & Others*,⁸⁶ where the court applied the duty of care principle *ex post facto*.⁸⁷ The case is fully discussed in chapter 3.

⁸⁶ 2004 (2) SA 393 (E).

⁸⁷ This means that the court applied Section 28 after the damage occurred.

CHAPTER 3

CHALLENGES OF EFFECTIVE IMPLEMENTATION OF DUTY OF CARE TO THE ENVIRONMENT IN SOUTH AFRICA: ISSUES AND PERSPECTIVE

1. Introduction

In terms of National Environmental Management Act 107 of 1998 (NEMA), “South African law regards the environment as a public trust to be conserved and protected for the benefit of all”⁸⁸. In the event the environment is subjected to harm, the law provides for mechanisms to hold perpetrators accountable through imposition of criminal sanctions as well as by requiring them to take specified measures (e.g. to remedy the damage) and to compensate the state and third parties for expenses that have been incurred as a consequence of the offence⁸⁹.

While the NEMA has always imposed a general duty on all persons to take reasonable measures to avoid, or to minimise and rectify, significant harm to the environment, since the commencement of the National Environmental Laws Amendment Act 14 of 2009, in September of that year, it has become an offence for anyone to unlawfully and intentionally or negligently commit any act or omission which: (a) causes, or is likely to cause, significant pollution or degradation of the environment, or (b) detrimentally affects, or is likely to affect, the environment in a significant manner. Furthermore, if the authorities step in and issue a directive to ensure that an offender takes reasonable measures to address actual or potential pollution or degradation, failure to comply with a directive is now an offence⁹⁰.

⁸⁸ Section 2(4)(o) of Act 107 of 1998.

⁸⁹ Nel, G. 2012. Environmental Law and Liability. Cullinan and Associates. Available at www.enviropaedia.com/topic/default.php?topic_id=293. Accessed on the 02/05/2016

⁹⁰ Section 28(14) of Act 107 of 1998.

NEMA contains various important provisions in relation to liability. Section 28 of NEMA establishes distinctive environmental principles that are of great importance. These distinctive principles include the polluter pays principle, the precautionary principle, sustainable development, life cycle responsibility and environmental justice.

This development has allowed the courts to impose penalties on individuals and corporations that cause significant harm to the environment without taking steps to remedy such harm. Therefore this chapter will provide an analysis of the duty of care as contained in Section 28 of NEMA, and also highlights some challenges in the enforcement of the duty by paying particular attention to the case of *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd T/A Pelts Products & Others*⁹¹, The court applied the duty of care principle *ex post facto*⁹². In international law the interpretation of the duty of care principle is linked to the precautionary principle, which relies on the prevention of damage rather than remedying of damage.⁹³

2. Analysis of Section 28 of NEMA

Section 28 of NEMA which is commonly known as the duty of care envisages protection of the environment and promotes one of the core principles of environmental law which is inter-generational equity which ensures that there is preservation of natural resources to further social and economic development. It is common cause that if natural resources are utilised in an unsustainable manner without due regard to their possible exhaustion human survival will be curtailed⁹⁴. Section 28 (1) of NEMA provides that:

“Every person who causes, has caused or may cause Significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be

⁹¹ 2004 (2) SA 393 (E).

⁹² This means that the court applied Section 28 after the damage occurred.

⁹³ Du Pleissis, W. *Hichange - A New Direction in Environmental Matters?* Faculty of Law, North-West University (Potchefstroom).

⁹⁴ The Reconstruction and Development Programme, 1994 (RDP).

avoided or stopped, to minimise and rectify such pollution or degradation of the environment”.

Section 28 compels everyone who caused or may cause significant pollution to take reasonable measures to prevent such pollution from occurring, continuing or recurring in order to protect the environment. Therefore, the section places both negative and positive obligation on every individual or corporation to prevent pollution or to make sure that they cease doing activities causing such pollution.

An important part of section 28 of NEMA is the category of persons on whom liability is non-exhaustive, because it refers to ‘every person’⁹⁵ Section 28 (2) goes even further and stipulates three categories of persons, firstly an owner of land or premises, secondly, a person in control of land or premises, for example, a lessee and thirdly a person who has a right to use the land or premises on or in which, any activity or process is or was performed or undertaken or any other situation exists, which causes, has caused, or is likely to cause significant pollution or degradation of the environment.⁹⁶

Section 28 (8) provides for the authorities to recover costs incurred as a result of it acting under section 28 (7) of the Act from any or all of the following persons:

- (a) “any person who is or was responsible for, or who directly or indirectly contributed to the pollution or degradation or the potential pollution or degradation,
- (b) the owner of the land at the time when the pollution or degradation or the potential pollution or degradation occurred, or that owner's successor in title,
- (c) the person in control of the land or any person who has or had a right to use the land at the time when (i) the activity or the process is or was performed or undertaken, or (ii) the situation came about, or

⁹⁵ Section 28(2) of NEMA.

⁹⁶ Nabileyo, O. 2009. *The Polluter Pays Principle and Environmental Liability in South Africa*. North West University. (2010).

(d) any person who negligently failed to prevent (i) the activity or the process being performed or undertaken, or (ii) the situation from coming about”.

Section 28 (3) of the NEMA points out some measures that should be taken by persons found responsible for the incident, these include the persons identified above. These measures include evaluations, investigations and assessment of the impact on the environment. The identified person must ensure that his or her employees have received proper education and information in relation to environmental risks of their tasks and the manner at which they must be carried out in order to refrain from causing serious environmental degradation and pollution.

Any process or activity causing environmental degradation or pollution must be stopped, modified and controlled. The movement of pollutants must as well be contained and prevented, while any source of environmental degradation or pollution be eliminated terms of section 24 of the NEMA 120, section 28 (6) (b) and section 2 (7) the director-general or the provincial head of department of environmental affairs may take measures to remedy the situation and recover the costs emanating from the number of stipulated persons including any person who is or was responsible directly or indirectly in the commission of environmental degradation or pollution.

The above section also does not leave out the owner of the land the time when the degradation of pollution occurred, or the successor of the owner. The person in control of the land at the time of the degradation or pollution or the person with a right to utilize the land at the period when the activity or the processes or was performed or undertaken or the incident came about, or any person who negligently failed to prevent the activity or the process being performed or undertaken or the situation from coming about may also be held liable for the costs incurred.

It is apparent that all persons including drivers and owners of trucks or any mode of transport that carries harmful substances take reasonable measures to prevent any environmental damage from occurring and they must exercise the duty of care as provided for by section 28 of the NEMA. If the measures are not taken in accordance to section 28 (1), then the director general or provincial, of department, may after

consultation, may direct the person who fails or failed to take those reasonable measures. The said authorities may as well investigate assess and evaluate the damage. If the assessment results indicate that there is degradation or significant pollution, the person has to take reasonable measures to repair the environment, in the event the person fails, the director general remedy the environment, and then after claims for the equivalent value that he or she used to remedy the environment. The claim is made against the environmental perpetrator.⁹⁷

Section 28 of the Act promotes reasonable corrective measures. The duty to enforce the reasonable corrective measures by means of directives falls upon the director-general or provincial head of the department. The duty to take reasonable measures is sparked by activities carried out that result in causing environmental degradation or significant pollution to the environment. However, the level that sets out significant pollution is not very clear; the law is silent on this and it is one of the factors which need to be looked at. This may be as a result of the fact that what appears to be a significant pollution on one person may appear not to be on the other.⁹⁸

The legislature must then establish laws or standards that mark what constitutes significant. Pollution is pollution whether significant or not, thus the legislature must amend the wording that has been used in section 28 of the NEMA. Environmental protection must be observed by all persons. For pollution to cause harm it needs not to be significant, even minor pollution can cause harm. For an example, urinating at a public place may be taken as a minor pollution, but it may however cause serious health problem to another.

Section 28 of the NEMA further addresses the issue of liability. The section appears to be general on the issue of liability to an extent that it is not clear as to when can liability arise. Practically, it is an impossibility to completely avoid pollution incidents as in some cases environmental pollution or harm may emanate from activities that are lawful.⁹⁹ For

⁹⁷ Section 25 (7) NEMA.

⁹⁸ Oosthuizen F. The Polluter Pays Principle: Just A Buzzword of Environmental Policy, South African Journal of Environmental Law and Policy (1998).

⁹⁹ Section 28 of the National Environmental Management Act.

an example, mining companies that work hand in hand with Eskom to produce electricity. Electricity is needed for lighting, cooking and other industrial use, but its production results in environmental pollution. The mining companies that produce charcoal to generate electricity have been authorised to do so, even though it causes environmental harm.

The National Environmental Management¹⁰⁰, has always imposed a general duty on all persons to “take reasonable measures to avoid, or to minimise and rectify, significant harm to the environment”, this have been running ever since the commencement of the “National Environmental Laws Amendment Act”.¹⁰¹ In September of the year 2008, it has unlawfully and intentionally or negligently commit any act or omission which “: (a) causes, or is likely to cause, significant pollution or degradation of the environment, or (b) detrimentally affects, or is likely to affect, the environment in a significant manner had become an offence”. Furthermore, none compliance by any person to directives issued by the environmental authorities in ensuring environmental protection has also been regarded as an offence.¹⁰² Any person from the said year found to be carrying out unlawful activities which result in significant pollution or degradation would be criminally liable for such an act.

Another amendment made to the NEMA was to “clarify the fact that the duty to take reasonable measures to prevent significant pollution or degradation of the environment from occurring, continuing or recurring, also applies to pollution that occurred before NEMA commenced”. The section was amended to also recognise pollution that might arise at a different time from the actual activity that caused the contamination and to pollution that may arise following an action that changes pre-existing contamination as an offence.¹⁰³ Therefore no one can stand and raise a defence saying that the pollution is historic. Historic or not, the underlying factor is that the duty to take full responsibility in ensuring environmental protection remains.

