



**UNIVERSITY OF
KWAZULU-NATAL**

**INYUVESI
YAKWAZULU-NATALI**

**FINANCIAL PROVISIONS AND ENVIRONMENTAL
LIABILITIES ON INDUSTRIAL SITES**

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Submitted in partial fulfilment of the requirements for the

Degree of

Masters of Environmental Law

In the College of Law and Management Studies

University of Kwazulu-Natal

2017

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DECLARATION

I, Bronwyn Parker, hereby declare that:

1. this research paper is my own work and I have not copied the work of another student or author;
2. the written work is entirely my own except where other sources are acknowledged;
3. collaboration in the writing of this dissertation or the copying of another student's work constitutes cheating for which I may be excluded from the University; and
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ABSTRACT

This paper looks at the management of environmental liabilities in South Africa with a specific emphasis on industrial sites. The focus on industrial sites is due to the illustrated environmental legacy issues which arise from these sites and the fact that our natural resources legislation does not correctly emphasise, and ensure provision for the financial implications of these liabilities. The lack of statutory regulation has created an environmental debt exposure for many unsuspecting persons and contributes to the proliferation of environmental degradation. To highlight the potential inadequacy of the legislation, this paper considers the management of these liabilities in two commercial situations, namely the sale of business and winding up of a company and examines how the applicable key legislation addresses these liabilities.

ACKNOWLEDGMENTS

I started this journey in 2013 with an inquisitive mind and heart. I have grown in knowledge and emotion, having lost a very dear grandparent to cancer in the throes of academic aspiration. It is for this reason that I would like to acknowledge Margret and Dave Chandler – Gags and Pops, for your belief in me "your lawyer granddaughter". Witnessing the amount of pride with which you have regarded my small successes, has always been the reason for my determination. Gags you are always in the spirit of everything I do and I had to finish this so as to honour your tenacious character.

A debt of gratitude to my husband, Stuart Parker for your support and resilience through assignments and the drafting process, for listening to my endless chatter about environmental legal injustices and subtly nudging me along when hopelessness set in.

Thank you to my family far and near for your patience and support, I am sure you are as relieved as I am! Together you are my FAMILY, an anchor.

Then not least, thank you to my supervisor Avishkaar Ramdhin, for your tolerant support whilst I untangled this topic.

1 CHAPTER ONE: BACKGROUND AND INTRODUCTION

*“Until we connect the profitability of business with the survival of the natural world, we will not be able to balance real profits with real losses”.*¹

1.1 Environmental Liabilities On Industrial Sites

The Department of Environmental Affairs ("DEA"), Environmental Inspectorate Unit ("EMI's") publishes an annual National Environmental Compliance and Enforcement Report ("NECER")² that aims to provide an overview of environmental compliance and enforcement activities undertaken by the various environmental authorities over the period of a financial year.³ The reports highlight, *inter alia*, operational activities relating to industrial sectors which are problematic.⁴ In the preceding five years NECERs have exposed disturbing developments concerning environmental liability at various major manufacturers in the South African industrial sector.⁵ The discussed case studies serve to highlight these developments.

The Old Vanchem Vanadium Basic Oxygen Furnace Slag Disposal Facility ("SDF") in Witbank, was owned and operated by Vanchem Vanadium. In 2011 the EMI found that the SDF was being operated unlawfully by Vanchem Vanadium, and issued them with a s31H request for information notice under the National Environmental Management Act⁶ ("NEMA") to determine if a s28 NEMA directive could be issued. Vanchem then later in that year, sold its Witbank industrial steelmaking complex with SDF to Highveld Steel (known as Evraz Highveld Steel and Vanadium Limited) who, in terms of the sale, assumed Vanchem's operational and rehabilitation obligations in respect of the industrial complex and SDF, which included compliance with a duty of care directive issued by the EMI's. Evraz Highveld's ("Highveld") intention with the purchase was the reworking of the SDF to exploit further value.⁷ In 2014 the DEA was informed by Highveld that they were experiencing financial constraints, which was hampering progress on obtaining licenses to operate the facility and

¹ A Larkin. *Environmental Debt: The Hidden Costs of a Changing Global Economy* (2013) 6.

²The Department of Environmental Affairs "Mediation and Law Enforcement" <https://www.environment.gov.za/otherdocuments/reports#legal> (Accessed 5 July 2017).

³ The Department of Environmental Affairs *National Environmental Compliance and Enforcement Report* (2015/16) 1.

⁴ Ibid.

⁵*National Environmental Compliance and Enforcement Report* (See note 3;50); The Department of Environmental Affairs. *National Environmental Compliance and Enforcement Report* (2014/15).

⁶ NEMA Act 107 of 1998.

⁷ The Department of Environmental Affairs *National Environmental Compliance and Enforcement Report* (2011/12) 40.

implement the required directive measures.⁸ The SDF formed part of a complex steel manufacturing operation at Highveld. The DEA also noted that the SDF had additional significant environmental non-compliances, such as unlined disposal sites and unlined process dams used to convey waste and process water, posing serious contamination risk to soil and groundwater due to the nature of the manufacturing operation.⁹ In 2015 Highveld notified the DEA of its intention to commence business rescue proceedings, which was subsequently realised.¹⁰ When the DEA challenged Highveld about its outstanding environmental obligations, Highveld replied that, due to the financial responsibility arising out of these obligations and the non-compliances they were struggling to find an investor to rescue the business.¹¹

The facts in this case study epitomise why it is necessary to have a dialogue about environmental liabilities on industrial sites. Highveld had already indicated that it could not financially meet its environmental liabilities and, taking cognisance of this fact in all probability the environmental liabilities exceeded the value of the business asset. This raises the eventual question of who will pay for these environmental liabilities, in the event that Highveld declares insolvency. The answer, simply, the State and taxpayers.

Another industrial operation, which reaffirms that there is indeed cause for concern, is Exxaro Base Metals Zincor refinery (Zincor). Zincor is a historic Zinc manufacturing industrial facility located in the Ekurhuleni Metropolitan Municipality. Zincor is positioned upon a historic gold mining site, which was converted into a uranium processing facility in the late 1960's where, after it was retrofitted, became a zinc metal refinery up until 2010.¹² In 2011 the EMI's noted various environmental non-compliances on the Zincor site, which included the disposal of hazardous waste on historic unlined gold tailings storage facilities ("TSF"), evidence of groundwater contamination as a result of activities and potential surface water pollution from the plants' storm and waste water retention dam.¹³ An Independent Competent Persons Report on the Mining Resources of Exxaro Resources

⁸ The Department of Environmental Affairs. *National Environmental Compliance and Enforcement Report* (2013/14) 45.

⁹ *National Environmental Compliance and Enforcement Report* (see note 3; 53).

¹⁰ *Ibid.*

¹¹ *National Environmental Compliance and Enforcement Report* (see note 3; 54). See also Faku, D "Still hope for Evraz asset sale strategy"(2016) <http://www.iol.co.za/business-report/companies/still-hope-for-evraz-asset-sale-strategy-2006203> (Accessed 5 July 2017).

¹² Thomaz, C "Zincor base metals refinery, South Africa" <http://www.miningweekly.com/article/zincor-base-metals-refinery-2006-12-15> (2006) (Accessed 5 July 2017).

¹³ *National Environmental Compliance and Enforcement Report* (see note 7; 45).

Limited ("SRK report") confirmed the presence of major environmental damage on the site, the foremost features being water contamination plumes from the TSF at approximately 250 meters from the Blesbokspruit (a tributary of a declared Ramsar Wetland), and extensive soil contamination.¹⁴ The SRK report noted that Zincor had no financial provision for its closure liabilities as it was not statutorily required to make such provision. Exxaro and SRK estimated the closure liabilities for Zincor to be in the region of R191 million¹⁵ at the end of the 2004 financial year.

In 2013 Zincor indicated to the DEA that it intended on decommissioning the facility, citing that the business was no longer viable due to the soaring electricity and transport costs, with electricity costing the company R50 million of the R600 million operational cost in 2006.¹⁶ It is, however, suspected that the possibly escalated closure liability may have been a major contributing factor. Assuming that Zincor was in the process of decommissioning, in 2015 the DEA's Directorate of Land Remediation still considered the site to pose a significant risk to the environment and issued Zincor with an urgent remediation order.¹⁷ The remediation order is indicative of the fact that Exxaro may not have the necessary resolve to address the significant environmental liability or that it is not in a position financially to provide for these liabilities, thus allowing the environment to be subjected to further degradation.

The Zincor case serves to further highlight the environmental liability cost burden associated with the decommissioning and remediation of industrial complexes and the fact that whilst commercial solutions are sought to address this burden, they take time and may ultimately result in the entity opting for insolvency to evade liability.

This paper will take a closer look at the management of environmental liabilities in South Africa, with a specific emphasis on industrial sites.¹⁸ The focus on industrial sites is due to the illustrated environmental legacy issues which arise from these sites and the fact that our natural resources legislation does not correctly emphasise and ensure provision for the financial implications of these liabilities. This lack of statutory regulation has created an environmental debt exposure for many unsuspecting persons and the proliferation of

¹⁴ SRK Consulting Engineers *An Independent Competent Persons Report on the Mining Resources of Exxaro Resources Limited* <http://www.exxaro.com/pdf/icpr/g/em/zincor.htm> (Accessed 5 July 2017).

¹⁵ Ibid.

¹⁶ Rees, M "Exxaro to shut Zincor" (2011) <http://www.moneyweb.co.za/archive/exxaro-to-shut-zincor/> (Accessed 19 June 2017).

¹⁷ *National Environmental Compliance and Enforcement Report* (see note 3; 55).

¹⁸ Industrial sites in this context include all types of manufacturing plants, refineries and the waste dump sites which are utilised by these industries.

environmental degradation.¹⁹ To highlight the potential inadequacy of the legislation, this paper will consider the management of these liabilities in two commercial situations, namely the sale of business and winding up of a company and how the applicable key legislation addresses these liabilities.

1.2 Why Industrial Sites?

Some of the major impacts from industrial sites include pollution of land, air and the water resources surrounding the site.²⁰ The problem is that the majority of South African industrial sites are not legally obligated to have in place a financial provision as security for some of their environmental liabilities, in contrast to that of the mining and petroleum industries which require license holders to have rehabilitation and closure provisions.²¹ As a result, in the industrial sector, environmental liabilities are usually unaccounted for, leaving the authorities, tax payers and purchasers financially exposed should the facility be passed on in a corporate transaction or face insolvency.²² In the latter situation, a liquidator will have a limited supply of funds to meet the manufacturer's environmental liabilities, let alone

¹⁹See Mathee, A. J, 'Environment and health in South Africa: Gains, Losses and opportunities' (2011) *Public Health* Vol 32 (Suppl 1): S40. See Cock J, Connecting the red, brown and green: The environmental justice movement in South Africa (2004). A UKZN Case Study: Globalisation, Marginalisation & New Social Movements in Post-Apartheid South Africa. Cocks discusses the proliferation of environmental justice movements, her paper however exposes some of the major industrial polluters in South Africa, such as Iscor, Engen, Sapref and these movements responses to the environmental liability issues being experienced by the surrounding communities. See also Sparks, 'SA Long History: Civil Society, Pollution and the Wentworth Oil Refinery' *Centre For Civil Society Research Report No.45 University of Kwazulu-Natal And University of Michigan* (accessed 20 June 2017 http://ccs.ukzn.ac.za/files/RREPORT_VOL106_SPARKS.pdf). Sparks discusses the history of air pollution challenges experienced by surrounding communities from the Wentworth Oil Refinery. See McDonald D, *Environmental Justice in South Africa: Double Speak in Durban. Mondi, Waste Management and the Struggles of the South Durban Community Environmental Alliance* (2002) 202. This paper discusses the various environmental challenges experienced by the South Durban community in respect of surrounding industrial manufacturers. The challenges range from poor management of hazardous waste landfills and dumps which includes substances such as chrome, exposure of children to organo phosphate dumped in an exposed area on a manufacturer's site, complaints against Mondi for poor management of ash waste dumped on its property and SO₂ pollution. Whilst these papers focus on the human health impact, it is noteworthy that these industries are not legally obliged to ensure their environmental liabilities are funded.

²⁰Mathee (see note 19; S40).

²¹MPRDA Act 28 of 2002; GG 26275, 23 April 2004, *Mineral and Petroleum Resources Development Regulations*, Regulation 53 and 54 and Act 102 of 1977; GG 287, 27 March 2006, *Regulations Regarding Petroleum Products Wholesale Licenses*, Regulation 10 and 11; GG286, 27 March 2006, *Regulations regarding Petroleum Products Site and Retail Licenses*, Regulation 9 and 10.

²²See T Carnie, "Decades of Toxic Waste Not Cleared Up" (2012) <http://www.iol.co.za/mercury/decades-of-toxic-waste-not-cleared-up-1227577> (accessed 05 July 2017); E Hamilton, 'The Poisoned Land' (2015) *Noseweek* Issue #193, 1st November <http://www.noseweek.co.za/article/3539/The-poisoned-land#sthash.4gk31RF6.dpuf> (Accessed 05 July 2017) and See McBarron, M. "The implications to industrial sites of risk and hazard-based approaches to managing land contamination."(2006) *ICHEME Symposium series-https://www.icheme.org/communities/subject_groups/safety%20and%20loss%20prevention/resources/hazards%20archive/~media/Documents/Subject%20Groups/Safety_Loss_Prevention/Hazards%20Archive/XIX/XIX-Paper-12.pdf* (accessed 05 July 2017).

contemplate remediation. In the mining and petroleum sectors, holders of licenses²³ are required in intervals as described in their environmental management programme ("EMP"), to account for their remediation by assessing the closure, environmental remediation and latent liability costs associated with their operations.²⁴ In the mining sector this provision is protected in the event of insolvency of the mining rights holder.²⁵

Aspects which are considered in the financial provisioning process for these sites include costs associated with rehabilitation of the surface area, prevention and management of pollution of water and soil, and engineering solutions which prevent leakage from the site.²⁶ The final aspect would include costs associated with post closure management of residual and latent environmental impacts.²⁷ These measures are key for ensuring the financial burden associated with the cost of remediation and rehabilitation is passed to the polluter, the state is provided with sureties and holders of licenses, and the purchaser of these assets is financially equipped to deal with these costs, even in the event of unplanned closure. It is, however, acknowledged that this is not a sure measure and that it has its challenges, but it is nonetheless more than what is legally required of industrial sites.²⁸

1.3 Commercial Situations

It is assumed that the corporate history of Highveld and Zincor is not unique and resonates with many manufacturing facilities in South Africa, having at some stage been the subject of a share sale or asset purchase transaction, the focus of a business rescue or insolvency proceeding. Considering the extent of the environmental damage which has emanated from Highveld and Zincor, it is vital for us to assess these commercial situations and consider if further regulatory control could have averted the ongoing mismanagement of environmental

²³ MPRDA Act 28 of 2002, s41 which has been replaced with NEMA Act 107 of 1998; s24P which states that holders of prospecting rights, mining rights and mining permits require a financial provision. Under the Petroleum Products Act 102 of 1997, Regulation 286 and 287, operators of petroleum product sites and holders of wholesale and retail licenses are required to cost for a financial provision for site rehabilitation.

