INSURANCE AGAINST DAMAGE

CAUSED BY POLLUTION

by

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Birgit Kuschke
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SUMMARY

Insurance against Damage caused by Pollution

Universally complications exist concerning insurance cover for the risks posed by pollution damage. Environmental insurance cover can be procured under first-party or third-party insurance. For the latter, the polluter's statutory or civil liability is required. The determination of liability for compensation, especially delictual liability, remains problematic.

The right to the environment in section 24 of the Constitution creates a general duty of care. The introduction of a strict liability regime can be recommended to alleviate the burden of proving fault and contributory negligence. Where there is multiple or cumulative causation or the exact identity of the polluter is unknown, potential solutions regarding the allocation of liability include a pollution-share, joint and several, market-share or, as a last resort, a proportional allocation. Actionable damages should include property damage, pure economic loss, clean-up costs and natural resource damages, including compensation for reduced aesthetic value.

Due to the uncertainty and potential magnitude of pollution-related claims, insurers have attempted to avoid or limit these risks by including specific pollution exclusion and limitation clauses in policies. Statutory regulation of policy content and prescribed wording for clauses could address problems relating to the interpretation of policy provisions.

Various other issues such as the coverage of gradual pollution, the effect of the various triggers of coverage and the potential long-tail liability of insurer, the lack of information and the unpredictability of the risk cause further complications for both the insured and the insurer. Policies should preferably be issued on a 'claims-made' basis linked to retroactive dates. Mandatory third-party insurance to the benefit of a third party should be required within specific high-risk industries, specifically for the benefit of the prejudiced

person or an environmental remediation fund. The right of a prejudiced party to claim directly from the polluter's liability insurer should be introduced.

Currently, the focus appears to be more on protection and environmental remediation than on civil compensation. There is an urgent need for the development of statutory and civil liability compensation mechanisms and for an increased regulation of insurance policies and practices to ensure effective insurance cover to provide compensation for environmental damage.

KEYWORDS

Insurance; environment; pollution; environmental insurance; first-party insurance; third-party insurance; first-party insurance for the benefit of a third party; statutory liability; civil liability; strict liability; clean-up costs; natural resource damage; property damage; pure economic loss; pollution exclusion clauses; interpretation; triggers for cover.

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CHAPTER 1

INTRODUCTION

'Environmentalism is a spiritual responsibility'

Patriarch Bartholomew I

Eastern Orthodox leader

1.1 BACKGROUND

The one theme that dominates our age is that of the environment. The acknowledgement of ecological values has since the 1970s, except for unemployment, been on most political agendas.[1] Due to various environmental catastrophes and the manifestation of environmental damage over the past decades, international awareness on the issue and the search for solutions has increased profoundly.[2] Global warming, as a long-term effect of pollution, has become the greatest challenge that the world's population will have to face and overcome in order to survive. The international community expects members to adhere to set international environmental standards and to accept responsibility for their contribution to pollution damage.

[1] Oil casualties and pesticides were initial concerns in the 1960s, followed by emissions and chemical discharges in the 1970s. The depletion of the ozone layer and resulting climate change are current issues; for a historical perspective on the increasing environmental awareness see Larsson M *The Law of Environmental Damage: Liability and Reparation* (1999) 121 *et seq*.

[2] For example, the Exxon Valdez, Erika and Prestige oil spills; the Love Canal disaster in 1980 in the United States of America, where thousands of drums containing a chemical waste called dioxins were buried in a landfill site, creating a major health hazard for residents in the area; pollution of the Houston Ship Channel by the operations of a refining and chemical plant complex by Shell Oil Co; the Bhopal gas leak in India; the increasing awareness of the extent of asbestos poisoning causing asbestosis worldwide, especially in South Africa, where the latest casualties now even include deaths caused by secondary asbestos pollution in Kuruman in the Northern Cape in February 2008; the frequent occurrence of oil fires and gas flares in the Niger Delta that causes water and air pollution that in turn affects plant-life, causes acid rain and the death of marine life, causes the contamination of fish and produce that are then unfit for human consumption in a society that subsists mainly on farming and fishing for which the water from the Niger is crucial, and also pushes the affected organisms to the brink of extinction.

The development of the South African economy necessitates an increase in hazardous activities that inevitably increases pollution causing environmental damage. The interests of the economy and its growth are as a universal general rule directly opposed to the interests of the community and the interests of the individual.[3] Society faces three great challenges, namely environmental sustainability, a stable world population and the end of extreme poverty. Conflict exists between development at the cost of the environment, and protection of the environment at the expense of development. An example of this conflict of interests can be found where a property developer lawfully exercises his rights to develop urban settlements within a protected natural environment, but which have the potential of causing irreversible environmental harm.[4] Countries attempting to industrialise are confronted with the fact that measures to protect the environment are expensive and resources are limited.[5] The universal goal, however, should for the sake of mankind, remain one of sustainable development.[6]

Where loss, harm or damage to persons and the environment is caused by economic activity, public policy dictates that someone should be held liable and should be at risk to make good such loss, harm or damage.[7] Someone has to pay for the damage suffered and for clean-up and restoration costs. Polluters and victims usually turn to their insurers for financial reimbursement to cover their losses and their liabilities. As will be seen from this study, insurers who are confronted with huge pollution damage claims constantly attempt to avoid or limit claims brought under their policies.

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[3] United Nations World Commission on Environment and Development *Our Common Future* (also known as the 'Brundlandt Report') (1987).

[4] This was at issue in the case of *Myburgh Park Langebaan (Pty) Ltd v Langebaan Municipality and others* 2001 4 SA 1144 (C).

[5] Shaw MN *International Law* (2003) 758.

[6] The Brundtland Report 43 defined the concept; see Larsson 49 n 41 for alternatives to this term such as 'sustainable growth', as used in most EU documents.

[7] See Winter G "Perspectives for environmental law – entering the fourth phase" 1989 *Journal for Environmental Law* 38 for international recommendations on the importance of finding a balance between development and the protection of the environment; for an even earlier wake-up call see Rabie MA "The need for adequate environmental law" 1971 (September) *De Rebus* 361.

To illustrate the potential magnitude of damage, the following serve as recent examples of pollution claims. In the United States of America the Massey Energy Company, the world's fourth largest coal producer, was fined $20 million in January 2008 in the largest ever civil penalty levied for a pollution violation, and also has to invest an additional $10 million in pollution control improvements.[8] In France the oil company Total, in its capacity as a cargo owner, was held partly liable together with the ship's owners for an oil spill on the coast of Brittany in 1999. Total was ordered to pay $298 million in damages, and fined $550 000 for causing marine pollution.[9] The specialty chemical company W.R. Grace recently settled asbestos claims for $1.8 billion.[10] Closer to home, claims due to asbestosis and manganism have recently escalated.[11]

1.2 EXPOSITION AND PURPOSE OF STUDY

When it comes to social change, the law sometimes leads, sometimes follows and in this case mostly trots alongside.[12] The law, especially in South Africa, has in the past contributed little to the effective protection of the environment, and has been lax in setting strict guidelines to hold polluters liable and to regulate the payment and funding of clean-up and restoration costs. These issues are currently being rapidly addressed.[13] Studies and case law in most countries expose the limitations of traditional concepts in liability and insurance law when it comes to environmental pollution damage claims.

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[8] Urbina I "U.S. Fines Mine Owner $20 Million for Pollution" *The New York Times* 18 January 2008.
[9] Carvajal D "French Court finds Oil Company Partly Liable for Spill" *The New York Times* 17 January 2008.
[10] Huslin A "W.R. Grace to Settle Asbestos Claims for $1.8 Billion, Start New Chapter" *The Washington Post* 16 April 2008.
[11] *Lubbe & Four Others v Cape Plc and related appeals* 27-7-2000 (House of Lords; Khanyile S "Assmang back in hot seat for safety violations" *Business Report* 21 April 2008 http://www.busrep.co.za/index.php?farticleId=4361612 (last accessed on 21 April 2008).
[12] Waldmeir P "The Freedom to Exclude" *The Financial Times* 12 April 2003.
[13] See, for example, the establishment of a liability regime for air pollution by the enactment of the new National Environmental Management: Air Quality Act 39 of 2004 as examined in chap 3 par 3.4.4.10 below.

This study aims to identify and investigate complications relating to the insurability of pollution-related risks and liabilities. It attempts to propose solutions to circumvent these problems and provides recommendations to facilitate effective compensation and remediation via the South African insurance market.

Initially developing countries direct their focus more at development than at protection of the environment, followed by a stage where the focus is primarily on protection of the environment and prevention of harm rather than advancing development at all cost. This can be seen, for example, by the penalties levied in the United States and in France as mentioned in the text above. As South Africa is still classified as a developing country, it might not do any harm to learn from their experience and to implement protection and indemnification measures before it is too late, rather than to steamroller ahead with plans for development without first installing efficient liability regimes to provide for satisfactory clean-up and restoration of inevitable environmental damage, and providing for instruments in the insurance and financial markets to facilitate effective compensation.

The modern challenge for the insurance industry in providing cover for claims that relate to damage caused by pollution, is that environmental harm is currently caused not only by the traditional polluting causes, such as water pollution by the release of effluents from factories, seepage from rusted waste containers, excessive release of smoke and gases from factories and by the illegal 'midnight dumping' of waste products, but also by the increased use of new technologies and exposure to new risks, that even include the threat of environmental terrorism.[14] Hacking, for example, has the potential to cause enormous environmental damage. In 2001 a hacker broke into the computer network of a government-run sewage plant in Queensland, Australia, deliberately releasing thousands of litres of raw sewage into public

[14] For a collaborative study on some of these new risks in a civil liability context see Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectieven* (2003) (hereinafter 'Faure & Neethling').

waterways.[15] Another major new waste stream is toxic e-waste caused by discarded electronic goods, currently comprising more than 5 percent of all municipal waste internationally.[16] These new hazards place demands on the insurance industry that cannot always be met.[17]

Our law acknowledges various sources of legal obligations between persons. Once an obligation exists, rights and duties or liabilities accrue to the parties. The insurability of property damaged by pollution, as well as the insurability of liability for pollution damage caused, lie at the heart of this study.[18]

In case of first-party insurance cover, issues relate specifically to the extent of the cover provided, and whether the operation of exclusion and limitation clauses affects a claim for damages under a specific policy.

As far as third-party or liability insurance is concerned, the issues are far more complex. Because an interdependency exists between liability and third-party or liability insurance, it is necessary to examine liability regimes before an examination of insurability can be launched.[19] In this context environmental risks have two basic components, namely the policyholder's obligations to clean-up contamination, and his liability to third parties for environmental damage caused. Each and every requirement set for delictual liability poses a variety of complications in the context of environmental liability. Examples include liability for omissions and the legal duty to prevent loss, wrongfulness, contributory negligence, multiple and cumulative causation and the nature and assessment of actionable damages as well as their apportionment.

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[15] Schenker JL "Look out! Inside that PC! It's the KILLER WORM!" *Time* 1 February 2008 61.

[16] See especially chap 3 par 3.4.8 on The Hazardous Substances Act 15 of 1973 that an 'electronic product' is seen as a hazardous substance for which statutory liabilities in terms of the Act can be incurred; http://www.greenpeace.org/international/press/reports/not-in-our-backyard (last accessed on 21 February 2008).

[17] Faure M & Skogh G *The Economic Analysis of Environmental Law and Policy* (2003) 282; for a comprehensive discussion on the new risk posed by toxic mould see Goodman GA "Insurance Triggers as Judicial Gatekeepers in Toxic Mold Litigation" 2004 (57) *Vanderbilt Law Review* 241.

[18] Larsson 525 proposes that the complications en problems relating to insurance against environmental damage deserves a thesis of its own.

[19] This view is confirmed by Faure M (ed) "Interdependancies Between Liability and Insurance" in *Tort and Insurance Law Vol 5: Deterrence, Insurability and Compensation in Environmental Liability: Future Developments in the European Union* (2003) 207.

Due to the unique nature of pollution claims, the last years have seen the emergence of a new international environmental or toxic tort law.[20] In view of these trends, chapters 3 and 4 contain a detailed discussion on the South African law on constitutional, statutory, and common-law based liability in an environmental context.

Insurance claims for environmental damage caused by pollution are different from other socially acceptable claims that are generally acknowledged under the general principles of insurance, due to the unpredictability of the risks and the difficulty in proving liability, as well as the potential of the apocalyptic extent of damage that can be caused to the environment and affect the quantum of the resulting insurance claims.[21] Insurance cover has therefore over time often been excluded or limited contractually by various pollution exclusion clauses.[22]

Due to social pressures the insurance industry had to make a serious about-turn to incorporate and entertain claims for pollution damage. The availability of insurance in the market is directly influenced by the probability that a specific type of liability may be incurred. As liability for environmental damage is rapidly increasing, the demand for effective insurance products has of necessity increased as well.[23]

In a nutshell, the risks of damage and liability, their insurability and the availability of effective insurance mechanisms in an environmental context form the main thrust of this thesis.

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[20] See also Larsson 382 with regard to the global emergence of environmental tort law; also on 383 n 840 where she holds the opinion that a parallel between environmental tort law and product liability tort law is not far-fetched, and that development in the latter can assist in developing the former. This possibility is also considered in this study.

[21] See Spier J "Apocalyptische Scenarios, De prijs van de onzekerheid na de aanslagen in the Verenigde Staten op 11 September 2001 en de daarop volgende economische ellende" in Faure & Neethling 3, 13; see also Kuschke B "Insurance against damage caused by pollution" 2000 (3) *TSAR* 494.

[22] See chap 6 par 6.5 for a detailed discussion on the current issues surrounding the nature and effect of pollution exclusion clauses.

[23] As stated by Havenga P "Liability for Environmental Damage" 1995 (7) *SA Merc LJ* 188.

1.3 METHODOLOGY

This study is based on an analysis of local South African legislative and common-law legal principles. The problem at hand must be approached and examined in the following sequence.

Where environmental pollution damage occurs, one must first determine whether the claim falls within the descriptions in law of both the 'environment' and 'pollution' before it becomes possible to determine who is to be held liable for the damage or loss. The relevant definitions and descriptions of these terms are summarised in Chapter 2.

The following step in the process is to determine the identity of the person who is to be held liable for the damage or loss. The first layer of liability for damage is statutory liability that is examined in Chapter 3.

The second layer of liability is civil or delictual liability that is examined extensively in Chapter 4.

Once the liability of the polluter has been determined, the insurability of the damage or loss under first-party insurance cover, and the insurability of the liability of the polluter under third-party insurance cover, must be evaluated. This is dealt with in Chapter 5.

Chapter 6 contains a study of the universal core issues and autogenous complications relating to pollution damage liability and the insurability against pollution damage.

A comparative study to determine whether answers can be found in other jurisdictions in an attempt to address the shortcomings in our national system follows in Chapter 7. The jurisdictions decided upon were the United Kingdom, The Netherlands, Belgium and finally the United States of America, with specific focus on its federal law.

The United Kingdom was chosen because of the long liaison South Africa has had with its counterpart in the development of insurance law.[24] The development in the United Kingdom of a specialised toxic tort law may prove to be informative for the extension of our own law of delict in the context of pollution damage liability.

The Netherlands and Belgium were chosen because of the Roman-Dutch roots that their law shares with South African law, and because these two countries have been at the forefront of intensive study and legal innovation in an attempt to accommodate pollution liability claims and to develop effective compensation mechanisms.

The United States of America offers a contribution to the study due to the implementation of its statutory fund solution that provides for the recovery of environmental clean-up and restoration costs. As the position in many of the states have merit and the problems are universal, no single state could be singled out for purposes of the study.

As some of the issues are multi-dimensional, they cannot be addressed comprehensively in the scope of a single chapter and are therefore addressed in various chapters. Liability for causing prospective loss, and the assessment as well as the insurability of prospective loss that are discussed in various chapters, serve as an example.

The final conclusion and recommendations for South African law follow in chapter 8.

1.4 DELIMITATION OF SCOPE

The following aspects are limited or excluded from the scope of this thesis:

[24] Reinecke MFB, Van der Merwe S, Van Niekerk JP & Havenga P *General Principles of Insurance Law* (2002) par 26.

1.4.1 environmental pollution that causes damage or loss remains the main focus of the study, and it is not extended to also include product liability for damage unless the principles of the latter inform the former;

1.4.2 the study does not cover damage caused by natural catastrophes;

1.4.3 the study focuses primarily on liability for private and public property damage and not on personal injuries;

1.4.4 the heavily regulated international liability regimes that apply to marine pollution, oil pollution, waste disposal and the nuclear industry regimes are not examined extensively and are discussed as briefly as possible in order to serve the purpose of this study;

1.4.5 a lengthy discussion on the liability of states is not within the scope of the thesis unless it is of relevance to a specific insurable liability;

1.4.6 criminal liability for pollution damage falls beyond the scope of the study;

1.4.7 the study includes only a limited discussion of contractual liability as most of the issues relate to *extra*-contractual liability;

1.4.8 transboundary pollution and transboundary liability regimes are, due to their specialised and extensive nature, not considered in great detail;

1.4.9 alternatives to insurance, for example specialised financial instruments such as contractual warranties or guarantees and non-compliance fines, governmental compensation funds or other risk-sharing alternatives are also beyond the scope of the study.

Very little South African case law exists specifically on matters relating to environmental insurance litigation, whereas the body of case law in respect of delictual liability and insurance in general is extensive. As far as possible, only Supreme Court of Appeal and Constitutional Court case law and legislation dealing with liability issues and insurance matters relevant to environmental or pollution issues were used as reference.

I have attempted to state the law as at 1 September 2008.

CHAPTER 2

DEFINING THE ENVIRONMENT AND POLLUTION

2.1 INTRODUCTION

It remains uncertain what the exact definitions or descriptions of the terms 'environment', 'pollution' and related 'damage' actually are, as the possibilities are non-exhaustive.[1] One must at least attempt to complete a process of 'terminological disentanglement'[2] in order to effectively address the liability for and the insurability of the inevitable changes to the environment brought about by polluting activities.

Whereas the environment was in the past simply divided by its three classical components namely land, water and air,[3] the modern approach is to view the environment holistically from a multi-media perspective.[4] In international law

[1] As can be seen from the various possibilities discussed in this chapter, and in the words of Fuggle RF & Rabie MA *Environmental Management in South Africa* (1999) 83 'Many writers who discuss environmental issues do not even attempt to define the term "environment".' This does appear to be the safest approach rather than getting caught up in the quagmire of attempting to formulate the perfect description; Glazewski J *Environmental Law in South Africa* (2005) 9 holds the same opinion. For an international perspective on the problems regarding the formulation of a general definition of 'environmental damage' see Carette A *Herstel en vergoeding voor aantasting aan niet-toegeeigende milieubestanddelen* (1997) 70; Faure M (ed) *Tort and Insurance Law Vol 5: Deterrence, Insurability and Compensation in Environmental Liability: Future Developments in the European Union* (2003) (hereinafter 'Faure (ed)') 133.

[2] In the words of Winter G, Jans JH, Macrory R & Kramer L "Weighing up the EC Environmental Liability Directive" 2008 (June) *Journal of Environmental Law* 163 166 who confirm and advocate the necessity of defining important terms in a context of pollution liability.

[3] The lithosphere (the sphere of soils and rocks), the hydrosphere (the sphere of water) and the atmosphere (the sphere of the air) as described in http://www.wikipedia.org/wiki/ Ecological (accessed on 28 August 2006).

[4] See in general Henderson *Environmental Laws of South Africa* Vol 1 (1999) xvii; see also the discussion in Fuggle & Rabie 83 *et seq*; see some statutory definitions provided in international legislation, for example s 1 of the Environmental Protection Act of 1990 of the United Kingdom that defines environment as consisting of 'all, or any of the following media, namely the air, water and land'; the Australian Environment Protection Act 1973 for Tasmania defines the environment in s 2(1) as 'the land, water and atmosphere of the earth'; see the criticism by Kidd M *Environmental Law, A South African guide* (2008) 2 that these definitions exclude any organisms and only refer to the physical environment. This approach does offer

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parallel regimes address various topics in international law, which requires the environment to be sectorally divided concerning the protection of different environmental components such as wildlife, water and the marine environment, air and climate and natural resources, and also transectorally as regards the factors that impact on the environmental components. These include, for example, waste, hazardous substances, genetically manipulated material, biotechnology and energy. The latter includes nuclear energy and nuclear technology.[5]

Before 1970 the term 'environment' was virtually unknown as a specific legal term.[6] The need to find an agreeable standard description and meaning of the term was brought forward by the need for a general comprehensive environmental policy, for the integration of environmental management and for compulsory environmental impact studies as required in our law.[7] As will be seen from the discussion in this chapter, finding a single acceptable definition for the 'environment' proves to be a challenge.[8]

Fuggle and Rabie state that one should not focus on the individual components of the environment, but rather 'centre one's attention on the concept of the environment as a whole'.[9] They identify the environment as

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the benefit that it includes the natural environment as well as any human modifications made to the natural environment.

[5] See in general Larsson M *The Law of Environmental Damage: Liability and Reparation* (1999) 61, 122; and also the recent extensive work of De Ketelaere D (ed) *Handboek Milieu- en Energierecht* (2006) on environmental law in general as well as on the emerging field of energy law.

[6] According to Fuggle & Rabie 83.