¹⁰⁰ Act 107 of 1998.

¹⁰¹ Act 14 of 2009.

¹⁰² NEMA, section 28(14).

¹⁰³ NEMA section 28(1A).

The paramount importance of these changes becomes more clear when one remembers that section 34 of NEMA makes provision for “both ‘firms’ (including companies and partnerships) and their ‘directors’ (including board members, executive committees or other managing bodies of companies or members of close corporations or of partnerships)” to be held liable, in their personal capacities, for environmental crimes.

This means that unless it can be shown that all reasonable steps necessary to prevent the crime were taken, even an unintentional unlawful act or omission which causes significant pollution or degradation of the environment, can make a ‘director’ personally liable¹⁰⁴ This is a sting in the tail provided for by section 28(14) of the NEMA which is now listed as a Schedule 3 offence.

Some of the offences include offences for contravening legislation regulating heritage resources, water, forests, veld and forest fires, biological diversity and air quality. (As yet the schedule does not include the offences under the National Environmental Management: Waste Act.) “The penalties for many of these offences are severe, ranging from a fine of a million for a section 28(14) offence, to fines of five or ten million Rand (coupled with periods of imprisonment) for contravening certain provisions of the National Environmental Management: Biodiversity Act. A court can substantially increase these criminal sanctions by increasing the fine by an amount equivalent to the monetary advantage gained by committing the offence, ordering the person convicted to take remedial action (e.g. to clean-up a contaminated site) and to compensate the state or third parties for loss or damage suffered as a consequence of the offence, and to reimburse the authorities for the reasonable costs of investigating and prosecuting the case (NEMA section 34(3) and (4))”.¹⁰⁵

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

3. Challenges in implementing and enforcing section 28 of the NEMA

According to Loots¹⁰⁶ before the enactment of the Constitution and its predecessor, the Interim Constitution¹⁰⁷ highlighted the following in its introduction:

“As the threats to our environment increase the need to use law to protect the environment becomes more critical. South Africa has a considerable body of environmental legislation but, generally speaking, it has not been effectively enforced. There are three methods of enforcement: criminal sanction, administrative action and civil litigation. In order to achieve effective enforcement, all three methods should be fully utilised. To date there has been very little enforcement by way of either criminal law or civil action. Insofar as there has been enforcement, it has been almost exclusively by way of administrative action.”¹⁰⁸

Ever since the publication of Loots’s article, the Government of South Africa promulgated a large number of Legislative and other measures to provide for and comply with the duty imposed under section 24(b) of the Constitution and many of these laws are aimed at preventing pollution and ecological degradation of the environment. The question is whether these laws have succeeded in effectively preventing pollution and ecological degradation to the environment from occurring or not.

3.1 Challenges in enforcing and implementing section 28 of the NEMA

There are challenges that have been discovered during enforcement and implementation of the section in question. The challenges emanate as a result of the interpretation of this section. It is said that one can be held accountable under this section without fault. Section 28 (1) of the NEMA provides that every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring. However, it

¹⁰⁶ Loots, C. “Making Environmental Law Effective”. *South African Journal of Environmental Law and Policy*, South African Journal of Environmental Law and Policy 17. (1994).

¹⁰⁷ Act 200 of 1993.

¹⁰⁸ see Footnote 93 *Op cit*

is not always the case that a person has to have caused pollution or degradation to be held accountable under section 28.

Kidd¹⁰⁹ gave an example of where a compliance officer of agriculture and environmental Affairs discovers that there has been a contamination of soil by patrols that has leaked from underground storage tank at a service station. The circumstances are that the causer of the leak is unknown. The person in control of the service station has done periodic checks and the tanks have been well maintained. In other words, the person at fault is uncertain. Section 28 requires the service station manager and or the owner of the land to take reasonable measures to stop the pollution.

The effect of this is that a person in control of land (owner or otherwise) who is unaware of how the land in question was polluted in the past, is nevertheless required to remediate the problem. This clearly outlines the fact that the section applies irrespective of fault, or even knowledge. This raises concern in that how can one be held accountable for something that he or she did not know or commit. Section 28 is somehow contrary to principle of fairness and the rule of law.

3.2 Significant pollution

The NEMA is silent about what constitutes significant pollution. Section 28 provides that “any person who causes, or is likely to cause significant pollution must take reasonable measures to prevent such pollution from occurring”. However, it is not apparent as to whether by significant pollution or degradation the Act refers to harm to humans or damage to property. Furthermore, what appears to be significant pollution on one person’s perspective may appear not to be significant on the other. This means for as long as the law or the act itself is silent on the issue of marking the threshold that determines significant pollution there shall always be a challenge.

NEMA must be more specific as to what constitutes significant pollution since the term constitutes an element of vagueness and reduces its practicability when it comes to deterring environmental perpetrators. In Malaysia, they also succumbed to the same

¹⁰⁹ Kidd M. "Removing the green-tinted spectacles: *The three pillars of sustainable development in South African environmental law*". South African Journal of Environmental Law and Policy 85-102. (2008).

challenges when it comes to dealing effectively with pollution, however they addressed the challenge by categorising all forms of pollution under their Environmental Quality Act¹¹⁰ which is specific and governs all areas of the environment, therefore if an individual harms the environment, there is always a provision that governs such conduct through the imposition of a heavy penalty or imprisonment.¹¹¹

This is seen in the case of *Malaysian Vermicelli Manufacturer (Melaka) Sdn Bhd v PP* ([2001] 3 AMR 3368). The accused was charged under Reg. 8(1)(b) of the Environmental Quality (Sewage and Industrial Effluents) Regulations for discharging effluent into inland waters (the Malacca river) without a license. The illegal action was an offence under s.25 (1) of the Environmental Quality Act 1974 (maximum fine RM100, 000). The Sessions Court had convicted and sentenced the Accused to a fine of RM75, 000 in default of 1-year imprisonment. The High Court affirmed the decision made by the Sessions Court.

This approach by Malaysia has proved to be very successful since there has been a noted reduction in the number of cases involving environmental degradation and pollution.¹¹² In that same vein, South Africa should also formulate a more holistic and inclusive definition of pollution that eliminates the element of uncertainty and also introduction of stiffer penalties to deter perpetrators.

3.3 The enforcement of the duty of care

On this sub-topic special attention will be paid to the case of *Hichange Investments Pty Ltd v Cape Produce Co (Pty) Ltd T/A Pelts Products & Others JDR 0040 (E) 1050/2001*.

South Africa is one of the countries which possess the best environmental laws; however the enforcement of these laws by government departments is a huge problem¹¹³. Government officials are incapacitated by lack of human resources and skills. The lack of skills and resources sometimes due to an unwillingness to act, to grant the permit

¹¹⁰ Environmental Quality Act, 1974.

¹¹¹ Preamble of the environmental quality Act "Environmental Quality Act, 1974."

¹¹² Chief Justice of Malaysia, *Statutory penalties for environmental violations*:

www.ajne.org/sites/default/.../statutory-penalties-4-for-environmental-violations Accessed on the 14/05/2016.

¹¹³ Du Pleissis, W. Hichange - A New Direction in Environmental Matters? Faculty of Law, North-West University.

applicant additional extension to comply with his or her authorisation conditions or to the non-enforcement of legislation.

The case of *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products & Others* delivered by Leach J is an example of how the courts adjudicated this type of case.

Facts of the case

This case concerns a business entity that was working under the title of Hichange Investments operating in Port Elizabeth where it owned land to conduct its business.

They had entered into a dealership with a company named Southern star that delivers motor vehicles manufactured by the Delta Motor Corporation where they let them their property. The cars are driven to the premises, where they are formed into convoys for delivery to different destinations. The cars were then kept for a long period on the premises and had to be protected from the elements. They contemplated on a plan of building a shelter that would cost R12 million protect the vehicles. On the premises there was also a service centre for the company's own vehicle fleet, as well as engineering works to build truck bodies for industry.

The premises were separated by a railway line and railway reserve from Pelt Products, which carries on a business as a semi-processing tannery. This business converts cured raw hides and skins into mineral-tanned bovine (cattle) and pickled ovine (sheep) pelts. These pelts are supplied to tanneries having finishing facilities. The tanning produces chemical waste products, such as malodorous hydrogen sulphide. Under South African law the use of hydrogen sulphide in industrial processes requires a registration certificate from the chief atmospheric pollution control officer.¹¹⁴

The hides and skins are first treated in rotating wooden drums containing a high-pH sulphide and lime-based liquor to remove hair and fat from the skin. The hide is then

¹¹⁴ The Atmospheric Pollution Prevention Act of 1965.

treated in a low-pH liquor of salt and acid. The bovine hides are also tanned with chromium sulphate. These processes result in gaseous emissions, including ammonia and hydrogen sulphide.

The Council for Scientific and Industrial Research (CSIR), a government-funded research institution, conducted a survey at the request of Hichange to determine the cause of the odours and pollution and look at their potential health effects. CSIR found that the pond was the main contributor of the pollution and that the hydrogen sulphide level measured up to six parts per million. This level violated public health exposure standards and occupational health exposure limits. The amount of hydrogen sulphide downwind from the pond was 300 times the nuisance guideline set by the Department of Environmental Affairs and Tourism. It was found that the corrosion on Hichange's premises was also caused by hydrogen sulphide. Hydrogen sulphide smells like rotten eggs.