²⁴ Ibid.

²⁵ Ibid note 23. See NEMA Act 107 of 1998; s24P(6) which provides that " The Insolvency Act, 1936 (Act No. 24 of 1936), does not apply to any form of financial provision contemplated in subsection (1) and all amounts arising from that provision."

²⁶ Ibid note 21.

²⁷ MPRDA Act 28 of 2002; GG26275, 23 April 2004, *Mineral and Petroleum Resources Development Regulations* at Regulation 53 and 54.

²⁸ Petroleum Refineries are not included under the definition of petroleum product sites, wholesalers or retailers. See also Van Zyl H...et al "Financial Provisions for Rehabilitation and Closure in South African Mining: Discussion Document on Challenges and Recommended Improvements" (2012) World Wide Fund for Nature (WWF).

liabilities.²⁹ As for the looming insolvency threat, it is pertinent to understand the statutory position of the State, the purchasers and liquidators with respect to environmental liability costs and if these parties will be lumped with these liabilities.

The corporate transactions which will be considered in this discussion are share purchase and asset purchase transactions. The transaction between Vanchem Vanadium and Highveld involved a share purchase transaction of majority shares in the Vanchem Vanadium Company. The difference between a share and asset purchase will be highlighted with respect to the duties of the seller and purchaser in respect of transferring environmental liabilities.

1.4 The legal problem

Highveld and Zincor only represent two of many industrial sites in South Africa, all of which probably have more or less similar environmental liabilities.³⁰ The situation in which the Highveld and Zincor find themselves should cause alarm bells to siren and raise question about who fits the bill for the ‘environmental liabilities’ associated with these sites? There are some predominant problems with pollution, which make the calculation of this ‘liability’ challenging. Firstly, the issue of associating liability is not easy, due to the complexity around pinpointing the sources of pollution, especially historical pollution on a site like Zincor. When a business is facing a constrained financial situation these liabilities can often exceed the value of the actual asset. Without a type of financial provision to, at minimum, provide security for the environmental liabilities of these sites, it is likely that this financial burden may fall squarely on unsuspecting purchasers, liquidators, or, by default, onto the State.³¹

This paper aims to answer the following questions:

- i. What are ‘environmental liabilities’ in the South African context and how are these currently funded by high risk industrial polluters other than mines?
- ii. What challenges do these liabilities pose?

²⁹ T Carnie, "Decades of toxic Waste Not Cleared Up" (2012) <http://www.iol.co.za/mercury/decades-of-toxic-waste-not-cleared-up-1227577> (accessed 05 July 2017). It is alleged that a demerger was undertaken by Thor chemicals as a way to escape legal damages claims of ill workers.

³⁰ Ibid note 19. See McDonald D, *Environmental Justice in South Africa: Cripple for Life by Mercury Exposure* (2002) 289. This paper discusses the exposure of employees at Thor chemicals to mercury waste as well as the exposure of the waste to the environment, and its possible knock on effects.

³¹ Ibid note 29. The article exposes the potential cost liability of the State in respect of remediation of the Thor chemicals site. Also see The Constitution of South Africa, s24(b) which introduced the concept public trusteeship.

- iii. Who are the parties potentially exposed to environmental liabilities?
- iv. Are environmental liability costs a concern unique to South Africa or is there international precedent for these costs?
- v. What are the proposed solutions to these challenges?

These questions will be unpacked by looking at industrial sites to illustrate the significant legislative gap that exists in the management of environmental liabilities in South Africa and the possible solution, which is borrowed from foreign jurisdictions.

1.5 Research Question

Environmental liabilities in the South Africa mining and petroleum sector are financially managed by obligatory legislated financial provisions. However, the status of environmental liability on other industrial sites, which cause significant environmental pollution, is unknown along with the question of what happens to these liabilities in the event of insolvency or sale of these businesses.

1.6 Limitations of Study

Not all industrial sites have significant environmental liability costs as each site would be unique in its operation, and certain operators may be more vigilant about their statutory obligations than others. It is an acknowledged limitation of this discussion that an assumption is made regarding the significance of the cost associated with environmental liabilities on industrial sites, the main focus of the paper however being on high risk industrial sites. It is not the intention of this paper to discuss the adequacy of South Africa's fiscal system to cater for financial provision instruments as this would extend beyond the scope of the paper. Furthermore, this paper does not intend to recommend the appropriate financial provision mechanisms which may be utilised by an industrial manufacture. It is, however, noteworthy that there are concerns raised by finance experts around the tax implications and administrative management of financial provision instruments which may affect which mechanisms are appropriate.³² Moreover, at the time of writing, the United Kingdom is in the process, of putting in place plans to assist it with exiting the European Union. The effect hereof upon Ireland's legislative regime around the polluter pays principle, insofar as the Irish legislation accommodates for the obligations contained in the Treaty on the Functioning of the European Union which deal with the principle, is currently unknown.

³²Khaki , S. "Integritax Newsletter Online" (2015) <https://www.saica.co.za/integritax/2015/2389 . Provision for mining rehabilitation.htm> (Accessed 19 May 2017).

1.7 Methodology and structure of research paper

The methodology utilised to compile this research paper was limited to literature reviews of both primary and secondary sources and based on experience of the writer. The paper is structured in Chapters, of which Chapter One is the Introduction around the challenges of environmental liabilities on Industrial Site, Chapter Two discusses the concept of environmental liability as it is catered for in the natural resource legislation. Chapter Three indicates the challenges with these liabilities and the parties exposed in the event of sale of a business and insolvency. Chapter Four discusses the European Union's and particularly Ireland's approach to environmental liabilities on industrial sites. The European Union was selected due to the focus placed on the internationally recognised polluter pays principle in the Treaty on the Functioning of the European Union, and Ireland as the international comparative country, as this principle has shaped the country's approach to environmental liability³³. Similarly, in South Africa, the principle is incorporated into a majority of the country's environmental laws. The principle in the South African context *inter alia*, is utilised to internalise cost associated with pollution³⁴, is used to disincentivise unlawful behaviour³⁵ and forms one of the principles against which our umbrella environmental legislation is interpreted³⁶.

The concluding chapter, Chapter Five, will contain recommendations and a proposal on how to manage these challenges, the substance of which is founded upon international sources.

³³ The Treaty on the Functioning of the European Union, art. [174], 2008 O.J. C. 115, at [2].

³⁴ A Patterson .et al. *Environmental Compliance and Enforcement in South Africa: Legal Perspectives*. 1st ed.(2009) Chapter 12: 302.

³⁵ Patterson (34:54) Chapter 3.

³⁶ Paterson (34: 259) Chapter 7.

2 CHAPTER TWO: THE CONCEPT OF ENVIRONMENTAL LIABILITY

2.1 Introduction

In natural resource law, the concept of 'environmental liability' is usually associated with the financial provision for rehabilitation in the mining and petroleum industries³⁷ and enforcement actions taken by authorities.³⁸

In the mining sector, applicants for an environmental authorisation relating to mining activities must, in accordance with s24P(1) of NEMA, first comply with the financial provisions relating to rehabilitation, closure and ongoing post decommissioning management of negative environmental impacts before their authorisation is granted.³⁹ Holders are then required to assess their 'environmental liability' in a prescribed manner⁴⁰ and increase the financial provision to the satisfaction of the Minister, responsible for environmental affairs to adequately cater for the liability. The sum of this liability is calculated by considering the cost associated with rehabilitation and remediation of the mining area; decommissioning and closure activities at the end of prospecting, exploration, mining or production operations; and remediation and management of latent or residual environmental impacts which may become known in future, including the pumping and treatment of polluted or extraneous water.⁴¹

Holders of site, wholesale, retail and petroleum production licenses are, under the Petroleum Products Act ("PPA")⁴² Regulations, similarly required to provide a total quantum for the rehabilitation, management and remediation of negative environmental impacts.⁴³ Under the

³⁷Ibid note 23.

³⁸F Soltau, *The National Environmental Management Act and liability for environmental damage* (1999) 6 SAJELP 48-49; M Kidd, *Liability of corporate officers for environmental offences* (2003) 18 SA Public Law 277-288.

³⁹NEMA Act 107 of 1998; s24P (1). This Section was preceded by Section 41(1) of the Minerals and Petroleum Resources Development Act 28 of 2002.

⁴⁰NEMA Act 107 of 1998, GG 1147, 20 November 2015, *The Financial Provision for Prospecting, Exploration, Mining or Production Operations Regulations* sets out this prescribed manner. It is however important to note that Regulation 53- 60 contained in GG 26275,23 April 2004, *Mineral and Petroleum Resources Development Regulations* has not been repealed and as such holders are encouraged to assess the requirements of both Regulations when undertaking annual evaluation of liability obligations.

⁴¹See Act MPRDA 28 of 2002, GG 26275, 23 April 2004, *Mineral and Petroleum Resources Development Regulations* Regulation 56 and GG 1147, 20 November 2015 *Financial Provision for Prospecting, Exploration, Mining or Production Operations Regulations*.

⁴²PPA Act 102 of 1997, GG287, 27 March 2006, *Regulations Regarding Petroleum Products Wholesale Licenses*, Regulation 10 and 11 and GG286, 27 March 2006, *Regulations Regarding Petroleum Products Site and Retail Licenses*, Regulation 9 and 10.

⁴³ Ibid.

PPA Regulations, the quantum of the financial provision must include a sum for decommissioning and final closure, post closure management of residual and latent impacts as well as a separate provision for premature closure of the facility.⁴⁴ The quantum of the financial provision for premature closure must be validated by a specialist assessment, which assesses the cost of the activities associated with rehabilitation of land, prevention of pollution of the atmosphere, management of pollution of water and the soil and the prevention of spillage and leakage into the ground of chemical substances introduced onto the site.⁴⁵

The following aspects are noteworthy when considering the extent of these environmental liabilities:

- the construct of these obligations, to put in place a financial provision, bear the characteristics of the 'polluter pays principle'⁴⁶;
- NEMA only places this obligation on holders of a mining authorisation and not petroleum product license holders, as there is industry specific legislation therefore⁴⁷;
- NEMA only requires these holders to ensure that an adequate financial provision is available for the listed environmental liabilities (i.e liabilities associated with mine closure)⁴⁸ and no other liabilities;
- neither NEMA and/or any other national natural resource legislation contain similar statutory provision for other significant polluting industries; and
- there is no other national natural resource legislation which links environmental liability with financial implications, other than under the threat of enforcement actions.⁴⁹

These aspects are problematic, considering the fact that our natural resource legislation comprises various other environmental liabilities which can be associated to various

⁴⁴PPA Act 102 of 1997, GG287, 27 March 2006, *Regulations Regarding Petroleum Products Wholesale Licenses*, Regulation 11 (3) and GG286, 27 March 2006, *Regulations Regarding Petroleum Products Site and Retail Licenses*, Regulation 10(3).

⁴⁵ Ibid.

⁴⁶The Polluter Pays Principle – Definition, Analysis, Implementation, Organisation for Economic Cooperation and Development (OECD) Report. Environment Directorate. France. (1975)12.

⁴⁷ Ibid 44.

⁴⁸ Ibid 41.

⁴⁹ See F Soltau, *The National Environmental Management Act and liability for environmental damage (1999)* 6 SAJELP 48-49; M Kidd, *Liability of corporate officers for environmental offences (2003)* 18 SA Public Law 277–288.

industries and persons dependant on their actions.⁵⁰ What then are these other environmental liabilities and how are they being funded? To answer these questions, it is important to understand that the word 'liability' is synonymous with words such as legal responsibility, obligation and charges.⁵¹

2.2 A Legal Framework for Environmental Obligations

Within the context of environmental auditing⁵² the source of environmental obligations are said to be a combination of environmental duties, environmental administrative requirements and common law obligations placed on 'polluters' to implement reasonable measures to regulate their actions.⁵³

Industries are often not aware of all their environmental obligations and the actual cost implications of these obligations, as our legislation does not draw a distinctive connection between these obligations and their financial implications, as has been done for the mining and petroleum industries.⁵⁴ This is often the reason why these obligations are unfunded and/or underfunded, leading to non-compliances. This lack of awareness is also problematic for business transactions, such as sale of a business or for liquidators in insolvency.

This legal framework will demonstrate that, to a large degree, all environmental damage associated with industrial manufacturers is regulated by an environmental obligation contained in our natural resource legislation and that these obligations always have a financial consequence, an aspect of environmental liability in South Africa often overlooked.

⁵⁰ See for example NEMA Act 107 of 1998, s28 the 'duty of care' obligation. The remainder obligations are discussed in paragraph 2.1.1.

⁵¹Oxford Living Dictionary. <https://en.oxforddictionaries.com/thesaurus/liability> (Accessed: 22 May 2017).

⁵²Sampson I...et al. *In: Environmental Due Diligence Audits. A guide to environmental auditing in South Africa.*(2008). 8, Par 1.1. Environmental audits are defined by international bodies in several different manners. Highlighted here is only one definition compiled by the International Chamber of Commerce (ICC) – "a management tool comprising of systematic, documented, periodic and objective evaluation of how well environmental organisation, management and equipment are performing with the aim of contributing to safe guarding the environment by facilitating management control of environmental practices and assessing compliance with company policy, which includes meeting regulatory requirements."

⁵³ Sampson (52: Par 2.4).

⁵⁴Centre for Environmental Rights ("CER") *Full disclosure the truth about corporate environmental compliance in South Africa* (2015), <http://fulldisclosure.cer.org.za/2015/download/CER-Full-Disclosure.pdf> (Accessed 22 May 2017). This report discloses numerous compliance concerns relating to different mining and manufacturing industries, and the discrepancies between the disclosures made by these in their financial reporting and the actual environmental compliance concerns. Whilst the report does not pin point lack of awareness of environmental obligations as a factor which has contributed to the environmental non-compliances it does highlight the fact that numerous of the corporates identify hold the view that the identified "non-compliance constitute an "opinion" or "interpretation" of the Environmental Management Inspectors". This is concerning as it implies a lack of awareness as a contributing factor to identified non-compliance. See Executive Summary, 2.

2.2.1 Environmental Duties

Legislation which regulates environmental management from national to local level may contain specific environmental duties⁵⁵ which find application to various industries and persons dependant on the specific circumstance. As such, it should be acknowledged that the circumstances of each manufacturer will dictate the applicable environmental duties. There is however, framework legislation which contains universal duties, such as the 'general duty of care' with respect to the management of the environment as a whole, which duty is found in s 28 of NEMA.

The duty of care principle is not explicitly mentioned or explained in the the White Paper on Environmental Policy in South Africa ("the White Paper 1998"), but if one considers the expression of the principle in s28 of NEMA, it is easy to see that the principle can be said to be a combination of the 'prevention' and 'polluter pays' principles, both of which are discussed in the White Paper. As stated in s28 of NEMA⁵⁶–

"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 minimise and rectify such pollution or degradation of the environment."