[7] This led to the Green Paper for Public Discussion: An Environmental Policy for South Africa dated, October 1996 that provided a basis for developing an environmental policy; The White Paper on Environmental Management Policy for South Africa dated May 1998 that set out the government's national policy, culminating in the National Environmental Management Act 107 of 1998.

[8] Glazewski 9 confirms that there cannot be one single obvious definition of the environment; Fuggle and Rabie 92 concur by saying that 'what is to be regarded as the environment seems, in the final analysis, to be a policy question upon which opinions may differ'; Larsson 154 considers all the apparently futile attempts to find a universally acceptable definition.

[9] Fuggle & Rabie 83; see also Kidd 3 who is of the opinion that the definition provided in the Local Government (Planning and Environment) Act of 1990 for Queensland, Australia is probably closer to the meaning one seeks. This definition for the environment in s 2(1) includes '(a) ecosystems and their constituent parts including people and communities; (b) all natural and physical resources; (c) those qualities and characteristics of locations, places and areas, however large or small, which contribute to their biological diversity and integrity,
Footnote continues on the next page.

'the earth's natural resources, both renewable and non-renewable'.[10] Einstein is reported to have said that 'the environment is everything that is not me',[11] which is the simplest yet apparently a most effective description.

As stated in the White Paper on Environmental Management in South Africa, the environment means different things to different people.[12] The environment also means different things in the context within which the term is used.[13] As various statutes cover different scopes and different mediums within the general environment, it remains practical to provide a definition within each specialised statute that focuses only on those elements of the environment covered by that particular piece of legislation, rather than to attempt to formulate a single definition that applies to them all. The existing statutory definitions of the 'environment' and its related concepts and of 'pollution' and its related concepts vary enormously, as will be seen from the discussion on the various statutes below. The exact scope of the entire field of environmental law in general also remains uncertain, as it appears to cover any aspect that relates to or interacts with the environment.[14] In the words of Bray, '[t]he term 'environment' is not static but evolving: it may differ from country to country and over time, depending to a large extent on policy decisions and people's perceptions'.[15]

There is of course still merit for the point of view that one should attempt to enact a standard definition within the sphere of general environmental law, to

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intrinsic or attributed scientific value or interest, amenity, harmony and a sense of community; and (d) the social, economic, aesthetic and cultural conditions which affect the matters referred to in pars (a), (b) and (c) or which are affected by those matters'.

[10] Fuggle & Rabie 90; see also par 2.2.5.2 for a further reference to the views of these authors.

[11] As quoted by Ball S & Bell S *Environmental Law:The Law and Policy relating to the Protection of the Environment* (1994) 4.

[12] White Paper on the Environmental Management Policy for South Africa published in the *Government Gazette* No 18894 on15 May 1998 9.

[13] Glazewski 9 divides general environmental law into three inter-related areas of general concern, namely land-use planning and development, resource conservation and utilisation, and waste management and pollution control.

[14] This view is reiterated by Fuggle & Rabie 83 *et seq*; see also Glazewski 9, 11 and Kidd 1, 4 for similar views.

[15] Bray E "Public participation in environmental law" 2003 (10) *SA Public Law Journal* 121 (hereinafter 'Bray (2003)').

serve as a default definition where no suitable alternative is available. The definitions found in NEMA and in the ECA as discussed below attempt to serve this purpose.

Other definitions are found in various statutes, bills, white and green papers, academic publications and textbooks, both national and international.[16] For the purposes of this thesis, the national descriptions and definitions of both the 'environment' and 'pollution' are dealt with extensively. As the Constitution calls upon courts to regard public international law, including international environmental law and applicable international conventions signed, agreed or acceded to, to form part of our law,[17] brief references to a few generalised descriptions from foreign jurisdictions are included in this chapter where applicable.[18]

The same applies when attempting to define the terms 'pollution' and 'damage'.[19] Various attempts have been made to provide general definitions or descriptions of what 'pollution' and 'pollution damage' in an environmental context actually are.[20] Most works on environmental law do not necessarily cover all aspects of pollution, defilement, environmental harm or damage, the production and dumping of waste into the environment, or aspects relating to the ensuing liability and the duty to clean-up. The descriptions of the term 'pollution' and of its related concepts are therefore sought in more general works unless a specific source, such as a statute, provides a specialised description.[21]

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[16] Sands 15 *et seq* provides a variety of versions found in international sources.
[17] The Constitution of the Republic of South Africa 1996 (hereinafter 'the Constitution') s 25.
[18] See par 2.2.5.3, par 2.3.5.2 below.
[19] The extent of the term 'damage' is considered extensively in the text on liability issues as examined in chap 4 par 4.2.6 and specifically with regards to interpretation in chap 6 par 6.5 and par 6.6.2 below; see also specifically on issues of insurability in chap 5 par 5.3.2.3.4 below.
[20] See the discussions on the extent of the term 'pollution damage' in par 2.3 below; and in chap 5 par 5.3.2 and chap 6 par 6.5.6 in the text below on its application in the context of insurance; see in this regard Glazewski 9, and also 10 where he provides a brief explanation of the distinction between 'brown' issues that deal with the negative side of resource development, such as pollution and waste control, and 'green' issues relating to resource utilisation.

2.2 DEFINING 'THE ENVIRONMENT'

2.2.1 General

For a simple definition of the term, in a narrow sense, the starting point would logically be to refer to the basic meanings allocated to the term 'environment' in various dictionaries. 'Although dictionaries are helpful insofar as they set forth the ordinary, usual meanings of words, they are imperfect yardsticks of ambiguity. By their very nature, dictionaries define words in the abstract, and must always be viewed in context.'[22] The definitions found in statutes then follow, which are more specialised and aim to focus on the subject matter of the specific legislation. Related concepts are briefly discussed,[23] followed by the view, criticisms and proposals made by writers on the subject.

2.2.2 Dictionaries

2.2.2.1 The Concise Oxford Dictionary[24]

The 'environment' is defined in this general dictionary as 'the surroundings or conditions in which a person, animal or plant lives and operates. The natural world, especially as affected by human activity'.[25]

The first part of this definition sees the environment as that *surrounding* a person, animal or plant, and not as including these things.[26] Harm or damage done directly to an animal or plant, and not merely to its environment, will therefore not be seen as damage to the environment. This is a very limited

[21] See the discussion in par 2.3.3 below.
[22] These meanings found in dictionaries must be viewed in context as was stated in the case of *New Castle County v Hartford Accident and Indemnity Company* 933 F.2d 1192 (3d Cir.1991) 1193.
[23] Such as the brief discussion on the meaning of the term 'ecology' in par 2.2.4.1 in the text below, that is often used as a synonym for the 'environment'.
[24] Pearsall (ed) *The Concise Oxford Dictionary* (1999).
[25] *The Concise Oxford Dictionary* 477.
[26] See also in this regard Urdang (ed) *The Oxford Thesaurus* (1991) 125 where synonyms for the environment are listed as 'surroundings, environs, atmosphere, ecosystem, conditions, habitat, circumstances, medium, milieu, territory, locale, setting, *mise en scene*, situation'.

viewpoint and does not offer a satisfactory definition to cover what modern man sees as environmental pollution or damage.

The second part of this definition refers to the natural world, which is the description of the 'environment' in terms of the limited approach as discussed by Fuggle and Rabie.[27] The criticism that can be levelled against the limited approach is briefly that it does not include the built environment or the environment as changed or modified by humans, and thus narrows the scope only to what we understand the classical concept of 'nature' to be.[28]

2.2.2.2 Black's Law Dictionary[29]

The 'environment' is defined as 'the totality of physical, economic, cultural, aesthetic and social circumstances and factors which surround and affect the desirability and value of property and which also affect the quality of people's lives'.[30]

This definition follows the extensive approach and is therefore far broader than the previous one, yet refers only to property in general and to the quality of people's lives. Defilement of nature that does not directly detract from or affect the quality of people's lives will not be covered by this definition even if the specific aspects of nature are seen as property that is reduced in desirability or value.

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[27] See Fuggle & Rabie 86 *et seq*.
[28] 'Nature' is defined in *The Concise Oxford Dictionary* 950 as 'the phenomena of the physical world collectively, including plants, animals, and the landscape, as opposed to humans and human creations; the physical force regarded as causing and regulating these phenomena'; Fuggle & Rabie 84 describe the natural environment as 'in a strict sense the natural world in its pure state, but more generally regarded as referring to renewable and non-renewable natural resources such as air, water, soil, plants, animals etc'. One can also note here that genetically modified organisms would, under this definition, not fall under the description of the 'environment' as they have been changed from their pure state through human modification to something deemed to be 'unnatural'.
[29] Garner (ed) *Black's Law Dictionary* (1990).
[30] *Black's Law Dictionary* 534.

The term 'property' is defined as 'that which is peculiar or proper to any person, that which belongs exclusively to one. In the strict legal sense, it is the aggregate of rights which are guaranteed and protected by the government. The term is said to 'extend to every species of valuable right and interest'.[31] As everyone has the right to a clean and healthy environment in terms of the Constitution,[32] this right is also included in the specific description of the concept of 'property' found above.

Fuggle and Rabie on the other hand criticize the use of the term 'environment' as a synonym for words such as 'circumstances', 'milieu' or 'situation', as they hold the view that the intention should be not to refer to an interrelationship but merely to a context or circumambience.[33] This is in accordance with the view of Garner who refers in the definition provided to the environment merely as the circumstances and factors that surround property and people, yet also prefers not to include the interrelationship between them.[34]

2.2.2.3 Webster's Dictionary[35]

The 'environment' is described as 'the entire surroundings of an organism, and for man also the totality of his natural and culturally altered living space'.[36]

Once again an extensive approach is followed, as only that which surrounds an organism, and not the organism itself, falls within the scope of the 'environment' in terms of the first part of the definition. Under the second part, all things surrounding man, that would by implication include all living organisms as well, are covered. Man himself does not, in terms of this definition, form part of the environment. Although this is an older definition as

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[31] *Black's Law Dictionary* 1216.
[32] The Constitution s 24.
[33] Fuggle & Rabie 4; see also the discussion of the viewpoints of various authors in par 2.2.5.2 of the text below.
[34] As the editor of Black's Law Dictionary.
[35] Gove PB (ed) *Webster's Third New International Dictionary of the English Language* (1961).
[36] As quoted by Fuggle & Rabie 84 from Gove above.

it is a pre-1970s attempt to define the term 'environment', it is still quoted with approval in view of the scope of this study.[37]

2.2.2.4 http://www.wikipedia.com

The general definition in this popular layman's electronic dictionary describes 'the environment' as 'a complex of surrounding circumstances, conditions or influences in which a thing is situated or developed, or in which a person or organism lives, modifying its life or character'.[38] 'The 'environment of an organism' is described as 'including both physical properties, which can be described as the sum of local abiotic factors[39] such as solar insulation, climate and geology, as well as other organisms that share its habitat'. Lastly it also states that 'in biology, ecology[40] and environmental science, an environment is the complex of physical, chemical, and biotic factors that surround and act upon an organism or ecosystem'.[41]

2.2.3 National Statutory Definitions

2.2.3.1 General introduction

As is shown below, a multitude of statutes apply and refer to situations relating to the management of the environment and ecological issues, as well as to environmental pollution and degradation.

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[37] See especially the conclusion below that for purpose of this study, man cannot be included as part of the environment, as this would have the effect that where one person's conduct directly injures another, it would also constitute an environmental injury. The scope of this work requires a person's conduct to directly damage the environment, which then indirectly causes harm or loss to another person.

[38] http://www.wikipedia.org/wiki.Environment (last accessed on 6 September 2006).

[39] 'Abiotic factors are the non-living factors of the earth which affect the ability of living organisms to survive in an environment, and includes both physical and chemical factors', for example soil, weather, the availability of consumable water, the amount of sunlight and natural disasters' http://www.wikipedia.org/wiki.Abiotic (last accessed on 11 September 2006).

[40] Par 2.2.4.1.

[41] N 36 above.

Although the National Environmental Management Act[42] functions as the general statute on environmental matters, and its definitions are referred to as authoritative in various other statutes, the focus of some of the statutes discussed below is of such a specialised nature that a specialised definition for the purpose of these Acts is required, and consequently provided. Key environmental legislation, namely the Constitution, the National Environmental Management Act and the Environmental Conservation Act[43] are discussed first, followed by the other relevant statutes in alphabetical order.

2.2.3.2 The Constitution of the Republic of South Africa

2.2.3.2.1 Section 24: the right to the environment

The right to the environment is dealt with specifically in section 24 of the Constitution,[44] which reads as follows: 'Everyone has the right to an environment that is not harmful to their health and well-being; have the environment protected for the benefit of present and future generations through reasonable legislative and other measures that: prevent pollution and ecological degradation; promote conservation; secure ecologically sustainable development and use of natural resources, while promoting justifiable economic and social development.'

This section refers to the terms 'environment', to 'ecology' as well as to 'natural resources'. As far as the latter term is concerned, one could deduce from only the words used, and the context within which they are used,[45] that it refers to the 'natural environment' as part of the greater 'environment' as a

[42] As discussed in par 2.2.3.3 in the text below.
[43] The Environment Conservation Act as discussed in par 2.2.3.4 below.
[44] See chap 3 par 3.2 for a comprehensive discussion of the scope and effect of this section of the Constitution on statutory liability.
[45] As it is in a subparagraph that falls within the description of 'environment' in the main body of s 24, and is in the subparagraph specifically linked to the rest of the provision that refers to the '*ecologically* sustainable development and use' of said natural resources.

whole.[46] No definitions for these terms are specifically provided elsewhere in the Constitution.[47]

2.2.3.2.2 Scope of terminology used in section 24

The Constitution has made it difficult to achieve full integration of environmental laws, as it provides for functional areas of concurrent national and provincial legislative competence, functional areas of exclusive provincial legislative competence, and some competence allocated to local authorities.[48]

Schedule 4 Part A of the Constitution lists the functional areas of concurrent national and provincial legislative competence, under which are found the Environment and Pollution Control, as well as Nature and Soil Conservation and Health Services.

Under Part B the matters provided for on local government level include air pollution, water, sanitation services, wastewater and sewage disposal systems, and aspects relating to pontoons, ferries, jetties, piers and harbours.[49] Schedule 5 of Part B refers to local matters that include cleansing, control of public nuisances, noise pollution, refuse removal, refuse dumps and solid waste disposal.

The application of section 24 is therefore extensive and its terminology must be interpreted as broadly as possible to accommodate all the issues that it addresses. National as well as provincial legislation cover these aspects and various statutes contain specific definitions for, or refer to, the 'environment'. For the purposes of this thesis only the definitions provided in national statutes are examined.

[46] See the examination of the scope of 'natural resources' in n 26 above, and in chap 6 par 6.6.2.5 on the description of 'natural resource damage'.
[47] See the examination of the scope of 'natural resources' in n 26 above, and in chap 6 par 6.6.2.5 on the description of 'natural resource damage'.
[48] See in general the discussion by Henderson 1-4.
[49] S 155(6)(a), s 155(7).

2.2.3.2.3 Interpretation

In accordance with s 39(2) of the Constitution any legislation or legislative provisions must be interpreted in line with the spirit, purports and objects of the Bill of Rights. This would require any interpretation of statutory or other relevant wording that gives effect to the environmental right as contained in the Constitution, to be in accordance with the purpose that the right to the environment serves.[50]

2.2.3.3 National Environmental Management Act[51]

2.2.3.3.1 Terminology in the Process preceding NEMA

The Act is a legislative measure as contemplated by section 24(b) of the Constitution,[52] and was preceded by extensive discussions over many years. Prior to the enactment of NEMA, various reports by the Planning Committees of the President's Council on nature conservation in South Africa were issued, each containing a different definition of what the term 'nature' entails.[53] The Green Paper and the White Paper followed.[54]

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[50] *MEC: Department of Agriculture, Conservation and the Environment Dr ST Cornelius v HTF Developers (Pty) Ltd* Case nr CCT 32/07 [2007] ZACC 25 par 10.
[51] Act 107 of 1998 (hereinafter referred to as 'NEMA').
[52] Par 2.2.3.2.1 above.
[53] In the *Report of the Planning Committee of the President's Council on priorities between conservation and development* PC 5/1984 par 3.1 it was described as 'all living and therefore renewable natural resources'; in the *Report of the Planning Committee on nature conservation in South Africa* PC 2/1984 par 2.1 it was provided that in a broader sense it would also have to include 'non-renewable natural resources, such as landscapes, natural phenomena such as habitats, as well as biological organisms and communities'; in the *Report of the Planning Committee on nature conservation in South Africa* par 4.1.1.1 it was stated that in the broadest sense it would include 'the works of man that are of lasting cultural value and that serve to enhance the quality of the environment'. The last attempt at a description in these reports provides that the environment is 'the aggregate of physical, biological and cultural conditions affecting the life of an individual human being or the community' as found in the *Report of the three committees of the President's Council on a national environmental management system* PC 1/1991 par 1.3.2.
[54] Green Paper 4 on the process preceding the Paper; in the Green Paper: http://www.gov.za/ greenpaper/1996/environmental.htm the 'environment' was described as including 'many things, the land, water and air, all plants, animals and microscopic forms of life on Earth, the built environment and our social, economic, political and cultural activities that form part of everyday life. The 'environment' is further described as 'embracing the conditions and/or influences under which any individual or thing exists, lives or develops. These include the following categories of conditions or influences: the natural environment including
Footnote continues on the next page.

2.2.3.3.2 Definition in NEMA

'Environment' was subsequently 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 (i) and (ii) and the interrelationship among and between them; and the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being'.[55] The health of organisms other than humans is not mentioned. Although other organisms are seen as part of the surroundings within which humans exist, the health of these organisms is not included *per se*. It appears that the relevance of their health will only fall within the ambit of the 'environment' if it directly influences human health and well-being.

2.2.3.3.3 Legislation enacted in terms of NEMA

Legislation that will be enacted in accordance with the provisions of NEMA will usually in the definitions clause merely provide that 'environment' has the meaning assigned to it in section 1 of the National Environmental Management Act.[56] It is therefore clear that NEMA will, as a general rule and

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renewable and non-renewable natural resources such as air, water, land and all forms of life; the social, political, cultural, economic and working conditions that affect the nature of an individual or community; and natural and man-made spatial surroundings, including urban and rural landscapes and ecosystems and those qualities that contribute to their value'. In the White Paper 9, the word 'environment' refers to 'the biosphere in which people and other organisms live. It consists of renewable and non-renewable natural resources such as air, water (fresh and marine), land and all forms of life; natural ecosystems and habitats; and ecosystems, habitats and spatial surroundings modified or constructed by people, including urbanised areas, agricultural and rural landscapes, places of cultural significance and the qualities that contribute to their value'. It is also stated that 'people are part of the environment and are at the centre of concerns for its sustainability'. It appears as if people were not included under the first description provided in Green Paper, yet were included as 'all forms of life', whereas people were specifically included in the White Paper. See the conclusion in par 2.4 where criticism is levelled against the inclusion of people in terms of a broad definition, as the injury of a person would then be included as harm or damage to the environment.

[55] NEMA s 1 item 11; see also *Verulam Fuel Distributors CC v Truck and General Insurance Co Ltd and another* 2005 1 SA 70 (W) 71, 73 where reference is made to 'pollution and ecological damage'.

[56] See, for example, the recent National Environmental Management: Air Quality Act as examined in par 2.2.3.10, and The Mineral and Petroleum Resources Act as examined in par 2.2.3.9 below.

unless an express alternative description is required and provided, provide the default or overall umbrella definition for all subsequent legislation proposed or enacted in terms of NEMA.

2.2.3.4 Environment Conservation Act[57]

2.2.3.4.1 Definition in the ECA

This Act preceded NEMA and was the first in South Africa that attempted to define the term 'environment'. It is defined as meaning 'the aggregate of surrounding objects, conditions and influences that influence the life and habits of man or any other organism or collection of organisms'.[58] It is important to note that this definition was not replaced or substituted by the subsequent definition in NEMA.

2.2.3.4.2 Extended scope of the ECA

The purpose of the ECA is 'to promote the preservation of ecological processes, natural systems, natural beauty or species of indigenous wildlife or the preservation of biotic diversity in general'.[59] This serves as an extension of the definition provided for in the term 'environment', and extends the basic concept to include an organism (therefore including man) as well.

Under the preamble to the General Policy enacted in terms of the ECA,[60] every inhabitant of the Republic of South Africa has the right to live, work and relax in a safe, productive, healthy and aesthetically and culturally acceptable environment and therefore also has a personal responsibility to respect the same right of his fellow man.[61]

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[57] Act 73 of 1989 (hereinafter referred to as 'the ECA').
[58] The ECA s 1 item 13.
[59] The ECA Part III s 16(1)(a).
[60] Enacted in accordance with s 2(1) of the ECA in GN 51 of the *Government Gazette* 15428 of 21 January 1994.
[61] Bullet 1 of the Preamble.

The preamble further provides that every generation also has the duty to act as a trustee of its natural environment and cultural heritage in the interest of succeeding generations.[62] In addition, the preamble provides that the State, every person and every legal entity has a responsibility to consider all activities that may have an influence on the environment duly and to take all reasonable steps to promote the protection, maintenance and improvement of both the natural and the human living environment.[63]

Irrespective of the formal definitions found in the ECA, various other terms were used in the preamble, such as 'natural environment', 'cultural heritage' and 'human living environment'. The broad description of the latter would include the spatial or built environment and all other environments included if the extensive approach is followed. In the Policy itself reference is also made to the urban environment.[64] If all provisions of the ECA together with its Regulations and the General Policy are read together, it becomes clear that a very broad and extensive approach is followed with respect to what the 'environment' for purposes of this Act entails.