In 1998 the Pollution Monitoring Committee of Port Elizabeth, a lobby group, took the case up with the chief officer. They invited him to a meeting and informed him that they obtained a legal opinion from their lawyers, stating that Pelts Products needed permission to operate. They also informed him of the effect of the pollution. The chief officer then ordered Pelt Products to apply for a permit and laid down certain conditions. Pelt Products was also ordered to appoint a consultant to assess its operations and to draw up an abatement programme.

The consultant proposed a treatment process that involved considerable modifications to the process used by Pelt Products. Pelt Products was given until the middle of 1999 to implement the new process. A provisional registration certificate, which included certain conditions, was issued for a period of three months. At the end of the three-month period, Pelt Products had not met all the requirements. Negotiations among the local municipality, the provincial department of environmental affairs, and the chief officer resulted in the provisional certificate being extended from time to time

The municipality conducted tests on behalf of Pelt Products to determine whether the conditions of the effluent treatment plant were acceptable and whether they had been met. Although the conditions were not all met, the certificate was again extended, this

time to 8 April 2000. Pelt Products wrote a letter denying that the tannery caused the air pollution.

The company stated its belief that the activities caused “just the normal pollution one can expect from a tannery such as ours.” Hichange then wrote a letter to the Human Rights Commission complaining about the pollution. The chief officer was asked to comment on this letter. He agreed that the tannery still did not meet the required standards and that he would visit the tannery during May 2000 to perform a full assessment of the situation.

On 24 May 2000, the city engineer’s department reported that Pelt Products still did not meet the requirements and that the aeration tank was not operating properly, contributing to the release of hydrogen sulphide. Pelt Products was then given formal notice to address the problem in order to avoid legal action. Pelt Products was ordered to submit a programme to meet the municipality’s (chief officer’s) conditions. It failed to do so. An extension was again granted until 29 July 2000 to submit the programme. Measurements taken on 5 October 2000 indicated that the tannery fell within the limits prescribed in the provisional certificate. However, the measurements taken on 8 November and 14 November again failed to comply with the levels specified in the certificate.

On 2 February 2001, Hichange’s attorney gave notice to the provincial department of environmental affairs of its intention to take the matter further. Referring to South Africa’s National Environmental Management Act of 1998, the attorney argued that the pollution from the tannery was intolerable. A copy of the notice was sent to the chief officer. In April 2001, the chief officer again issued a directive to Pelt Products, giving it 30 days to comply with certain requirements. This was again ignored. On 25 July 2001, the chief officer again wrote to Pelt Products stating that it was not in compliance with the directive and that it either had to comply or halt all operations within 30 days.

On 29 June 2001, Hichange’s attorney wrote to the Department of Environmental Affairs and Tourism, stating that he had copies of the chief officer’s last two directives and that Pelt Products still had not complied. He also stated that this problem had existed for years. He asked the department not to grant any more extensions and that the operations be halted if Pelt Products did not comply with the conditions. A day after the 30-day period

ended, Hichange's attorney again contacted the chief officer to determine whether Pelt Products had complied with the directives. On 3 August 2001, the chief officer informed Hichange's attorney that Pelt Products did not comply and appeared to be unable to do so.

On 6 August 2001, representatives of Pelt Products met the chief officer in his office in Cape Town by then Pelt Products still did not comply with the directives. Hichange approached the High Court on 8 August 2001 for relief. Hichange alleged that the tannery released noxious gases, and that the gases caused rapid and uncontrollable erosion of metal structures and equipment on the property. It was further alleged that these gases harmed the health and well-being of the workers on the premises, as well as the residents of Port Elizabeth. Hichange asked the court for several types of relief:

Ordering the chief officer to suspend the registration certificate until Pelt Products complied with the conditions in the certificate and the directives.

- "Ordering the provincial department of environmental affairs to direct Pelt Products to comply with the National Environmental Management Act of 1998 (section 28(4)), by investigating, evaluating, and assessing the impact of gases emitted from the tannery".
- "Halting all activities at the tannery until Pelt Products had complied fully with the registration certificate".

The court was not prepared to give judgement against the chief officer, as no evidence in the form of sworn statements was put before the court with regard to the pollution levels. The information before the court was also that Pelt Products was in the process of introducing new pollution prevention measures. The court, however, ordered the Department of Environmental Affairs and Tourism to force Pelt Products to undertake an environmental impact assessment and to take proper steps to prevent further pollution. The department also had to ensure that Pelt Products complied with the registration certificate issued in terms of the Atmospheric Pollution Prevention Act of 1965, as well as with the provisions of the National Environmental Management Act of 1998.

- **Decision of the Court**

The court distinguished between relief based on the law of delict (common law), the relief based on the provisions of section 28(1) of NEMA and relief based on section 32 of NEMA. It held that on the affidavits before the court no case was made out for relief on the grounds of delict. The court was not prepared to give judgement against CAPCO, as no sworn statements with regard to the pollution levels were put before the court. The information before the court was also that Pelts Products was in the process of introducing new pollution prevention measures. The court, however, ordered the Provincial Department of Economic Affairs, Environment and Tourism to force Pelts Products to undertake an environmental impact assessment (EIA) and to take proper steps to prevent further pollution in terms of section 28 of the NEMA. This department also had to ensure that Pelts Products complied with the registration certificate issued in terms of the APPA, as well as with the other provisions of the NEMA.

- **Application of Section 28-Duty of Care**

The court based its final order on section 28 of NEMA. Section 28 incorporates the duty of care and precautionary principles¹¹⁵. Section 28(1) is the embodiment of the section 2(4)(a)(vii) and (viii) NEMA principles that ‘a risk adverse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decision and actions’ and that ‘negative impacts on the environment and on people’s environmental rights be anticipated and prevented and where they cannot be altogether be prevented, are minimised and remedied. These principles are interpreted in different ways. In this case, the court ordered the provincial department to enforce the duty of care principle *ex post facto* i.e. after the damage occurred.

The application of the duty of care invokes the application of the Section 2 principle’s contained in NEMA and International environmental law. These principles ensure that damage to the environment is stopped and remedied, also ensures that punitive measures are imposed towards those who violate the duty. Therefore the principles underlying the duty of care will be discussed below:

- (i) Precautionary Principle**

¹¹⁵ This means that the court applied Section 28 after the damage occurred.

This principle stipulates that if the environmental consequences of a particular project, proposal or course of action are uncertain, then the project, proposal or course of action should not be undertaken. It is sometimes possible in these circumstances to use predictive tools such as risk assessments, to make value judgements in the absence of full information. In cases where there is poor communication between project developers and interested and affected parties, the precautionary principle is often well advised.¹¹⁶

If, however, there is trust between the various stakeholders, then it is often possible to make decisions without the fullest of information being available and based upon the professional judgements and opinions of the experts involved. Calculated risk is the basis of advances in science and technology, as an over-cautious policy could stifle any advances to the detriment of society as a whole. South African environmental policy and legislation now have the precautionary principle and the principle of polluter pays firmly entrenched within their structures. This means that should the officials have any doubt regarding the environmental merits or demerits of a proposal, they can apply the precautionary principle and delay development or formal legislative approval, pending further investigations or evidence¹¹⁷

According to the Wingspread Statement on the Precautionary Principle¹¹⁸ it is stated that 'when an activity raises threats of harm to health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.' According to principle 14 of the Rio Declaration¹¹⁹ there should be sufficient likelihood that serious damage to the environment or health of the people would occur before the precautionary principle comes into consideration.

There are six concepts enshrined in the precautionary principle, namely:¹²⁰

¹¹⁶ Precautionary Principle: www.cefic.org.

¹¹⁷ *Ibid.*

¹¹⁸ Wingspread Statement on the Precautionary Principle (2008).

¹¹⁹ The Rio De Janeiro Declaration On Environment and Development (Rio Declaration), (1992).

¹²⁰ Nel, J. "Environmental management principles: precautionary principle' Unpublished lectures. Certificate Course on Environmental Law PU for CHE. (2003)

- “Preventive anticipation: Take action ahead of scientific proof.
- Safeguarding of ecological space: recognition of ecological margins of tolerance.
- Proportionality of response: cost effectiveness of margins of error, i.e. weighting of ignorance.
- Duty of care: onus of proof on the proponent of change (strict liability applies).
- Promotion of intrinsic natural rights: i.e. the right of ecosystems to function.
- Paying for past ecological debt.”

According to Nel¹²¹ the use of the precautionary principle is designed to protect people’s health and the environment under conditions of uncertainty of cause effect relationships. The precautionary principle transfers the burden of proof of the acceptability of, an activity, product or service to the proponent of a potential hazard. This arrangement relieves the person at risk, or persons acting on behalf of the receiving environment that are at risk to prove that harm or loss was caused before action is taken. Henderson¹²² argues that ‘the context in which the principle has been described indicates that there has been no express intention to disturb the principles of the burden of proof required in criminal and civil law cases.’ However, scientific uncertainty supported by reasonable likelihood of harm or loss should accordingly be a basis for corrective or preventive action to prevent harm or loss before it occurs.

It can also be argued in the light of *Hichange* that the duty of care includes the optimisation of actions and processes to prevent pollution or where it cannot be prevented altogether to reduce it to acceptable levels further by doing an EIA. The information obtained from the EIA should be used to cease, modify or control an action, activity or process that causes the pollution or to eliminate or to reduce the source of the pollution or degradation as said above.¹²³ In 2002 the NEMA was amended to empower the Minister to make regulations providing for the prohibition, restriction and control of activities that are likely

¹²¹ Ibid

¹²² Henderson 2001. Some thoughts on distinctive principles of South African Environmental Law’ 8 South African Journal of Environmental Law and Policy. 139 at 161.

¹²³ Section 28(3)(c)-(d).

to have an effect on the environment.¹²⁴ The National Environmental Management Amendment Act makes provision for environmental authorisations to commence and continue listed activities.¹²⁵ If a person commences with an activity or continues an activity without an environmental authorisation such a person may be ordered to do an EIA.