In the international environmental law context the 'prevention principle' was first recognised as an obligation on States to prevent transboundary environmental harm.⁵⁷ The principle was, however, developed when codified into various countries' national legislation, as a principle which requires activities which will cause environmental harm to first be prevented⁵⁸. To this end, this principle requires action to be taken as an early stage of the process before damage has actually occurred.⁵⁹ In s28 of NEMA, the 'prevention principle' is expressed in the first

⁵⁵ Sampson (52: Par 2.4.2).

⁵⁶ NEMA Act 107 of 1998,s28(1).

⁵⁷Arbitral Trail Smelter Case 3 U.N. Rep. Int'l Arb. Awards 1905 (1941)1965 and *See* UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992) the Rio Declaration on Environment and Development- Principle 2, which in summary requires States to ensure that activities in their jurisdiction do not cause damage to the environment of other States.

⁵⁸Ibid (46:15).

⁵⁹J Glazewski, *Environmental Law in South Africa 2ed* (2005) 18.

part of the duty, so polluters are required to first prevent significant pollution by taking reasonable measures and then in the second part they have an obligation to rectify the significant pollution or degradation, which is an expression of the ‘polluter pays principle’, as it places the onus on "every person who has caused...pollution to pay the repair costs".

Soltau, observes that the strength of the s28 principle lies in its ‘generality’, as in the context of NEMA it can be used as an enforcement tool for past, present and future pollution and is considered an ‘environmental value’, enforceable even beyond the issuance of a permission to pollute, placing an ongoing duty on ‘everyone’ to minimise and rectify pollution.⁶⁰

Practically, if this principle is applied to an industrial manufacturing site which shows signs of significant pollution on the premises, it means that the manufacturer has failed in its ongoing environmental duty of care and is required, in order to avoid enforcement measures, to take reasonable measures to minimise and rectify the past⁶¹, present and avoid future pollution. These measures in terms of s28 can include-

(a) investigate, assess and evaluate the impact on the environment, (b) cease, modify or control any act, (c) contain or prevent the movement of pollutants or the cause of degradation, and (d) remedy the effects of the pollution.⁶²

Beyond the general duty of care in respect of the environment as an all-encompassing object of this duty, environmental media which receives a significant amount of attention in respect of environmental duties is land and water, which is possibly due to the susceptibility of these media to source based pollution risks⁶³.

The environmental duties in respect of contaminated land are described in Chapter 4, Part 8 of National Environmental Management Waste Act ("NEMWA").⁶⁴ Contamination is defined broadly in the NEMWA as⁶⁵ –

⁶⁰Soltau(38; 48-49).

⁶¹ NEMA Act 107 of 1998,s28(1A).

⁶² NEMA Act 107 of 1998, s28(3)(a)-(f).

⁶³South African. Dept. Envir. Affairs. *Framework for the Management of Contaminated Land*, (2010) 8. The focus of this Framework is source pollution of land and water resources.

⁶⁴ NEMWA Act 59 of 2008.

⁶⁵ Ibid note 58.

"the presence in or under any land, site, buildings or structures of a substance or micro-organism above the concentration that is normally present in or under that land, which substance or micro-organism directly or indirectly affects or may affect the quality of soil or the environment adversely."

NEMWA places an environmental duty on an owner of land that is *significantly* (own emphasis) contaminated to notify the Minister responsible for Environmental Affairs, of the contamination and on issuance of an order from the Minister, requires the owner to compile a site assessment report and undertake remediation if required.⁶⁶ The Framework for the Management of Contaminated Land⁶⁷ provides insight into the complexities of pollution on this media, as it proposes a "multi-tiered based methodological approach to the assessment of contaminated land which approach allows proponents to identify contaminant linkages to the environment".⁶⁸ The pollution of this media does not only affect natural resources independently, but usually occurs through multiple natural resource channels, each having a contaminant linkage to the pollution source.

NEMA and NEMWA have two noteworthy points in common when considering the context of these environmental duties. The Acts both refer to the notion of retrospectivity⁶⁹ and significant pollution.⁷⁰ The management of environmental legacy pollution is a challenge for the polluter and authorities alike, which is why the legislators have made provision for retrospective liability for these environmental duties.⁷¹ The inclusion of retrospectivity in both these abovementioned Acts has various consequences, namely:

- a person who caused pollution through historical activities is obliged to take the requisite measures described in the Acts⁷²; and
- a person⁷³ may utilise the available enforcement instruments to enforce their rights to address environmental legacy pollution issues⁷⁴.

⁶⁶ Act 59 of 2008, s36-38.

⁶⁷ Ibid note 63, See Preface.

⁶⁸ Ibid note(63: 8).

⁶⁹ NEMA Act 107 of 1998, s28(1A); Act 59 of 2008, s35(a).

⁷⁰ NEMA Act 107 of 1998, s28(1); Act 59 of 2008, s36(5).

⁷¹ Fuggle and Rabie. *Environmental Management in South Africa*. 2nd ed. (2009) ch1-p26.

⁷² Ibid.

⁷³ NEMA Act 107 of 1998, s28(4) the competent authority; s28(12) 'any person'.

⁷⁴ NEMA Act 107 of 1998, s28(4); s31L and s32 applies to the enforcement of NEMWA Act 59 of 2008, s36(5) as the responsible person would not be complying with Act NEMWA 59 of 2008, s36(5), if they were not taking the requisite measures described in the NEMWA Act 59 of 2008 to report the contamination.

The term 'significant' was discussed in the context of 'significant pollution' in the *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd T/A Pelts Products, And Others*⁷⁵

("the Hichange case"), wherein the court held that⁷⁶-

- a consideration of what is significant involves a considerable measure of subjective import;and
- in light of the Constitutional right a person has a right to 'an environment conducive to health and well-being, the threshold of significance is therefore not particularly high.

The effect of Judge Leaches refinement of this term is that the requisite environmental duties under NEMA and NEMWA are limited, as they do not allow polluters a significant amount of latitude for the pollution or contamination if this is measured by subjective import against the s24 environmental right in the Constitution. Similarly, the burden of proof is also not substantial for a claimant who may seek to enforce the environmental duty created by these environmental obligations. According to the Hichange case, any pollution which offends the s24 environmental right is 'significant' and would warrant a claim.⁷⁷

With respect to water resources, the National Water Act ("NWA")⁷⁸ at s19 is entitled : "prevention and remedying effects of pollution" and is essentially a replica of the s28 principle.⁷⁹ The Act however focuses specifically on water resources, and the duty of care in s19 states the following⁸⁰:

⁷⁵ 2004 (2) SA 393 (E).

⁷⁶ 2004 (2) SA 393 (E) 415.

⁷⁷ 2004 (2) SA 393 (E) 415 where the court held that " Bearing that in mind, no matter what the precise level of pollution may currently be, it is clear from a conspectus of the evidence as a whole, including the first respondent's own papers and the reports attached thereto, that there has been a pollution of the environment (in the sense envisaged by the definition of 'pollution' in NEMA) at a level which must be regarded as 'significant'. The first respondent itself, albeit while denying that it is substantial, concedes pollution to the extent normally associated with a tannery. As I have already mentioned, immediately before this application was launched the first respondent conceded that it was unable to comply with the third respondent's requirements relating to its DO and C MLSS levels, the two components crucial to the formation of H₂S. If one bears in mind the undisputed evidence that even the most minute concentration of H₂S in the atmosphere is detected by the human nose as a stink similar to rotten eggs, I am satisfied on a balance of probabilities that the H₂S generated by the first respondent's processes would regularly have been detectable to the persons working nearby on the premises of the applicant, as the latter alleges. This is confirmed by the deponent to the fourth respondent's answering affidavit, one Scarr, who states that he has visited the tannery and that the smell is extremely offensive. One should not be obliged to work in an environment of stench and, in my view, to be in an environment contaminated by H₂S is adverse to one's 'well-being'. I am therefore satisfied that the activities of the first respondent have caused 'pollution' as defined in NEMA."

⁷⁸ NWA Act 36 of 1998; s19.

⁷⁹ The exception being the s19 does not refer to 'significant pollution', but only refers to pollution. It seems that it is not necessary for the pollution to be 'significant' before a debtor is obliged to take reasonable measures.

⁸⁰ NWA Act 36 of 1998; s19(1).

"an owner of land, a person in control of land or a person who occupies or uses the land on 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 pollution of water resources, must take all reasonable measures to prevent such pollution from occurring, continuing or reoccurring.."

The Supreme Court of Appeal case of *Harmony Gold Mining Company Ltd v Regional Director: Free State Department of Water Affairs*⁸¹ (hereinafter referred to as "the 2013 Harmony Gold case") serves as an illustrative example of the extent of this environmental duty and how onerous the "reasonable measures" may become for an operator of an industrial site. Some of the legal points made in the 2013 Harmony case about this environmental duty, were :

- that the s19 duty of care is not delimited by the actual time of landholding⁸²;and
- that the measures required of a landholder are not limited only to the land mentioned in subsection 19(1).⁸³

On a simplistic reading of this duty in s19, the duty requires principal polluters of water resources to, on an ongoing basis, take reasonable measures to prevent pollution and, once present, to minimise and rectify sources of water pollution from the past, present and prevent the materialisation of future pollution. A principal's duty, according to the 2013 Harmony Case extends beyond the actual time of landholding, meaning that the polluter cannot 'sell' himself out of this obligation and that the pollution is not limited to the actual land owned by the polluter, but can extend beyond the perimeter of that land.⁸⁴These are consequences which are pertinent when evaluating the extent and potential costs of this environmental duty.

The description of these environmental duties provides insight into the extent of the duties and the potential measures required to be taken by industrial manufacturers to meet their environmental obligations, to avoid non-compliance. It is inherent that these measures will in all respects have a significant cost implication for an owner or operator of an industrial

⁸¹ Harmony Gold case 2013 JDR 2812 (SCA).

⁸²T Humby "The Spectre of Perpetuity Liability for Treating Acid Water on South Africa's Goldfields: Decision in Harmony II" (2013) 31(4) *Journal of Energy and Natural Resources Law* (JENRL) 416. Judge Makgoka held that a severing ties with the land did not relinquish the validly imposed liability and that only fulfilment of the imposed obligations could sever such ties with the directive.

⁸³ Harmony Gold case 2013 JDR 2812 (SCA) 15.

⁸⁴ Ibid.

manufacturer, a cost which NEMA and the associated natural resource legislation is silent about, not requiring the operator to make provision for these costs at any stage. What if the operator does not have the financial means to meet these obligations, either in the normal course of business or through enforcement measures imposed upon the operator as was evident with Evraz Highveld? Who is then responsible for the fulfilment of these obligations?

2.2.2 Common Law

The s28 of NEMA and s19 of NWA duties of care obligations are just a form of codifications of the common law duty of care.⁸⁵ The justification for this obligation at common law is possibly founded in the doctrine of abuse of rights, which provides that subjective rights have certain social limits and every 'anti-social' exercise of a person's right is wrongful, and therefore an abuse of that right.⁸⁶ In the context of neighbour law and nuisance, a person who undertakes an activity which causes harm to his neighbour or another would have exceeded his powers of ownership which would be an abuse of his rights of ownership. To determine the extent of his wrongfulness, the owner would be subject to an objective assessment of whether he acted reasonable and fair in the circumstances.⁸⁷

As an environmental obligation, the obligations arise out of the principles relative to the law of nuisance and neighbour law. The value of these common law principles in creating environmental obligations over and above the statutory obligations was emphasised in *Rainbow Chicken Farm (Pty) Ltd v Mediterranean D Woollen Mills (Pty) Ltd*⁸⁸, where the court held that the pollution of the stream was an actionable nuisance and that –

"a producer of effluent that discharges into a public stream, quite apart from statutory duties imposed on him by sections 21(1) and (2), of the 1956 Water Act owes a common law duty of care towards others".

The applicant in this matter was successful in illustrating the nuisance and obtaining an interim interdict stopping the respondent from discharging effluent from its dyeing operations into the river.⁸⁹

⁸⁵ Fuggle ..et al (71: 211).

⁸⁶ Neethling ...et al. *Law of Delict*.6th ed. (2010) 116.

⁸⁷ Neethling..et al (86; 116,117 and 118).

⁸⁸ 1963 (1) SA 201 (N) 205A.

⁸⁹ Glazewski J.. et al. *Environmental Law in South Africa* (2005). 24.

The environmental obligation can thus be found in the 'duty of care', that must be taken towards others which includes care of the environment to prevent nuisance.

2.2.3 Environmental administrative requirements

Environmental administrative requirements are environmental obligations referred to as permits, licenses, environmental authorisations and management plans.⁹⁰ Arguably, these obligations can also involve enforcement instruments such as directives and compliance orders issued upon an entity by the respective enforcement authorities.⁹¹

An industrial manufacturer may need to obtain numerous environmental administrative authorisations to permit and regulate its activities. Similar to the environmental duties, the type of entity and its associated activities will determine which authorisations it needs to obtain. As NEMA is the framework legislation, the environmental administrative requirements of NEMA will be described to illustrate the effect hereof on environmental liability.

The Minister must, in terms of s24(2) of NEMA, identify activities and specific activities in geographical areas based on their environmental attributes, which may not commence without an environmental authorisation from the competent authority. Environmental authorisations must as described under s24E of NEMA, contain 'minimum conditions'. These minimum conditions require that every environmental authorisation must –

- ensure that *adequate provision* (own emphasis) is made for ongoing management and monitoring of impacts of the activity on the environment throughout the lifecycle of the activity; and
- ensure that provision is made for the transfer of rights and obligations.

As a result of these conditions, the authority needs to draft provision into all environmental authorisations which at a minimum give effect to the requirements in this section. There are two relevant aspects that must be noted out of this section when considering the realisation of potential environmental liability in respect of this obligation.

⁹⁰ Sampson (52: 28) Par 2.4.3.

⁹¹ NEMA Act 107 of 1998, s28(4) and s31L respectively for example of environmental enforcement instrument.

The first aspect is the intended meaning of the word 'provision'. It is uncertain whether the legislator intended that the authorities must (a) include a condition in the environmental authorisation which directs the holder on how to manage and monitor impacts for the lifecycle of the activity, or (b) whether it is intended to prompt the authority to draft a condition into the license which requires 'the holder' to provide proof of provision by a financial provision, which would be sufficient for the undertaking of management and monitoring obligations for the lifecycle of the activity. The term 'financial provision' is defined in NEMA as⁹²:

"the insurance, bank guarantee, trust fund or cash that applicants for an environmental authorisation must provide in terms of this Act guaranteeing the availability of sufficient funds to undertake the (a) rehabilitation of the adverse environmental impacts of the listed or specified activities;... (c) decommissioning and closure of the operations; (d) remediation of latent or residual environmental impacts which become known in the future; (e) removal of building structures and other objects; or (f) remediation of any other negative environmental impacts.