In terms of the ECA a certain area may also be declared as a 'protected natural environment'.[65] The fact that the environment can specifically be classified as a protected natural environment in section 16(1) leads one to the conclusion that the environment in general then, in terms of the ECA, also includes man-made buildings and other structures above and beyond nature[66] as we know it.[67]

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[62] Bullet 2 of the Preamble.
[63] Bullet 4 of the Preamble.
[64] Under the heading 'The Urban Environment'.
[65] The ECA s 16(1); in s 1 item 24 the term 'protected natural environment' is not defined but reference is merely made of s 16(1) regarding the declaration of an area as such; see also s 44(2) of the ECA as well as reg 2.2 of the regulations issued in terms of the ECA.
[66] See the reference to the definitions and descriptions of 'nature' and the 'natural environment' referred to in n 26, n 50 and n 51 above.
[67] See also the Declaration 1 of the United Nations Conference on the Human Environment, Stockholm June 1972 (A/CONF 48/14) that '[b]oth aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights – even the right to life itself'.

As stated, the earlier version of the definition contained in the ECA has not been repealed and replaced by the later definition provided in the NEMA.[68] Two distinct definitions therefore pertain to a single term as far as the scope and focus of the two statutes are concerned.[69] Whereas the definition in NEMA is more often used as the default definition,[70] some statutes such as the Development Facilitation Act below refer to the ECA definition as the default definition.[71]

2.2.3.5 Development Facilitation Act[72]

'Environment' is merely defined 'as described in section 1 of the ECA'.[73]

2.2.3.6 Genetically Modified Organisms Act[74]

'Environment' in this Act is very broadly defined as 'the aggregate of surrounding objects, conditions and influences that influence the life and habits of man or any other organism or organisms'.[75] Upon inspection it is clearly an abbreviated form of the definition as found in the ECA above.

One can argue that due to the unknown new risks posed by the effects of genetic engineering, the scope of the environment that is potentially at risk has to be as extensive as possible, rather than restricted by statute, and that this definition serves this purpose. Because of the great uncertainties that exist worldwide regarding the extent and effect of genetic manipulation, this has become one of the most rapidly developing areas in law, and statutory control will have to be maintained and implemented to keep track with developments.

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[68] Par 2.2.3.3 in the text above.
[69] See in this regard Glazewski 9.
[70] For example, in The National Environmental Management: Air Quality Act as examined in par 2.2.3.10 below.
[71] See par 2.2.3.5 below.
[72] Act 67 of 1995.
[73] S 1 item 8.
[74] Act 15 of 1997.
[75] S 1(x).

2.2.3.7 Marine Pollution (Control and Civil Liability) Act[76]

It is interesting to note that 'environment', 'marine environment' and 'pollution' are not defined in this Act, even though the words are used in the paragraph on the objects of the Act. The objects of the Act are to provide for the protection of the marine environment from pollution by oil and other harmful substances, and to provide for the prevention of and to combat such pollution.[77]

2.2.3.8 Maritime Zones Act[78]

For purposes of this thesis it is important to discuss the extent of the South African environment as well. Obviously the land within our physical borders fall within the South African environment and is therefore subject to the national legislation discussed in this chapter. Difficulties arise with the determination of the extent of the South African environment as far as the sea and other inland waters are concerned. It is therefore necessary to conduct a brief examination of statutes that determine the extent of our territorial waters.

In this Act only the concept of 'internal waters' is defined as 'all waters landward of the baseline, and all harbours'.[79] The baseline is defined as 'the low-water line, as modified by straight lines adjoining certain grouped co-ordinates described in the Schedule to the Act'.[80] The low-water line is then defined as 'the intersection of the low-water tidal plain with the land and includes the low-water line on a low-tide elevation'.[81] Low-tide elevation is defined as 'a naturally formed area which is surrounded by water and which is above water at low-tide, but submerged at high tide and situated within a

[76] Act 6 of 1981.
[77] The Preamble to the Act.
[78] Act 15 of 1994.
[79] S 3(1).
[80] S 2.
[81] S 1 item 5.

distance of not more than 12 nautical miles from the low-water line of the mainland or of an island'.[82]

The territorial waters of the Republic of South Africa are described in section 4 as 'the sea within a distance of 12 nautical miles from the baselines'. In terms of the Act the common and any other law in force applies to both inland and territorial waters.[83]

The powers of government have been extended in terms of this statute to areas beyond the territorial waters to an area known as the contiguous zone.[84] The contiguous zone covers the area at sea 24 nautical miles from the baselines.[85] Even though it is strictly speaking beyond the borders of the Republic, the Republic has the right to enforce any sanitary law[86]and to punish any contravention thereof.[87]

2.2.3.9 Mineral and Petroleum Resources Development Act[88]

The 'environment' is described merely 'as defined in section 1 of the NEMA'.[89]

2.2.3.10 National Environmental Management: Air Quality Act[90]

In this Act the term 'environment' enjoys the meaning assigned to it in the definition found in the NEMA.[91]

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[82] S 1 item 3.
[83] S 3(2), s 4(2).
[84] S 4.
[85] S 5(1).
[86] As well as any customs, emigration and immigration laws.
[87] S 5(2).
[88] Act 28 of 2002.
[89] S 1 item 13.
[90] Act 39 of 2004.
[91] S 1, see also par 2.2.3.3.

2.2.3.11 National Forests Act[92]

The term 'ecosystem' is mentioned in a variety of other statutes. This term is specifically defined in the National Forests Act as 'a system made up of a group of living organisms, the relationship between them and their physical environment'.[93] The environment is not specifically defined in this Act.

2.2.3.12 National Heritage Resources Act[94]

It should be mentioned that the definitions of the 'environment' found in other statutes[95] are broad enough also, upon interpretation, to include our cultural resources as part of the comprehensive definition of the 'environment' that they provide.[96] For this reason, and also because it is classified as an environmental statute, a brief examination of this Act is required.

This Act only contains a definition of 'heritage resource'[97] that briefly describes such a resource as any place or object of cultural significance. This is then defined as 'aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance'.[98]

'Living heritage' is also defined in the Act as 'the intangible aspects of inherited culture, and may include cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to *nature*, society and social relationships'.[99] 'Nature' is therefore included specifically in the description.

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[92] Act 84 of 1998.
[93] S 2 item 9 of chap 1 titled 'Introductory Provisions'.
[94] Act 25 of 1999.
[95] Found in both NEMA par 2.2.3.3, and the ECA in par 2.2.3.4 above.
[96] See Henderson 2-371 on this point. Although these resources include aspects of the natural environment they fall under the administration of the Department of Arts and Culture and not under the Department of Environmental Affairs and Tourism as the other statutes do.
[97] S 1 item 16.
[98] S 1 item 6.
[99] S 1 item 21.

'Object' also refers to environmental aspects and is defined as 'any movable property of cultural significance which may be protected in terms of the provisions of this Act, including any archaeological artefact, palaeontological and rare geological specimens, meteorites and other objects mentioned in section 3'.[100] Once again aspects of nature and the environment are included in this description.

2.2.3.13 Wreck and Salvage Act[101]

Part I of the Schedule to the Act contains the International Convention on Salvage 1989 to which South Africa is a party by agreement. In Article I 'damage to the environment' is defined as meaning 'substantial physical damage to human health or to marine life or resources in coastal or inland waters or areas adjacent thereto, caused by pollution, contamination, fire, explosion or similar major incidents'.[102]

2.2.4 Related Concepts

2.2.4.1 'Ecology'

The term 'ecology' is often used as a synonym for the 'natural environment',[103] and can be defined as 'that branch of biology which deals with the relations of living organisms to their surroundings, their habits and modes of life';[104] 'the distribution and abundance of living organisms and how

[100] S 1 item 29; s 3 contains a long list of aspects that form part of the national estate, including but not limited to for example places, building, structures, equipment, graves, burial grounds, as well as movable objects such as books, films, etc.
[101] Act 94 of 1996.
[102] Art 1 par (d).
[103] Par (a) of the Preamble of the National Environmental Management: Air Quality Act discussed in par 2.2.3.10 below, applies the term 'ecological degradation' as an alternative for 'pollution'; see also *Verulam Fuel Distributors CC v Truck and General Insurance Co Ltd and another* 2005 1 SA 70 (W), where reference is made to 'pollution *and* ecological damage' 71, 73. In order to cover all possibilities, s 38 of the Minerals and Petroleum Resources Development Act as discussed in par 3.4.4.8 of the text below includes the broadest possible reference namely 'environmental damage, pollution or ecological degradation'; see also the use of this term by Bowman M in Bowman M & Boyle A *Environmental Damage in International and Comparative Law* (2005) chap 4.
[104] *The Concise Oxford English Dictionary* (1991) 494.

the distribution and their abundance are affected by the interactions between the organisms and their environment'.[105] This definition therefore includes all living organisms. It was coined in 1866 by biologist Ernst Haeckel when he defined ecology as 'the comprehensive science of the relationship of the organism to the environment'.[106] 'Ecology' is also described as the science of survival.[107] The term 'ecology' must be mentioned as it also appears in the Constitution, although no specific definition is provided.[108] This term is not specifically defined in any of the national environmental statutes.

2.2.4.2 'Natural resources'

The term 'natural resources' is often used to refer to the environment in general, or at least to the 'natural environment' as one of its components.[109] In the Conservation of Agricultural Resources Act,[110] the term 'natural agricultural resources' includes 'the soil, the water sources and the vegetation, excluding weeds and invader plants'. The examination as to whether 'natural resource damage' (also known as 'NRD') resorts under 'property damage' for purpose of insurance claims is extensively dealt with in chapter 6 below.[111]

2.2.5 Other Descriptions

2.2.5.1 General introduction

Above and beyond the extensive dictionary and statutory definitions discussed above, many authors have tried to define both the environment and what pollution with regards to the environment entails. In addition to the

[105] http://www.wikipedia.org/wiki/Ecological (last accessed 11 February 2008).
[106] http://www.mblwhoilibrary.org/heackel/bio.html (last accessed on 12 February 2008).
[107] As put by Rabie MA "The need for adequate environmental law" September 1971 *De Rebus Procuratoriis* 361.
[108] See also the discussion in par 2.2.3.2 above.
[109] See the CERCLA definition in par 2.2.5.3 and its reference in n 122 below.
[110] Act 43 of 1983.
[111] See chap 6 par 6.6.2.3 and 6.6.2.5 below.

discussion in the introduction to this chapter,[112] the more extensive views of some authoritative South African authors are considered below.

2.2.5.2 Views of South African authors

According to the statement made by Henderson in his introductory note to the section dealing with cultural resources, because of the definitions of the environment provided by NEMA and the ECA, even cultural resources fall within the ambit of environmental law.[113] Under the general international principle of sustainable development a nation's natural environment as well as its' cultural heritage have to be protected.[114]

Kidd concedes that it seems as if the definitions provided nationally and internationally do not bring us closer to a meaning that elucidates the exact scope of environmental law, as some are open-ended, whereas others that are more specific, are still wide.[115]

Bray states that '[a]n all-embracing concept of the environment is unacceptable as a workable basis for determining the scope and content of environmental law because it would tend to make all law environmental law'. She warns that making it too narrow would be restrictive as it could exclude some aspects of the environment that one would prefer to be included. She proposes that it suffices to say that 'environmental law deals primarily with human beings and the environment and the legal relationship (balance or harmony) that exists, or should exist, between them'.[116]

[112] Par 2.1 above.
[113] Henderson 2-371.
[114] See the discussion on The National Heritage Resources Act in par 2.2.3.12 above; see also Bray (2003) 123 who states that South Africa has been among the leading countries to enshrine a right to the environment in its bill of rights and to incorporate the concept of sustainable development in its Constitution as well.
[115] Kidd 2.
[116] Bray (2003) 121.

Glazewski holds the opinion that there cannot be one single obvious definition of the environment.[117] He therefore does not offer his own attempt at defining the term, and only refers to the statutory definitions found in the NEMA and the ECA.[118]

In the words of Fuggle and Rabie 'the term environment means various things to various people'.[119] According to these authors the term 'environment' can be interpreted in so many ways that it needs to be qualified so as to focus attention on its particular relevance in a specific sphere. Internationally a limited approach and an extensive approach exists.

In terms of an extensive approach the term 'environment' can therefore be divided into the following categories, namely (a) the natural environment, that encompasses the natural world in its pure state, thus all natural resources including all the inhabitants and contents of nature such as plant and animal life, mountains, rivers, soil, natural rock formations, etc;[120] (b) the spatial environment, that refers to natural areas such as regions, provinces, or countries, specific landscapes such as mountains, wetlands and forests, and the built or man-made environment, that encompasses the spatial structures erected by man; (c) the social, sociological or cultural environment within which human beings find themselves, including the political, cultural-historic and work environment; and (d) the economic environment.[121]

'Environmental problems' should then, according to Fuggle and Rabie, refer to impaired interrelationships between human beings and their physical surroundings.[122] All animals, plants and other physical aspects such as man-

[117] Glazewski 9.
[118] Par 2.2.3.3 and 2.2.3.4 above.
[119] Fuggle & Rabie 4.
[120] Also in par 2.2.4.2 on the term 'nature' and 'natural resources'; and n 26, n 50 and n 51 above.
[121] See Fuggle & Rabie 84 *et seq* for this division; Larsson 123 acknowledges three distinct groupings, namely, the natural, the man-made and the human environment which includes the economic environment. The latter is not included in this study.
[122] This view is held by Fuggle & Rabie 84.

made structures, land, water, air and so forth are covered under 'physical surroundings'. This approach is preferred.

One should note that irrespective of all these detailed descriptions, for the purpose of this study on the liability for causing environmental or ecological damage, contamination or destruction, and the insurability thereof, the environment has to be recognized as a relational concept regarding the interrelationship of human beings with their surroundings, and not as a concept that excludes human beings entirely from the environment.[123] In terms of this extensive approach almost everything that in some or other way influences the life of human beings, is covered and forms part of the 'environment' as defined. This also complicates matters regarding the scope of environmental law, as all fields of law technically to some extent then fall under environmental law.

Three different approaches can be identified. In terms of a holistic approach, emphasis is placed on the concept of the environment as a whole, and not on its individual components. In terms of a limited approach on the other hand, the 'environment' consists only of nature, thus the natural environment. This excludes the anthropogenic[124] environment consisting of the social, sociological or cultural, economic and spatial environment as discussed above.[125] In terms of an extensive approach, the 'environment' appears to be the 'human environment', and therefore includes all relevant factors that determine human existence, such as the natural, spatial, sociological, economic, cultural-historic, built, political and work environments.

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[123] As endorsed by Fuggle & Rabie 86; see also s 4(1) of The (Australian) Commonwealth Environment Protection (Impact of Proposals) Act of 1974 that stipulates that 'the environment includes all aspects of the surroundings of man, whether affecting him or in his social groupings'.

[124] *The Concise Oxford Dictionary* 56 defines the term 'anthropogenic' as an adjective meaning: '(chiefly in pollution) originating in human activity'.

[125] See also Fuggle & Rabie 86; for a discussion of what the 'natural environment' entails, see par 2.2.4.2 of the text above; also n 26 above for a description of 'nature'.

2.2.5.3 Examples of descriptions from foreign jurisdictions

In addition to the English and Australian definitions quoted above,[126] a few other examples may be examined. The definition of 'natural resources' found in the United States in CERCLA[127] simply reads as follows: 'land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources 'that belong to, are managed by or under the control of a governmental authority'.[128]

The description for 'environmental damage' proposed for the regulations to be issued in accordance with the EU Environmental Liability Directive[129] includes (a) damage to protected species, natural habitat or sites of scientific interest caused by a 'designated activity'; (b) damage to surface water and groundwater; and (c) contamination of land by substances, preparations, organisms or micro organisms.[130] These must result in a significant risk of adverse effect on human health.[131] The description is very broad and the purpose is not to provide a specific statutory definition.

A compact and effective definition can be found in the New Zealand Environment Act of 1986, that the 'environment' includes '(a) ecosystems and their constituent parts; (b) all natural and physical resources; and (c) the social, economic, aesthetic and cultural conditions which affect the environment of which are affected by changes to the environment'.[132] The

[126] Par 2.1 n 4 that refers to some Australian and English statutory definitions.
[127] United States Comprehensive Environmental Response, Compensation and Liability Act of 1980 (hereinafter referred to as 'CERCLA').
[128] § 9601(16); see the comprehensive discussion of this statute in chap 7 par 7.6.2.2 below; see also in general Fogleman V *Environmental Liabilities and Insurance in England and the United States* Part A (2005) 303 for an examination of the CERCLA definition and its application in the extensive body of case law in the US.
[129] Directive 2004/35 CE [2004] O.J. L143/56.
[130] Bell S & McGillivray D *Environmental Law* 6th ed (2006) 393 are of the opinion that the narrow scope of the description of 'environmental damage' under the Directive is problematic, but that it does offer the benefit of providing improved protection for the 'unowned environment'.
[131] Art.2(1) describes 'environmental damage' as including (a) damage to protected species;(b) water damage;(c) land damage; 'damage' is in general is defined as 'a measurable adverse change in the natural resource or measurable impairment of a natural resource service which may occur directly or indirectly'.
[132] See Larsson 122 n 5 where this definition is considered.

environment can also be said to cover 'all those elements which in their complex inter-relationships form the framework, setting and living conditions for mankind, by their very existence and by virtue of their impact'.[133]

Sands prefers to follow a scientific approach by dividing environmental issues into the following 'compartments', namely (a) atmosphere and atmospheric depositions; (b) soils and sediments; (c) water quality; (d) biology; and (e) humans, as it does not have a generally accepted usage as a term of art in international law. Recent international agreements have consistently preferred to identify the various media included in the term, rather than to provide a single general description.[134]

2.3 DEFINING 'POLLUTION' AND RELATED CONCEPTS

2.3.1 General

Most causes of damage or loss caused to the environment are well known and are in a broad sense labelled as pollution, for example, where air, water and soil are contaminated by chemicals and so forth. These causes are currently receiving their fair share of attention worldwide in legislation and case law, especially relating to their interpretation in insurance policies.[135] It is important also to emphasise the 'new' risks to the environment that are posed by, for example, the detrimental effects of electro-magnetic fields,[136] toxic

[133] EEC OJ C 115, dated May 1976 2.
[134] According to Sands Ph *Principles of International Environmental Law* (2003) 16.
[135] Rodler DN "Carbon Monoxide ruled to be a pollutant" 2003 (27 January) *The Legal Intelligencer* 1 refers to the case of *Matcon Diamond Inc v Penn National Insurance Co* Co No 186 WDA (2002) PA Super (January 2003), where carbon monoxide was found to be a pollutant and to fall within the ambit of the pollution exclusion clause in an insurance policy. This was found to be the case as the court held that a 'contaminant' should be defined as being something that 'renders another thing impure and unsuitable for breathing', which definition was provided in the well-known case of *Mount Lebanon v Reliance Insurance* (2001) PA Super 177.
[136] Also referred to as 'electro smog'.

mold growth and the potential risks posed by the genetic modification of organisms, where the damage caused cannot simply be classified as affecting the classic mediums of air, water and land.[137] A general discussion of the generic term 'pollution', as well as its synonyms or related concepts such as 'waste' and 'litter' follows. Specific forms of pollution such as oil pollution, marine pollution and the potential damage caused by nuclear risks fall outside the scope of this study and are therefore not extensively addressed in this thesis.

2.3.2 Dictionaries

2.3.2.1 The Concise Oxford Dictionary[138]

'Pollution' is not specifically defined, yet 'pollute' is defined as 'to contaminate (water, the air etc.) with harmful or poisonous substances, to corrupt'.[139]

This definition only includes contamination through harmful or poisonous substances, and does not provide for general littering or the discharge of organic waste for example, that is merely unsightly yet does not cause direct harm and is not generally poisonous. The definition also does not link pollution to the environment, yet refers in general only to mediums that make up the environment as examples of things that can be polluted.

Reference can be made to the term 'anthropogenic' in this dictionary, as the term 'environment' is defined as an adjective meaning '(chiefly in pollution) originating in human activity'.[140] For purposes of this thesis 'pollution' and subsequent liability incurred for polluting the environment therefore requires the pollution to be caused by human activity in some or other form, and not by natural disasters or catastrophes.

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[137] See par 2.1 n 3 above.
[138] Par 2.2.2.1 n 22 above.
[139] *The Concise Oxford Dictionary* 1108.
[140] Above 56.