If a person commences with an activity or continues an activity without an environmental authorisation such a person may be ordered to do an EIA. If such a person is ordered to cease an activity, he or she may be ordered to rehabilitate the environment. It seems as if this proposed amendment incorporates the idea of an *ex post facto* duty of care - giving statutory effect to the court's order in Hichange. If the duty of care and the precautionary principles are inter-linked as is argued above, then the duty of care should also apply to all activities before pollution occurs and not only *ex post facto*.

(ii) Polluter Pays Principle

The main objective of the polluter pays principle is the preservation and protection of the environment. The principle is a measure aimed at the prevention of pollution and environmental degradation as referred to in section 24(b) (ii) of the Constitution. Section 24 directs the government to take measures to ensure that remediation of environmental damage takes place.¹²⁶ Section 2(4) (p) of the NEMA which embodies the polluter pays principle provides that:

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

The polluter pays principle establishes the requirement that the costs of pollution should be borne by the polluter responsible for causing the pollution¹²⁷. The polluter pays principle implies that it is for the polluter to meet the costs of pollution control and prevention measures, irrespective of whether these costs are incurred as a result of the

¹²⁴ Section 44(l)(A).

¹²⁵ Section 24F.

¹²⁶ Oosthuizen F "The Polluter Pays Principle: Just A Buzzword of Environmental Policy" South African Journal of Environmental Law and Policy (1998).

¹²⁷ Brownlie I *Principles of Public International Law*, 6th ed.

imposition of some charge on pollution emission, or are debited through some other suitable economic mechanism.¹²⁸

The polluter pays principle is an important cornerstone of environmental law. The polluter pays principle was included in the Rio Declaration.¹²⁹ The polluter pays principle holds that the cost imposed on society and the environment by pollution must be borne by the polluter. The polluter pays principle is generally accepted as an economic principle aimed at consumer protection.¹³⁰ The reason for characterising the principle as an economic principle is that the implementation of the principle has cost implications for the polluter.

The polluter pays principle is contained in sections 2 and 28 of NEMA. The principle is reflected in section 2 (4) (p) of NEMA in particular, which provides that the costs of remedying pollution, environmental degradation and consequent health effects must be paid for by those responsible for environmental pollution.¹³¹ NEMA contains various important provisions in relation to liability. Section 28 of NEMA furthermore establishes distinctive environmental principles that are of great importance. These distinctive principles include the polluter pays principle, the precautionary principle, sustainable development, life cycle responsibility and environmental justice.

The wording of section 2 (4) (p) reflects the notion of the polluter pays principle. Section 2 of NEMA serves as a guideline by reference to which any organ of state at every level must exercise any function in relation to decision-making in terms of this Act or any statutory provision concerning the protection of the environment. Section 2 of NEMA contains principles that are binding upon the actions of all spheres of government that may significantly affect the environment. It is accordingly necessary to investigate the

¹²⁸ Hunter O, Salzman J and Zaelke *International Environmental Law and Policy* 2nd ed.

¹²⁹ Principle 16 of the United Nations Conference on Environment and Development of 1992 (hereafter referred to as 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.

¹³⁰ See footnote 27 above.

¹³¹ Gaines S.E The Polluter Pays Principle: From Economic Equity to Environmental Ethos, *Texas International Law Journal* (1991).

polluter pays principle as this principle plays an important role in the implementation of environmental liability.

Paying for pollution is good but not enough. The polluter pays principle must be coupled with stronger criminal penalties. In this way no company shall escape justice through payment of pollution caused. This will reduce the number of companies that pollutes the environment. This works in countries such as Malaysia where there are serious well categorised criminal penalties which includes serious imprisonments, hence the study suggest that South Africa adopts the same.¹³²

(iii) Sustainable Development

In the *Fuel Retailers case*¹³³, the Constitutional court defined the concept of sustainable development as follows: “sustainable development is the integration of social, economic and environmental factors into planning, implementation and decision-making for the benefit of present and future generations”. This broad definition incorporates two of the internationally recognised elements of the concept of sustainable development, namely: the principle of integration of environmental protection with socio-economic development, and the principle of inter-generational and intra-generational equity.

Moreover, section 24(b) (iii) makes provision for ecologically sustainable development and use of natural resources while promoting justifiable and social development. This section breaks the old-fashioned notion that the rights to development and environmental protection are inconsistent with each other. To this end, the Constitution promotes the concept of sustainable development as incorporated in international environmental management instruments.

In international law the concept was also coined at the Stockholm Declaration. The concept of sustainable development originates from the Stockholm Declaration held in Stockholm from 5 to 16 June 1972. The aim of the Stockholm Conference was to integrate environmental protection and development. At the Conference, principles relating to

¹³² Chief Justice of Malaysia, statutory penalties for environmental violations, The Right Hon TunArifin Zakaria.

¹³³ *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture Conservation and Environment, Mpumalanga Province and Others*, 2007 (6) SA 4(CC).

environmental protection and development were tabled. The aim of the principles was to link the right to environmental protection and development. The preamble of the Stockholm Declaration emphasises the need to conserve natural resources in order to improve man's quality of living.

Therefore, Section 28 of NEMA, which contains the duty of care also promotes sustainable development in that everyone must stop activities that result in environmental damage, or to take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment. This would in turn protect the environment for the benefit of the present generation and would not prevent the future generations from meeting their needs. Therefore, development must take into account environmental protection.

Should development continue to fail to take into account environmental protection in South Africa, the country shall end up like Malaysia which used to be well known for her cleanliness as compared to most of countries in the world. "But her environment has been worsening due to some grounds such as waste management problems, rapid growth of industrialization, urbanization, lack of facilities, unawareness, weakness of law enforcement, lack of technology etc."¹³⁴ This may bear negative impacts on the economy of South Africa as it did in Malaysia.¹³⁵ The tourism industry which contributes highly to the country's gross domestic product will be negatively affected, as tourist will stop coming to South Africa if nature is destroyed in the name of development.

3.4 Addressing environmental challenge: the approach of the Court

The court in the case of *Hichange* formulated a precedent that there was enough evidence of pollution as required by section 28(1) of NEMA. The court relied on Glazewski¹³⁶ where he argues that the threshold levels of significance need not to be particularly high when section 24 of the Constitution is interpreted. The first respondent also according to his

¹³⁴Mohammad N. Zinatul H. Ruzian J, Aminurasyed, Waste Administration in Malaysia: A Case Study. (2013).

¹³⁵ Ibid.

¹³⁶ Glazewski, *Environmental law* at para 5.2.8.2. (2000).

own statements failed to take measures to minimise significant pollution or to prevent such pollution from occurring, continuing or recurring. The court was satisfied that the 'substantial requirements for relief to be granted under s 28(12) have therefore been fulfilled.

The provincial department on many occasions alleged that it is not the appropriate authority to deal with the matter as it lacks the necessary expertise to handle the matter. The court, however, found that in terms of section 28(4) the provincial department is the appropriate authority. The department cannot rely on the excuse of 'a lack of expertise to carry out the functions that the legislature has specifically entrusted it with. Nothing prevented the department to include CAPCO or the national DEA&T. The court ordered the provincial department to direct Pelts Products to investigate, evaluate and assess the impact of its activities and to report thereon. The applicant asked that this be done in terms of GN R1 18327 but the court was not prepared to grant such an order. It was argued that GN R1183 pertains to activities, which are still in the planning phase and that it would not be appropriate in this specific case.

Although the order was made against the fourth respondent, the court found that it indirectly constituted an order against Pelts Products. Pelts Products vigorously opposed the application and therefore was ordered to pay the costs jointly with the fourth respondent. Applicant was ordered to pay DEA&T's costs but with regard to the costs of CAPCO the court made no order. The court stated that although CAPCO resisted an order being granted against him, he had allowed the first respondent to operate and continue to operate in contravention to the conditions set out in the registration certificate.

It is, however, clear from section 2 that the principles are not only applicable to decision-making with regard to NEMA but also with regard to any statutory provision concerning protection of the environment. It would also include decisions that may affect the obligations arising from section 24 of the Constitution. It is therefore argued that the courts should include the precautionary principle and duty of care principles in their interpretation of 'other measures' thus allowing the courts to also prevent pollution from taking place even before such pollution takes place. It would not preclude the courts to enforce the duty of care principle *ex post facto*.

4. Other Challenges

4.1 Lack of awareness

The duty of care applies to all people as contemplated in section 28 of the NEMA, but the question is whether all people are aware of it? There is serious environmental degradation and pollution that transpire at some other areas in South Africa where people are completely unaware of this duty including their environmental rights. This is mostly common in rural areas. Many mining companies approach these informal areas and conduct mining activities which result in environmental harm and endangerment of people's health.

The mining companies do not take precautionary measures as required by the NEMA and at some point they don't even consult with the community members. This is a clear violation of section 24 of the Constitution (right to a clean and healthy environment) and section 28 of the NEMA (Duty of care to the environment) and no one is doing anything about it due to lack of awareness. All these factors raise major questions of concern as to 'why are environmental laws not fully enforced in South Africa'? Thus, South Africa has to come up with strategies that would alert the members of the public of their environmental right as provided for by section 28 of the Constitution. The strategies may include awareness campaigns which may be aimed at enlightening members of the public on the actions to be taken should it transpire that one tempers with their environmental right.

4.2 Polluter pays principle

This principle is contained in NEMA and it entails that whosoever pollutes the environment must pay. It is subject to criticisms: it is said that it cannot deter wealthy people from polluting the environment. The said people can continue to pollute the environment simply because they can afford to pay for the damages. This principle is based on fine; hence wealthy people violate it since they can afford to pay. Taking this into account, the study recommends that the principle be coupled with imprisonment. Whosoever causes significant pollution to the environment must be liable for payment of the pollution and also imprisonment. In that way people won't deliberately pollute the environment and

escape the hands of justice through money, but they shall face justice through imprisonment.