On this definition, a financial provision only relates to environmental impacts which are realised at the end of the life of an activity, which is troublesome, as the minimum conditions in terms of s24E specifically refer to management and monitoring for the lifecycle and not just at the end of life of the activity. The lifecycle of an activity is understood to be referring to all stages of implementation until decommissioning of that activity.⁹³ This understanding is discharged from the description of the cradle to grave principle, which is also a material principle of environmental management in NEMA, but finds more relevance in connection with products from manufacturing facilities.⁹⁴ This implies that the holders' obligations for management and monitoring may, in terms of an environmental authorisation, be extinguished on decommissioning of the facility. This is problematic when considering industrial activities with environmental impacts that may, exceeds the lifecycle of the authorised activity, arising at a later date in the form of residual and latent pollution.

⁹² NEMA Act 107 of 1998, s1 Definitions.

⁹³ GNR.749 15/05/199; White Paper on Environmental Management Policy for South Africa, See Paragraph 3 Principles.

⁹⁴ Ibid.

It may be that s24E provides the authority with the discretion to impose a provision in the environmental authorisation which deals with all lifecycle phases, including end of life activities, which is where the environmental liability is most significant.⁹⁵ It is proposed that either interpretation of this condition has merit, allowing the authorities discretion to insert a provision that they see fit for the activity.

The second aspect to s24E of NEMA, then requires the authority to include a condition for transfer of rights and obligations under the authorisation. There is however no minimum requirement in NEMA or its regulations for the procuring person to be a ‘competent person’ as required by the Mineral and Petroleum Resources Development Regulations (hereinafter referred to as "the MPRDA Regulations").⁹⁶ This may be a gap in NEMA as a potential purchaser of a business would not, in terms of the current provisions of NEMA, be required to prove they have the requisite competency to fulfil the existing environmental obligations of the seller. This risk can translate into an environmental liability risk for the State and public if the purchaser acquiring the business doesn’t accurately assess or understand its potential environmental liability, leading to the purchaser defaulting on its newly acquired obligations. The defaulting purchaser could cause a potentially harmful environmental situation, which may become a liability for the State⁹⁷, especially if the seller cannot be retraced when the purchaser is found in default of its environmental obligations. It is, however, accepted that these are minimum conditions and that there is scope for the authorities to expand on the conditions, creating the opportunity for the insertion of a ‘competency test’ on transfer in the authorisation.

The environmental liability created by environmental administrative requirements is found in the cost associated with fulfilling the conditions of the authorisation. These conditions are

⁹⁵ *Framework for the Management of Contaminated Land* (63:7).

⁹⁶ MPRDA Act 28 of 2002, GG 26275, 23 April 2004, *Mineral and Petroleum Resources Development Regulations*, Regulation 59 - "The person to whom such transfer is made must—(a) have the expertise, resources and organisational abilities to integrate risk assessment, risk management and risk financing to ascertain the cost of environmental management; (b) have the expertise, financial and other resources to meet his or her obligations to carry out actions necessary to fulfil the environmental obligations as set out in the environmental management plan or the environmental management programme or any closure plan concerned; (c) have appropriate experience in environmental management, prospecting or mining operations and mine health and safety matters; (d) have direct access to insurance products and alternative risk financing services appropriate to financing of exposure to risks; (e) have the ability to manage trusts set up in terms of section 10 (1) (cH) of the Income Tax Act, 1962 (Act No. 58 of 1962); and (f) have expertise and experience or proven access thereto to interpret and manage the findings of an environmental risk assessment."

⁹⁷ NEMA Act 107 of 1998, s28(5)(e) wherein the environment as a whole is the object or *res publicae* and the State holds the legal title with fiduciary responsibility, to the whole environment.

placed in the environmental administrative instrument to protect the environment, which costs can endure for the lifecycle of the activity and escalate towards the end of life of the activity, due to potential decommissioning obligation.⁹⁸ These are costs which the natural resource legislation does not require the operators of industrial facilities to make provision for at initiation of the project.

Enforcement instruments in the form of directives and compliance orders intrinsically result in a financial liability for operators either in the measures prescribed in the instrument or fines for non-compliance. The 2013 Harmony Gold case⁹⁹ provided insight on the extent of the measures that can be imposed in a directive, affirming that the Minister has the discretion to determine the extent of the reasonable measures, should the landholder not be fulfilling their obligation¹⁰⁰ and that a directive will only come to an end once the reasonable measures contained therein have been fulfilled.¹⁰¹ The court however limited the Minister's discretion by providing that the measures are limited to the extent that the imposed measures must be consistent with the purpose of the NWA and the NEMA principles.¹⁰² Translated into environmental liability, the fact that the Minister has discretion to impose measures it sees fit should be cause for alarm, as once the measures are imposed the debtor no longer has control over the measures it would have otherwise chosen to impose to prevent or remedy the pollution. This may lead to significant financial liability for the polluter, as was the case in the 2013 Harmony Gold case.¹⁰³ Moreover, the directive will remain until it has been fulfilled, which means that the financial liability will endure even if the entity is sold or becomes insolvent.

Similarly, in relation to compliance notices the court in *Khabisi NO and Another v Aquarella Investment 83 (Pty) Ltd and Others*¹⁰⁴ found that the wording of s31L(4) of NEMA makes it

⁹⁸NEMA Act 107 of 1998, GG 38282, GN983, 4 December 2014, *Environmental Impact Assessment Regulations - Activity 31*, which requires a basic assessment to be undertaken for 'decommissioning of existing facilities, structures or infrastructure for any developments described in Activity 31, which refers to specific facilities, structures or infrastructure in GN983, GN984, GN 985.

⁹⁹ The 2013 Harmony Gold case 2013 JDR 2812 (SCA).

¹⁰⁰The 2013 Harmony Gold case 2013 JDR 2812 (SCA) 23-24.

¹⁰¹T Humby "The Spectre of Perpetuity Liability for Treating Acid Water on South Africa's Goldfields: Decision in Harmony II" (2013) 31(4) *Journal of Energy and Natural Resources Law* (JENRL) 461.

¹⁰² 2013 JDR 2812 (SCA) at par 25.

¹⁰³According to a *Business Day ePaper* - 31 Jan 2014, "Harmony tells court pollution directive is invalid: as a result of the directive "Harmony is paying R1.3m a month to pump water from one of the shafts, a figure disproportionate to its contribution to water pollution in the Klerksdorp, Orkney, Stilfontein and Hartbeesfontein area".

¹⁰⁴ [2007] 4 All SA 1439 (T) 1448.

clear that once a compliance notice is issued, the respondent is obliged by law to comply therewith and that s31L(4) is authoritative on the fact that the respondent has no choice but to abide by the notice.¹⁰⁵ The legislation is once again silent about the cost implications of these types of enforcement actions, where the question is again: what if the operator does not have the financial means to comply with these conditions?

There are two striking conclusions, which can be reached having considered all of the above mentioned environmental liabilities. Firstly, the fact that there is a potential for an amassing of cost associated with liabilities and no legislative instrument which ensures that the operators of industrial sites can meet these costs and secondly, these costs are associated with fulfilling statutory obligations or complying with the enforcement measure and are not optional liability costs, leaving them exposed to being unfunded. With this in mind, chapter three will further unpack the challenges with these liabilities and the parties exposed in the event of the sale of a business burdened with these liabilities or insolvency.

¹⁰⁵ Ibid.

3 CHAPTER THREE: CLARIFYING THE CHALLENGES WITH ENVIRONMENTAL LIABILITIES ON INDUSTRIAL SITES

3.1 The overall challenge

What has been demonstrated is that currently, there are no express general obligations in South African law which compel high risk industries other than mining and petroleum industries, to ensure that they have sufficient financial means to cater for their environmental liabilities.

These liabilities are also not always obvious, as the legislation does not identify them as such. This could be achieved if the legislation requested a type of financial surety from high risk industrial polluters to ensure that the liabilities are addressed.¹⁰⁶ If an industry does not have the means to attend to its environmental liabilities, this may cause innumerable and foreseeable consequences for the State, third parties and certain commercial situations. The most significant impact, however, is on the environment.

The following discussion provides further clarity on the scope of environmental liability and the challenge which lies ahead for regulators in managing the complexities of this concept. It will also recognise the parties currently exposed to these liabilities and the commercial transactions which are frustrated by the current regulatory cavity. This forms the basis for appealing for a regulated solution which will see a type of financial surety put in place for high risk industrial manufacturers' environmental liabilities.

3.2 Scope and Challenges with Environmental Liability

3.2.1 The Cost of Environmental Liabilities on Industrial Sites

The cost of cleaning up abandoned mines in South Africa was estimated by the World Wildlife Fund ("WWF") in 2012 to be estimated at R30 billion, a cost which may be borne by the State and, indirectly, tax payers.¹⁰⁷ In the same year the DEA is quoted as estimating the remediation costs for a chemical manufacturer accused of prolific mercury contamination of

¹⁰⁶ Kruger E, 'Insurance for Environmental Damage: South Africa' (unknown)1. North West University, Dissertation. http://dspace.nwu.ac.za/bitstream/handle/10394/1628/kruger_erlise.pdf;sequence=1 (Accessed 04 July 2017).

¹⁰⁷World Wildlife Fund (2012) <http://www.wwf.org.za/?6600/acid-mine-draining> (Accessed 19 June 2017). See Limpitlaw D ...et al. *Post-Mining Rehabilitation, Land Use and Pollution At Collieries In South Africa*; Presented at the Colloquium: Sustainable Development in the Life of Coal Mining, Boksburg, (2005) 2.

land and water resources to exceed R100 million.¹⁰⁸ If these figures are used as yard sticks by which to measure the potential costs of industrial sites' environmental liabilities, the polluters involved with these sites are guaranteed to be exposed to comparable, if not similar, cost liability. A natural problem when costing environmental liability is the complexity of the item that is managed by the environmental obligations, the environment, a mobile and unpredictable entity. A starting point, however, is possible by defining "environmental damage" as a way to grasp the possible extent of the costs.

3.2.2 Environmental Damage

It is necessary to define the term "environmental damage" as this will provide insight into the complex nature of activities which are regulated by environmental obligations, which will consequently provide perspective on the potential cost of any ensuing environmental liability. Damage is synonymous with words such as destruction, harm and injury¹⁰⁹ and in the context of environmental damage, it is reasonable to construe this to be relative to destruction, harm and injury to the environment. Environment is defined in NEMA as -

"the surroundings within which humans exist and that are made up of the land, water and atmosphere of the earth; micro-organisms, plant and animal life; any part or combination of the aforementioned and the interrelationships among and between them; and the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being".¹¹⁰

An environmental impact can therefore be said to be an activity which, in some manner, affects the environment as defined above.¹¹¹ Pollution is one of the most significant kinds of environmental impacts causing environmental damage, and is defined as:

"any change in the environment caused by substances, radioactive or otherwise, or 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

¹⁰⁸ Ibid 22.

¹⁰⁹ Oxford English Dictionary. Thesaurus. <https://en.oxforddictionaries.com/thesaurus/damage> (Accessed: 21 June 2017).

¹¹⁰ NEMA Act 107 of 1998, s1 Definitions.

¹¹¹ Sampson (52:29) Par 2.5.

and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future”.¹¹²

Environmental damage in terms of the above explanations can in the writers view be narrowed down to 'an impact resulting in destruction, harm and injury to the land, water and atmosphere of the earth; micro-organisms, plant and animal life; any part or combination of the aforementioned and the interrelationships among and between them; and the physical, chemical, aesthetic and cultural properties and conditions of the foregoing and in addition influences human health and well-being'.

Larrson, however, further analyses this term explaining that environmental damage can be further distinguished based on¹¹³:

- (a) a separation of its source;
- (b) its time perspective; and
- (c) its temporal character.

The sources, refer to the activity which causes the damage, which in Larrson's view can be movable or immovable, dependent on how it impacts.¹¹⁴ An industrial manufacturer is to a large extent, an immovable source of environmental damage to the surrounding environment. Examples of these sources include accidental spillages of hazardous substances onto land and waste deposition to land, causing land and water contamination.

The time perspective characteristic refers to an attribute of environmental damage which makes it difficult to assign environmental debt liability, that being the pollution or impact which could have occurred in the past, present or that they may arise in future.¹¹⁵

The temporal character refers to the way in which the source of pollution or environmental impact causes the environmental damage either intentionally, accidentally (instant), or gradually as a result of an old burden.¹¹⁶

To serve as an illustration of Larrson's explanation, take a figurative 'snapshot in time' of a tyre manufacturer's operation, which could be classed as a high risk industry due to its

¹¹² NEMA Act 107 of 1998,s1 Definitions.

¹¹³ ML Larrson "Legal Definitions of the Environment and of Environmental Damage."(2009)54 (*Sc.St.L*).157.

¹¹⁴ Ibid.

¹¹⁵ Ibid (113).

¹¹⁶ Ibid.

numerous potential lifecycle pollution sources.¹¹⁷ One can say that the onsite environmental damage of the manufacturer is:

- (a) the adverse environmental impacts resultant from an immovable source. The most significant adverse environmental impact of a tyre manufacturer is waste production and management¹¹⁸ (the actual manufacturing site or an onsite waste site could serve as an immovable source of such pollution), with resultant onsite impacts commonly being land and water contamination. Land and water contamination by immovable sources is in fact a collective concern for most high risk industries;
- (b) the impacts which are present as they could have occurred in the past or present and could arise in the future. Pollution of land and water from an industrial manufacturer can be a current impact which arose from a past action (i.e illegal or legal dumping) and may also have potential future impacts (i.e leaching);and
- (c) the intentional, accidental, gradual or historic acts which caused pollution. This will assist a claimant to establish liability for the pollution, with intentional and negligent acts punishable in law.

Larrson's description of environmental damage provides insight into the complexity of what is regulated by environmental obligations and the potential cost liability which could burden the State and other ignorant parties.

3.2.3 The Shortfall in Financial Provisioning

The mining sector has in place a regulatory mechanism which requires rights holders to ensure financial provision for remediation and closure activities at the mine.¹¹⁹ Noteworthy is the fact that the mining financial provision, however, does not require a holder to provide security for fulfilling the mines' ongoing environmental obligations, such as the costs of maintaining the mine's environmental license to operate (e.g environmental management

¹¹⁷Constantin, C "Ecological Dimension of Tire Management. Environmental Impact of tire use" (2012) 2(1) *International Journal of Academic Research in Accounting, Finance and Management Sciences*.192. <http://www.hrmars.com/admin/pics/1027.pdf> (Accessed 19 June 2017).

¹¹⁸"The environmental impacts caused by the production of vehicle tyres include odour, solvent and dust emissions, noise, waste, and consumption of energy. The most significant of these impacts are waste and, locally, odour. Solvent emissions (i.e. VOC emissions) are also a significant impact." <https://www.nokiantyres.com/company/sustainability/corporate-sustainability-report-2016/planet/environmental-impacts-of-production/> (accessed : 19 June 2017).