2.3.2.2 Black's Law Dictionary[141]

'Pollution' is not defined, but the word 'pollute' is said to be 'to corrupt or defile; especially to contaminate soil, air or water with noxious substances'.[142] This definition is very similar to the one provided by The Concise Oxford Dictionary.[143] The effect of noxious substances as a pollutant has been included. The term 'noxious' is defined as 'harmful, poisonous or very unpleasant'.[144]

2.3.2.3 Dictionary of Legal Words and Phrases[145]

The term 'environment' does not appear in this dictionary, yet the term 'pollution' is referenced but the definition or description provided refers only to case law[146] and a reference to a journal article by Van Niekerk.[147] His view is that 'environmental pollution must be seen for what in effect it has become, that of a basically unlawful act'. This offers no true definition of pollution itself. He refers to various synonyms such as 'insults to the environment' and 'environmental blight' in his publication, and describes 'environmental harm' merely as 'including harm of an acoustic and aesthetic kind'.[148]

In the case of *S v Verlander*[149] referred to above, a criminal charge was brought against a farmer who stored grass in an unused dam. During an unexpected and rare flood, the grass was swept down-river and caused a nuisance to other landowners. In his decision on whether the accused contravened the old Water Act,[150] Beadle CJ examined the definition of

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[141] N 27 above.
[142] *Black's Law Dictionary* 1180.
[143] Par 2.3.2.1 above.
[144] *The Concise Oxford Dictionary* 975 explains that the word is derived from the Latin term *noxa* that means 'harm'.
[145] Claassen *Dictionary of Legal Words and Phrases* Service (J-P).
[146] *Dictionary of Legal Words and Phrases* P-64; *S v Verlander* 1975 2 SA 376 (RA).
[147] See Van Niekerk "The Ecological Norm in Law or the Jurisprudence of the Fight against Pollution" 1975 (92) *SALJ* 78.
[148] Van Niekerk 82–85.
[149] *S v Verlander* 378.
[150] The Water Act 54 of 1956, chap 268R, s 135A read with s 135DA.

'pollution' as provided for in the old Water Act[151] and came to the conclusion that not all instances of nuisance are to be seen as pollution for purposes of criminal liability, yet he did not address its effect on civil liability.[152]

2.3.2.4 http://www.wikipedia.com

It is again interesting to note the definition provided in this layman's electronic dictionary. It describes 'pollution' as 'the contamination of the environment by harmful substances, and the release of chemical, physical, biological or radioactive contaminants to the environment'.[153] Principal forms of pollution include air pollution,[154] radioactive contamination,[155] noise pollution,[156] light pollution,[157] and even visual pollution or the pollution of aesthetics.[158]

2.3.3 National Statutory Definitions

2.3.3.1 General introduction

Not many statutes use the general term 'pollution', and many prefer to use other alternatives in the context of damage or loss caused to the environment by pollution. The term 'waste' is also often used in the context of pollution and is used in various statutes as discussed below.[159] Some statutes therefore define the term 'pollution', others define only 'waste' and some refer to other

[151] S 2 of the Act defines pollution as 'pollution, in relation to water, including private water, means (a) such contamination or other alteration of the physical, chemical or biological properties of the water, including change of temperature, taste, colour, turbidity or odour; or (b) such discharge of any liquid, gaseous, solid or other substance into the water; as will or is likely to create a nuisance or to render such water harmful, detrimental or injurious'.
[152] *S v Verlander* 378.
[153] http://en.wikipedia.org/wiki/Pollution (last accessed on 21 January 2006).
[154] Above; and includes 'the release of chemicals and particulates into the atmosphere'.
[155] N 137 radioactive contamination was only added later, in the wake of the 20th century discoveries in astrophysics, and refers specifically to alpha emitters and actinides in the environment.
[156] N 145 'which encompasses roadway noise, aircraft noise, industrial noise as well as high-intensity sonar'.
[157] N 145 'includes light trespass, over-illumination and astronomical interference'.
[158] N 145 'which can refer to the presence of overhead power lines, motorway billboards, scarred landforms (as from strip mining), open storage of junk or municipal solid waste.
[159] According to Kidd 127 the concept 'pollution' incorporates the concept 'waste', yet that it should be noted that the two terms are not synonymous.

related terms such as 'litter' and 'leaching'.[160] These definitions are for practical reasons of unity discussed together in each of the statutes below, and not under the heading of 'related concepts',[161] which will refer only to damaging polluting events.

2.3.3.2 The Constitution of the Republic of South Africa 1996

The term 'pollution' also appears in the Constitution in section 24,[162] which reads as follows: 'Everyone has the right to have the environment protected for the benefit of present and future generations through reasonable legislative and other measures that prevent *pollution and ecological degradation*.'[163]

The Constitution lists the functional areas on Environment and Pollution Control, as well as Nature and Soil Conservation and Health Services as concurrent national and provincial legislative competencies.[164] Matters relating to pollution that are provided for on a local government level include air pollution, water, sanitation services, wastewater and sewage disposal systems, and pontoons, ferries, jetties, piers and harbours.[165] Local matters include cleansing, control of public nuisances, noise pollution, refuse removal, refuse dumps and solid waste disposal.[166]

[160] Par 2.3.3 below.
[161] See par 2.3.4 below.
[162] See also pars 2.2.3.2 above and chap 3 par 3.2.2 on constitutional aspects.
[163] Own emphasis.
[164] Sched 4 Part A.
[165] Sched 4 Part B s 155(6)(a), s 155(7).
[166] Sched 5 Part B; see also paragraph 2.2.3.2.2 above on the difficulty on achieving full integration of environmental laws under the Constitution, which results in an extensive variety of terminology referring to pollution and to environmental damage. These cannot all be examined in greater detail, yet is addressed under the more general terminology as discussed below where applicable.

2.3.3.3 National Environmental Management Act[167]

'Pollution' is defined as 'any change in the environment caused by (i) substances; (ii) radio-active or other waves; or (iii) noise, odours, dust or heat emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in or by any person or an organ of state, whether that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future'.[168]

2.3.3.4 National Environmental Management: Air Quality Act[169]

In this Act both the terms 'environment' and 'pollution' enjoy the meanings assigned to them in the definitions found in the NEMA.[170]

In the Act 'air pollution' is specifically defined as 'any change in the composition of the air caused by smoke, soot, dust (including fly ash), cinders, solid particles of any kind, gases, fumes, aerosols and odorous substances'.[171] This description is especially relevant for purposes of the discussion of pollution exclusion clauses in chapter 6 below.[172]

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[167] Act 107 of 1998.
[168] S 1 item 24.
[169] Act 39 of 2004.
[170] NEMA s 1; see also par 2.3.3.3 above; see also for relevant case law *Verulam Fuel Distributors CC v Truck and General Insurance Co Ltd and another* 2005 1 SA 70 (W) 71, 73 where reference is made to 'pollution and ecological damage' that was caused by the appellant.
[171] S 1 item 1.
[172] See chap 6 par 6.5.3 on the scope and wording of the absolute pollution exclusion clauses.

2.3.3.5 Environment Conservation Act[173]

2.3.3.5.1 General Environmental Policy

The term 'pollution' is not specifically defined in the ECA, yet in section 2, the ECA provides that a general environmental policy needs to be drawn up, in order to protect the environment against 'disturbance, deterioration, defacement, poisoning, pollution or destruction as a result of man-made structures, installations, processes or products of human activities'.[174] The General Policy that was enacted in terms of the ECA refers expressly to 'pollution control',[175] yet the term pollution is not defined anywhere in the ECA, its regulations or in the General Policy itself.

In Part IV in section 19 regarding the prohibition of littering, 'littering' is described as 'discard, dump or leave any litter on any land or water surface, street, road or site in or on any place to which the public have access'.[176] 'Litter' is defined as 'any object or matter discarded or left behind by the person in whose possession or control it was'.[177]

2.3.3.5.2 Descriptions in the ECA

Part V of the ECA covers activities that have, or may have, a 'detrimental effect' on the environment, in other words pollute the environment. Some regulations under the ECA[178] also cover activities which may have substantial detrimental effect on the environment. The 'detrimental effect' could be seen

[173] Act 73 of 1989.
[174] S 2.
[175] As enacted in GN 51 *Government Gazette* 15428 of 21 January 1994 in terms of s 2(1) of the ECA.
[176] S 19(1).
[177] S 1 item 17.
[178] RGN 1183/18261/5 of 5 September 1997, published In terms of s 2(1) of the ECA.

as a synonym for pollution as it means that the environment is in some way defiled or damaged, in other words polluted.[179]

The term 'waste' is more broadly described, and is seen as 'any material,[180] solid, liquid or gaseous that is discharged or emitted, irrespective of control, treatment, reduction or compositional change or lack thereof, that is no longer used for its original purpose and that is likely to be stored or accumulated for three months or longer irrespective of the intentions on the person who stores such waste, that is sent off-site to be recycled, reused, regenerated, alienated, treated or disposed of, or from which such processes will be extracted'.[181]

2.3.3.5.3 Description in the Regulations to the ECA

Regulations enacted under section 21 of the ECA identify a long list of activities that have the potential of causing a substantial detrimental effect on the environment.[182]

These actions can briefly be summarised as work done for construction, upgrading or erection,[183] change of land use,[184] concentration of living organisms in confined spaces for the purpose of commercial production,[185] intensive husbandry or importation of organisms,[186] release of any organism from its natural area or distribution,[187] genetic modification of an organism,[188]

[179] This viewpoint is reiterated by Van Niekerk 85; *MEC: Department of Agriculture, Conservation and the Environment Dr ST Cornelius v HTF Developers (Pty) Ltd* CCT 32/07 [2007] ZACC 25 par 4.
[180] Where previous definitions have referred to 'matter', this definition, according to the *Concise Oxford Dictionary* 731 refers to 'material'. The latter means 'the matter from which a thing is made; the elements or constituent parts of a substance'.
[181] S 4(12).
[182] As enacted in GN R1182 *Government Gazette* 18261 of 5 September 1997.
[183] Sched 1 reg1.
[184] Sched 1 reg 2.
[185] Sched 1 reg 3.
[186] Sched 1 reg 4.
[187] Sched 1 reg 5.
[188] Sched 1 reg 6.

reclaiming land,[189] disposal and handling of waste,[190] certain scheduled processes,[191] and the cultivation or use of virgin ground.[192]

In general all of these activities have the potential of causing pollution or detriment to the environment, and are therefore actions that have to be prevented, limited or prohibited. Regulations have also been enacted regarding the control of the activities as listed.[193]

This leads one to the conclusion that pollution is not classified according to the status of the environment or the conditions of the environment, but rather classified in the ECA in terms of actions that could cause the environment to be detrimentally affected and therefore polluted.

There are also regulations in terms of section 25 of the ECA regarding noise, vibration and shock.[194] One could ask whether the latter also have the potential to 'pollute' the environment. Where noise and vibrations cause the loss of amenities of one's property or discomfort during the use of property, one may argue that this constitutes harm or loss even though it is not of a physical nature.[195] As the ECA covers conservation of the environment and as noise control is discussed in the ECA, one can conclude that noise pollution, or vibration or shock pollution, is also seen as pollution of the environment.[196]

Regulations enacted in terms of the ECA[197] provide a very broad description of 'waste matter'. The regulations identify waste as 'an undesirable or superfluous by-product, emission, residue or remainder of any process or

[189] Sched 1 reg 7.
[190] Sched 1 reg 8.
[191] Sched 1 reg 9.
[192] Sched 1 reg 10; in Sched 1 reg 11 item 4 'virgin ground' is defined as 'land that has at no time during the preceding 10 years been cultivated'. It remains unclear why the use or cultivation of virgin ground should necessarily have the potential to cause substantial detriment to the environment.
[193] Regulations regarding activities identified in s 21(1) of the ECA as enacted in GN R 1183 *Government Gazette* 18261 of 5 September 1997.
[194] As enacted in GN R154 *Government Gazette* 13717 of 10 January 1992.
[195] See chap 6 par 6.6.2.3.2 below.
[196] See also the definition provided in par 2.3.3.5 in the text above

activity, any matter,[198] either gaseous, liquid or solid or any combination thereof, originating from any residential, commercial or industrial area, which is discarded by a person; accumulated or stored to be discarded irrespective of prior treatment of such waste or not; building rubble used for landfill or levelling of land; or is stored for purpose of recycling, re-using or extracting a usable product from such matter'.

The regulations exclude certain categories of matter from this description, provided they are produced in terms of specified legislation. These exclusions include discarded radio-active substances,[199] any minerals, tailings, waste rock or slimes produced by or due to mining activities,[200] and ash produced or resulting from the generation of electricity.[201]

Waste is further divided under the directions issued in terms of the ECA regarding the control and management of general communal and general small waste disposal sites[202] as general waste, landfill and leachate.[203]

'General waste' is described as 'waste that does not pose an immediate threat to human life or the environment'.[204] This includes household waste, builder's rubble, garden waste, dry industrial and commercial waste. This type of waste has the potential of producing a polluting leachate, or could create various nuisances such as odour, fly or other nuisances.

'Land fill' means the land body created by the disposal of waste either to fill excavations or by creating a landform above ground.[205] The recently coined term 'brownfield' deserves a brief explanation and description as it concerns a

[197] As enacted in accordance with s 20 in GN 1986 *Government Gazette* 12703 of 24 August 1990, as amended by GN 292 *Government Gazette* 24938 of 28 February 2003.
[198] 'Matter' is defined in the *Oxford Concise Dictionary* 732 as 'physical substance in general, as distinct from mind and spirit; that which has mass and occupies space'.
[199] In terms of the Nuclear Energy Act 92 of 1982.
[200] In terms of the Mines and Works Act 27 of 1956.
[201] In terms of the Electricity Act 41 of 1987.
[202] In terms of s 20(5)(b), as enacted in GN 91 *Government Gazette* 23053 of 1 February 2002.
[203] See the description as per n 201, and the reference in n 204 below.
[204] Item 7 in the definitions clause found in the relevant Schedule.

very current issue of regulating the process of reclaiming landfills. Landfills are contaminated repositories of wastes, yet they are also referred to as 'brownfields' where they have the potential to be redeveloped for renewable energy development.[206]

'Leachate' refers to 'an aqueous solution, containing final and intermediate products of decomposition, various solutes and waste residues that has a high pollution potential resulting from the percolation of water though decomposing waste'.[207]

The latter is of specific importance for this thesis as gradual pollution, discussed in chapter 6[208] is usually caused by the leaching[209] of waste into the environment. This type of pollution creates a situation called 'long-tail liability' that is difficult to insure against and causes enormous problems regarding the institution of claims against polluters.

2.3.3.5.4 ECA Draft Policy on Hazardous Waste Management

Issues on hazardous waste are dealt with in terms of the Draft Policy on Hazardous Waste Management to be enacted in terms of the ECA.[210] In the introduction to the Schedule the main aim of hazardous waste management is stated as the protection of human health and safety as well as the environment.[211]

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[205] Above item 8.
[206] Ferrey S "Converting brownfield environmental negatives into energy positives" 2007 (34) *Boston College Environmental Affairs Law Review* 417 418. It is important to note that when acquiring a brownfield property there is an unavoidable transfer of existing environmental liabilities, that obviously play a role in the future insurability of the site.
[207] Above item 10.
[208] See chap 6 par 6.3 of this thesis on specific issues relating to the insurability of gradual pollution damage.
[209] According to *The Oxford Concise Dictionary* 671, 'leaching' means 'to make (a liquid) percolate through some material; subject (bark, ore, ash or soil) to the action of percolating fluid'.
[210] As enacted in GN 1064 *Government Gazette* 15987 of 30 September 1994.
[211] Above in par 2.3.3.5; see also Henderson 1-105.

The term ‘hazardous waste’ is not specifically identified and used as the criterion *per se*, but rather the risk factor that is caused by the disposal of the waste. Hazardous waste can be seen as waste that either ‘directly or indirectly threatens human health or the environment due to certain risks, such as explosions, fire, infections, pathogens, parasites or their vectors, chemical instability, reactions or corrosions, acute or chronic toxicity, cancer, mutations, tumours or birth defects, toxicity (once again), or damage to the ecosystems or natural resources, accumulation of biological food chains, persistence in the environment or multiple effects’. This type of waste requires special attention and cannot be stored or released into the environment by adding it to sewage or allowing the creation of leachate. A specific SABS classification system for The Identification and Classification of Dangerous Substances and Goods also applies in the waste industry.[212]

The difference between ‘hazardous’ and ‘dangerous’ in the draft policy and in the SABS classification is not clear. How the Policy and the SABS classification are to be read together remains uncertain. [213] The classification of substances as ‘dangerous’[214] is in fact so broad that it covers most other alternatives that are not identified elsewhere as hazardous. From this definition it becomes clear that, in the attempt to be as comprehensive as possible, literally any result of any type of risk is covered in the Draft Policy.

2.3.3.6 Dumping at Sea Control Act[215]

This Act covers the pollution of the sea by the dumping or depositing of substances as well as the disposal of man-made structures and crafts at sea.[216] In a broad sense this is also pollution, yet the Act does not define ‘pollution’ in general.

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[212] Code 0228/MDG.
[213] The Draft Policy on Hazardous Waste Management in terms of the ECA above, and the SABS classification as discussed.
[214] Class 9 of the relevant SABS classification.
[215] Act 73 of 1980.
[216] Above s 1 item 3.

2.3.3.7 Genetically Modified Organisms Act [217]

The term 'waste' is specifically defined as 'any matter, whether gaseous, liquid or solid or any combination thereof, which is, in the opinion of the person in whose possession or under whose control it is, an undesirable or superfluous by-product, emission, residue or remainder of any process or activity in connection with genetically modified organisms'.[218]

As far as damage to the environment is concerned, two other terms in the Act should be mentioned. The first is the description of 'hazard', which means 'an intrinsic biological, chemical or physical characteristic of a genetically modified organism which could lead to an adverse impact on the environment'.[219] The other term relates to the 'risk' or environmental damage, which means 'the probability of causing or incurring a loss or damage or an adverse impact or misfortune'.[220]

2.3.3.8 Marine Pollution (Control and Civil Liability) Act[221]

Even though the title and the preamble to this Act refer to pollution, the term 'pollution' is not specifically defined in this Act. The definitions section[222] does, however, contain a description of 'hazardous substance', which can be the cause of pollution. A 'hazardous substance' is defined as 'any substance which, if introduced into the sea, is likely to create a hazard to human health, harm living resources and marine life, damage amenities or interfere with other legitimate uses of the sea, including oil and any other substance subject to control by MARPOL 1973/78,[223] and mixtures of such substances and water or any other substances'.[224]

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[217] Act 15 of 1997.
[218] S 1(xxix).
[219] S 1(xiv).
[220] S 1(xxv).
[221] Act 6 of 1981.
[222] Above s 1.
[223] Meaning the International Convention for the Prevention of Pollution from Ships 1973, as amended by the Protocol of 1978, adopted by IMCO, the Inter-Governmental Maritime
Footnote continues on the next page.

2.3.3.9 Marine Pollution (Intervention) Act[225]

Various other conventions that cover marine pollution, by oil or by other substances,[226] are given effect to by this Act,[227] yet the Act itself contains no specific definition of the term 'pollution'. The meanings allocated in these international conventions and protocols would then apply in terms of this Act.

2.3.3.10 Mineral and Petroleum Resources Development Act[228]

The regulations[229] issued in terms of this Act require that any holder of a right or permit must 'avoid the generation and production of pollution, waste and mine residue at source'.[230] Where this cannot be altogether avoided, it must be minimized, re-used or recycled, or disposed of.[231] 'Pollution', 'waste' and 'mine residue' are not specifically defined and must be interpreted in general terms. The regulations also provide for the management of air quality,[232] noise management and control,[233] soil pollution and erosion control,[234] and lastly the disposal of waste material.[235] Under the latter the sources of 'waste material' are described as 'the waste from reduction works, beneficiation plants, coal preparation plants, screening and washing installations and generating stations at mines'.[236] Dumping or impounding of 'rubble, litter, garbage, rubbish or discards of any description, whether solid or liquid', all which

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Consultative Organisation, in London on 17 February 1978, as set out in the Schedule to the Marine Pollution (Prevention of Pollution from Ships) Act 2 of 1986.
[224] N 207 s 1 item 9.
[225] Act 64 of 1987.
[226] International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, done at Brussels on 29 November 1969, as set out in Sched 1 of the Act, and the Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other than Oil, done at London on 2 November 1973, as set out in Sched 2 of the Act.
[227] S 2.
[228] Act 28 of 2002.
[229] As in RGN 527/26275/3, 23 April 2004 *Government Gazette* 26942 of 29 October 2004.
[230] Above reg 63(a).
[231] Reg 63(b) and (c).
[232] Reg 66.
[233] Reg 64.
[234] Reg 70.
[235] Reg 69.

describe other wastes, is prohibited unless it is done at specified sites and in the specified manner.[237]

In regulations relating to the control of soil pollution and erosion,[238] many descriptions of ways in which the environment can be polluted, and relevant regulations that address the problem of pollution, can be found. Examples include 'spillage of hazardous chemicals onto soils or its escape or migration into surrounding soils';[239] 'oils, grease and hydraulic fuels';[240] and 'the acidification, salinisation and mineralization of soils through seepage of polluted water'.[241]

2.3.3.11 National Nuclear Regulator Act[242]

Once again 'pollution' is not specifically defined, yet the term 'nuclear damage' is described as '(a) any injury to or death or any sickness or disease of a person; or (b) other damage, including any damage to or any loss of use of property or damage to the environment'.[243] The 'environment' is also not specifically defined in this statute.