5. Conclusion

The South African environmental law has come a long way and it is still developing. Many laws and principles have been promulgated in order to protect the environment for the benefit of the current and future generation yet to come. This chapter has indicated that even today there are some pitfalls and challenges that the environmental authorities have to address in order to ensure maximum protection of the environment as required by the highest law of the land (the Constitution of the Republic of South Africa 1996). The judiciary has been very proactive in giving clarity into the provisions of environmental laws that seeks to protect the environment and deters degradation. Cases like *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd T/A Pelts Products & Others*, the court applied the duty of care principle ex post facto.

CHAPTER 4

COMPARATIVE ANALYSIS BETWEEN UNITED KINGDOM, AUSTRALIA AND SOUTH AFRICA ON DUTY OF CARE TO THE ENVIRONMENT

1. Introduction

This chapter will deal with a comparative study between South Africa, Australia and United Kingdom. It will identify similarities and differences with the regulation and enforcement of environmental law, especially on the duty of care for the purpose of drawing lesson that can be used to improve South African environmental duty of care and protection.

2. The environmental duty of care in Australia

With the challenges being faced in South Africa with regard to protection of the environment especially with enforcement of the environmental duty of care, Australia has made notable strides in this event that can be emulated. The concept of the duty of care in Australia was first introduced by Binning and Young in 1997 and later developed in the Industry commission report in 1998.¹³⁷ The Industry Commission¹³⁸ proposed that an environmental duty of care be defined in legislation in order to require everyone who influences the management of the risk to the environment to take all reasonable and practical steps to prevent harm to the environment that could have been reasonably foreseen. This is also evident in South Africa where the duty of care has been codified and entrenched in the National Environmental Management Act.

The sole purpose of an environmental duty of care in Australia is to prevent harm to market and non-market values embodied in land and water resources and to further encourage the on-going environmental improvement.¹³⁹ The aim of the proposition of the

¹³⁷ Binning, C. Principles for managing changes in land and water property rights. Paper presented to a Conference of the NSW Farmers Association, Sydney. (2002).

¹³⁸ Now known as the Productivity Commission, 1998, p. 134.

¹³⁹ Binning, C. and Young, M. Motivating People – Using Management Agreement to Conserve Remnant Vegetation. Report prepared for the National Research and Development Program on Rehabilitation, Management and

environmental duty of care was to adopt externalities but only to the extent that it is economically efficient to do.¹⁴⁰The obligation was to do what is reasonable to prevent harm to the environment, this could however be interpreted as an obligation on a land manager.¹⁴¹

The duty of care to the environment in Australia is largely based upon the concepts of impact and risk which are strongly embedded in the precautionary principle. The precautionary principle requires that “decisions by the private sector, governments, institutions and individuals need to allow for and recognise conditions of uncertainty, particularly with respect to the possible environmental consequences of those decisions. It requires all agents to act to prevent or avoid detrimental effects (immediate and in the future) which may be damaging the environment, thereby implicitly establishing an ethical duty of care for the environment”.¹⁴²

2.1 The law regulating the duty of care in Australia

The law regulating the duty of care in Australia is the Environmental Protection Act 1997 and this study will also look at the Environmental Protection Act of 1994 (EPA of 1994) which is the provincial legislation of Queensland. The EPA of 1994 contains a general environmental duty in section 319 (1) ,¹⁴³ which provides that “A person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practical measures to prevent or minimise the harm.” This provision is similar to the duty of care under section 28 of the NEMA which also provides for the duty of care.

Conservation of Remnant Vegetation. Report 1/97, Land and Water Resources Research Development Corporation, Canberra. (1997).

¹⁴⁰ Industry Commission a Full Repairing Lease: Inquiry into Ecologically Sustainable Management. Report 60, Commonwealth of Australia, Belconnen, ACT, 27 January. (1998).

¹⁴¹ Ibid.

¹⁴² Greiner R, Patterson L and Miller O, Explaining the concept of “Environmental Duty of Care” in the context of the Northern Gulf region (Queensland), Discussion Paper. (2007).

¹⁴³ section 319, sub-section 1 of the Environmental Protection Act 1994.

2.1.1 Environmental protection Act of 1997

The Environmental protection act defines environmental harm in section 14, (3) as “any adverse effect or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value. The Environmental Protection Act 1997 further outlines that environmental harm may be caused by an activity:

- Whether the harm is a direct or indirect result of the activity; or
- Whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors.

The act provides for the establishment of an Environment Protection authority (EPA). The primary purpose of the EPA is to administer the Act.

The EPA's administrative functions include meeting objectives to:

- “protect and enhance the quality of the environment;
- prevent environmental degradation and risk of harm to human health;
- require people engaging in polluting activities to make progressive environmental improvement;
- achieve effective integration of environmental, economic and social considerations in decision-making processes;
- facilitate the implementation of national environment protection measures under national laws;
- provide for the monitoring and reporting of environmental quality on a regular basis;
- ensure that contaminated land is managed having regard to human health and the environment;
- co-ordinate activities needed to protect, restore or improve the ACT environment; and,

- Establish a process for investigating and, where appropriate, remediating land areas where contamination is causing or is likely a significant risk to human health or the environment”.

The EPA meets these objectives by giving environmental authorisations, promoting environmental awareness (which South Africa needs to implement), public and industry education, entering into environmental protection agreements, developing codes of practice with industry and issuing notices, environment protection orders and a range of other instruments. The Act covers all activities that have the potential to cause harm to human health or the environment through emissions to air, land and water.

In the administration of the Act the EPA must also have regard, where relevant, to the:

- “principle of a shared responsibility for the environment;
- precautionary principle;
- inter-generational equity principle;
- waste minimisation principle; and,
- Polluter pays principle”.

Environmental duty of care forms a core element of that the State Leasehold Land Strategy, whereby leaseholders whose land is in ‘good condition’ are rewarded, when they seek renewal of their leases, with longer lease terms than other lessees who fail to take care of the land hold or occupy.¹⁴⁴ This is a way of encouraging the leaseholders to continuously take good care of the environment, because when they do they receive a rewarded. In South Africa, taking care of the environment is an obligation to every person and no compensation or whatsoever is received for fulfilling this obligation. Even though there is no reward put in place for protecting the environment, in South Africa, taking care of the environment indirectly pays.

Without clean or healthy environment humans and all other species cannot survive, thus exercising a duty of care to the environment is beneficial. This may serve as a good lesson

¹⁴⁴ *Ibid.*

to South Africa to also come up with ways in which they would reward or rather appreciate all people who exercise the duty of care to the environment.

2.2 Analysis of the duty of care to the environment

A general environmental duty is mentioned in section 319 (1) of the Environmental Protection Act 1994 and it states that a person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practical measures to prevent or minimise the harm to the environment.¹⁴⁵ This section is in line with the precautionary principle as provided for by the NEMA.

The precautionary principle provides that precautionary measures must be taken to prevent or minimise harm that may be caused to the environment. However, the NEMA provides more than the act in question in as far as environmental duty of care is concerned. Without limiting the generality of the applicability of the duty of care to the environment, section 28 further stipulates the persons who may be bound by the duty and of which it is not found on the EPA.¹⁴⁶

In Australia environmental duty of care is specifically related to agricultural land uses and diffuses sources of environmental impacts. It encapsulates elements of the precautionary principle¹⁴⁷ and risk management and combines them with the notion of land stewardship.¹⁴⁸ The concept is of particular relevance to leaseholders in Australia Queensland. There is a duty of care under the Land Act 1994; an environmental duty of care under the Environmental Protection Act 1997; and a duty of care under the Aboriginal Cultural Heritage Act 2003. All leaseholders are compelled to comply with the three Acts.¹⁴⁹

¹⁴⁵ Greiner, R, Patterson.L and Miller.O.. Explaining the concept of "Environmental Duty of Care" in the context of the Northern Gulf region (Queensland) Page 3. (2007).

¹⁴⁶ Environmental Protection Act 1994.

¹⁴⁷ Smith, C. *The Precautionary Principle and Environmental Policy Science, Uncertainty, and Sustainability*. International Journal occupation of environ heal. Vol 6/no 3, oct/dec. (2000).

¹⁴⁸ See footnote 1 Opcit.

¹⁴⁹ Ibid.

In Australia they also have the concept of the “Duty of care and stewardship” which is about avoiding environmental harm. The Queensland Department of Natural Resources and Water (DNRW, 2007) identifies several types of environmental harm, including:

- “Land degradation (e.g. soil erosion and decline in soil structure
- Air pollution
- Water pollution (including pollution by salt, agrichemical and nutrients)
- Invasion of weeds and pests
- Noise
- Destruction of ecosystems and habitats
- Loss of species.”

In South Africa, NEMA does not have an extension of the duty of care to regulate specific areas of the environment that are suffering from irreparable harm as compared to Australia. This may be noted on aspects like the protection of endangered species, noise and invasion of weeds. Section 28 is largely concerned with the protection of the physical environment and excludes other areas. Therefore, the duty of care and stewardship in Australia may also be introduced to South Africa to make the existing duty of care more holistic.