¹¹⁹Ibid 24.

programme compliance measures, monitoring and reporting) and various other statutory and common law obligations which are in place to regulate pollution of the environment¹²⁰.

These costs are usually considered an operational cost, but should a mine find itself in financial difficulty with reduced resources to meet its environmental and other financial obligations, the environment is undoubtedly going to suffer the consequences. As a result, holders risk exposure to enforcement actions and the State may be obliged to take its own remedial actions.¹²¹ The Pamodzi Gold mine fiasco serves as an example of the serious effect the reduced financial situation of a polluter can have on the environment whilst the commercial solutions are considered.¹²²

Without any financial provisioning for environmental liabilities the polluter and uninformed parties, who may possibly become involved in the management of high risk industrial sites, are far more exposed than mines.

There are voluntary financial provisioning instruments available to industrial sites, such as insurance policies. These instruments are however voluntary and these policies have their limitations, which includes problems with defining the insurable risk, i.e 'the environment', determining the extent of the insurer's liability and the calculation of the correct premium.¹²³ This does not mean that this type of financial provision is not possible or available. It means that polluters would need to voluntarily identify the environmental liability risk, seek out an insurer who is willing to assume the liability and understands the risk, and they would most

¹²⁰MPRDA Act 28 of 2002; GG26275,23 April 2004, Mineral and Petroleum Resources Development Regulations at Regulations 53, no mention is made of ongoing environmental obligations, only premature closure, decommissioning and final closure and latent and residual liability.

¹²¹ CER, Full Disclosure Report (2015)5- Executive Summary. The report identifies the problem of cost cutting by mines as a result of the poor economic climate as one of the factors contributing to a lack of transparency and environmental compliance in South Africa. The report states that “when companies are cutting back on all expenditure that they consider to be “non-essential”, it is even more important for enforcement action to be swift and meaningful. Attempts to “save” costs on matters relating to environmental impacts – by cutting back on capital expenditure, by reducing environmental staff, and by reducing expenditure on appropriately qualified external environmental expertise, now means that serious environmental violations and incidents are more likely in the future”.

¹²²*Engelbrecht NO and others v Zuma and others* [2015] JOL 33491 (GP); Groenewald Y, "Aurora Mines toxic Water Crises" (2010) <http://mg.co.za/article/2010-06-11-aurora-mines-toxic-water-crisis> (Accessed 12 July 2017); Marais J, "Lessons from the Blyvoor Demise" (2014) <http://www.miningmx.com/special-reports/mining-yearbook/mining-yearbook-2015/10948-lessons-from-blyvoor-s-demise/> (accessed 12 July 2017).

¹²³ Kruger E, 'Insurance for Environmental Damage: South Africa' (unknown) 47. North West University, Dissertation. http://dspace.nwu.ac.za/bitstream/handle/10394/1628/kruger_erlise.pdf;sequence=1 (Accessed 04 May 2017).

likely be liable for the payment of weighty premiums which may deter them from providing for the liability.¹²⁴

3.2.4 An Issue of Competence

The complexity of environmental damage and, as a result the potential environmental liability costs seem to be sufficient incentive to ensure that a seller and/or a purchaser are competent to manage these liabilities, so as to avoid negligent environmental damage. The legislators of the MPRDA had the foresight through regulation to put in place the obligation for holders to 'transfer environmental liabilities' to purchasers who, under Regulation 59 of the MPRDA Regulations, must prove that they have the requisite competence and financial means to manage the liabilities identified in any environmental management programme and foreclosure plan.¹²⁵

A competent person is described in the MPRDA Regulations as a person that must¹²⁶-

- "(a) have the expertise, resources and organisational abilities to integrate risk assessment, risk management and risk financing to ascertain the cost of environmental management;
- (b) have the expertise, financial and other resources to meet his or her obligations to carry out actions necessary to fulfil the environmental obligations as set out in the environmental management plan or the environmental management programme or any closure plan concerned;
- (c) have appropriate experience in environmental management, prospecting or mining operations and mine health and safety matters;
- (d) have direct access to insurance products and alternative risk financing services appropriate to financing of exposure to risks;
- (e).....
- (f) have expertise and experience or proven access thereto to interpret and manage the findings of an environmental risk assessment."

The MPRDA Regulations raise the bar for the transfer of environmental liabilities, requiring all the above 'perfect' conditions before these liabilities can be assumed by a purchaser.

¹²⁴Kruger E, 'Insurance for Environmental Damage: South Africa' (unknown) 47. North West University, Dissertation. http://dspace.nwu.ac.za/bitstream/handle/10394/1628/kruger_erlise.pdf;sequence=1 (Accessed 04 May 2017).

¹²⁵MPRDA Act 28 of 2002, GG26275, 23 April 2004, *Mineral and Petroleum Resources Development Regulations* at Regulation 58 and 59.

¹²⁶ Ibid.

These regulations commenced in 2004, which illustrates the point that already prior to their commencement the State was alive to the cost implications of environmental liabilities and the risk this presented to holders, purchasers and probably inadvertently the State. What is noteworthy is that Regulation 59(d) requires purchasers to have direct access to a financial provision which is appropriate to financing "exposure to risk", which, on a reading of Regulation 59 in its entirety includes risk exposure for all other environmental liabilities over and above remediation and closure of a mine.

In the Evraz Highveld matter, should the sale between the parties at a minimum be subjected to a competency check, this may have prevented the current environmental tragedy. The Minister of Environmental Affairs, given the opportunity to interrogate such a transaction, may have taken note of Highveld's inability to fund and manage the full extent of the sites environmental liability or requested adequate surety from Highveld to cover this liability. In the event that Highveld could not meet these criteria, it also would give the Minister an opportunity to recommend that the sale should not proceed on the basis that the liability will become the States, as is the current situation.

3.3 Affected Parties -The Polluter, the State and Liquidators

3.3.1 The Polluter

The 'polluter pays principle' was first defined in a discussion document written by the Organisation for Economic Co-operation and Development in 1974¹²⁷ ("OECD"). In the discussion document, the environmental committee of the OECD explained that the principle is founded on the concept that the cost of pollution prevention and control measures must be allocated in such a manner that it encourages rational use of scarce environmental resources and avoids distortion in international trade and investment¹²⁸. With this in mind, the committee ring-fenced the principle as a "fundamental principle of cost allocation".¹²⁹ The definition of the principle in the discussion document is also telling with regards to its intended cost allocation purpose, with the document defining the principle by explaining that-

“... the polluter should bear the expenses of preventing and controlling pollution to ensure that the environment is in an acceptable state”¹³⁰....

¹²⁷ The Polluter Pays Principle (46:12).

¹²⁸ Ibid.

¹²⁹ The Polluter Pays Principle (46:6).

¹³⁰ The Polluter Pays Principle (46:15).

The committee also made recommendations on how the policy is to be adopted, suggesting process and production standards and/or individual regulation and prohibition and/or direct national regulation¹³¹. In summary, the principle as it stands in the OECD document was designed to put in place a mechanism for making polluters responsible for the costs of preventing and putting in place control measures, but not considered a legal principle which could be used for allocating liability to a party for the consequences of pollution - i.e a compensatory principle.¹³² As a compensatory principle one would be looking at claiming from the polluter, the cost incurred by a claimant and the cost to the environment itself for environmental harm.

The White Paper on Environmental Policy in South Africa (“the White Paper 1998”) did exactly this, stating that the implementation of this principle in South Africa means that ¹³³ –

“those responsible for environmental damage must pay the repair costs both to the environment and human health, and the costs of preventive measures to reduce or prevent further pollution and environmental damage”.

As a result of this, the 'polluter pays principle' has been implemented as a preventative and compensatory principle in environmental management regulation in South Africa, a dynamic concept which provides the basis for assigning cost for environmental liability. The principle may however be unusable when trying to use it to for matters involving historic pollution, where polluters have long since disappeared.¹³⁴ The 'polluter pays principle' provides the basis for labelling industrial manufacturers like Highveld and Exxaro's Zincor as 'polluters' and therefore liable for the costs associated with environmental liabilities.

3.3.2 The State as a trustee

The notion of 'public trusteeship' of the State over certain natural resources is not a commonly exploited concept, which is surprising considering the potential authority and

¹³¹ The Polluter Pays Principle (46;16)

¹³² The Polluter Pays Principle (46;6) and Kidd M *Environmental Law 2ed* (2011) 8.

¹³³ GNR.749; 15 May 1998; *White paper on environmental management policy for South Africa*, See the Principles.

¹³⁴ Feris L, The Public Trust Doctrine and Liability- for Historic Water Pollution in South Africa (2012) *Law, Environment and Development Journal* 3 and 5.

burden this concept places on the State in respect of the trust object. International supporters of the public trust doctrine claim that s24 of the Constitution laid the foundation for numerous of our environmental statutes to incorporate the public trust doctrine.¹³⁵ This doctrine is accepted as “a legal obligation placed on the State to hold certain natural resources in trust for its people and creates a custodial duty on the State to protect and preserve the resource for present and future generations”.¹³⁶

The environmental right under s24 of the Constitution is in the same category as a ‘fundamental human right’ and s24(b) directs the State to-

"take reasonable legislative and other measures to prevent pollution, promote conservation and secure ecological sustainable development and use of natural resources while promoting justifiable economic and social development".

Feris demonstrates that this burden can be shared with the extension of the understood application of s24(a) of the Constitution.¹³⁷ Traditionally s24(a) is a ‘horizontally applied principle, guaranteeing the right to an environment that is not harmful to human health or well-being and to environmental protection for the benefit of present and future generations. When enforced, this translates into an obligation for the legislature, executive and judiciary and all State organs to take steps to guarantee this right for the benefit of "every person". However, a reading of s8(2) of the Constitution extends the application of rights in the Bill of Rights to bind natural and juristic persons, meaning that private individuals also carry this obligation. In Feris's view, this means that private actors can also be required to shoulder some of the environmental liability which may arise out of custodial duties.¹³⁸

The White Paper on a National Water Policy for South Africa ("the White Paper 1997") explains that the doctrine of public trust descends from the Roman law principle of public trust¹³⁹, a doctrine which arises from the Roman seed of *jus publicum*.¹⁴⁰ This notion prescribes that certain resources are of such a common nature that they defy private ownership, and as such should be managed for public benefit. Internationally, this principle

¹³⁵ E Van Der Schyff and G Viljoen “Water and the Public Trust Doctrine- A South African Perspective” (2008) 4(2) *The Journal for Transdisciplinary Research in Southern Africa* 379.

¹³⁶ Feris (note 134); E Van Der Schyff, "Stewardship Doctrine of Public Trust: Has The Eagle of Public Trust Landed on South African Soil?" (2013) 130 (2) *South African Law Journal (SALJ)*373.

¹³⁷ Feris (134: 17).

¹³⁸ Ibid.

evolved in water law as a way to protect public rights of access to navigable waterways and, it then went on to develop conservationist principles.¹⁴¹ It then slowly became recognised as a custodial duty placed on State governments to manage and protect certain natural resources for the sole intergenerational benefit of their citizens.¹⁴²

The doctrine enacted into our natural resources law appears in s2 of NEMA, which states that the 'environment is held in trust for people' and the State is appointed as the custodian thereof, which is implied seeing that the State is the elected representative of the public.¹⁴³ This notion is reinforced by s28(5) of NEMA which provides that the competent authority must regard "the desirability of the State fulfilling its role as custodian holding the environment in public trust for the people", when considering reasonable measures to enforce upon a defendant under this section. The State in NEMA is represented by the Minister of Environmental Affairs as an agent of the State.¹⁴⁴ In the preamble of the NWA, it is stated that water is a natural resource that belongs to all people, and s3 states that the national government, acting through the Minister of Water Affairs is the public trustee of the nation's water resources and that –

“the Minister must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons and in accordance with its constitutional mandate”.

To be a public trustee of water resources, as described above means that the State holds the legal title to the water resources as the trust object and can only manage the resource insofar as the fiduciary responsibilities and obligations in the NWA allow.¹⁴⁵ The obligations of the public trustee are onerous under the NWA, requiring the State to take ultimate responsibility over water resource as a resource of *res publicae*, with use and allocation required to be in the

¹³⁹ South African Department of Water Affairs and Forestry *White Paper on a National Water Policy for South Africa*, (1997) paragraph 5.1.2.

¹⁴⁰ E Ryan “Public Trust and Distrust: The Theoretical Implications of the Public Trust Doctrine for Natural Resource Management” (2001) 31 (1), *Environmental Law (Envtl. L)* 479.

¹⁴¹ *Ibid.*

¹⁴² *White Paper on a National Water Policy for South Africa* (131; par 5.1.2) and E van der Schyff, (136: 372).

¹⁴³ E Van Der Schyff ...et al (135:380).

¹⁴⁴ E Van Der Schyff ...et al (135:381).

¹⁴⁵ Thompson H , *Water Law a practical approach to resource management & provision of services.* (2006)279-284.v

interest of all citizens¹⁴⁶. The Minister is authorised to delegate this mandate to provincial and local government and create water management institutions to assist government to implement its mandate¹⁴⁷. Jointly, these government authorities can be referred to as the trustees of the nation's water resources.

The use of the words trust, trustee and custodian in the legislation denotes a fiduciary responsibility on the Ministers to deal with natural resources in the public interest or in the interest of the South African nation.¹⁴⁸ The beneficiaries are therefore not distinct persons, but the public at large, and the trust object is protected in the public interest.¹⁴⁹ According to the White Paper 1997, government's custodial duties to protect the environment for the benefit of current and future generations includes the duties to¹⁵⁰-

- ensure that environmental resources are beneficially used in the public interest;
- protect the people's common heritage;
- ensure the public's reasonable access to the environment and natural resources;
- ensure adherence by all spheres of government to the public trust; and
- promote and fulfil the Department of Environmental Affairs and Tourism's leading role in implementing government's custodianship of the environment.

The result of the doctrine is that it has the potential to create a public right for citizens ('the beneficiaries') to demand the realisation and protection of their interests in the environment as individuals, and gives the custodian 'legal standing' to take action against historic and current polluters.¹⁵¹ The courts have, on numerous occasions, confirmed the State's role as custodian in respect of natural resources¹⁵², and ultimately this confirmation may result in a cost liability for the State as a trustee can be required by beneficiaries to 'fit the bill' in the event that the trust object is damaged or harm is sustained by a beneficiary.¹⁵³

¹⁴⁶ Ibid.

¹⁴⁷ Thompson (145:281).

¹⁴⁸ E Van Der Schyff ...et al(135:382).

¹⁴⁹ E Van Der Schyff ...et al(135: 385). The trust object is determined by the specific statute. In NEMA it is the environment, which is defined in the Act and in NWA it is the nation's water resources.

¹⁵⁰ *White Paper on a National Water Policy for South Africa (131;see Principles.)* See also PA Olivier...et al. *Trust Law and Practice* (2008) Issue 4/3-32 and 3-46.

¹⁵¹ Feris (134: 15-18); PA Olivier (150: 3-46).