2.3.3.12 National Water Act[244]

In Chapter 1 of the Act, 'pollution' is defined as 'the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it less fit for any beneficial purpose for which it may reasonably be expected to be used; harmful or potentially harmful to the welfare, health or

[236] Reg 69(3).
[237] Reg 69(4).
[238] Reg 70.
[239] Reg 70(3).
[240] Reg 70(4).
[241] Reg 70(6).
[242] Act 47 of 1999.
[243] S 1 item 15.
[244] Act 36 of 1998.

safety to human beings; to any aquatic or non-aquatic organisms; to resource quality or to property'.[245]

'Resource quality' refers to 'the quality of all the aspects of a water resource'.[246] 'Waste' is described as 'any material that causes or is reasonably likely to cause the water resources to be polluted'.[247]

2.3.3.13 Nuclear Energy Act[248]

The Act does not contain a specific definition of 'pollution', yet contains only a definition on 'radioactive waste' that has the potential of causing pollution.[249]

2.3.3.14 Waste Management Bill[250]

Brief reference must be made to the terminology used in this Bill that is expected to be enacted in the near future.

The term 'pollution' enjoys the same meaning as that assigned to it in terms of section 1 of NEMA.[251] The term 'contaminated' is described as 'the presence in or under any land, site, buildings or structures of a substance or organism above the concentration which is normally present in or under that land, which substance directly or indirectly affects or may affect the quality of the soil or the environment adversely'.[252]

The definition for 'waste' has been improved and is much shorter than the definitions provided in the ECA or in the Draft Policy. It provides that 'waste

[245] S 1 item 15; *Verulam Fuel Distributors CC v Truck and General Insurance Co Ltd and another* 71 and 73 where reference is made to 'pollution and ecological damage'.
[246] S 1 item 19; 'water resource' is described as 'includes a watercourse, surface water, estuary or aquifer' in s 1 item 27.
[247] S 1 item 23.
[248] Act 46 of 1999.
[249] Above s 1 item 28 refers to such waste as 'any radioactive material destined to be disposed of as waste material'.
[250] No 1832 of 2007.
[251] S 1(ee).
[252] S 1(f).

includes any substance, whether solid, liquid or gaseous which is (i) discharged, emitted or deposited in the environment in such volume, consistency or manner as to cause an alternation to the environment'.[253]

'Hazardous waste' is described as 'waste that may be, by circumstances of use, quantity, concentration or inherent physical, chemical or toxicological characteristics, have a significant adverse effect on health and the environment'.[254]

2.3.4 Related Concepts

2.3.4.1 General alternatives

Nationally as well as internationally a multitude of terms such as 'environmental damage, harm, contamination or impairment',[255] 'environmentally degrading activity'[256] or an activity that has a 'substantial detrimental or deleterious effect on the environment',[257] 'unacceptable negative impact on the environment',[258] 'insults to the environment and environmental blight',[259] and 'ecological damage or ecological degradation',[260] are often used as synonyms for 'environmental pollution'.

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[253] S 1(rr).

[254] S 1(o); see in contrast par 2.3.3.5.4 for the more extensive statutory description referred to.

[255] See in this regard the terminology used by Shaw 767, Larsson 123, 125; Havenga (1995) 187 n 3; s 38(1)(e) of the Mineral and Petroleum Resources Development Act 28 of 2002; Saylor RN & Cole AM "The Mother of all Battles: the Dispute over Insurance Coverage for Environmental Contamination in the United States" 1993 *Environmental Liability* 29.

[256] Anderson 399 "Transnational Corporations and Environmental Damage: Is Tort Law the Answer?" 2002 (Spring) *Washburn Law Journal* 2.

[257] In the regulations enacted in terms of s 2(1) of the ECA RGN11183/18261/5 (5 September 1997); see also Shaw 765.

[258] S 38(2) of the Mineral and Petroleum Resources Development Act 28 of 2002.

[259] See Van Niekerk 82–85 for the use of this term; The Water Act 54 of 1956 s 2(a).

[260] The Constitution s 24 refers to 'pollution and ecological degradation'; and as found in par (a) of the preamble to the National Environmental Management: Air Quality Act, where 'ecological degradation' is applied as an alternative for 'pollution'; also *Verulam Fuel Distributors CC v Truck and General Insurance Co Ltd and another* 71, 73 where reference is made to 'pollution and ecological damage'; s 38(1)(e) of the Mineral and Petroleum Resources Development Act 28 of 2002; Larsson 146 prefers to refer to 'ecological damage' as specifically damage caused to public natural resources.

Some authors even use the terminology 'environmental problems' that offers the widest possible description.[261] In the case of *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another*,[262] where a diesel spill caused 'pollution, contamination and ecological damage',[263] these terms were not specifically defined. The court found it unnecessary to embark upon a major enquiry of whether 'ecological damage' equates to 'property damage', which was the issue at hand.[264]

2.3.4.2 Statutory alternatives

In terms of the Constitution in section 24 'everyone has the right to have the environment protected for the benefit of present and future generations through reasonable legislative and other measures that: prevents pollution and *ecological degradation*'. [265] It refers to both 'pollution' and 'ecological damage'. Some statutes cover as many alternatives as possible, such as the Mineral and Petroleum Resources Development Act[266] that requires persons not to cause 'unacceptable pollution, ecological degradation or damage to the environment when prospecting'.[267]

2.3.5 Other Descriptions

2.3.5.1 Views of South African authors

Henderson[268] distinguishes various forms of pollution according to the mediums that pollute or mediums through which they pollute. He distinguishes pollution of the atmosphere,[269] pollution through mismanagement of

[261] See the view of Fuggle & Rabie as referred to in par 2.3.5.1 in the text below.
[262] N 51 above.
[263] Par 5.
[264] Par 23; for a detailed discussion on the different types of damage caused by pollution and whether cover is included or excluded, see chap 6 par 6.5 and 6.6 below.
[265] See also par 2.2.3.2.1 of the text above.
[266] Act 28 of 2002; also the discussion in par 2.2.3.9 and 2.3.3.10 in the text above.
[267] S 17(1)(c).
[268] Henderson 5-4 to 5-5.
[269] The National Environmental Management: Air Quality Act 39 of 2004.

hazardous substances,[270] pollution of water resources[271] and noise pollution.[272]

Fuggle and Rabie do not define or explain the term 'pollution' *per se*, yet they discuss the broader concept of 'environmental problems' that are mostly caused by what we understand to be pollution or defilement of the environment through the actions of human beings.[273]

These authors distinguish four separate classes of environmental problems, namely, degradable wastes, persistent wastes, reversible biological and geophysical impacts and irreversible biological and geophysical impacts.[274]

Each class has its own legal implications and legal sanctions, according to the different strategies that have to be followed to solve the relevant environmental problems. Where there is an emission of degradable wastes, penalties may be levied to allow for cosmetic action. Sanctions in the form of criminal prosecution, civil claims for damages, seizure and forfeiture of assets or effluent taxes may be applied. Liability in terms of these sanctions is clearly an insurable interest that is insurable where insurance cover is available. These penalties could also be applied to persistent wastes, yet as the latter is long-term and cumulative, the penalties should be so onerous as to act as a deterrent that prohibits or prevents persons from causing these environmental problems.

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[270] In terms of The Hazardous Substances Act 15 of 1973; Fertilizers, Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947, yet excluding mining and radioactive wastes through GN 1986 of 24 August 1990, and in terms of *inter alia* The Mineral and Petroleum Resources Development Act 28 of 2002, Electricity Act 41 of 1987, The Nuclear Energy Act 46 of 1999 and The National Nuclear Regulator Act 47 of 1999.
[271] In terms of The National Water Act 36 of 1998.
[272] In terms of various statutes and laws of which the regulations issued in accordance with the Environment Conservation Act 73 of 1989 and the Road Traffic Act 29 of 1989 are but two examples.
[273] Fuggle & Rabie 4, 5.
[274] See Fuggle & Rabie 5 – 6 for a comprehensive discussion of these classes.

In both these cases the test for successful legal sanctions would be whether it effectively prevents problems from occurring, rather than to remedy the situation once the problems have actually occurred.

Regarding the other two classes, the authors are of the opinion that, as each case will be unique, a blanket provision cannot be laid down to cover all situations. The answer is to control case by case by requiring the completion of proper environmental impact studies in each specific situation.[275] Where developments cause irreversible harm, it is clear that they should be prohibited entirely.[276]

Holdgate[277] defines pollution as 'the introduction by man into the environment of substances or energy liable to cause hazards to human health, harm to living resources and ecological systems, damage to structures or amenity, or interference with legitimate uses of the environment'.[278]

Glazewski discusses pollution control aspects by following a pure media approach, namely by dividing the issues under air, land and water,[279] yet he does not define the term 'pollution' as such.

Kidd defines pollution as 'the introduction by man into the environment of substances or energy liable to cause hazards to human health, harm to living resources and ecological systems, damage to structures or amenity, or interference with legitimate uses of the environment'.[280]

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[275] See the statutory provisions that regulate environmental impact studies assessments in general in NEMA chap 3.
[276] This is also in accordance with the views of Fuggle & Rabie 6.
[277] Holdgate MW *A Perspective of Environmental Pollution* (1997).
[278] Holdgate 7.
[279] Glazewski 629.
[280] Kidd 127, see also 127–129 where he explains that he bases his discussion on the definition of waste as found in Gourlay *World of Waste: Dilemmas of Industrial Development* (1992) 21, as well as on the definition found in the *Concise Oxford Dictionary*, on which some criticism is provided by Kidd 127 n 5.

2.3.5.2 Examples of descriptions from foreign jurisdictions

The definition of the pollution of the marine environment as found in the Convention of the Law of the Sea,[281] namely 'the introduction by man, directly or indirectly, of substances or energy into the marine environment which results or is likely to result in deleterious effects',[282] is a simple yet very efficient definition and can also be applied to pollution of the environment in general.

Shaw includes loss of property as well as harm caused to living resources or ecosystems, interference with amenities and other legitimate uses of the environment under the description which he endorses.[283]

Larsson prefers to use the synonym 'environmental damage',[284] but approves of the description that 'it also indicates any alteration in a given environment, and is an indication of a legally significant threshold level of damage or interference, and also includes an interference with the use of the environment'.[285] The pollution must be man-made where human conduct (or omissions) creates a danger or adds substances to the environment.[286]

In the United Kingdom, The Department of Environment's Working Group on Financial Guarantees against Environmental Damage in the Waste Management Industry provides a broad description of 'environmental damage and nuisance' as 'odour, vermin, noise, dust, litter, fire, traffic and local visual amenity'.[287]

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[281] 1982; see also chap 3 par 3.3.3 and Annexure A to this study.
[282] Article 1(4) of the Convention.
[283] Shaw 766.
[284] Larsson 123, 124 concedes that the two terms are often used interchangeably.
[285] Larsson 124 referring to Springer AL "Towards a meaningful concept of pollution in international law" *International and Comparative Law Quarterly* 1977 (26) 531.
[286] See also Larsson 126 with regard to the position in terms of the OECD Recommendation for the Implementation of a Regime of Equal Right of Access and Non-discrimination in Relation to Transfrontier Pollution C(77)28(Final) of 17 May 1977.
[287] Financial Guarantees Report (1991); See also Fogleman 1066 for a discussion of this specific definition.

The EU Environmental Liability Directive[288] describes 'environmental damage' in the context of pollution as including (a) damage to protected species;(b) water damage;(c) land damage'; where 'damage' is in general is defined as 'a measurable adverse change in the natural resource or measurable impairment of a natural resource service which may occur directly or indirectly', which must result in a significant risk of having an adverse effect on human health.[289]

2.4 CONCLUSION AND RECOMMENDATIONS

It is clear from the examination of the possibilities in this chapter that the relevant descriptions and definitions vary extensively. As the 'environment' means different things to different people, the scope of the descriptions clearly depend on the need for which a description is sought, as well as the angle from which one views the issue.[290] In some cases the verbosity of the descriptions is astounding. It is submitted that the varied statutory definitions and descriptions considered have the potential to create legal uncertainty, yet that these distinctions can in most cases be justified as the focus for which each definition is proposed, differs. As a sectoral as well as a transectoral division of environmental law is unavoidable,[291] it impacts on the descriptions required for effective administration and governance. As discussed, the various statutes provide definitions that focus exclusively on the scope of the relevant Acts. Where the facts and circumstances of a specific situation require these concepts to be interpreted in accordance with one of the specialised statutes, the descriptions in that statute will of course enjoy precedence.

Where a problem with interpretation exists, for example, where a civil claim is brought in a specific situation that does not fall directly within the scope of a

[288] See n 125 above.
[289] Art 2(1).
[290] See par 2.1 for the reference in the White Paper on Environmental Management in South Africa n 12 above.

specialised statute, guidance should be given by the general descriptions provided by NEMA and the ECA, and also by statutes that address similar issues that pertain to the facts of the case. Where statutes offer no solution the views of authoritative writers could offer guidance. In the final instance, cognisance can also be taken of corresponding international descriptions. The exact description that offers a solution will clearly depend on the individual facts and circumstances of each instance.

The parameters of the concept 'environment' are continuously evolving, and it is therefore not prudent and appears to be impossible to propose a final solution to the problems relating to the varied descriptions of the 'environment' and 'pollution'. As many specialists in environmental law have not yet succeeded in formulating comprehensive definitions, it seems futile to even attempt to propose a final definition. The international trend of avoiding the term 'environment' by using other general terms such as 'life support systems', 'foundations for life' or 'biosphere' merely avoids the issue and does not provide clarity that is satisfactory for purposes of this thesis.

For purposes of this study, it is proposed that the 'environment' can be described simply as 'everything surrounding a human being, yet not including any human beings'. If one includes humans as part of the environment, then damage by one human caused directly to another, through assault for example, can be seen as environmental damage. Environmental damage should rather be damage caused to the environment by or due to the conduct of a human being that indirectly has a negative impact on the rights and interests, such as the health and well-being, of another human being. Although it can be said that nature has to be protected merely for nature's sake, one should concede that it must be protected more for the sake of mankind. This is in accordance with section 24 of the Constitution that provides that '[e]veryone has the right to have the environment protected for the benefit of present and *future generations*'.[292] This description specifically

[291] See par 2.1 above.
[292] Own emphasis.

acknowledges the environment in terms of its link to humans, and does not refer to the protection of the environment only for the sake of the environment itself.

Although this is a very broad definition, the scope of its application has to be linked to and thus limited by the definition of 'pollution' provided below, as both terms go hand-in-hand for purposes of the topic and focus of this thesis.

As the focus of the study is on damage and liability issues and related first-party and third-party insurance cover, 'pollution' for purposes of this study needs to be defined in its narrow sense, in that it should also accommodate any detrimental or negative result caused by human conduct that causes or has the potential to cause the wrongdoer's liability towards another, and does not include situations where pollution results from sources other than human conduct, for example, by forces of nature or natural soil erosion.

'Pollution' can, therefore, for purposes of this thesis be defined simply as 'any change of, or in, the state of the environment that is caused by a person's conduct or lack thereof, that causes ensuing damage, harm, loss or prejudice to another'. This definition is broad enough to cover even situations where the environmental damage causes pure economic loss, loss of environmental amenities or a reduced enjoyment of life because of an unsightly or non-aesthetical environment, for example, where plastic bags get stuck in bushes, trees are lost due to acid rain, or where polluted soil and water cause wild animals to contract diseases, resulting in them not being the splendid specimens one expects to see.

This description has the advantage that it also covers an exacerbation or increase of pollution in areas that have already been polluted. Should one refer only to a change in the environment from its original state, it could appear to include only actions that initially polluted the environment from its proper natural state, and not further acts of increased pollution to an already polluted environment.

Once it has been determined that a specific factual situation falls within the scope of an environmental pollution damage scenario, the liability issues of ensuing claims have to be dealt with. An examination of the legal rules relating to liability in South African law, both statutory and common-law rules, follows in the next two chapters.

CHAPTER 3

STATUTORY LIABILITY FOR DAMAGE CAUSED BY POLLUTION

3.1 INTRODUCTION

Liability for environmental damage is established under both national and international law.[1] As a starting point, the relevant sections and principles of the Constitution as the supreme law of South Africa are discussed as environmental damage usually entails some form of violation of human rights.[2] On an international level, Declaration 1 of the United Nations Conference on the Human Environment provides that '[b]oth aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights – even the right to life itself'.[3] The African Charter on Human and Peoples Rights[4] also provides that '[e]very

[1] Anderson M "Transnational Corporations and Environmental Damage: Is Tort Law the Answer?" 2002 (Spring) *Washburn Law Journal* 399 concedes that '[i]t is now commonplace to observe that the causes and consequences of global environmental change cannot be addressed through the exercise of national jurisdiction alone'; examples of conventions include The Basel Convention of the Control of Transboundary Movement of Hazardous Wastes and their Disposal ratified in May 1994; the United Nations Framework Convention on Climate Change (UNFCCC) signed on 15 June 1993 and 27 August 1997 and ratified on 29 August 1997, and the other conventions discussed in par 3.3.3 and listed in Annex A.

[2] In most well-known cases of environmental damage as mentioned in chap 1 par 1.1 n 3 the introduction to this study, the claims relate to damage to the environment, other patrimonial damages and also to death, personal injuries and include claims based on human rights violations as well; for an African perspective see Ebeku KSA "The right to a satisfactory environment and the African Commission" 2003 (3) *African Human Rights Journal* 149; for a European perspective see Article 1 of The Charter on Environmental Rights and Obligations of Groups and Organizations as reprinted in the *Report on the Regional Conference at Ministerial Level on the Follow-Up Report of the World Commission on Environment and Development in the European Commission for Europe Region: Action for a Common Future* (Bergen 16–18 May 1990) where it is reiterated that the right to a satisfactory environment means that all human beings have a fundamental right to an environment that is adequate for their health and well-being, and that it includes a responsibility to protect the environment for the benefit of present and future generations; see also the Constitution s 24 that provides the following: 'Everyone has the right to an environment that is not harmful to their health and well-being'. In a recent class action in environmental context, the Inuit group is taking the Federal government of the USA to the Inter-American Commission for Human Rights to force the government to reduce global warming by greenhouse gas emissions as they claim that government's actions or omissions infringe upon their fundamental human rights: http://news.bbc.co.uk/2/hi/business/ 5365728 (last accessed on 27 September 2006).

[3] Stockholm June 1972 (A/CONF 48/14).

[4] Adopted on 27 June 1981 OAU DOC CAB/LEG/67/3/Rev 5.

individual shall have the right to enjoy the best attainable state of physical and mental health',[5] and that '[a]ll peoples shall have the right to a general satisfactory environment favourable to their development'.[6] As section 39 of our Constitution provides that international law has to be considered, the effect of international agreements and instruments as listed in Annexure A is briefly considered.[7] An identification and summary of the relevant sections of South African statutes are given below.

As the Constitution applies to all law, the values enshrined in the Bill of Rights apply to statutory law and to the entire body of private law, which includes the law of obligations, specifically the law of delict and insurance law, which form the main thrust of this study.[8]

3.2 THE CONSTITUTION

3.2.1 Brief History

The right to a satisfactory, healthy or clean environment is enshrined in over 60 constitutions from all over the world.[9] The first time in legal history that the right was constitutionally acknowledged in South Africa was in terms of section 29 of the Interim Constitution of South Africa[10] that read as follows:

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[5] S 16(1) of the African Charter; see also Van der Linde M & Louw L "Considering the interpretation and implementation of article 24 of the African Charter on Human and Peoples' Rights in light of the *SERAC* communication" 2003 (3) *African Human Rights Law Journal* 167; see also Ebeku 161 in general for a comparative study of the right to a clean environment in various international constitutions, with specific emphasis on the position in African countries.

[6] S 24 of the African Charter.

[7] As enforced by s 39(1)(b); see s 108(2), s 231, s 232 and s 233.

[8] Reinecke MFB, Van der Merwe S, Van Niekerk JP & Havenga P *General Principles of Insurance Law* (2002) (hereinafter 'Reinecke *et al*') par 29.

[9] Ebeku 149 *et seq* for specific wordings of this fundamental right as they appear in the constitutions of various countries.

[10] Act 200 of 1993.

'Every person shall have the right to an environment that is not detrimental to his or her health and well-being.'[11] A reworded version was included in the final Constitution in section 24 which is discussed below.[12]

3.2.2 Constitutional Rights relevant to the Environment

3.2.2.1 Fundamental right to the environment

3.2.2.1.1 The right to the environment in section 24

The fundamental right to the environment is found in section 24 of the Constitution: 'Everyone has the right to:

(a) an environment that is not harmful to their health and well-being;

(b) have the environment protected for the benefit of present and future generations through reasonable legislative and other measures that:

  (i) prevent pollution and ecological degradation;

  (ii) promote conservation;

  (iii) secure ecologically sustainable development and use of natural resources, while promoting justifiable economic and social development.'

3.2.2.1.2 Classification of the right to the environment

The right to the environment is classified as a green or third generation right. These third generation rights have also been referred to as 'people's rights' as they are rights for the public at large rather than rights of individuals.[13] The right to the environment is in fact a composite right that includes social, economic and cultural considerations, with the ultimate goal of ensuring a

[11] See *De Klerk and another v Du Plessis and others* 1994 6 BCLR 124 (T) for a discussion of the wording and effect of this clause given prior to the enactment of the final Constitution.
[12] Par 3.2.2.1.1.
[13] See Kidd M *Environmental Law, A South African Guide* (2008) (hereinafter 'Kidd') 19 for a brief exposition of the classification; see also Glazewski J "The environment, human rights and a new South African Constitution" 1991 (7) *SAJHR* 167; as well as the discussion by Loots C "Making Environmental Law Effective" 1994 (1) *SAJELP* 17.

balanced environment. Although development must be socially, environmentally and economically sustainable, it also places an imperative on the State to secure environmental rights.[14] The right does not supersede or eclipse other rights.