The Environmental Protection Act further provides for several codes of practice¹⁵⁰ which outline the expected environmental outcomes and usually management practices to achieve these outcomes. Under the Environmental Protection Act 1994, the following code of practice have been established and approved in Queensland:

- “Environmental Code of Practice for Australian Prawn Farmers
- Environmental Code of Practice for Agriculture
- Environmental Code of Practice for Queensland Piggeries
- Queensland Dairy Farming Environmental Code of Practice
- Sustainable Cane Growing in Queensland

¹⁵⁰ Codes of Practice Outline Expected Environmental Outcomes and usually management practices to achieve these outcomes. Alternative strategies may be used to those outlined in a code of practice as it is the Expected Environmental Outcomes which must be met to prove compliance.

- Sustainable Fruit and Vegetable Production in Queensland”

According to Smith and Capelin, “Complying with these environmental codes of practice allows primary producers to demonstrate their commitment to the general environmental duty”.¹⁵¹

In South Africa these codes for good environmental practice must also be adopted by various government departments such as the Department of environmental affairs, department of agriculture forestry and fisheries and department of mineral resources to ensure economic and ecological sustainability.

Australia also has other legislations containing the duty of care, for instance the Land Act of 1994. Section 199, (2) of the Land Act 1994 stipulates that: “If a lease is issued for agricultural, grazing or pastoral purposes, the lessee’s duty of care includes that the lessee must take all reasonable steps to do the following in relation to the lease land,

- avoid causing or contributing to land salinity that-
 - (i) reduces its productivity; or
 - (ii) damages any other land;
- conserve soil;
- conserve water resources;
- protect riparian vegetation;
- maintain pastures dominated by perennial and productive species;
- maintain native grassland free of encroachment from woody vegetation;
- manage any declared pest;
- Conserve biodiversity”.

¹⁵¹ Smith, M. and Capelin, M. (2006). Duty of care for holders of state land. Land series fact sheet L120, QNRM053890, Produced by Land Management Use for the Department of Natural Resources and Water (Queensland).

However, section 28 of the NEMA is not specific on the reasonable measure that a land owner (as mentioned in section 28 as part of the people the duty applies to) must take to avoid or guard against environmental harm as much as the land Act in Australia does.

According to Bates¹⁵² in Australia “A statutory duty of care can potentially be more precise about when and how a duty will arise, provided it is clearly defined.” Section 28 of the NEMA provides that the duty of care applies to every person who caused or may cause significant pollution or degradation to the environment, but however never specifies what constitutes significant pollution or degradation. In other words, the South African duty of care lacks clarity on what constitutes significant pollution.

2.3 Comparing the duty of care in South Africa and Australia

In South Africa the duty of care to the environment is an obligation to all people as contemplated in section 28 of the NEMA. Any person who causes or is likely to cause harm to the environment must take reasonable measures to prevent such harm from occurring, or minimize the harm to the environment. NEMA also contain the polluter pays principle, it entails that whosoever pollutes or commit any harm to the environment must pay for such harm. Taking this into account, there are some lessons that South Africa can learn from Australia.

In Australia, environmental duty of care forms a core element of that the State Leasehold Land Strategy, whereby leaseholders whose land is in ‘good condition’ are rewarded, when they seek renewal of their leases, with longer lease terms than other lessees who fail to take care of the land hold or occupy. If South Africa can adopt this kind of strategy it will be very helpful. People will start to take a good care of the environment simply because they will be rewarded for it. Instead of polluting the environment with the mind-set that they will pay for the damage caused, they will conserve and take care of the environment with the thought that they shall receive a reward.

¹⁵² Bates, G. A duty of care for the protection of biodiversity on land. Consultancy Report, Report to the Productivity Commission. AusInfo: Canberra. (2001).

3. United Kingdom

3.1 Introduction

Environmental degradation and pollution are a global concern, and countries all over the world have put in place regulations and policy frameworks to combat the effects of such a catastrophe and for purposes of improving South Africa, this section will draw lessons from the United Kingdom. Despite all the laws which are aimed at deterring people from polluting or degrading the environment in South Africa, challenges are still being noted on their enforcement and such laws include even the NEMA itself.

The provisions contained in NEMA provides in section 28 (14) that any person who fails to comply with the provisions of this act may be criminally liable to pay a fine of up to 1 million rand, or be taken to prison for up to a year. Apart from NEMA, there is the polluter-pays principle, which provides that, whosoever pollutes the environment must pay for the pollution that he or she has caused.

The precautionary principle is also one of the commonly used principles to ensure maximum protection of the environment and it provides that, before any person may take an action that might harm the environment, there must be precautionary measures taken. However, these laws and principles are not enough to deter environmental perpetrators from harming the environment. Therefore, a comparison shall be done with the United Kingdom since they have stricter environmental laws aimed at protecting the environment.

The laws that govern the environment in the United Kingdom are: -

- “Environmental Protection Act 1990
- Waste (Household Waste) Duty of Care (England & Wales) Regulations 2005
- The Waste (Household Waste Duty of Care) (Wales) Regulations 2006
- Clean Neighborhoods and Environment Act 2005
- The Waste (England and Wales) Regulations 2011”

3.2 Duty of Care in the UK

In the United Kingdom there are two types of environmental duty of care although they relate directly to waste management. The first is the general duty of care and the second one is the household duty of care. In terms of the general duty of care, it provides that any person who produces, “imports, keeps, stores, transports, treats or disposes of waste must take all reasonable steps to ensure that waste is managed properly. This duty of care is imposed under section 34 of the Environmental Protection Act.¹⁵³ It also applies to anyone who acts as a broker and has control of waste. A breach of the duty of care could lead to an unlimited fine if convicted in the Magistrates Court or in the Crown Court.”

The household duty of care entails that, “householders must ensure that household waste is properly disposed of. Household waste is defined in section 75(5) of the Environmental Protection Act¹⁵⁴ and includes waste from domestic properties, caravans and residential homes. The householder duty of care is provided by Section 34(2A) of the Environmental Protection Act 1990 (inserted by the Household Waste Duty of Care Regulations 2005). A breach of the household duty of care would also attract an unlimited fine if convicted.”

In the United Kingdom If you have waste you are obliged to ensure that the person who takes control of your waste is licensed to do so; further you must also take steps to prevent it from escaping from your control; store it safely and securely; prevent it from causing environmental pollution or harming anyone; describe the waste in writing and prepare a transfer note if you intend to pass the waste on to someone else.

In the case that a person wants to collect waste from others people, such an individual must be authorized under the law to collect and receive waste; get a description of the collected waste in writing; complete and retain a transfer note.

According to the Department for Environmental Food and Rural Affairs, household duty of care, if one is a householder, he or she is required to take reasonable steps to check that people removing waste from his or her premises are authorized to do so. He or she

¹⁵³ Environmental Protection Act 1990.

¹⁵⁴ *Ibid.*

is as well responsible for asking the waste carrier to provide him or her with their full address and telephone number; ask to see their waste carrier license issued by the Environment Agency or Natural Resources Wales and to contact the Environment Agency and ask for a free instant waste carrier validation check.¹⁵⁵

South African environmental law needs to incorporate the household duty of care which creates an obligation on every citizen to also ensure that household waste is properly disposed of and this would also go a long way in making sure that people recycle waste. The duty of care contained in NEMA is restrictive and more general and does not regulate processes like the duty to dispose of waste in a sustainable manner. That is the reason why there are challenges of waste disposal and environmental degradation, particularly in rural areas of South Africa and there are no actions taken against it.

3.3 Enforcement of the Duty of Care in the UK

In the UK, enforcement ensures that those individuals and/or businesses that spoil the environment are made accountable for their actions. The Environmental Protection Act 1990, Clean Neighborhoods and Environment Act (CNEA) 2005 and the Control of Pollution (Amendment) Act 1989, introduced powers and tools for local authorities to help tackle local environmental issues such as fly-tipping¹⁵⁶ and waste.¹⁵⁷ In ensuring that the environment is protected, the Westminster City Council adopted an approach that works with residents and businesses to ensure compliance, and this is primarily done through information and advice. However, where necessary enforcement is undertaken.¹⁵⁸

The management of waste in South Africa also calls for corporative governance amongst all the spheres of government so as to ensure that the law is enforced to all sectors in the republic, since lack of enforcement is one of the chief reasons leading to poor waste management. The major challenge has been the fact that waste management practices

¹⁵⁵ Department of Environmental Food and Rural Affairs UK. Waste Duty of Care Code of Practice. Available online www.gov.uk/government/publications. (2016.)

¹⁵⁶ Fly-tipping is an offence under Section 33 of the Environmental Protection Act (EPA) 1990 Section 33 states that a person shall not deposit controlled waste or knowingly cause or permit controlled waste to be deposited in or on any land, without an environmental permit authorising the deposit

¹⁵⁷ Westminster City Council. 2016. Waste Enforcement Policy 2016.

¹⁵⁸ *Ibid.*

in many areas of the Republic are not conducive to a healthy environment and the impact of improper waste management practices are often borne disproportionately by the poor¹⁵⁹. Therefore, the problems associated with waste disposal and management are largely felt on the local sphere of government, as such South Africa should also adopt the duty of care that regulates waste since waste management is one of the reasons leading to environmental degradation.

In the City of Westminster, the officers authorized to carry out enforcement are the City Inspectors. City Inspectors cover the entire City and work locally in each ward, and on market sites, as well as providing a consistent response service.¹⁶⁰ The environment inspectors in South Africa must also receive proper training and carry out similar shifts to ensure that the duty of care is enforced for the sake of safeguarding the environment for the present and future generations.

There is a historical backlog of waste services in South Africa especially in urban informal areas, tribal areas and rural formal areas. Although 61% of all South African households had access to kerbside domestic waste collection services in 2007, this access remains highly skewed in favour of more affluent and urban communities. Inadequate waste services lead to unpleasant living conditions and a polluted, unhealthy environment¹⁶¹. Therefore, South Africa may learn lessons from the UK especially on the duty of care for waste management.