¹⁵² *Hichange Investments (Pty) Ltd v Cape Produce Company (Pty) Ltd t/a Pelts Products and Others*, Eastern Cape Division, Judgment of 20 November 2001, 2004 1 All SA 636 (E) 658; *De Beers Consolidated Mines v Ataquu Mining (Pty)Ltd and Others*, High Court of South Africa Orange Free State Provincial Division, Judgment of 13 December 2007, Case No: 3215/06 and *Meepo v Kotze, Northern Cape Division*, Judgment of 29 June 2007, 2008 (1) SA 104 (NC).

¹⁵³ Feris (134: 15-18).

The State and the respective Ministers are therefore also exposed in the event that an industrial polluter relinquishes their obligation to address the environmental liabilities caused by their operation.

3.3.3 Liquidators

A liquidator's primary duty is to take possession of all movable and immovable property of a company, then to realise the property in the prescribed manner and to apply the proceeds towards payment of the costs of winding up, satisfy the claims of the creditors and to distribute the balance among the members.¹⁵⁴ The liquidator of a company also stands in a "fiduciary relationship" to the company, to the body of its members and creditors as a whole, which relationship requires it to act in good faith.¹⁵⁵

Should the company, prior to the insolvency, be issued with a compliance order from the competent authority to clean up, remediate or pay a putative penalty¹⁵⁶, the liquidator is obliged as a result of this 'fiduciary relationship' to act in good faith in respect of this order as with any other compliance orders.¹⁵⁷ The same would ring true for all the other environmental obligations placed on the insolvent.¹⁵⁸ In the event that the liquidator does not comply with this order, the liquidator may be held criminally liable for failing to comply with the order, as s49(1)(e) and (f) of NEMA provide that a person is guilty of an offence if they –

"(e) unlawfully and intentionally or negligently commit any act or omission which causes significant pollution or degradation of the environment or is likely to cause significant pollution or degradation of the environment;

(f) unlawfully and intentionally or negligently commit any act or omission which detrimentally affects or is likely to detrimentally affect the environment."

Criminal liability may include the imposition of a fine or imprisonment.¹⁵⁹ A liquidator may also be exposed to liability if the State¹⁶⁰ elects to take steps to fulfil the obligations in the

¹⁵⁴ Sharrock...et al *Hockly's Insolvency Law* 9th ed (2012) 259

¹⁵⁵ Carolina Trekkers en Implemente (Edms) Bpk v Venter 1982 (2) PH E 9 (AD);Sharrock (154:238).

¹⁵⁶ NEMA Act 107 of 1998, s28(4) and s31L.

¹⁵⁷Sharrock (note 154). D Goldman, *Environmental Claims in Insolvency and the Liability of Insolvency Practitioners* (2015) 3.

¹⁵⁸ Stander, L 'Some Thoughts on Environmental Claims In Liquidation'(2013) 76 *Tydskrif vir hedendaagse Romeins-Hollandse Reg (THRHR)* 437.

¹⁵⁹ NEMA Act 107 of 1998; s49B.

compliance order due to inaction of the liquidator, as is authorised by s28(7) of NEMA. In this case the State may, in terms of s28(8) of NEMA recover costs for the reasonable remedial measures from:

"(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;

(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;

Provided that such person failed to take the measures required of him or her under *subsection (1)*."

Furthermore, a liquidator that fails to take the measures required of him in terms of the order and s28(1) of NEMA, which contains an environmental obligation to fulfil a 'duty of care' to the environment, will be exposed jointly and severally to this environmental debt liability along with any other parties that benefited from the State's actions.¹⁶¹

3.4 The impact on commercial dealings

3.4.1 A purchaser and seller

Stilton advises that there are two basic structures for buying and selling a business, a sale and purchase of some or all of the assets (with all or only some of the liabilities) or a sale and purchase of the shares in a company.¹⁶² In the first structure, a purchaser will buy all the agreed assets of the business and ownership of each will pass to the purchaser. Whereas, in a share sale, the assets and liabilities of the business will continue to belong to the business, with ownership only changing in respect of the shares.¹⁶³

Purchasers often expose themselves to hidden liabilities in the target company's assets as a result of the target's past and present operating practices.¹⁶⁴ These liabilities can manifest in the form of contaminated land or operational equipment which does not meet compliance

¹⁶⁰ The term 'the State' has been used so as not to distinguish between representatives of the 'environment' as examined under the concept of 'public trusteeship' of the State over certain natural resources.

¹⁶¹ NEMA Act 107 of 1998, s28(9) and s28(11). D Goldman (157:3).

¹⁶² Stilton A. *Sale of Shares and Business*, 2nd ed (2008) 3.

¹⁶³ Ibid.

¹⁶⁴ Sampson (52:33) Par 3.3.

standards.¹⁶⁵ However, an asset sale can be beneficial for a purchaser as it allows the purchaser, through a due diligence assessment, to assess all liabilities. It is, however, evident that 'environmental audits' do not play a big role in due diligence examinations in South Africa.¹⁶⁶ This can possibly be attributed to the fact that South Africa is an emerging market economy, and due to the fact that there is a lack of clear legislative regulation for these liabilities.¹⁶⁷ Should a purchaser then default on these liabilities it is likely that a third party may pursue the seller, who will then rely on the contractual indemnities provided by the purchaser, which may be of no value if the purchaser is in financial difficulty.¹⁶⁸

This scenario highlights four potential outcomes when considering environmental liabilities, namely the purchaser's ignorance regarding the extent of the liabilities it may be assuming, the purchaser's default on these liabilities as a result of financial constraints, the seller being called upon to address the liabilities by third parties and when either party defaults¹⁶⁹, the State as trustee risks being summonsed. This is more often than not the situation that will arise where a purchaser needs to claim for these liabilities after the fact. Although an asset sale allows the purchaser to identify all the liabilities and to negotiate these with the seller, our legislation does not identify, nor mandate a financial provision to be held for all potential environmental liabilities associated with high risk industrial sites, thus leaving the purchaser and third parties exposed.

A share sale transaction creates a far greater risk for a purchaser, as all that is necessary for the purchaser to assume all the liabilities of the target company is for a formal transfer of the target company's shares.¹⁷⁰ The purchaser in a share sale transaction is liable to take on the liability for any breaches of law committed by the seller¹⁷¹, which may cost the purchaser more than the value of the shares in the long run, especially since it is likely that the seller indemnified itself against such liabilities as part of the transaction terms.

¹⁶⁵ Sampson (52:34) Par 3.3.

¹⁶⁶ F Gillman. *Due Diligence: A Strategic and Financial Approach* (2010) 76.

¹⁶⁷ Ibid; Sampson (52:39) Par 3.7.

¹⁶⁸ Stilton (162:5).

¹⁶⁹ Sampson (52:34) Par 3.3. A purchaser may prior to a third parties involvement attempt to rely on the warranties and indemnities given by a seller, there are however also limitations to these in that (a) they often only last a limited number of years, (b) the amounts are usually limited, (c) compensation is often limited due to restrictive methods of calculation of damages, (d) legal actions are time consuming and expensive.

¹⁷⁰ Stilton (162: 6) Par 1.3.3.

¹⁷¹ Stilton (162:78)Par 7.4.2.

As has been illustrated, the seller and purchaser of a business are similarly exposed to the risk of environmental liabilities costs.

3.4.2 Due diligence, indemnities and warranties in sales

The rationale for undertaking a due diligence exercise, requesting indemnities and warranties in corporate sales is broadly to protect either party from assuming unidentified liabilities and to limit the respective parties' liability in respect of identified liabilities.¹⁷² Environmental audit due diligence is a valuable tool in that it identifies environmental issues at an early stage of the transaction allowing the purchaser to estimate the cost hereof; it reveals how the target company managed its liabilities and it has the potential to highlight future liability concerns.¹⁷³

The disadvantage is that these audits are voluntary and only as valuable as the professionals responsible for the assessment. Whilst it is true that a purchaser would not blindly purchase a risky target company, without first attempting to understand its exposure, it is also true that due to the voluntary nature of these audits there are no regulatory requirement to undertake them. There is furthermore, no legislated professional criteria for auditors other than what is recommended by academic literature and the International Standards Organisations (ISO).¹⁷⁴ As a result of the fallibility of these audits, environmental liabilities which are unidentified or underfunded may pass between the parties.

Warranties and indemnities then provided by a seller are also not a sure security for such liabilities, as these often only last a few years as a result of the contract between the parties and are limited by amounts and timing, which make the enforcement of them time consuming and costly whilst the environmental damage continues.¹⁷⁵

3.4.3 Winding up a business

The scenario of insolvency represents various challenges for environmental liability. This is mainly due to the fact that environmental liability and insolvency are concepts which seem to be continuums apart. A closer look, however, reveals that environmental liability should play a more significant role in insolvency practice on industrial sites. These challenges are separated for ease of understanding.

¹⁷² Sampson (52:33) Par 3.3.

¹⁷³ Ibid.

¹⁷⁴ Sampson (52:33) Par 3.2 and 3.7. See ISO 14015 Environmental Assessments of Sites and Organisations; Gillman (168:76).

¹⁷⁵ Sampson (52:33) Par 3.3.

3.4.3.1 Administrative costs of environmental liabilities

Theoretically, during the process of administration the liquidator would need to manage all the debtor's environmental obligations progressing to remediation and closure of the site. These obligations include the debtor's statutory and administrative obligations, which can be identified in insolvency terms as obligations which are administrative in nature and, therefore they are not stayed when insolvency of the debtor is ordered. An example of the statutory obligation which the liquidator would need to comply with would be the duty of care obligation, which requires the debtor to neutralise the sites current and future pollution potential.¹⁷⁶ According to Stander, these costs would form part of the administrative costs of the liquidation being paid out of the proceeds of the liquidation before the claims of any creditors, as would any other compliance obligation of the debtor.¹⁷⁷ However, due to the potential cost it is unlikely that the liquidator will be able to meet the obligations, which will leave the environment exposed and the State responsible.¹⁷⁸

Stander recognises that the potential cost of remediation of land associated with an industrial site may form a significant part of the environmental liability costs. It is suggested that the liquidator establish a reserve or be allowed to abandon the property, rendering it *bona vacantia*, allowing it to accrue to the State.¹⁷⁹ This ultimately becomes a liability for the public due to risk exposure and financial implications.

The establishment of a reserve for environmental damage and awarding preference in insolvency proceedings is, according to Stander, based on the proposal that this should only be for the "necessary cost...where environmental conditions present immediate, imminent and identifiable harms".¹⁸⁰

Considering the Hichange case, what is 'significant' is a subjective matter and measured against the environmental right in the Constitution regarding "immediate, imminent and identifiable harms,"¹⁸¹ which may be most if not all of the environmental damage on a high risk industrial site.

¹⁷⁶ Stander (158: 437 and 442).

¹⁷⁷ Stander (158:438).

¹⁷⁸ It is acknowledged that the directors or the debtor may be held personally liable in terms of s24N(8) of NEMA for funding of these liabilities, however in the absence of the State taking enforcement measures against the directors the environment and the State are exposed.

¹⁷⁹ Stander (158:441).

¹⁸⁰ Stander (158:443).

¹⁸¹ *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd T/A Pelts Products, And Others* 2004 (2) SA 393 (E) 415.

3.4.3.2 Environmental Damage and Priority of claims

A claim for damages or harm to the environment lodged before liquidation as a result of the debtor's activities is a concurrent claim.¹⁸² Correspondingly, a claim for environmental damages which arises after liquidation as a result of activities prior, or even after, the liquidation will also be a concurrent claim.¹⁸³ If the State or a third party undertook the remediation of the site as fulfilment of the debtor's obligations, they would similarly only have a concurrent claim.¹⁸⁴ This does not seem reasonable considering the fact that the preferred creditors may in fact benefit from the remediation or fulfilment of the manufacturer's environmental obligations.

The extent of the environmental liabilities and potential risk exposure of third parties described in Chapter Three, should be incentive enough for legislators to consider legislating statutory solutions, which sees the implementation of a 'security system' for high risk industrial sites. These challenges are however, not unique to South Africa, as it is not the only country with high risk industrial sites. Chapter four will discuss perspective on these challenges and solutions that can be found in the international context with certain countries in Europe, supporting high risk industrial activities and manufacturing for over two centuries.

¹⁸² Stander (158: 442).

¹⁸³ Ibid.

¹⁸⁴ Ibid.

4 CHAPTER FOUR: THE EUROPEAN UNION AND IRELANDS APPROACH TO ENVIRONMENTAL LIABILITIES

4.1 The European Union

The 'polluter pays principle' is one of the key environmental principles of the Treaty on the Functioning of the European Union ("TFEU"), which at Article 174 (2) states that ¹⁸⁵–

"Union policy on the environment...shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay."

The White Paper on Environmental Liability ("Environmental Liability White Paper") was adopted by the European Commission in February 2000 with the aim of exploring how "the polluter pays principle" can best serve the aims of community environmental policy. This entails that the Environmental Liability White Paper explores how community regimes on environmental liability can best be shaped to improve the application of the principle and to ensure restoration of damage to the environment.¹⁸⁶

The Environmental Liability White Paper recognises the 'polluter pays principle' as the single environmental management principle, which can provide a solution to the concern of the State and taxpayer becoming liable for environmental damage, and as a way to improve compliance within the respective community regimes.¹⁸⁷ This recognition is founded on the fact that the principle in its pure form requires prevention first and then internalisation of environmental costs by the polluter.¹⁸⁸ The Environmental Liability White Paper therefore promotes the idea that community regimes should adopt a system of liability (legal responsibility, obligation and charges) for environmental damage. The emphasis here, being an environmental liability regime which is focused on the environment and all the damages

¹⁸⁵ TFEU, art. [174], 2008 O.J. C. 115, at [2].

¹⁸⁶ White Paper on Environmental Liability COM(2000) 66 Final 9 February 2000(1). Commission adopts White Paper on Environmental Liability , EU Commission Press Release http://europa.eu/rapid/press-release_IP-00-137_en.htm (Accessed 01 February 2017).

¹⁸⁷ White Paper on Environmental Liability COM(2000) 66 Final 9 February 2000(3)14.

¹⁸⁸ The Polluter Pays Principle Definition, Analysis, Implementation , Organisation for Economic Cooperation and Development (OECD). Environment Directorate. France. (1975)12.

caused by activities that are known to be hazardous to the environment.¹⁸⁹ The Member States, similar to the South African position, had in place existing environmental legislation which dealt with issues of strict liability for damage and general obligations in respect of the environment, but did not have a regime which dealt consistently with all damages caused by activities that are known to be hazardous to the environment.¹⁹⁰

Some salient features which the Environmental Liability White Paper proposes that should be included in such a regime, include:

- the covering of environmental damage specifically and not only in the traditional sense which includes claims for personal injury or damage to property. This can be achieved by isolating specific environmental media or impacts such as biodiversity or contaminated land;¹⁹¹
- catering specifically for activities which bear an inherent risk for causing damage and merging these existing legislative obligations;¹⁹²
- the principle of strict liability for environmental damage;¹⁹³
- ensuring that specific persons are indicated as liable for activities;¹⁹⁴ and
- establishing criteria for different types of damage to environmental aspects and impacts, taking into consideration the objectives of environmental media and impacts, which could include conservation and/or restoration.¹⁹⁵

Moreover, the Environmental Liability White Paper emphasises that any regime on environmental liability must be founded upon the core of "workable financial security systems". These systems are there to ensure that the goals of a financial liability regime are met and that polluters are able to meet their liabilities in the event that they are called to do so by the authorities.¹⁹⁶ The paper acknowledges that this system's effectiveness is linked wholly to techniques used to quantify environmental damage, and that "developing qualitative and reliable quantitative criteria for recognition and measurement of environmental damage will

¹⁸⁹ White Paper on Environmental Liability (178:14).