3.2.2.2 Conflicting constitutional rights

The process of environmental management by its very nature induces tension with other rights contained in the Bill of Rights, most notably property rights[15] and the right to freedom of trade and occupation.[16]

Other constitutional rights that must be read in context with the right to the environment include the right to life,[17] human dignity,[18] equality,[19] freedom and security,[20] privacy[21] and the socio-economic right of children,[22] especially their rights to basic nutrition and shelter.[23] These are all non-derogable rights.[24]

Two other socio-economic rights that could impact on the right to the environment are the right to access to food and water and the right to adequate housing.[25] The right of the freedom of trade, occupation and profession can often be in conflict with the right to the environment, where industrial development and other related activities impact negatively on the

[14] NEMA s 2; *MEC: Department of Agriculture, Conservation and the Environment Dr ST Cornelius v HTF Developers (Pty) Ltd* Case nr CCT 32/07 [2007] ZACC par 12, par 28; *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* 2007 6 SA 4 (CC) pars 13, 44, 59.
[15] S 25.
[16] S 22.
[17] S 11.
[18] S 7(1), 10.
[19] S 9; see also the position stated by Christie RH *The Law of Contract in South Africa* 5th ed (2006) 13 and the discussion of exclusion clauses in chap 6 par 6.5 below.
[20] S 12.
[21] S 14.
[22] S 28.
[23] S 28(1)(c) and s 28(1)(d).
[24] Table of Non-Derogable Rights in the Constitution chap 2.
[25] S 26.

environment.[26] Other rights that apply in the process of enforcing the constitutional right to the environment include the rights of access to information,[27] of just administrative action,[28] the extended provisions on *locus standi*,[29] and the requirement to consider international law.[30] These are, together with the right to the environment in section 24, classified as derogable rights.

Irrespective of the right envisaged in section 24, the remainder of the Constitution contains various other provisions that deal with matters pertaining to environmental law that have made it difficult to achieve full integration of environmental laws. This is caused by the different functional areas of concurrent national and provincial legislative competence, functional areas of exclusive provincial legislative competence, and some competence allocated to local authorities as provided for in the Constitution.[31]

The focus of this study will remain on national legislation, as provincial and local government legislation is too extensive in scope, and has limited application to the purposes of this study.

As mentioned above, the Constitution is divided into various functional areas for purposes of pollution control and waste management, and the following brief exposition of these functional areas can be made. Henderson identifies the prime areas as the environment, pollution control and road traffic regulation, the latter specifically relating to air and noise pollution. These are all concurrent national and provincial legislative competencies.[32]

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[26] S 22.
[27] S 32, also the Promotion of Access to Information Act 2 of 2000 that gives effect to the constitutional right to information.
[28] S 33; also the Promotion of Administrative Justice Act 3 of 2000.
[29] S 38; also the full discussion of this section in the text below.
[30] S 39(1)(b); see also the reference to s 39 in n 39 and its application in par 3.3.1 in the text below; see also Bray E "Legal perspectives on Global Environmental Governance" 2005 (68) *THRHR* 357 361 on the management of the environment as a 'shared' functional area within the national and the provincial spheres of government'.
[31] Henderson PGW *Environmental Laws of South Africa* Vol 1 (1999) 1-4.
[32] Schedule 4 Part A.

Secondary areas include air pollution, municipal health, and certain water and sanitation services that are identified as functional areas that enjoy concurrent national and provincial legislative competencies, yet are subject to the executive authority and administrative control of local authorities.[33]

Lastly, provincial authorities have exclusive legislative authority over cleansing and control of public nuisances, over which local authorities then have the executive authority as well as the administrative control.[34]

3.2.3 Liability and Remedies for Infringement

3.2.3.1 Application of the Constitution

Both the State and other persons, such as individuals and juristic persons, have to ensure that the environment is protected. The constitutional right to the environment needs to be assessed in this context.

3.2.3.1.1 Vertical application

The Constitution primarily has a vertical application between the State and its citizens.[35] The right to just administrative action in section 33 applies to the State's functions and is especially relevant to any development and any processes that affect the environment.[36] The basic values and principles that govern public administration are set out in section 195(1).

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[33] Schedule 4 Part B.
[34] Schedule 5 Part B.
[35] In terms of s 7(2) that provides that the State must respect, protect, promote and fulfill the rights in the Bill of Rights; as well as s 8(1) that provides that it binds the legislature, the executive, the judiciary and all organs of State.
[36] S 33 reads as follows: '(1) Everyone has the right to administrative action that is lawful, reasonable and procedurally fair. (2) Everyone whose rights have been adversely affected by administrative action has the right to be given written reasons. (3) National legislation must be enacted to give effect to these rights, and must – (a) provide for the review of administrative action by a court, or where appropriate, and independent and impartial tribunal; (b) impose a duty on the State to give effect to the rights in subsections (1) and (2); and (c) promote an efficient administration.' See also in this regard The Promotion of Administrative Justice Act 3 of 2000 that regulates the enforcement of this constitutional right.

3.2.3.1.2 Horizontal application

Section 8 provides that the Bill of Rights also applies to non-state bodies and to individuals where applicable.[37] This means that one could also enforce constitutional rights against all persons, thus against the State, a non-state or private body or against any individual for causing pollution or ecological degradation, not promoting conservation or for failing to comply with the duties as required by section 24.

Due to the provisions of section 39, the Bill of Rights also enjoys an indirect horizontal application in that the interpretation or development of any law needs to comply with the provisions in the Constitution.[38] This includes the development or interpretation of principles of the law of delict and the law of contract.[39] The values that underlie our constitutional democracy, among them the values of human dignity, the achievement of equality,[40] the advancement of human rights and freedoms, and the rule of law form the

[37] S 8 provides as follows: '(1) The Bill of Rights applies to all law, and binds the legislature, the executive, the judiciary and all organs of State. (2) A provision of the Bill of Rights binds a natural or a juristic person if, and to the extent that, it is applicable, taking into account the nature of the right, and the nature of any duty imposed by the right. (3) When applying a provision of the Bill of Rights to a natural or juristic person in terms of subsection (2), a court – (a) in order to give effect to a right in the Bill, must apply, or if necessary develop, the common law to the extent that legislation does not give effect to that right; and (b) may develop rules of the common law to limit the right, provided that the limitation is in accordance with section 36(1).'

[38] S 39 provides that '(1) [w]hen interpreting the Bill of Rights, a court, tribunal or forum - (a) must promote the values that underlie an open and democratic society based on human dignity, equality and freedom; (b) must consider international law; and (c) may consider foreign law. (2) When interpreting any legislation, and when developing the common law or customary law, every court, tribunal or forum must promote the spirit, purport and objects of the Bill of Rights. (3) The Bill of Rights does not deny the existence of any other rights or freedoms that are recognised or conferred by common law, customary law or legislation, to the extent that they are consistent with the Bill'. *De Klerk and another v Du Plessis and others* 1994 6 BCLR 124 (T); see in general the discussion by Loots C "The Impact of the Constitution on Environmental Law" 1997 (4) *SAJELP* 57; see also Bell S & McGillivray D *Environmental Law* 6th ed (2006) (hereinafter 'Bell & McGillivray') 388 who declare that '[h]uman rights law may force through some welcome developments, for example to bring nuisance actions.' See also the discussion of claims based on nuisance or the abuse of rights in chap 4 par 4.2.3.4.1 below.

[39] As was confirmed by both the majority and the minority judgments in *Barkhuizen v Napier* 2007 5 SA 323 (CC).

[40] Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000, for example, gives effect to the Constitution in its goal to prevent or limit discrimination.

principles on which the determination of public policy must be based.[41] Any statute or contractual provision that is contrary to public policy, tested against constitutional values, is unenforceable.[42] This is especially relevant when one has to determine the constitutionality of clauses in insurance policies that limit or infringe upon the policyholder's constitutional rights.

3.2.3.2 Remedies in terms of section 24

The inclusion of section 24 in the Constitution clearly creates a statutory duty to protect the environment and to prevent pollution that could cause damage to the environment. The question remains whether this section is wide enough to create specific constitutional remedies which the injured party who suffers damage could enforce against the polluter who causes it.

It is important to note that section 24 is divided into two distinct subsections. Section 24(a) provides that '[e]veryone has the right to an environment that is not harmful to their health and well-being'.[43] This section places a duty upon all citizens and on the government not to act in a way that could cause pollution or ecological degradation to harm or cause detriment to the environment. No specific remedies are mentioned in section 24(a).

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[41] *Sasfin (Pty) Ltd v Beukes* 1989 1 SA 1 (AD) 7 for a discussion of public policy *ex ante* the Constitution; *ex post* the Constitution again *Barkhuizen v Napier* par 29 *et seq*; *Afrox Healthcare Bpk v Strydom* 2002 6 SA 21 (SCA); Naude T & Lubbe FG "Exemption clause – a rethink occasioned by *Afrox Healthcare Bpk v Strydom*" 2005 (121) *SALJ* 441 *et seq*; *South African Forestry Co Ltd v York Timbers Ltd* 2005 3 SA 323 (SCA); *Brisley v Drotsky* 2002 4 SA 1 (SCA); *Johannesburg Country Club v Stott* 2004 5 SA 511 (SCA)*;* see also Havenga (1995) 187; also the general discussion of the legality of contractual clauses by Christie 213 *et seq.*

[42] *Barkhuizen v Napier* par 29; see in this regard the extensive discussion in chap 6 par 6.5.2.3 below.

[43] It is not clear what the words 'health and well-being' precisely mean, and this remains open for eventual interpretation in subsequent case law, and based on the facts and circumstances of each specific situation. The term 'well-being', being broader than the term 'health', could, for example, include even aspects beyond bodily integrity and include aspects of human dignity and even privacy. Our general well-being also includes our right to enjoy quality of life. See as an example in this regard the case of *Lopez Ostra v Spain* 1995 20 EHRR 277 that was brought before The European Court of Human Rights, where the court ruled that a bad smell emitting from a tannery that did not cause environmental harm *per se*, was a violation of the right to privacy of the neighbouring residents.

Section 24(b), however, provides that '[e]veryone has the right to have the environment protected, for the benefit of present and future generations, through *reasonable legislative and other measures*'.[44]

In contrast to section 24(a) above, section 24(b) does create a positive duty to take the required actions in order to reach the constitutional goals set out in the Bill of Rights. Section 24(b) also places an imperative on the State to secure environmental rights by legislation. Once again, no specific remedies are mentioned in this section. General constitutional remedies will therefore apply as discussed below.[45]

3.2.3.3 Limitation in terms of section 36

Section 36 allows for the infringement upon or limitation of a person's constitutional right to a satisfactory environment by a law of general application in certain specified circumstances. A fair balance has to be struck between the competing interests of the community as a whole, and that of the specific individual whose fundamental rights are infringed upon. The relevant section reads as follows: '(1) The rights in the Bill of Rights may be limited only in terms of law of general application to the extent that the limitation is reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom, taking into account all relevant factors, including – (a) the nature of the right; (b) the importance and purpose of the limitation; (c) the nature and the extent of the limitation; (d) the relation between the limitation and its purpose; and (e) less restrictive means to achieve the purpose. (2) Except as provided under subsection (1) or in any other provision of the Constitution, no law may limit any right entrenched in the Bill of Rights'.

This section will apply in a situation where a constitutional right is infringed upon for the greater good of society, for example where an industrial

[44] Own emphasis; see the full wording of s 24(b) in par 3.2.2.1.1 above.
[45] See par 3.2.3.5 below.

development that can benefit a developing society[46] causes environmental damage to the property of an individual.[47]

The effect of competing constitutional rights is relevant to the issues addressed in the following chapters, for example on the liability for omissions, regarding issues of wrongfulness and for the assessment of actionable damages as discussed in chapter 4 below.[48] The application of constitutional principles will determine whether there was an acceptable and therefore legal infringement of a constitutional right.[49] The constitutionality of contractual exclusion, exemption and limitation clauses that intend to exclude liability for environmental harm or damage in insurance contracts, deserves special attention and is discussed in detail in chapter 6 below.[50]

3.2.3.4 Right of access to information

Another right that is important for the enforcement of the right to the environment in section 24 is the right of access to information.[51] It is important to be able to ascertain whether conduct or lack thereof by the State or by another person has the potential of causing damage to the environment, to a

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[46] As allowed in the Constitution s 22, the freedom of trade, occupation and profession; s 25, the right to property; s 26 the right to housing; and s 27 the right to *inter alia* food and water.

[47] S 24 the right to environment.

[48] *Petroprops (Pty) Ltd v Barlow and another* 2006 5 SA 160 (W) 189 where the right to property competed directly with the right to a clean and healthy environment, as the plaintiff intended to build and operate a fuel service station in an ecologically sensitive area.

[49] See *Sasfin (Pty) Ltd v Beukes* 7 for an comprehensive examination of the criterion of public policy prior to the Constitution; for case law *ex post* the Constitution see *Barkhuizen v Napier* par 23 *et seq*; *Reddy v Siemens Telecommunications* 2007 2 SA 486 (SCA) 493, 496, 500; *Afrox Healthcare Bpk v Strydom* 21 *et seq*; see also the discussion by Naude & Lubbe 441; *South African Forestry Co Ltd v York Timbers Ltd* par 27; *Brisley v Drotsky*; *Johannesburg Country Club v Stott;* Havenga (1995) 187; also in general Van der Merwe S, Van Huyssteen LF, Reinecke MFB & Lubbe GF *Contract General Principles* 3rd ed (2007) 97, 199, 192, 513; Christie 18, 248, 347.

[50] See the full discussion of the constitutionality of exclusion,exemption and limitation clauses in chap 6 par 6.5 below.

[51] S 32 that reads as follows: '(1) Everyone has the right of access to – (a) any information held by the State; and (b) any information that is held by anther person and that is required for the exercise or protection of any rights. (2) National legislation must be enacted to give effect to this right, and may provide reasonable measures to alleviate the administrative and financial burden on the State.' For an extensive general discussion of the constitutional right of access to information see Klaaren J & Penfold G on "The Right of Access to Information" in Woolman S (ed) *Constitutional Law of South Africa* Chap 62 2nd ed (2006) (hereinafter 'Klaaren & Penfold') chap 62.

person or to the community at large via the environment, in order to act proactively to prohibit or limit this conduct. Where loss or damage has already been caused, sufficient information is crucial for an actionable claim.[52] Information found in environmental impact assessments for example can be of great value.[53] This is discussed in chapter 6 below regarding the adverse effect that a lack of information has on the predictability of the risk.[54]

To succeed with an environmental claim, one usually requires access to information contained in various reports, such as environmental impact assessment reports, and records held by other persons, for example, by the Department of Environmental Affairs and Tourism.[55] The right of access to information is a universal human right. The international position on infringements of this right and subsequent liability may potentially be applied as a precedent when dealing with future issues in this regard in South Africa where the South African law is lacking in precedent.[56]

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[52] See Bray E "Public participation in environmental law" 2003 (68) *THRHR* 121 (hereinafter 'Bray (2003)') 126 who also states that access to information concerning the environment is crucial to effective public participation in environmental decision-making. Affected parties and communities 'must be furnished with relevant information to enable them to prepare an appropriate defence in environmental actions'.

[53] The requirement to complete and provide EIA's in terms of Chap 5 of the NEMA, that came into effect on 1 July 2006.

[54] See chap 6 par 6.2 below.

[55] The results of an environmental impact assessment report, as well as the Environmental Authorisation are required in terms the Regulations issued in accordance with chap 5 of the NEMA, or by s 38 and s 39, and reg 50 of the Minerals and Petroleum Resources Development Act referred to in par 3.4.11 of the text below.

[56] See *McGinley and Egan v United Kingdom* 1998 27 EHRR 1 where the explosions of nuclear testing on Christmas Island had the potential to cause radiation damage to the plaintiffs who lived in close proximity of the testing facility. The State refused information that would enable the plaintiffs in the first instance to determine whether the specific testing had the potential to cause damage, how serious one could expect the damage to be, and also what the quantum of damages would be when the injuries manifested. The court found at 44 that '[t]he issue of access to information which could either have allayed the applicants' fears in this respect, or enabled them to assess the danger to which they were exposed, was sufficiently closely linked to their private and family lives, as to raise an issue under (the relevant) provision' and subsequently held the State liable for its failure to disclose the relevant information; also *Lopez Ostra v Spain* 277 where the State was held liable for allowing a factory to be erected for the purpose of processing waste from various unlicenced tanneries, which caused air pollution and bad smells. The court held at 295 that '[n]aturally, severe environmental pollution may affect individuals well-being and prevent them from enjoying their home environment in such a way as to affect their private and family lives adversely without however, seriously endangering their health'.

The comprehensive Promotion of Access to Information Act[57] gives effect to the fundamental right to information, in terms of which access is given to information and records held by public bodies[58] as well as by private bodies.[59] The Act provides for specific grounds for refusal of access to records held by these bodies.[60] These exceptions that have been gleaned from the cumulative experiences of other jurisdictions reflect the need to balance the conflicting interests of the parties involved.[61] Except for a refusal based on the grounds of the protection of the privacy or security of a person or on the protection of his property, these grounds do not include any specific ground to refuse access to information relating to environmental records or the environmental status of property. What has been emphasised repeatedly is that a party is entitled to disclosure of 'relevant evidential material'.[62]

Where access is sought to the information held by a private body, the access will only be allowed where procedural requirements have been met, where no statutory grounds for refusal exist, and where access is required to protect or exercise any right, whether it is a constitutional, statutory or common law rights.[63] This 'need to know' is an additional yet not onerous requirement that

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[57] Act 2 of 2000.

[58] Part 2 s 11–s 49 of the Act; Klaaren & Penfold 62–11 *et seq* for a discussion of the distinction between these bodies; also 62–12 on the fact that a public body includes a State department and would therefore include the Department of Environmental Affairs and Tourism.

[59] Part 3 s 50 to s 73 of the Act; *Unitas Hospital v Van Wyk and another* 2006 4 SA 436 (SCA) 445 where it was confirmed that the requester of the information has to show an 'element of need' or 'substantial advantage' by gaining access to the information.

[60] Part 2 chap 4 contains the grounds for refusal of access to the records of public bodies, whereas part 3 chap 4 contains the grounds for refusal of access to the records of private bodies.

[61] Klaaren & Penfold 62–18 *et seq*; also Govender K "The Assessment of Limitation on Access to Information in the Promotion of the Access to Information Act and the Danger that Disclosure will become the Exception rather than the Norm" Seminar Report 2001 (5) presented at the Conference on the Constitutional Right of Access to Information (Johannesburg 2000) 525.

[62] See especially *Earthlife Africa (Cape Town) v Director-General: Department of Environmental Affairs and Tourism* 2005 3 SA 156 (C) par 51 that it is not equivalent to a right of complete disclosure; also par 65 that access must be allowed to serve the requirement of procedural fairness.

[63] S 50 of the Act; *Unitas Hospital v Van Wyk and another* 445; see also O'Regan J regarding the fact that the broader notion of the term 'right' than in a general private law context may be appropriate in *Premier Province of Mpumalanga and Another v Executive Committee of the Association of Governing Bodies of State-Aided Schools: Eastern Transvaal* 1999 2 BCLR 151 (CC) 163 n 10; also Klaaren & Penfold 62–14 that it can be interpreted so broadly that the term 'rights' moves closer to the meaning of a legitimate expectation.

a requester must prove before he is allowed access to the information required.[64]

The requirements were set in *The Cape Metropolitan Council v Metro Inspection Services*[65] that (a) the requester has to state what the right is that he wishes to protect or exercise; (b) the exact information that is required and (c) how the information would assist him in protecting or exercising his right.[66] One may ask whether the requester has to prove a *prima facie* case of the rights that he wishes to protect or exercise, or whether access to information may be granted to enable him to establish whether he has such a right.[67] It is submitted that the latter should be supported as it clearly facilitates the primary rationale of the right of access to information.

Where disclosure is sought from a public body, the 'need to know' - the requester's motives for seeking access, and the public body's information officer's beliefs in this regard - are irrelevant as access must be provided as stipulated in the Act unless statutory grounds for refusal of access exist. As far as access to environmental impact assessments is concerned, a public body may refuse access where the record contains an opinion, advice, report or recommendation or an account of consultation, discussion or deliberation for the purpose of formulating a policy or taking a decision in the exercise of power or performance of a duty imposed by law.[68] As this section is so broadly worded and would frustrate most claims brought on the grounds of improper administrative action, it should be interpreted restrictively. It should only apply to pre-decision documents, and only to documents containing opinions and the like and not to documents that set out facts.[69] Where the document contains evaluative material and disclosure would be in breach of a duty of confidentiality, access may also be refused.[70]

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[64] Govender 18 also holds the same view that this is not an onerous requirement.
[65] 2001 3 SA 1013 (SCA).
[66] *The Cape Metropolitan Council v Metro Inspection Services* par 28.
[67] Klaaren & Penfold 62-16 – 62-18.
[68] Promotion of Access to Information Act s 44(1)(a).
[69] Klaaren & Penfold 62–23.
[70] Promotion of Access to Information Act s 44(2).