4. Duty of care in international law

The duty of care as contained in NEMA has its roots in international environmental law. The provisions of Section 28 reflect principles of treaties, conventions and declarations held on an international arena regulating the environment. In international law, the duty of care is linked to the precautionary principle which denotes that international organizations and the civil society, particularly the scientific and business communities, to avoid human activity which may cause significant harm to human health, natural

¹⁵⁹ Preamble of Act 59 of 2008.

¹⁶⁰ *Ibid.*

¹⁶¹ *Ibid.*

resources or ecosystems, including in the face of scientific uncertainty¹⁶². Therefore, this reflects Section 28 of NEMA which posits that reasonable measures must be taken to prevent harm to the environment.

4.1 The Precautionary Principle

One may raise a question as to what is the meaning of the precautionary principle. Many scholars were of the opinion that the precautionary principle¹⁶³ has an indefinable kaleidoscopic character¹⁶⁴ and that it is not easy to come up with a universally applicable definition that is more meaningful or useful than saying “take care”¹⁶⁵ or “better safe than sorry.”¹⁶⁶ Some governments seem more comfortable referring to a “precautionary approach” rather than a “precautionary principle,” hoping, apparently, that this term will allow for more flexibility.

This principle forms part of the principles that were declared in international law to ensure sustainable development.¹⁶⁷ A precautionary principle commits States, international organizations and the civil society, particularly the scientific and business communities, to avoid human activity which may cause significant harm to human health, natural resources or ecosystems, including in the face of scientific uncertainty.¹⁶⁸ The principle

¹⁶² The Principle of the Precautionary Approach to Human Health, Natural Resources and Ecosystems: Recent Developments in International Law Related to Sustainable Development,” J. Hepburn, reviewed by M.W. Gehring & M.C. Cordonier Segger, Working Paper for Foreign Affairs Canada (Montreal: CISDL, 2005).

¹⁶³ For commentary on the content of the precautionary principle, see James E. Hickey, Jr., and Vern R. Walker, *Refining the Precautionary Principle in International Environmental Law*, 14 VA. ENVTL. L.J. 423 (1995); Gregory D. Fullem, Comment, *The Precautionary Principle: Environmental Protection in the Face of Scientific Uncertainty*, 31 WILLAMETTE L. REV. 495 (1995); John M. Macdonald, *Appreciating the Precautionary Principle as an Ethical Evolution in Ocean Management*, 26 OCEAN DEV. & INT’L L. 255 (1995).

¹⁶⁴ Bodansky D. Scientific Uncertainty and the Precautionary Principle, 33 ENVIRONMENT 4 (Sept. 1991) (“Although the precautionary principle provides a general approach to environmental issues, it is too vague to serve as a regulatory standard because it does not specify how much caution should be taken”) and Daniel Bodansky, *Deconstructing the Precautionary Principle*, Chapter 16 of this volume. But see also Daniel Bodansky, Remarks, *New Developments in International Environmental Law*, 85 AM. SOC’Y INT’L L. PROC. 413 (1991) (“Indeed, so frequent is its invocation that some commentators are even beginning to suggest that the precautionary principle is ripening into a norm of customary international law.”).

¹⁶⁵ Christopher D. Stone, *Is There a Precautionary Principle?* 31 ENVTL. L. RPTR. 10790 (2001).

¹⁶⁶ Frank Cross, *Paradoxical Perils of the Precautionary Principle*, 53 WASH. & LEE L. REV. 851, 851 (1996).

¹⁶⁷ See United Nations Framework Convention on Climate Change, 9 May 1992, 31 I.L.M. 849, arts. 3 & 4. United Nations Convention on Biological Diversity, 5 June 1992, 31 I.L.M. 822, arts. 8 & 10, Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, 17 June 1994, 33 I.L.M. 1328, arts. 4 & 5.

¹⁶⁸ *Ibid.*

mandates that studies precede action and that interdisciplinary environmental impact assessments be written and distributed with public input.¹⁶⁹ The principle therefore envisages the provisions of NEMA, which clearly state that in the case of development that bears uncertain results on the environment, Environmental Impact Assessments must be undertaken and also public participation must be encouraged.

The principle entails that Precautionary measures should be based on up-to-date and independent scientific judgment and be transparent.¹⁷⁰ They should not result in economic protectionism. Transparent structures should be established which involve all interested parties, including non-state actors, in the consultation process. Appropriate review by a judicial body or administrative action should be available. Lack of scientific certainty is not an excuse.

4.1.1 Precautionary principle linked with air pollution and climate change

The uncertainty surrounding the causes and effects of atmospheric pollution has also served to favour the use of the precautionary principle. Paradoxically, the 1985 Vienna Convention for the Protection of the Ozone Layer was adopted just as the scientific controversy over the effects of global ozone layer depletion had reached its height.¹⁷¹ The sixth Recital of the 1985 Vienna Convention presented the Parties as ‘Mindful of the precautionary measures for the protection of the ozone layer which have already been taken at the national and international levels’.¹⁷²

Since then, the principle has been endorsed by other instruments concerning air pollution. The preambles of the 1998 Long Range Trans-boundary Air Pollution (LRTAP) Protocols on Persistent Organic Pollutants (POPs) and on Heavy Metals state that the Parties are ‘resolved to take measures to anticipate, prevent or minimize emissions of persistent

¹⁶⁹ Hunter, D., Salzman, J., and Zaelke, D., *International Environmental Law and Policy* 366-70 (1998).

¹⁷⁰ *Ibid.*

¹⁷¹ *Ibid.*

¹⁷² Harremoës, P. et al. (eds) *Late Lessons from Early Warnings: The Precautionary Principle 1896–2000*, London: Earthscan. (2002),

organic pollutants, taking into account the application of the precautionary approach, as set forth in principle 15 of the 1992 Rio Declaration on Environment.¹⁷³

4.1.2 Consistency between the precautionary principles embedded within international environmental law and World Trade Organization (WTO) law

The principle has also become a major point of controversy in the strained relationship between trade and environment, with the EU pleading for its expansion, while the US calls for trade measures to be based on 'sound science'.¹⁷⁴ The principle is not mentioned explicitly in any of the constitutive agreements of the World Trade Organization (WTO) and recourse to the principle has been somewhat unsatisfactorily addressed by various WTO dispute settlement panels in a number of cases concerning health measures.

4.1.3 Precaution: a principle of customary international law

Although subject to varying interpretations accorded over 12 different definitions in international treaties and declarations, the precautionary principle is fast becoming a fundamental principle of international environmental law. The question whether precaution has to be considered as principle of customary international law is of utmost importance: while treaties create law between parties, the recognition of the precautionary principle as an international custom will make it applicable to all States.

While the principle to ensure that activities within a State's jurisdiction or control do not cause damage to the environment of other States or of areas beyond national jurisdiction is deemed to be a principle of customary international law, the procedure appears to be a great deal more delicate in the case of the precautionary principle. Whereas only the repeated use of State practice and a consistent opinion juries are likely to transform precaution into a customary norm, authors are crossing swords on this question.¹⁷⁵

The duty of care to the environment indeed derives its roots from international law as discussed above. South Africa alone cannot protect the world, it has to take all the states

¹⁷³ *Ibid.*

¹⁷⁴ See foot note 166 above.

¹⁷⁵ Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Areas (1996), ILM 36, 777.

to engage and come up with ways to prevent harm to the environment by ensuring environmental duty of care. Thus we have today international conventions that are aimed at protecting the environment such as the Kyoto protocol.

5. Conclusion

South Africa is one of the countries that have the best environmental laws in the world. However, enforcing these laws becomes a challenge at times. The comparative study indicates that some of the environmental laws and principles we have in South Africa are the same as those they are having in other developed countries. South Africa's enforcement may be strengthened by learning useful lessons from the UK and Australia in ensuring maximum protection of the environment.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

1. Conclusion

In conclusion, South Africa is one of the countries that have the best environmental laws in the world, this is evidenced by the enshrinement of the environmental right in section 24 Constitution which provides that: every person has a right to a clean environment that is not harmful to their health and to have the environment protected for the present and future generation yet to come. The Constitution of the Republic of South Africa is the highest law of the land as provided for by section 2 of the Constitution. This means that violation of section 24 of the Constitution is a serious offence and any person who feels that his or her right to a clean environment has been threatened may institute a legal action in court.

The NEMA is also an indicative attribute of the efforts that the South African Government has taken to ensure maximum protection of the environment. The sole purpose of this Act is to manage the environment, ensuring that no one tempers with it. This act contains principles such as the polluter pays principle, which entails that whosoever pollutes the environment must make payments for such damages in a way of protecting the environment. It further contains the precautionary principles which mandates people to take precautions in circumstances where they are about to carry on an activity that has prospects of causing environmental harm. The NEMA Further contains section 28 (the environmental duty of care) which is an important section for the study. Section 28 of the NEMA aims at protecting the environment for the benefit of all people including the upcoming generation.

The study points out that laws and policies are indeed there and they are constructed in a way of addressing all the environmental issues we are faced with today (such as pollution and degradation) but that implementation and enforcement are lacking in South Africa. Taking this into account, the state must continue to enforce environmental laws in order to protect the environment from harm.

2. Recommendations

In order to achieve maximum protection for the environment the following must be done.

Public reporting must be ensured and oversight through the National Environmental Advisory Forum. The state must create a platform that allows every person who wants to report any matter that relates to environmental violation to have easy access to it.

The authorities given regulatory powers must improve their capacities, particularly when it comes to managing, implementing and reviewing the Integrated Environmental Management Procedures.

The Environmental management inspectors must receive continuous training and the state must ensure that it provides the appropriate and sufficient resources for the training.