¹⁹⁰ Ibid

¹⁹¹ White Paper on Environmental Liability (178:16).

¹⁹² White Paper on Environmental Liability (178: 17).

¹⁹³ White Paper on Environmental Liability (178:18). Strict liability in the environmental liability regime is liability which is imputed onto an actor without the plaintiff having to prove fault by the actor in causing the environmental damage.

¹⁹⁴ White Paper on Environmental Liability (178: 19).

¹⁹⁵ Ibid

¹⁹⁶ White Paper on Environmental Liability (178:15).

advance the financial security available for the liability regime".¹⁹⁷ Financial security options promoted by the paper include insurance, guarantees, internal reserves or sector wise pooling systems.¹⁹⁸

Environmental impairment liability insurance is described as security where a third party ('the insurer') undertakes to compensate the licensee for environmental damages.¹⁹⁹ Bank guarantees or guarantees in general also involve third parties, either the bank or a parent company providing surety in the name of a beneficiary which is not the licensee. The beneficiary could be the State or a specific authority, who can call on the guarantee should it be faced with remediating the environmental damage.²⁰⁰ Internal reserves refers to a secured fund or trust held by the licenses, with a "first ranking fixed charge in favour" of the State.²⁰¹ The trust is set up in such a way that should the licensee fail to meet its obligations, the trust event is triggered and the State can then access the trust funds.²⁰²

Sector wise pooling has been described as "special compensation funds for damage caused by industries posing a particular risk of damage".²⁰³ The intention of such a fund is to provide a supplement form of compensation in the event that the polluter cannot, for whatever reason, afford to remediate their environmental damage. An excellent example of such a system is the US Superfund, which fund is funded by taxes placed on crude oil, chemical feedstock industries and general environmental corporate tax.²⁰⁴ The fund empowers the US Environmental Protection Agency to respond to environmental incidents or remediation of sites. The civil liability system is then used to recover costs from responsible parties.²⁰⁵

4.2 Ireland and Environmental Liabilities

To give life to the intentions of the Environmental Liability White Paper, the Directive on Environmental Liability was passed by the European Parliament in 2004 ("the EL Directive").²⁰⁶ The EL Directive was transposed into Irish Law through the European

¹⁹⁷ White Paper on Environmental Liability COM(2000) 66 final 9 February 2000 (4.9) 23.

¹⁹⁸ Ibid.

¹⁹⁹ Environmental Protection Agency (EPA). *Guidance on Assessing and Costing Environmental Liabilities* (2014) 18.

²⁰⁰ Environmental Protection Agency (EPA). *Guidance on Financial Provision for Environmental Liabilities* (2015)12.

²⁰¹ *Guidance on Financial Provision for Environmental Liabilities* (191:8).

²⁰² *Guidance on Financial Provision for Environmental Liabilities* (191:8).

²⁰³ BIO Intelligence Service. Discussion paper prepared for European Commission, DG ENV(2012)17.

²⁰⁴ Ibid.

²⁰⁵ BIO Intelligence Service. Discussion paper prepared for European Commission, DG ENV(2012)18.

²⁰⁶ White Paper on Environmental Liability (188), EU Commission http://ec.europa.eu/environment/legal/liability/pdf/el_full.pdf (Accessed 1 February 2017).

Communities' Environmental Liabilities Regulations 2008 ("ECEL Regulations")²⁰⁷, the Integrated Pollution Prevention Directive ("IPPC")²⁰⁸, the Industrial Emission Directive ("IED")²⁰⁹, the Waste Framework Directive ("WFD")²¹⁰, the Landfill Directive²¹¹ and the Mining Waste Directive²¹². Jointly, these form the basis for Ireland's regulation of environmental liabilities.

At the initiation of the process of Ireland's regulation of environmental liabilities, Ireland, (similar to what may be experienced by South Africa should it transition its environmental liability regime) had legislation which varied with the ECEL Regulations, the IPPC and IED.²¹³ To manage the integration, the Irish Environmental Protection Agency ("EPA") published numerous guideline documents on how the concepts in the Environmental Liability White Paper and EL Directive²¹⁴ could be assimilated into Irish law. Currently, Irish law only requires holders of landfill authorisations and mining permissions to have in place financial security for the full cost of responding and remediating when incidents occur and for management, decommissioning, closure and aftercare.²¹⁵ Already, this shows that Ireland has a more advanced environmental liability regime.

The discussion will underline the most significant aspects of these guidelines and Irish law insofar as it may assist South Africa with taking steps towards regulating high risk industrial sites and overall environmental liabilities in a holistic fashion.

4.2.1 Guidance on Environmental Liability, Risk Assessment, Residual Management Plans and Financial Provision

This 2006 Irish EPA ("2006 guide") guideline proposes that environmental liabilities can be subdivided into two main types, namely known and unknown liabilities, with the quantification and costing of these liabilities conducted separately, making use of different

²⁰⁷ S.I NO 547/2008. See <http://www.irishstatutebook.ie/eli/2008/si/547/made/en/pdf> (Accessed 1 February 2017).

²⁰⁸ (2008/1/EC); Environmental Protection Agency (191: 4).

²⁰⁹ (2010/75/EU).

²¹⁰ (2008/21/EC).

²¹¹ (1999/31/EC).

²¹² (2006/21/EC).

²¹³ Environmental Protection Agency (EPA), *Guidance on Environmental Liability, Risk Assessment, Residual Management Plans and Financial Provision* (2006)1.

²¹⁴ Environmental Protection Agency (EPA), *Guidance on Environmental Liability, Risk Assessment, Residual Management Plans and Financial Provision* (2006); *Guidance on Assessment and Costing Environmental Liabilities* (2014); *Guidance on Financial Provision for Environmental Liabilities* (2015).

²¹⁵ EPA, *Guidance on Assessment and Costing Environmental Liabilities* (2014)4; *Guidance on Financial Provision for Environmental Liabilities* (191:1).

financial instruments.²¹⁶ The 2006 guide identifies these liabilities by the environmental damage perpetrated by the polluter, whereas South African national legislation identifies these liabilities by importing obligations onto a polluter. Therefore, our legislation assumes that the polluter is aware of these liabilities through its obligations. The known liabilities are defined by the EPA as "planned, anticipated liabilities associated with facility closure, restoration and aftercare and management", and unknown liabilities identified as "the risk of environmental liabilities occurring due to unexpected events".²¹⁷

The EPA's proposes a systematic stepwise approach to managing these liabilities. The EPA considers the type of facility, the duration and extent of the restoration and aftercare management and the potential risk of unknown liabilities to determine the level of assessment and financial provisions required.²¹⁸ The steps proposed include:

- i. Step 1: Initial Screening and Operational Risk Assessment
- ii. Step 2: Preparation of a Closure, Restoration and Aftercare Management Plan ("CRAMP") for known Liabilities.
- iii. Step 3: Environmental Liability Risk Assessment ("ELRA") for unknown Liabilities; and
- iv. Step 4: Identification of Financial Provision ("FP") and Instruments

This systematic stepwise approach has been drafted by the EPA into certain legislative instruments which regulate high risk activities, some of which require the EPA to encapsulate these steps as pre-conditions into licenses.

4.2.2 Guidance on Assessing and Costing Environmental Liabilities

The 2014 Irish EPA guideline ("2014 Guide") presents a systematic approach to assessing and costing environmental liabilities associated with closure, restoration, aftercare and incidents, which may occur from activities falling under the EPA authorisation regimes.²¹⁹

What is significant here is the fact that the 2014 Guide indirectly acknowledged that there is a cost not only associated with closure of these authorised facilities, but also linked to their aftercare or possible incidents which may occur during their operation. The 2014 Guide explains that the "overall purpose of closure and restoration should be to ensure that the

²¹⁶Environmental Protection Agency (EPA). *Guidance on Environmental Liability, Risk Assessment, Residual Management Plans and Financial Provision* (2006)8.

²¹⁷Ibid.

²¹⁸Ibid.

²¹⁹*Guidance on Assessment and Costing Environmental Liabilities* (199:1).

necessary measures are taken to avoid any risk of environmental pollution and where this has occurred to return the site to a satisfactory state".²²⁰ According to the 2014 Guideline, operators that cause significant pollution of soil and groundwater must, at closure, return the environment to baseline conditions, which should be the benchmark unless the operator and the authority provide for an alternative.²²¹

The level of scoping assessment described in the 2014 guide is driven by the nature of the activity and its associated risks. Therefore operations with significant soil and groundwater pollution potential require a closure and restorative care plan, whereas those with minor pollution potential may only require a closure plan. All authorised operators are however required to assess and cost for incident management as part of their combined financial provisioning.²²²

4.2.3 Guidance on Financial Provision for Environmental Liabilities

The 2015 Irish EPA guideline ("2015 guide"), prioritises three principles for financial provisions, noting that they should be secure, sufficient and available when required.²²³

The 2015 guideline defines these principles stating that 'secure' means that the provision must be in place for the duration of the licensee's obligations, which includes possible insolvency of the licensee²²⁴. 'Sufficient' means that there must be enough of the provision to meet all the licensee's obligations and adequate to cover the cost of closure and environmental liability risk, 'available' means, the provision must be accessible to the authority or licensee when required to discharge the licensee's obligations at the relevant time.²²⁵

The financial provision instruments describe in the 2015 guide and catered for in the Irish law include secured funds²²⁶, on demand performance bonds²²⁷, parent company guarantees²²⁸,

²²⁰Ibid.

²²¹Ibid.

²²²*Guidance on Assessment and Costing Environmental Liabilities* (199: 3).

²²³*Guidance on Financial Provision for Environmental Liabilities* (200:3).

²²⁴ Ibid.

²²⁵ Ibid.

²²⁶A secured fund is a fund where money is deposited by the license holder into a bank account and is accessible to the authority in the event that the licensee does not comply with its license obligations.

²²⁷This is a financial instrument issued by the financial institution such as a bank as a promise on the part of the bank to pay the authority the cost of complying with the licensees obligations if the licensee fails to do so.

²²⁸Parent company guarantee is a legally binding commitment by a parent company, to promise on behalf of the licensee to fulfil the licensee's obligations if the licensee fails to do so.

charge on property²²⁹ and insurance²³⁰. This indicates that the Irish legal system recognises the need for dynamic financial provision instruments to cater for different types of environmental liability concerns. As an example, insurance would not be an appropriate financial provision for closure liability, as this is a known liability.

The following is an example from the Irish natural resource legislation regulating waste and illustrates how the EPA has provided for this approach.

4.2.3.1 The Waste Management Act, 1996 ("the WMA")²³¹

The WMA prohibits the EPA from granting or transferring²³² a waste management license until it is satisfied of certain matters which include, the agency satisfying itself that the applicant is a fit and proper person to hold a waste management license²³³ and that the applicant has complied with the requirements for provision of financial security.²³⁴

The fitness of the license holder and transferee of a respective license is determined on a similar basis as described in Regulation 58 and 59 of the MPRDA, which Regulations also require the authority to determine whether the holder is in a financial position to meet any financial commitments or liabilities.²³⁵ The EPA however does not limit these costs to a specific plan, but requires the applicants to make use of guideline and regulations which will assist them in satisfying the EPA that they can meet these commitments financially. The WMA, in s40(7), provides that -

"(7) For the purpose of this Part, a person shall be regarded as a fit and proper person if ... (c) in the opinion of the Agency, that person is likely to be in a position to meet any financial commitments or liabilities that the Agency reasonably considers will be entered into or incurred by him or her in carrying on the activity to which the waste

²²⁹Charge on property is a mortgage/charge over a specific piece of land in favour of the authority. The land remains the property of the licensee prior to activation of the mortgage, which could be default by the licensee with compliance with their obligations.

²³⁰Environmental impairment liability insurance is an undertaking by a third party insurer to compensate the licensee or the authority for environmental damage.

²³¹WMA Act 10 of 1996. See <http://www.irishstatutebook.ie/eli/1996/act/10/enacted/en/print.html> (Accessed 1 February 2017).

²³² WMA Act 10 of 1996,s53(1)(a)(i) and (ii). See also Act 10 of 1996. s47 which describes the process for transferring a license, which refers the transferee to the obligations in s53 of the Act.

²³³ WMA Act 10 of 1996,s40(7).

²³⁴ WMA Act 10 of 1996,s53(b)(i) and (ii).

²³⁵MPRDA Act 28 of 2002. Regulation 59(1)(b)"have the expertise, financial and other resources to meet his or her obligations to carry out actions necessary to fulfil the environmental obligations as set out in the environmental management plan or the environmental management programme or any closure plan concerned..."

licence will relate in accordance with the terms thereof or in consequence of ceasing to carry on that activity."

This requirement, if integrated into South Africa's national resource law, will address the competency and financial security challenge identified on transfer of licenses in the sale of a business.

In order to satisfy the EPA that the applicant has complied with the requirements for provision of financial security, the EPA proposes two measures which include regulatory compliance and inclusion of certain conditions into the holder's license. The regulatory requirement under the WMA are contained in s53(b)(i) and (ii), which states that-

"(1) The Agency may, before it does any of the following things, namely-

(a) decides whether to— (i) grant a waste licence...require the applicant for, or the holder of, the licence or the proposed transferee, as the case may be, to—

(i) furnish to it such particulars in respect of such matters affecting his or her ability to meet the financial commitments or liabilities that the Agency reasonably considers will be entered into or incurred by him or her in carrying on the activity to which the licence relates or will relate, as the case may be, in accordance with the terms of the licence or in consequence of ceasing to carry on that activity as it may specify, and

(ii) make, and furnish evidence of having so made, such financial provision as it may specify (which may include the entering into a bond or other form of security) as will, in the opinion of the Agency, be adequate to discharge the said financial commitments or liabilities."