In the final instance, where it is in the public interest that information be disclosed, overriding the other non-disclosure provisions may be justified. This is extremely important in an environmental context, as the Act states that a request for access must be granted, notwithstanding the other provisions of the act if '(a) the disclosure of the record will reveal evidence of – (i) a substantial contravention of, or failure to comply with the law; or (ii) an imminent and serious public safety *or environmental risk*;[71] and (b) the public interest in the disclosure of the record clearly outweights the harm contemplated in the provision in question'.[72]

This will be of immense value and will clearly assist any person who wishes to bring a claim for environmental damages that depends on the disclosure of information in records held by a public body.

3.2.3.5 General constitutional remedies and the right of access to the courts

3.2.3.5.1 General remedies

Section 38 deals with the way in which, and by whom, constitutional rights can be enforced, and provides that '[a]nyone listed in this section has the right to approach a competent court alleging that a right in the Bill of Rights has been infringed or threatened, and the court may grant *appropriate relief*, including a declaration of rights.[73] The persons who may approach a court are: (a) anyone acting in their own interest; (b) anyone acting on behalf of another person who cannot act in their own name; (c) anyone acting as a member of,

[71] Own emphasis.
[72] Klaaren & Penfold 62–24 criticise this provision in that the emphatic language used could have the effect that this override will seldom apply; they are also of the opinion that a mandatory disclosure of this type of information, and not a mere override of refusal to disclose, would have been in the public interest; see also the decision in *Earthlife Africa (Cape Town) v Director-General: Department of Environmental Affairs and Tourism*) par 50 *et seq*.
[73] Own emphasis: this section forms a pivotal principle when the extent of constitutional remedies, especially a constitutional damages claim, is examined; see pars 3.2.3.5.4, 3.5.3.6.1 below.

or in the interest of, a group or class of persons; (d) anyone acting in the public interest; and (e) an association acting in the interest of its members'.

What 'appropriate relief' is, will depend on the facts and circumstances of each case and the context in which the court is approached for assistance. It is a strict requirement that the remedy must be effective. Upon finding that there is an inconsistency, the court may declare any law or conduct invalid.[74]

A court can grant a declaration of rights to clarify the extent of a protectable right.[75] This, however, creates no direct legal consequences, yet focusses on the clarification of constitutional or other legal obligations.

A prejudiced party could also obtain injunctive relief where his rights are threatened or infringed upon. Clearly the interdict, whether mandatory or prohibitive, is also one of the most powerful remedies to protect or enforce a constitutional right. This was already acknowledged in the case of *Minister of Health and Welfare v Woodcarb (Pty) Ltd and another*[76] where an interdict was granted to prevent the defendant from continuing its activities that caused pollution of the atmosphere.[77] Our courts can also come to the assistance of the State to enforce environmental obligations by issuing an order of contempt of court in an attempt to enforce compliance. A supervisory or structural interdict that keeps the progress of the defendant under the court's supervision can be of great value and assistance where an interdict to prevent damage to the environment, or an interdict to repair environmental damage, is concerned.[78]

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[74] Constitution s 172(1)(a).
[75] S 38; see in this regard also *Rail Commuters Action Group and Others v Transnet Ltd and Others* 2006 6 SA 68 (C) par 108.
[76] 1996 3 SA 155 (N).
[77] It is submitted that the doctrine of ripeness cannot apply where an interdict is sought to prevent an infringement of a constitutional right, as the purpose of the interdict is to prevent a person from being affected and it cannot be a requirement that he must already be affected before the relief is provided; see also *National Coalition for Gay and Lesbian Equality & Others v Minister of Home Affairs & Others* 2000 2 SA 1 (CC) par 21 for the application of the doctrine of ripeness in a constitutional context.
[78] *Sibiya & Others v DPP: Johannesburg High Court & Others* 2005 5 SA 315 (CC) par 22.

An applicant can furthermore choose to appeal any administrative decision that affects his rights to the environment or pursue a review of such a decision.[79]

These are, however, of lesser importance for the purposes of this study as the focus should remain of an insurable liability, in this case the liability to pay damages. This is discussed in greater detail below.

3.2.3.5.2 The fundamental right of access to courts

Insurance policies usually contain standard exclusion clauses that bar or limit the policyholder's rights to judicial redress against the insurer. It was already held in *Schierhout v Minister of Justice*[80] in 1925 that an agreement that deprives someone of seeking redress in court for a future injury or wrong, would, at common law, be an illegal undertaking.

Section 34 of the Constitution deals with the right of access to courts and to other dispute resolution procedures, by providing that '[e]veryone has the right to have any dispute that can be resolved by the application of law decided in a fair public hearing before a court or, where appropriate, another independent and impartial tribunal or forum'.

The right of safeguarding equality in the form of equal protection by the law is ensured by the general right of access to the courts as set out above.[81]

It would be possible to obtain an interdict to prevent conduct that leads to environmental damage and the resulting loss or damage from occurring or

[79] *Earthlife Africa (Cape Town) v Director-General: Department of Environmental Affairs and Tourism* par 37 *et seq*; see also *Director: Mineral Development Gauteng Region and Sasol Mining (Pty) Ltd v Save the Vaal Environment* 1999 2 SA 709 (SCA) par 15 *et seq* on the application of the *audi alteram partem*-rule in an environmental context.
[80] 1925 AD 417 424.
[81] In *Barkhuizen v Napier* par 33 it was found that this right reflects the foundational values that underlie our constitutional order and also constitutes public policy; see also in general Liebenberg S in Davis DM, Cheadle MH & Haysom NRL *Fundamental Rights in the Constitution: Commentary and Cases* (1997) 256 *et seq*.

continuing.[82] The courts could also order the polluter to clean-up the environment, and under specific circumstances an award for constitutional damages could even be made.[83] In terms of section 172(1)(a) of the Constitution that deals with the powers of the courts in constitutional matters, any conduct by a person or other entity or institution can be found to be unconstitutional and appropriate relief ordered. The section provides that 'when deciding a constitutional matter within its power, a court – (a) must declare that any law or conduct that is inconsistent with the Constitution is invalid to the extent of its inconsistency'.

Our courts can also, due to their inherent jurisdiction, come to the assistance of the State by enforcing environmental obligations through the issue of an order of contempt of court.

3.2.3.5.3 Class actions

Class actions and actions that can be instituted on behalf of a group of persons who all have the same cause of action, for example by environmental

[82] *Minister of Health and Welfare v Woodcarb (Pty) Ltd and another*; *Petroprops (Pty) Ltd v Barlow and another* where the court *a quo* found that the application brought before it by a group in the public interest was not harassment, but was brought to protect the environment in general. In the words of the court: 'Their interest and motivation is selfless, being to contribute to environmental protection in the common good. None of them stands to gain material personal profit.'

[83] *President of the Republic of South Africa v Modderklip Boerdery (Pty) Ltd (Agri SA and others* amici curiae*)* 2005 5 SA 3 (CC) acknowledged that constitutional damages may be claimed for damage caused by an infringement of constitutional rights, is quoted with approval; *MEC Department of Welfare, Eastern Cape v Kate* 2006 4 SA 478 (SCA) 491 confirmed that a claim for constitutional damages should succeed where it is the most appropriate remedy based on the facts and circumstances of a specific case; *cf* the earlier decision in *Fose v Minister of Safety and Security* 1997 3 SA 786 (CC) that can be interpreted as a strong discouragement to attempt such a claim. Constitutional damages are also allowed in various countries around the world, such as in the USA. See in this regard, for example, *United States v Georgia* No 04-1203, S.Ct, 2006 WL 43973 that allowed a claim for damages for constitutional violations against a particular State; also *Philip Morris USA v Williams* 2006 U.S.LEXIS 4161, where an order was made that punitive damages must be paid by a person (not the State) to another for a constitutional rights violation, but that the claim remains subject to constitutional limits; see also the more detailed discussion of interdicts and on claims for constitutional damages discussed below in pars 3.2.3.6 and 3.5.3.6. It is important already at this stage to confirm that an order for payment of constitutional damages would trigger the cover provided under liability insurance, as discussed in chap 5 par 5.2.2.4 and chap 6 par 6.3 below.

protection groups on behalf of the community at large,[84] are specifically acknowledged by the Constitution in section 38.[85] In terms of the common-law doctrine of *continentia causae* or cohesion of cause of action, an action may even be brought by members of the class or group outside the jurisdiction of the Court where the action is brought, based on common interest,[86] convenience, justice and good sense.[87]

The constitutional right to a clean environment in terms of section 24 forms the background against which a class action brought in an environmental pollution damages case has to be interpreted, and would justify a class action where a 'public standing for the environment' exists.[88] In *Minister of Health and Welfare v Woodcarb (Pty) Ltd and another*, for example, the court granted an interdict in the Minister's favour to prevent the defendant from continuing to pollute the atmosphere as it impaired the rights of the general public.[89]

The *locus standi* of a person acting in the public interest will be determined by the following factors: (a) whether there is another reasonable and effective manner in which the challenge may be brought; (b) the nature of the relief sought; (c) the extent to which it is of general or prospective application; and (d) the range of persons or groups who may be affected directly or indirectly

[84] Such as Earthwatch, Earthlife Africa, the South African Foundation for the Conservation of Coastal Birds or the Wildlife Society of Southern Africa.
[85] The Constitution s 38(c) allows anyone acting as a member of, or in the interest of, a group or class of person; *Permanent Secretary, Department of Welfare Eastern Cape and another v Ngxuza and others* 2001 4 SA 1184 (SCA); *Wildlife Society of Southern Africa and others v Minister of Environmental Affairs and Tourism of RSA and others* 1996 (3) SA 1095 (T); see also other statutes that provide expressly for class actions, for example the NEMA, in s 32(1) that also creates the right to bring a class action to protect the rights of various persons, in the public interest and even in the interest of protecting the environment; *Rail Commuters Action Group and Others v Transnet Ltd and others*) 87; see also Bray (2003) 133 that over the years many good environmental cases were lost because of the shortcoming that groups could not bring an action, and that 'countless environmental offenders were never brought to book'. S 38 of the Constitution and s 32 of NEMA had the effect of liberalising the previously restrictive *locus standi* requirements.
[86] *Permanent Secretary, Department of Welfare Eastern Cape and another v Ngxuza and others* 1193; for the origin of this rule, see the United States of America Federal Rule of Court 8(8) that serves as an early introduction of this type of action.
[87] *Permanent Secretary, Department of Welfare Eastern Cape and another v Ngxuza and others* 1193; 1201; *Rail Commuters Action Group and Others v Transnet Ltd and others* 89.
[88] Larsson 506 *et seq* discusses this concept of 'pubic standing' in view the European position on class actions.
[89] *Minister of Health and Welfare v Woodcarb (Pty) Ltd* 159.

by any order of court, and the opportunity they are afforded to present evidence and argument to the court personally.[90]

A class action clearly benefits parties who have smaller individual claims, for example, where a number of claimants all suffered losses due to a single polluting event, but where their right of individual redress is unsuitable for enforcement in isolation or where it would be disproportionately expensive to do so.[91] A class action in specifically an environmental context will prove to be an effective vehicle to protect and enforce rights to the general environment, and a public interest action has since the inception of the Constitution and NEMA become a reality in South African law. See also *Raubenheimer NO v Trustees, Johannes Bredenkamp Trust and Others*[92] that any person who presents a case based on statutory provisions that are concerned with the protection of the environment has *locus standi* in accordance with NEMA section 32 of NEMA.

3.2.3.5.4 Constitutional damages

As stated in *Fose v Minister of Safety and Security* the court held that '[t]here is no reason in principle why "appropriate relief" should not include an award of damages, where such an award is necessary to protect and enforce' fundamental rights.[93] In view of later case law supporting the possibility of claims for constitutional damages, it is submitted that it is possible to claim constitutional damages from a person who infringes upon the constitutional right to the environment as 'appropriate relief' under sections 24 and section

[90] *Ferreira v Levin NO & Others* 1996 1 SA 984 (CC)*; Vryenhoek and Others v Powell NO and Others* 1996 1 SA 984 (CC) par 234; see also *Raubenheimer NO v Trustees, Johannes Bredenkamp Trust and Others* 2006 1 SA 124 (C) that any person who presents a case based on statutory provisions that are concerned with the protection of the environment is provided with *locus standi* in accordance with NEMA s 32.

[91] *Permanent Secretary, Department of Welfare Eastern Cape and another v Ngxuza and others* 1195 to 1996; *Lubbe & Four Others v Cape Plc and related appeals* 27-7-2000 (House of Lords) on the hearing of an asbestos claim in England where the parent company was situated, rather than in South Africa where the damage was caused by a subsidiary of the parent company; also *Petroprops (Pty) Ltd v Barlow and Another* 185 that one has to keep in mind the disadvantage that cost orders remain a great concern in class actions where individuals are drawn into litigation in respect of public interest issues.

[92] 2006 1 SA 124 (C).

[93] Par 60.

38.[94] In *President of the Republic of South Africa v Modderklip Boerdery (Pty) Ltd (Agri SA and others* amici curiae*)* the court acknowledged that constitutional damages may be claimed for damage caused by an infringement of a constitutional right. In *MEC Department of Welfare, Eastern Cape v Kate* the court confirmed that a claim for constitutional damages should succeed where it is the most appropriate remedy based on the facts and circumstances of a specific case. The remedy must also clearly fit the injury.[95] Although awards have been made by extending delictual liability in view of the Constitution, it is important to note that proving delictual liability is not a prerequisite for all claims for constitutional damages.[96]

Constitutional damages for loss in the absence of a common-law remedy will therefore only be possible where a damages claim is the most appropriate remedy in the specific circumstances.[97] Where the State fails to act in accordance with its duties, the Constitutional Court has acknowledged that it is also possible to sue for damages based on delict where the State fails to act in accordance with its statutory, common-law or constitutional duties.[98]

Damages for the infringement of the right to the environment can consist of clean-up or remedial costs, either on an emergency or a long-term basis, or costs incurred to eliminate threats to the environment.[99] As to the question whether the determination of the *quantum* of damages is also a constitutional issue, it is submitted that there should be no reason why this should not be

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[94] See this wording in italics in s 38 in par 3.2.3.5.1 above; *cf* the earlier decision in *Fose v Minister of Safety and Security* par 60 that discouraged such a claim.
[95] *Steenkamp NO v The Provincial Tender Board, Eastern Cape* 2007 3 SA 121 (CC) par 29 (as both the judgments of the 2006-case heard by the SCA, and the 2007-case heard by the CC are applied in this thesis, the cases are distinguished by reference to the respective courts); see also *MEC Department of Welfare, Eastern Cape v Kate* 491.
[96] See the cases of *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA); *Van Eeden v Minister of Safety and Security* 2003 1 SA 389 (SCA) for state liability based on the state's negligent failure to act, as discussed in chap 4 par 4.2.3.3 regarding delictual liability.
[97] *MEC Department of Welfare, Eastern Cape v Kate* 490 to 491.
[98] *Steenkamp NO v The Provincial Tender Board, Eastern Cape* (CC) 29–55.
[99] See in general the discussion by Van der Linde M & Basson E on "The Right to the Environment" in Woolman S (ed) *Constitutional Law of South Africa* Chap 50 2nd ed (2006) 50–49.

the case as it clearly falls under the broad description of 'appropriate relief'.[100] By not acknowledging it as such, the absurd consequences would be that where the Constitutional Court decides on the existence or merits of a potential claim for damages, it cannot make an order for payment of damages unless the matter is referred back to a lower court.

The South African courts have made awards for environmental damages in the following three cases. In *HL & H Timber Products (Pty) Ltd v Sappi Manufacturing (Pty) Ltd*[101] an award was made based on a breach of a statutory duty in terms of the Forests Act,[102] for damage caused by a veld or forest fire that was started negligently.[103] In *Viljoen v Smith*[104] an employer was held vicariously liable for delictual damages where a veld fire started by one of his employees caused damage to the plaintiff's farm.[105] In *Johannesburg City Council v Television & Electrical Distributors (Pty) Ltd*[106] a stormwater canal system that was improperly constructed caused flooding and resulted in an award for damage caused to goods on an adjacent flooded property.[107]

3.3.1 INTERNATIONAL LAW

3.3.1 General

Due to the nature of pollution and its global effects and especially because of the cross-border nature of environmental issues, it is clear that the causes and consequences of global environmental change cannot be addressed

[100] See also the judgments of Mokgoro J and Moseneke DCJ in *Dikoko v Mokhatla* 2006 6 SA 235 (CC) pars 53–54, and 90–92 that support this conclusion.
[101] 2001 4 SA 814 (SCA).
[102] Act 122 of 1984 s 84.
[103] It is important to note that s 84 of this Act also creates a presumption of negligence, which places the *onus* on the defendant to disprove his negligence.
[104] 1997 1 SA 309 (A).
[105] *Viljoen v Smith* 318.
[106] 1997 1 SA 157 (A).
[107] In *Johannesburg City Council v Television & Electrical Distributors (Pty) Ltd* 171 damages were awarded as they were found to be foreseeable and the wrongdoer was clearly negligent.

through the exercise of national jurisdiction alone.[108] The effect of international agreements, conventions, directives and protocols must also be examined.

In terms of both the Stockholm[109] and the Rio Declaration,[110] States have sovereignty over their natural resources and the responsibility not to cause environmental damage. The Rio Declaration acknowledged 'common but differentiated responsibilities' for developed countries and for the developing countries,[111] and developed general principles of international law for sustainable development.[112] The Rio Declaration also addressed the development of international law regarding liability and compensation for persons prejudiced by pollution and other environmental damage.[113]

It is therefore necessary briefly to focus on some international environmental principles and general liability principles in terms of international law, and to include some international agreements relevant to the scope of this study.[114] It is trite law that the universal principle of *pacta sunt servanda* applies and that

[108] Anderson 1; for example the European Commission Directive on civil liability for damage caused by waste; see in general on this point Sands 926. On the transboundary nature of pollution damage, see specifically Van Dunne JM (ed) *Transboundary Pollution and Liability: The Case of the River Rhine (Conference proceedings of the International Conference held at Rotterdam 19 October 1990*) Instituut voor Milieuschade, Erasmus Universiteit Rotterdam (1991) (hereinafter 'Van Dunne') on the pollution of the River Rhine that flows through various countries.

[109] Principle 21 of the Stockholm Declaration called for the rehabilitation and right to claim redress for environmental damage or degradation in the Report on the United Nations Conference on the Human Environment Declaration 1 (A/CONF 48/14) Stockholm June 1972.

[110] Principle 2 of the Rio Declaration in the Report on the United Nations Conference on Environment and Development (A/CONF.151/6/Rev.1June 13, 1992) Brazil June 1992.

[111] Principle 7 of the Rio Declaration; for a detailed examination of the position in various countries, see also in general Rajamani L *Differential Treatment in International Environmental Law* (2006).

[112] See the relevant principles in par 3.3.2.1, specifically item (e) below.

[113] See Sands Ph *Principles of International Environmental Law* 2nd ed (2003) (hereinafter 'Sands') 58 specifically for the distinction between 'developed' and 'developing' countries; the action plan as developed in Agenda 21 of the UNCED Report A/CONF. 151/26Rev.1(1993); Shaw MN *International Law* 5th ed (2003) (hereinafter 'Shaw') 754 identifies the initial conceptual problem posed for international law as the State-oriented nature of the discipline, leading to a differentiation in the applications and content of legal principles. The international community has slowly been moving away from this regime towards one of international co-operation.

[114] Annex I; a lengthy discussion of the liability of States is not within the scope of the thesis unless it falls within the scope of insurable liabilities which is not usually the case.

it requires countries to abide by binding treaties based on the principles of good faith and equity.[115]

3.3.2 Distinctive Principles of International Environmental Law

3.3.2.1 Identification of the principles

The following guiding principles are internationally acknowledged as principles that apply in the protection of the environment:[116] (a) the polluter-pays principle;[117] (b) the precautionary principle;[118] (c) the principle of preventative action;[119] (d) the principle of co-operation;[120] (e) the principle of sustainable development;[121] (f) the principle of common but differentiated responsibility;[122]

[115] As confirmed by Sands 150.
[116] See in this regard Sands 231; these principles are also implemented nationally, for example, by the ECA as discussed in par 3.4.3 below; see also the application of these principles in the context of marine pollution by Huybrechts MA & Van Damme KN in Faure MG & Hu J (eds) *Prevention and Compensation for Marine Pollution Damage* (2006) 123.
[117] See par 3.3.2.2 below; Principle 16 of the Rio Declaration; see detailed references to this principle in Faure (ed) 32; Kramer L *EC Environmental Law* (2007) (hereinafter 'Kramer') 27; Sands 279; Shaw 759; and also Larsson 90.
[118] See par 3.3.2.3 below; Principle 15 of the Rio Declaration; Principle 21 of the Stockholm Declaration; Sands 266; see for a general discussion Fisher E, Jones J, Von Schomberg R *Implementing the Precautionary Principle: Perspectives and Prospects* (2006); Kramer 23; Shaw 759, 776; see also Larsson 111 that the benefit of this principle lies therein that action is required before the polluting incident ocurs.
[119] Larsson 111 elaborates that the principle of substitution resorts under the principle of preventative action. The former includes, for example, the duty to use less harmful components where possible; for more detailed discussions of the principle of preventative action see also Kramer 25 and Sands 246. This principle again offers the benefit that it requires action to be taken prior to the polluting incident, as is the case in terms of the precautionary principle discussed in n 116 above.
[120] See Sands 249.
[121] The concept was defined in the Brundtland Report 43; Shaw 778; Sands 252 *et seq* explains that the principle includes integration of the environment and development. This is currently one of Africa's biggest challenges. For a comprehensive work on this principle see the study by Tladi D *Sustainable Development in International Law: An analysis of key enviro-economic instruments* (2007).
[122] See Sands 285.