The courts are the custodians of the Constitution; they must ensure that it is not violated. Therefore; the state must train the judiciary in the principles of environmental management and sustainable development and build legal capacity within the relevant national and provincial departments.

Awareness campaigns must be conducted. These campaigns will notify people on the rights they have towards the environment and also notify them on the steps to take when those rights are being threatened.

New principles and policies must be introduced, since principles such as polluter pays have pitfalls. They need to introduce principles which will encourage people to protect the environment. Such as the “Duty of care and stewardship” which is about avoiding environmental harm practiced in Australia discussed in chapter 4 above. South Africa must also establish more codes of practice which outline the expected environmental outcomes and management practices as provided for by the Environmental Protection Act in Australia in order to achieve maximum environmental protection.

BIBLIOGRAPHY

Articles and Journals

Ball and Bell (n 4) at 97; Michael Purdue, integrated pollution control in the environmental protection act 1990: a coming age of environmental law. (2014).

Bates, G. A duty of care for the protection of biodiversity on land. Consultancy Report, Report to the Productivity Commission. AusInfo: Canberra (2001).

Bates, G. Protecting biodiversity: property rights and the duty of care. In: Proceedings of the Ecologically Sustainable Agriculture Initiative Conference Rural Land Use Change, August 19-20, (2002).

Beder, S, Costing the Earth: Equity, Sustainable Development and Environmental Economics, New Zealand Journal of Environmental Law, 4, 227-243. (2000)

Binning, C. and Young, M. (Motivating People – Using Management Agreement to Conserve Remnant Vegetation. Report prepared for the National Research and Development Program on Rehabilitation, Management and Conservation of Remnant Vegetation. Report 1/97, Land and Water Resources Research Development Corporation, Canberr. (1997).

Binning, C. and Young, M. Motivating people – using management agreements to conserve rennet vegetation. Report 1/97 land and water resources research developmental cooperation cabinet. (1997).

Binning, C. Principles for managing changes in land and water property rights. Paper presented to a Conference of the NSW Farmers Association, Sydney. (2002).

Bray E "Focus on the National Environmental Management Act: Co-operative Governance in the Context of the National Environmental Management Act 107 of 1998" South African Journal of Environmental Law and Policy 1. (1999).

Christopher D. Stone, Is There a Precautionary Principle? 31 ENVTL. L. RPTR. 10790 (2001).

Daniel B. Scientific Uncertainty and the Precautionary Principle, 33 ENVIRONMENT 4 September, (1991).

David Hunter, James Salzman, and Durwood Zaelke, international environmental law and policy 366-70 (1998).

Department of Environment and Heritage Protection: Meeting environmental obligations and duties (2015).

Du Pleissis, W. Hichange - A New Direction in Environmental Matters? Faculty of Law, North-West University (Potchefstroom). (2015).

Federick S. The National Environmental Management Act and Liability for Environmental Damage, 6 SAJEL pp 45-46. (1996).

Feris L "Environment" in Currie I & De Waal J (eds) The Bill of Rights Handbook (Juta Cape Town 521 522. (2006).

Frank Cross, Paradoxical Perils of the Precautionary Principle, 53 WASH. & LEE L. REV. 851, 851 (1996).

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

Glendyr Nel. - Associate: Cullinan and Associates, Environmental Law liability page 1. (2007).

Gregory D. Fullem. Comment, the Precautionary Principle: Environmental Protection in the Face of Scientific Uncertainty, 31 WILLAMETTE L. REV. 495. (2005).

Greiner, R, Patterson.L and Miller.O. Explaining the concept of "Environmental Duty of Care" in the context of the Northern Gulf region (Queensland) Page 3. (2007).

Günther handl, declaration of the united nations conference on the human environment (stockholm declaration), (1972) and the Rio declaration on environment and development, page 4. (1992).

Harremoes, P. et al. (eds), Late Lessons from Early Warnings: The Precautionary Principle 1896–2000, London: Earthscan. (2002).

Henderson, P.G, Some thoughts on distinctive principles of South African Environmental Law' 8. (2001).

I.L.M. 849, arts. 3 & 4. United Nations Convention on Biological Diversity, 5 June 1992, 31 I.L.M. 822, arts. 8 & 10, Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, 17 June 1994, 33 I.L.M. 1328, arts. 4 & 5.

Industry Commission. A Full Repairing Lease: Inquiry into Ecologically Sustainable Management. Report 60, Commonwealth of Australia, Belconnen, ACT, 27 January. (1998).

J. Hepburn, reviewed by M.W. Gehring & M.C. Cordonier Segger, Working Paper for Foreign Affairs Canada (Montreal: CISDL, (2005).

James E. Hickey, Jr., and Vern R. Walker, Refining the Precautionary Principle in International Environmental Law, 14 VA. ENVTL. L.J. 423. (1995).

John M. Macdonald, Appreciating the Precautionary Principle as an Ethical Evolution in Ocean Management, 26 OCEAN DEV. & INT'L L. 255. (1995).

Kathrin, S. The duty to notify of environmental harm Approved Permit and License Management Director, Strategic Compliance Ph: 13 QGOV (13 74 68) Department of Environment and Heritage Protection Fax: (07) 3330 5875 Date: 7 October (2015).

Nabileyo, O. The Polluter Pays Principle and Environmental Liability in South Africa. Research Dissertation, North West University. (2009).

Nel, G. Environmental Law and Liability. Cullinan and Associates. (2012).

Nel, J. "Environmental management principles: precautionary principle' Unpublished lectures. (2003).

Oosthuizen F. The Polluter Pays Principle: Just A Buzzword of Environmental Policy. (1998).

Pearce, D. Blueprint int for a Green Economy (1989).

Sands P Principles of International Environmental Law (Cambridge University Press Cambridge (2003).

Sean Dole- Director, WSP Environment and energy; environmental compliance, (2007).

Smith, C. The Precautionary Principle and Environmental Policy Science, Uncertainty, and Sustainability. International Journal occupation of environ heal. Vol 6/no 3, oct/dec. (2000).

Smith, M. and Capelin, M. Duty of care for holders of state land. Land series fact sheet L120, QNRM053890, Produced by Land Management Use for the Department of Natural Resources and Water (Queensland). (2006).

The Reconstruction and Development Programme, (RDP). (1994).

Threatened Biodiversity, the NEMA EIA Regulations and Cultivation of Virgin Land: More of the Sorry Same?" (2007).

William, C.G, Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Areas ILM 36, 777. (1996).

Young, M., Shi, T., and Crosthwaite, J. Duty of Care: An instrument for increasing the effectiveness of catchment management. Department of Sustainability and the Environment: Victoria. (2003).

Zaelke, D.; Kaniaru, D. & Kružíková, E. Making Law Work: Environmental Compliance and Sustainable Development Vol. I and Vol. II, Institute for Governance and Sustainable Development, (2005).

Legislations

Access to Information Act 2 of 2000.

Atmospheric Pollution Prevention Act 45 of 1965.

Constitution of the Republic of South Africa 1996.

Environmental Protection Act 1994.

National Environmental Management: Waste Act 59 of 2008.

Promotion of Administrative Justice Act No. 3 of 2000.

The Environmental Conservation Act 73 of 1989.

The Environmental Protection Act 1994.

International instruments

Article 11 of the Stockholm Declaration 1972.

Principle 16 of the United Nations Conference on Environment and Development of 1992.

The Rio De Janeiro Declaration On Environment and Development (Rio Declaration), 1992.

The Rio Declaration on Environment and Development 1992.

Internet sources

Department of environment and heritage protection: Meeting environmental obligations and duties:

www.ehp.qld.gov.au/management/planning/guidelines/legislation/general_environmental_duty.html. (2015) Accessed 02/07/2016

Gilder A, Rumble O and Dhladhla D, Environment–South Africa:

www.ensafrica.com/news/Environment-South-Africa accessed 01/07/2016.

Williams s, Protection of the environmental law:

www.sielearning.tafensw.edu.au/MCS/CHCAOD402A/chcaod402a_csw/knowledge/duty_of_care/duty_of_care.html. Accessed 14/04/2016

www.ehp.qld.gov.au/management/planning-guidelines/legislation/general_environmental_duty.html Accessed on 07/04/2016.

Gilder A, Rumble O and Dhladhla D, Environment–South Africa:

www.ensafrica.com/news/Environment-South Africa?Id=843&STitle=environmental%20ENSight. Accessed 07/04/2016.

Precautionary Principle www.cefic.org.

Westminster City Council. 2016. Waste Enforcement Policy 2016:

www.advicelocal.org.uk Accessed on the 26/05/2012.

Chief Justice of Malaysia, Statutory penalties for environmental violations:

www.ajne.org/sites/default/.../statutory-penalties-4-for-environmental-violations

Accessed on the 14/05/2016.

Ball and Bell (n 4) at 97; Michael Purdue, integrated pollution control in the environmental protection act 1990: a coming age of environmental law?

www.complydirect.com/packagingregs Accessed 02/09/2016.

Case law

Director: Mineral Development, Gauteng Region and Sasol Mining v SAVE the Vaal environment. 1999 2 SA 709 (SCA).

Director: Mineral Development, Gauteng Region and Sasol Mining v SAVE 1999 2 SA 709 (SCA).

Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture Conservation and Environment, Mpumalanga Province and Others, 2007 (6) SA 4(CC).

Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products & Others, 2004 2 SA 393 (E).

Books

Bates, G. (1999). Environmental Law in Australia (5th edition). Butter worths, Sydney.

Brownlie I Principles of Public International Law, 6th ed

Currie and De Waal The bill of rights handbook (2005) (5th ed) 522-523.

Hunter O, Salzman J and Zaelke International Environmental Law and Policy 2nd ed.

South African Environmental legislation 2010 (2nd edition): Morné van der Linde.