The regulatory compliance, similar to that imposed under the MPRDA, prohibits the EPA from granting a license without the applicant proving and furnishing proof thereof to the EPA of their ability to meet their financial obligations with respect to environmental liabilities.²³⁶

Significantly, this requirement for financial provision contemplates the inclusion of costs associated with environmental administrative requirements (fulfilling the terms of the license) as well as ceasing the activity, which cessation could include unplanned or planned cessation. The EPA guideline provides examples of license conditions which are included in applicant's

²³⁶ See NEMA Act 107 of 1998,s24P and Regulation 53,53 of the MPRDA Regulations GNR527 of April 2004.

integrated pollution prevention licenses, which conditions include post authorisation financial provisioning to cater for the EPA's systematic approach to assessment and management of environmental liabilities.²³⁷ Concepts such as residual management, which in the guideline forms part of the step two assessment requirements and step three Environmental Liabilities Risk Assessment ("ERLA") for unknown liabilities, are included in conditions of licenses awarded by the EPA. Examples of conditions as described in the EPA's systematic approach, include:

"(a) Residual Management

14.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

14.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof. This plan shall be submitted to the Agency for agreement within six months of the date of commencement of the activities at the site.

14.2.2 The plan shall be reviewed annually ...

14.3 The Residuals Management Plan shall include as a minimum, the following:

14.3.2 The criteria which define the successful decommissioning of the activity or part thereof, which ensures minimum impact to the environment.

14.3.3 A programme to achieve the stated criteria..

14.3.5 Details of costings for the plan and a statement as to how these costs will be underwritten."

This license condition caters for the risk of residual management of a waste facility, in the event of planned or unplanned closure, requesting the holder to submit a costed and

²³⁷*Guidance on Environmental Liability, Risk Assessment, Residual Management Plans and Financial Provision (214:6).*

underwritten plan, which will render the site neutralised from an environmental pollution potential. Theoretically, this plan, if costed and funded appropriately, would address environmental liabilities associated with closure of a facility and address the funding gap, which may impact upon polluters, purchasers and liquidators. A further example of a conditions as described in the EPA's systematic approach:

"(b) Financial Provisions

15.3.1 The licensee shall arrange for the completion, by an independent and appropriately qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment for the operation, which will address liabilities from past and present activities. A report on this assessment to be submitted to the Agency for agreement within six months of date of commencement of either or both of the activities at the site.

15.3.2 Within nine months of the date of commencement of either or both of the activities at the site the licensee shall make financial provision in a form acceptable to the Agency to cover any liabilities incurred by the licensee. The amount of indemnity must always be capable of covering the liabilities identified in Condition 15.3.1.

15.3.3 The amount of indemnity, held under Condition 15.3.2 shall be reviewed and revised as necessary, but at least annually.

15.3.4 The licensee shall within two weeks of purchase, renewal or revision of the financial indemnity required under Condition 15.3.2, forward to the Agency written proof of such indemnity."

An ERLA in the context of this condition requires holders to assess a past and present liability which extends on the description provided in the guideline, requiring applicants to only assess 'unplanned events'. This would require holders to assess past and future activities on the site which would lead to unplanned events which would result in environmental liability. The guideline provides details on what the EPA requires in respect of this risk assessment and appropriate costing for these liabilities.

Significantly, this condition requires the holder to cost for this liability and to annually provide for the liability in an appropriate provision. Due to the fact that these are unknown liabilities, risk transfer instruments such as bonds and insurance are recommended.²³⁸

The illustrated regulations and conditions do not detail how an applicant should specifically apply the described systematic stepwise approach. It is understood that this approach is adopted by applicants as a part of 'best practice' when applicants are challenged with regulations and conditions as described. What is valuable about these provisions is that they illustrate how, by regulation and obligatory license conditions, all environmental obligations which arise at all stages of an activity can be secured by means of financial security. In Chapter five, recommendations will be provided as to how an environmental liability regime for high risk industrial sites can be introduced into South Africa, utilising existing statutory tools and proposing certain amendments to these tools, as a result of the findings in the international context.

²³⁸ *Guidance on Environmental Liability, Risk Assessment, Residual Management Plans and Financial Provision* (214:8).

5 CHAPTER FIVE: CONCLUDING REMARKS AND RECOMMENDATIONS

5.1 South Africa's Natural Resource Law and the White Paper on Environmental Liability

The South African natural resources regulatory framework for environmental obligations has some redeeming features which resonate with the suggested environmental liability regime features in the Environmental Liability White Paper. The environmental duty under s28 of NEMA caters for environmental damage specifically, associating liability to specific persons for this damage.²³⁹ With NEMA being framework legislation the specific environmental management acts can reference this general duty and authorities may utilise the liability regime created herein as a fit for purpose for specific environmental media claims.²⁴⁰ The principle of strict liability is also alive in s28, as the authority is able to issue a directive on the basis of the identified person not taking reasonable measures to prevent, mitigate or manage significant environmental pollution.²⁴¹ The authority is not required to prove that the person is at fault before issuance of the directive.²⁴²

The NEMWA contaminated land provisions are also a progressive example of a growing environmental liability regime, and include features which specifically establish a criteria for remediation of contaminated land.²⁴³ The mining and petroleum sectors and their governing legislation are also examples of the integration of environmental liability with financial security systems into specific high risk activities, illustrating that this can be achieved.

However, as has been exemplified in the scope of challenges with environmental liabilities, the South African legislators have omitted to integrate many of these features in a consistent

²³⁹ NEMA Act 107 of 1998.

²⁴⁰ NEMA Act 107 of 1998: Specific environmental management Act means—(a) the Environment Conservation Act, 1989 (Act No. 73 of 1989);(b)the National Water Act, 1998 (Act No. 36 of 1998);(c) the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003); (d) the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004); (e) the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004); (f) the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008); (g) the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008). See the National Environmental Management: Integrated Coastal Management Act, 2008 at s5 and s58.

²⁴¹ NEMA Act 107 of 1998; s28(4).

²⁴² NEMA Act 107 of 1998; s28(4).

²⁴³ NEMWA Act 59 of 2008,s36-38. South African. Dept. Envir. Affairs. *Framework for the Management of Contaminated Land*, (2010),See Preface.

manner, across all possible affected environmental media and specific high risk activities, such as those undertaken by industrial manufacturers.

The challenge with simply proposing that the legislators introduce a financial surety provision for industrial sites is that not all industries have the potential to create the same level of risk, and therefore a 'one size fits all' approach will not be appropriate. A more systematic approach, as catered for in Irish Law is recommended whereby the industrial sites are subjected to risk assessments, which guide the authority as to the potential environmental liability exposure which can emanate from the facility. The risk profile of the facility then determines the appropriate financial surety. As in the mining industry, this risk assessment should be a complementary tool to the already available set of impact assessment tools described in the Environmental Impact Assessment Regulations of NEMA²⁴⁴, such as the basic assessment process²⁴⁵, the scoping and environmental impact assessment process²⁴⁶, specialist reports²⁴⁷ and environmental audit reports.²⁴⁸

5.2 Steps towards a Holistic Environmental Liability Regime for South African

Due to the complexities involved in understanding and catering for environmental liabilities, it is recommended that legislators consider a series of statutory amendments and enactments to the framework legislation, which can include the formulating of environmental liability guidelines which can be published in terms of s24J of NEMA.

5.2.1 Defining Environmental Damage, Environmental Liabilities and Financial Provisions

It has been illustrated that environmental damage leads to environmental liabilities, which have cost implications for an operator. NEMA does not contain a conclusive definition of 'environmental damage' which can be utilised when considering environmental liabilities. Environmental damage must be distinguished from environmental impacts as not all impacts cause damage to the environment, thus creating liability.²⁴⁹ The definition of 'environmental

²⁴⁴ NEMA Act 107 of 1998; s24 and the Environmental Impact Assessment Regulations, GNR.982, 4 December 2014 (Government Gazette No. 38282). Appendix 1-7.

²⁴⁵ NEMA Act 107 of 1998; s24 and the Environmental Impact Assessment Regulations, GNR.982, 4 December 2014 (Government Gazette No. 38282). Appendix 1.

²⁴⁶ NEMA Act 107 of 1998; s24 and the Environmental Impact Assessment Regulations, GNR.982, 4 December 2014 (Government Gazette No. 38282). Appendix 2.

²⁴⁷ NEMA Act 107 of 1998; s24 and the Environmental Impact Assessment Regulations, GNR.982, 4 December 2014 (Government Gazette No. 38282). Appendix 6.

²⁴⁸ NEMA Act 107 of 1998; s24 and the Environmental Impact Assessment Regulations, GNR.982, 4 December 2014 (Government Gazette No. 38282). Appendix 7.

²⁴⁹ White Paper on Environmental Liability (187:13).

damage' should be broad and include activities which may cause significant pollution and risk to the environment.

A definition of 'environmental liabilities' then needs to be drafted, which alludes to environmental damage and the requirement to put in place financial provision for the cost implication of these damages. The definition in the Environmental Liability White Paper can be considered, dividing the environmental liabilities into known and unknown liabilities, which will assist operators to distinguish between the different financial provision instruments when catering for these liabilities. It is imperative that the definition of known liabilities, over and above the standard remediation and closure obligations, include reference to ongoing management obligations in respect of administrative obligation of an operator. This will close out the gap for the State or liquidators who may need to assume responsibility for a manufacturing operation in the event that the operator cannot meet its obligations. It is necessary to point out that in the list of unknown liabilities, administrative notices and directives should not be included, as obtaining surety for these may incentivise non-compliant behaviour.

The definition of 'financial provisions' as contained in NEMA should also be amended by the removal of references to the activities which require financial provision, as these will be catered for under the definition of environmental damage and liabilities.²⁵⁰ It should once amended, only refer to the purpose of the provisions (i.e 'to cover the cost of environmental management and remediation in the event of insolvency and the cost of closure at the end of the operating life of a licenses facility') and the financial mechanism which can be utilised by operators of high risk industries to provide surety for their environmental liabilities.

5.2.2 Identifying high risk industries

It is recommended that a separate list of high risk industries and activities in South Africa which cause environmental damage as defined should be established as a main piece of an environmental liability regime. This list would include all types of manufacturing plants, refineries and the waste dump sites which are utilised by these industries. The list of activities

²⁵⁰ NEMA Act 107 of 1998, s1 – Financial Provision means the insurance, bank guarantee, trust fund or cash that applicants for an environmental authorisation must provide in terms of this Act guaranteeing the availability of sufficient funds to undertake the (a) rehabilitation of the adverse environmental impacts of the listed or specified activities; (b) rehabilitation of the impacts of the prospecting, exploration, mining or production activities, including the pumping and treatment of polluted or extraneous water; (c) decommissioning and closure of the operations; (d) remediation of latent or residual environmental impacts which become known in the future;(e) removal of building structures and other objects; or (f) remediation of any other negative environmental impacts.

contained in NEMA²⁵¹ and the SEMA's could be a starting point for the compilation of the list, but it would, however, be necessary to consider the fact that the lists are not comprehensive when covering high risk industries and their associated activities.

5.2.3 Existing facilities and new facilities

A number of South Africa's industrial manufacturers have histories similar to that of Zincor, operating industrial site which predate South Africa's environmental management regulatory awakening.²⁵² As such, any legislative reworking would require careful consideration of the legislative history of South Africa's high risk industries, so that these industries are not exempted or prejudiced by the imposition of an environmental liability regime. It is therefore recommended that any environmental liability regime be aligned with the polluter pays principle and the current application of s28 of the NEMA and s19 of the NWA.²⁵³

5.2.4 Systematic step wise approach

A systematic approach to assessing, considering and calculating the cost of environmental liabilities should be followed as proposed by the Irish law. The environmental liability regime can be introduced to high risk industries in phases over the life of the facility. Firstly, the risk assessment could form part of the application requirements for an environmental authorisation, whilst the remaining steps could form part of the license to operate conditions as illustrated in the Irish EPA waste licenses conditions. The value of a systematic approach is that it systemises a very erratic concept to get the best possible outcome for the environment in the form of a suitable financial provision. This approach can be defined in guideline documents which emphasise the statutory requirements.

5.2.5 Section 24E and 24P of NEMA

The "Minimum conditions attached to an Environmental Authorisation" contained in s24E of NEMA should be amended to require the authority to include a condition in an environmental authorisation which requires applicants of high risk industries to secure a financial provision as referenced in s24P of NEMA. Furthermore, to ensure that the applicant is committed to rehabilitation, s24E should also require the authority to include a condition in an environmental authorisation which sees the applicant committing to closure expectations for

²⁵¹ NEMA Act 107 of 1998, GNR 983, 984 and 985 Environmental Impact Regulations (2014).

²⁵² See Glasweski, J...et al. Environmental Law in South Africa. 2ed. Durban: Lexi Nexis (2016) 3 "South Africa passed its first dedicated environmental Statue in the 1980's, which was replaced by the Environment Conservation Act 73 of 1989 and is now to a large extent repealed by the National Environmental Management Act 107 of 1998".

²⁵³ Glazewski J (252: 20-24).

the land, already at commencement of activities on the property. This will ensure that the applicant understands its commitments and can work towards the end use.

Furthermore, s24E(c) should be removed and drafted into a stand alone section, which deals with transfer of rights and obligations for listed activities and high risk industries. This new section should, at minimum, require a formal administrative process to occur for the transfer of environmental liabilities and require the receiver to prove they are competent to take over the environmental liabilities of the operator. The receiver's competence should specifically be linked to the receiver's ability to meet the financial provision obligations of the seller as set out in an amended s24P.

It is also proposed that s24P of NEMA be amended and entitled "Environmental Liabilities, Risk Assessment and Financial Provisions" and its objectives broadened to cater for all industries identified in the high risk industry list. These industries should however not be limited only to listed activities due to historic industries, which may for legal technical reasons not have environmental licenses under NEMA or the SEMA's.

The provision should make financial provisioning for environmental liabilities for all high risk activities obligatory, prospective and retrospective. Any new licensable activities should be obliged to undertake the systematic assessment as part of the environmental authorisation process or as part of a condition in a license, whilst existing operators should be obliged to undertake the process over a transitional period.

The section should also introduce the concept of competency of operators in high risk industries, requiring competency to be connected directly with financial liquidity and the ability to cater for environmental liabilities. Equally, any financial provision set aside for environmental liabilities should be protected from insolvency proceedings, as is currently the case under s24P(6).²⁵⁴ Without this protection, the very purpose of the financial provision can be undermined by forcing the business into compulsory liquidation, which would expose this provision to creditors' claims.

5.3 Concluding Remarks

It is necessary for the natural resources regulatory authorities to take a holistic perspective on environmental liability as is regulated by our current natural resource legislation, to ensure

²⁵⁴s24P(6) which provides that " The Insolvency Act, 1936 (Act No. 24 of 1936), does not apply to any form of financial provision contemplated in subsection (1) and all amounts arising from that provision."

that the proposed recommendations do not create compliance hurdles in other legislative areas, such as tax. The benefits in taking the proposed steps towards implementing a holistic environmental liability regime are significant. The principle benefits being that polluters, the State, purchasers and liquidators involved in high risk industrial sites will be in an improved position to meet the environmental duties and administrative obligations of the operation, improving protection of the environment and in Larkins words, "balancing the profitability of business with the survival of the natural world".²⁵⁵

²⁵⁵A Larkin. *Environmental Debt: The Hidden Costs of a Changing Global Economy* (2013) 6.

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