(g) the principle not to cause transboundary environmental damage;[123] (h) the principle of strict liability;[124] (i) the principle of *restitutio in integrum*.[125]

Some of these principles relate specifically to aspects of liability for environmental damage caused, and deserve further explanation.

3.3.2.2 Polluter-pays principle

The best known principle that is incorporated widely into international as well as national environmental law is the polluter-pays principle. It is, however, not an absolute principle.[126] As this is the case, communities and governments must attempt to ensure that this principle is met by laying down efficient standards and environmental charges to force persons who are responsible for pollution, such as operators of hazardous installations, to eventually carry the costs, rather than relying on the public purse.

It remains an unavoidable economic reality that the polluter will pass these costs on to the consumer, leading to a reallocation or internalisation of costs. The justification for the implementation of a strict liability regime is also often based on this principle.[127] Its application is clearly not suitable for huge natural catastrophes due to the extensive liabilities that it could cause for the

[123] See in this regard Shaw 768; for statutory measures on transboundary pollution see specifically the National Environmental Management: Air Quality Act 39 of 2004 as discussed in par 3.4.13 below, specifically s 50 that authorises the Minister to take action to prevent and remedy the source of air pollution that is generated within South Africa, and that has a substantial detrimental effect on the environment or the health of people and animals in other countries.

[124] In specific situations the principle of strict liability is established but not applied absolutely, yet must be taken into consideration. It is proposed in the conclusion to this study that a strict liability regime for environmental damage liability can be advantageous; current examples include statutory strict liability for marine oil pollution.

[125] Larsson 117 confirms the view that this reflects the ideal situation which is, of course, the full restitution of harm.

[126] As stated by Sands 213, 279; Faure M & Skogh G *The Economic Analysis of Environmental Law and Policy* (2003) (hereinafter 'Faure & Skogh') 26 confirm that this popular principle 'has intuitive appeal in that the person responsible for the damage should pay'.

[127] See in this regard the discussion in chap 4 par 4.2.4.5 below on the justification to introduce a strict liability regime in South Africa for environmental damage.

polluter.[128] The value of the polluter-pays principle is that it provides an incentive for polluters to adhere to set standards in order to prevent liability.[129]

3.3.2.3 Precautionary principle

This principle has been widely accepted but has also been heavily criticised.[130] It is, for example, expressed by the duty to complete compulsory environmental impact assessments,[131] as well as by the more general duties to comply with set industry standards of best available technology.[132] In *MEC: Department of Agriculture, Conservation and the Environment v HTF Developers (Pty) Ltd*[133] the court held that the Environmental Conservation Act[134] gave officials the right to apply the precautionary principle.[135] In order to achieve effective sustainable development, environmental policies of necessity have to be based on the precautionary principle.[136]

3.3.3 International Agreements

3.3.3.1 Status of agreements

Binding international agreements or instruments impose obligations on the countries to act either individually or collectively to achieve the goals set by the agreements, and States can be held liable for their omissions or transgressions.[137] South Africa is bound to these instruments by being a

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[128] This is in accordance with the position in as in the OECD Report on The Application of the Polluter-Pays Principle to Accidental Pollution RecC(89)99(Final) 1989.
[129] For a South African perspective, see Havenga P "A Few Steps Closer Towards Establishing the 'Polluter-Pays' Principle" 1997 (9) *SA Merc LJ* 89; for a more international perspective Faure (ed) 32, also with reference to the opinion of Jans JH *European Environmental Law* 2nd ed (2000) specifically 37 *et seq*.
[130] See Sands 266 for criticism on this principle.
[131] In accordance with Chap 5 NEMA which came into operation 1 July 2006.
[132] Larsson 111 describes this principle as one that 'requires one to omit from causing harm, and to prevent harmful activities'.
[133] Case CCT 32/07 [2007] ZACC 25.
[134] S 39A of Act 73 of 1989.
[135] Par 15.
[136] As reiterated by Sands 269.
[137] See Robb CAR (ed) *International Environmental Law Reports* Vol 3 (2001) for case law that serves as authority on this point; Shaw 768 confirms that States remain responsible for
Footnote continues on the next page.

party, a party with reservation or a signatory, or has acceded to some of the conventions and treaties.[138] A comprehensive list of these agreements and their status in South African law can be found in Annexure A to this study.

Although they do not apply to all countries, cognisance can also be taken of various EC Directives such as the EC Directive on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage of the European Parliament and Counsel, which aims to prevent and remedy environmental damage that presents a threat to human health, as these instruments can serve as examples of possible measures that countries in Africa could adopt in future. The EU Directive on Environmental Liability is examined in greater detail in chapter 7 below.[139]

3.3.3.2 Compliance

A duty rests upon participating countries to enforce the terms of the conventions on national level and to ensure due compliance by its citizens. The Constitution provides for the recognition, status and effect of customary international law, agreements and treaties, and confirms that they are binding once the prescribed approval or ratification process has taken place.[140]

International arbitration procedures are available as dispute resolution and enforcement mechanisms, and various international courts[141] have jurisdiction to hear matters in terms of international law.[142]

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unlawful acts by their officials, and must ensure that their international obligations are respected within their territory.

[138] See Annexure A to this thesis on the treaties, conventions and protocols that form part of South African law.

[139] See chap 7 par 7.2 below.

[140] S 39, also enforced by s 108(2), s 231, s 232 and s 233.

[141] For example, The International Court of Justice, the Dispute Settlement Body of the World Trade Organization, The European Court of Justice and the various Human Rights Courts.

[142] See Sands 212–226 for an examination of the various mechanisms available.

3.3.4 Liability and Insurance

3.3.4.1 Identification of participants

Contemporary international law recognises a wide range of participants, including States, international organisations, regional organisations, non-government organisations, public companies, private companies and individuals.[143] Not all these entities enjoy international personality under all the branches of international law. As personality is a relative phenomenon, it varies depending on the circumstances of a specific issue. A brief exposition of the position of the State and the position of individuals and non-state bodies follows.

3.3.4.2 Liability of States

The liability of an entity will depend largely on its nature, the extent and focus of an international legal rule, and the specific facts and circumstances of the situation that require the investigation into international liability.[144]

The ILC Articles on the Responsibility of States for Internationally Wrongful Acts adopted in 2001 reflect the liability imposed upon actors for their illegal acts or for adverse consequences due to their lawful acts.[145] Article 37 provides that '(1) The State responsible for an internationally wrongful act is under an obligation to compensate for damage caused thereby, insofar as damage is not made good by restitution. (2) The compensation shall cover

[143] See Henderson A "A step forward or a slap in the face? *Lubbe & Four Others v Cape Plc and related appeals* 27-7-2000 (House of Lords)" 2000 (October) *De Rebus* 47 on the position of the liability of holding companies and their subsidiary companies that operate in different countries.

[144] Shaw 178, 409–459 considers the recognition of an entity as a 'State'.

[145] Report of the ILC, UN Doc. A/56/10 (2001); see Sands 872; see also Boyle A in Bowman M & Boyle A *Environmental Damage in International and Comparative Law* (2005) (hereinafter 'Boyle') 23–25 for a discussion of State liability in an environmental context. Draft proposals of the ILC have rejected the implementation of a radical strict liability regime and prefer loss allocation amongst the various State actors based on existing civil liability treaties. See in this regard the principles of a strict liability regime in chap 4 par 4.2.4.5 below; Larsson 153 *et* seq considers the international legal principles that apply specifically to State liability specifically for transboundary pollution damage.

any financially assessable damage including loss of profits insofar as it is established.'

As far as the State is concerned, it is clear that our government could incur liability for failing to comply with its duties. The liability of the State has, in view of the various constitutional rights of the State's subjects, been extended from the pre-constitutional position. The State can also incur liability where it fails to give effect to a constitutional right. A brief reference can be made to section 33(1) of our Constitution that confers on everyone the right to administrative action that must be lawful, reasonable and procedurally fair. It is submitted that where the State has to comply with an international agreement and fails to do so, the international community and the citizens of the State may bring the latter to justice and require specific performance.

3.3.4.3 Liability of persons

Liability could be based on commissions or omissions, based either on a fault liability or on a strict liability regime. The latter implements a *prima facie* liability for which only specific defences, exemptions or qualifications exist.[146]

Claims for reparation include all costs required to wipe out the consequences of the illegal act and to re-establish the original position.[147] This could be restitution in kind or payment of a monetary sum for damages or losses sustained.[148] Such an award could be referred to the UN Compensation Commission that has established formal criteria for the quantification of claims regarding environmental damage and the depletion of natural resources.[149]

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[146] See also chap 4 par 4.2.4.5 for an extensive discussion of a strict liability regime for pollution damage liability; also Sands 881 n 57, n 59 for a general examination of strict and absolute liability regimes and n 124 for the defences available.

[147] Boyle 17 holds the opinion that reparation requires full compensation, which must be given content on particular detailed rules, and that it has no single, logically determined, fixed meaning; that the basic principle of reparation cannot be a practical guide to the assessment of damages, as methods of assessment and the results vary considerably in various legal systems.

[148] Report of the ILC n 113 above: (Part I chap II) art 34.

[149] UN Security Council Doc. S/AC.26/1991/W.P.20, 20 November 1991; and par 35 of Decision 7 of the Commission's Governing Council.

3.3.4.4 Mandatory insurance cover

3.3.4.4.1 General

Compulsory or mandatory liability insurance cover by both States and individuals has not been widely implemented in all areas under convention, except for potential liabilities in the nuclear industry and in the marine environment.[150]

3.3.4.4.2 Marine pollution insurance cover

The marine environment is currently the environmental medium in which pollution issues have been addressed most extensively.[151] As far as marine pollution is concerned, extensive and specialised international and national statutory measures exist that ensure the effective synchronisation of the prevention of transboundary pollution and the regulation of transboundary pollution damage liability.[152] The greatest regulatory framework can be found within the oil and petroleum industry as the transport of these substances by sea poses the greatest risks for marine pollution.[153]

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[150] The Lugano, Paris and Vienna Conventions as examined by Sands 934.

[151] For a comprehensive work on marine pollution see Hui W in Faure MG, Hu J (eds) specifically 2–23; see in general also Larsson 127 for a discussion of liability for marine pollution by oil; for the South African position under the general principles of insurance law see Reinecke *et al* chap 19.

[152] Such as the International Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea 1996; the 1992 Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971, the Rio Convention on Biodiversity 1992; The Convention on the Law of the Sea 1982, and others; see also Annex A to this thesis for international instruments relevant to the scope of this study; see in this regard Winstanley T "Trans-boundary corporate liability" 2000 (November) *De Rebus* 56; as well as Henderson (2000); see also chap 6 par 6.1 and par 6.6.2.2 on transboundary pollution.

[153] See Part 4 Division 1 of the Merchant Shipping (International Oil Pollution Compensation Fund) Bill 2005, which has yet to be enacted in South Africa, on contributions that will become due to the fund in terms of the 1992 Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, and which will allow the Republic to participate in the Civil Liability and Fund Conventions that to date have been approved by Parliament in terms of the Constitution s 231(2); see also Annexure A.

Ship owners can incur strict liability[154] for incidents involving hazardous and noxious substances.[155] Detachment of liability is possible only in limited circumstances.[156] The 1996 Convention furthermore provides for the channeling of liabilities in that only the ship owner or the statutory fund are liable to make compensation available to persons affected by polluting incidents.[157] Liability is furthermore limited to specific amounts.[158]

It is important to note that for marine pollution, ship owners must maintain the required liability insurance cover or provide security by presenting other financial instruments.[159] The Convention specifically provides for direct claims by the prejudiced party against the insurer and not against the insured.[160]

3.3.4.4.3 Liability cover for nuclear incidents

Another example of international co-operation lies within the nuclear industry, where the International Atomic Energy Agency or IAEA acts as a single central intergovernmental forum for scientific and technical co-operation in the nuclear field. It is the world's nuclear inspectorate on safety and liability issues, and promotes the safe use of nuclear technology and facilitates co-operation in nuclear development.[161]

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[154] See the discussion in chap 4 par 4.2.4.5 for the general principles of strict liability; also the various statutes that provide for strict liability regimes in par 3.4 below.
[155] Article 7(1) of the 1996 Convention.
[156] In terms of chap II of the 1996 Convention the circumstances include (a) an act of war or natural disaster; (b) damage caused wholly by the intentional conduct of a third party; (c) wholly due to negligent or wrongful acts of a government or other authority.
[157] Article 7(5) of the 1996 Convention; chap III creates the Hazardous and Noxious Substances Fund that under Article 14 provides compensation for (a) incidents caused by unidentified ships; (b) where the ship owner cannot be held liable; (c) where the ship owner cannot meet the claim; (d) or where the damage caused exceeds the limits of the ship owner's liability.
[158] The Article 9 limitations are justified by public policy considerations in that an attempt must be made to soften the onerous strict liability imposed.
[159] Article 12 of the 1996 Convention; compulsory insurance certificates must be issued and presented where required; see Shaw 808 on details and procedures for claims against ship owners.
[160] Article 12(8); see especially this type of first-party insurance to the benefit of a third party as examined in greater detail in chap 5 par 5.3.3 below.
[161] http://www.iaea.org (last accessed on 21 February 2008); see also Shaw 771, 801 for a discussion of the structure and role of the IAEA.

Liability in this industry is dealt with by various international instruments as adopted under the scope of the IAEA, and also by various international conventions such as the Vienna Convention on Civil Liability for Nuclear Damage, as well as the Convention on Supplementary Compensation for Nuclear Damage.[162] The Vienna Convention bases liability on the civil law concept and requires countries to adopt the following principles: (a) that liability is channeled exclusively to the operators of nuclear installations; (b) that the liability is absolute; (c) liability is limited in amount;[163] and (d) liability is limited in time.[164]

Operators of nuclear facilities must also maintain mandatory insurance or other financial securities to cover their potential liabilities.[165] Jurisdiction lies within the courts of the country in whose territories the nuclear incident occurred. The Convention has not yet met with general international approval.[166] Liability in this specific industry in a South African context is discussed in more detail below.[167]

As the scope of this thesis is on pollution liability in general, and as the marine and nuclear liability regimes have been identified as delimitations for purpose of this study, this basic discussion should suffice and the issues are not examined in greater detail.

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[162] See Annex A attached hereto.

[163] In terms of Articles II and III of the Convention liability must be limited to a specific minimum amount, but a maximum is not fixed and remains within the discretion of each country. Additional funding, consisting of contributions by the parties, and contributions by the Installation State and other contracting parties are available to cover damage, as well as the cover provided by additional insurance coverage.

[164] Rights to compensation are extinguished if an action is not brought within 30 (thirty) years from the date on which the damage is induced by a nuclear incident. National law may establish shorter prescription time limits, but not less that three years from the date on which the claimant knew or ought to have known of the damage and the operator's liability.

[165] See Shaw 803 for a discussion of the various limitations of the claims and on the responsibility of the specific State to ensure that these limits are met.

[166] States such as Russia, China and Pakistan who pose a major nuclear threat have not yet signed or adopted the Convention. South Africa is currently a non-party to the nuclear conventions http://www.ola.iaea.org/factSheets/CountryDetails.asp?country=ZA (last accessed on 27 February 2008); see the general considerations of the impact this has on the industry by Brown OF "A Continuing Impediment to Nuclear Commerce: The Uranium Institute Twenty Fourth annual Symposium 1999" http://www.world-nuclear.org/sym/1999/brown.

[167] See pars 3.4.4.12 and 3.4.4.15 below.

3.4 SOUTH AFRICAN STATUTORY LIABILITY

3.4.1 General

Statutes may create pure statutory duties and ensuing criminal liability or payment of fines for non-compliance, but may also establish the remedy of a statutory private law claim for damages.[168] It is trite law that the intention of the legislature to create a civil remedy must appear clearly from the express provisions of the statute. The provision must address both the basis of the claim and the identification of the capacity of the parties involved. It is conceivable that the cause of pollution is not limited to the introduction of substances into the environment, but that it can include the introduction of genetically modified organisms that did not exist previously or did not occur naturally in a specific environment. This requires the inclusion of some references to genetically modified organisms and their adverse impact on the environment and ensuing liability for damage caused to the environment in the discussion in this chapter.[169]

3.4.2 National Environmental Management Act[170]

3.4.2.1 General

Although many statutes dealing with the environment have been enacted, two key environmental statutes apply in general to environmental protection. The first is the National Environmental Management Act (hereinafter 'NEMA'), and the other is the Environment Conservation Act as discussed below.[171]

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[168] See the explanation by Neethling J, Potgieter JM & Visser PJ *Law of Delict* 5th ed (2006) (hereinafter 'Neethling *et al*') 69, specifically the content of n 235, on the intention of the legislature to create specific extraordinary statutory remedies in this regard.

[169] See also chap 2 pars 2.2.3.3 and par 2.3.3.3 for definitions and descriptions used in the Act.

[170] Act 107 of 1998.

[171] See par 3.4.3 below.

3.4.2.2 Rights in the Preamble to NEMA

In terms of the preamble to NEMA: 'Everyone has the right to an environment that is not harmful to his or her well-being. Everyone has the right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.'[172] It further provides that it is desirable that the law should be enforced by the State and that the law should facilitate the enforcement of the environmental laws by civil society. This imposes a statutory duty upon the State to comply with these provisions, and also, most importantly so, imposes a duty upon all its citizens to act in accordance with these statutory provisions.

3.4.2.3 Liability in terms of NEMA

NEMA deals specifically with the duty of care to prevent damage and the duty to remedy environmental damage.[173] Section 28[174] requires every person to take reasonable measures to prevent the occurrence, continuation or recurrence of pollution or degradation to the environment.[175] It also requires a person to minimize and rectify pollution or degradation where the harm caused to the environment cannot be prevented or stopped, even where it is authorised by law. Although it was arguably not the intention of the legislator,

[172] See the judgment in *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products and others* 2004 2 SA 393 (EC) 409 that 'appropriate relief' provided for in s 32(1) of NEMA even includes the right of the government to close a factory that caused extensive air pollution, where the management of the factory failed to remedy the situation after repeatedly being ordered to do so.
[173] NEMA Chap 7 Part 1 on 'Compliance and Enforcement'.
[174] S 28(1).
[175] See the discussion of the definition of the 'environment' in terms of NEMA in chap 2 par 2.2.3.3.

it was decided in the case of *Bareki v Gencor Limited*[176] that NEMA does not work retrospectively, which is a cause of great concern.

This duty applies to owners, occupiers and even to mere users of land on which environmental damage can occur.[177] The measures as required by section 28(1) are very broad, and include the investigation, assessment and evaluation of the impact that the pollution has on the environment,[178] the duty to inform and educate employees as to their manner of work and the impact that their conduct can have on the environment,[179] to cease, prevent or modify activity that pollutes or harms the environment,[180] to contain or prevent the movement of pollutants or cause of degradation,[181] to eliminate the source of pollution[182] as well as to remedy the effects of pollution or degradation.[183] This creates extensive statutory duties for any person who is involved in an activity that has the potential to cause pollution damage or degrade the environment.

An interesting statutory exemption is made for a person to avoid civil liability for acting in contravention to, or failing to act in accordance with, a civil obligation, for example, in accordance with his contractual duties. NEMA provides that no person will incur any liability, either civil or criminal, where such a person refuses to participate in any activity that could cause pollution or degradation to the environment.[184]

NEMA makes no mention of any liability or other insurance, whether mandatory or elective.

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[176] 2006 1 SA 432 (T).
[177] S 28(1); reg 2, enacted in terms of s 44 of NEMA, requires any person using a vehicle within a coastal zone to take all reasonable measures to avoid, minimize or rectify any harm caused.
[178] S 28(3)(a).
[179] S 28(3)(b).
[180] S 28(3)(c).
[181] S 28(3)(d).
[182] S 28(3)(e).
[183] S 28(3)(f).
[184] S 29(1). Furthermore, these persons have a statutory duty to report their failure or refusal to work within specified time limits, and may not be threatened or bribed to resume work; see s 29(2)–s 29(5).

3.3.3.2 Persons responsible for clean-up

3.4.2.4.1 Identification of persons

The following persons are responsible for the costs incurred to remedy or rehabilitate: (a) persons either directly or indirectly responsible for the pollution or degradation, or even for any potential pollution or degradation;[185] (b) owners of the relevant land or their successors-in-title;[186] (c) persons in control of land, or who used the land at the time of the pollution or degradation 'when the activity or process is or was performed or undertaken, or the situation came about';[187] (d) any persons who acted negligently in failing to prevent such pollution or degradation as required in terms of NEMA;[188] and (e) even a person who benefited from the preventative or remedial measures taken in terms of section 28(7).[189]

3.4.2.4.2 Extent of liability for clean-up costs

The costs that can be claimed include labour, administrative and overhead costs, but must be reasonable.[190] From the wording used, these persons appear to be jointly and severally liable, with a subsequent right of recourse against each other.[191] The liability of the State is limited to any failure to act that is unlawful, negligent or in bad faith. Costs incurred due to criminal liability are excluded as well.[192]

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[185] S 28(8)(a).
[186] S 28(8)(b).
[187] S 28(8)(c); see also chap 6 par 6.3 on the effects of insurance cover triggers and the possibility of a long-tail liability.
[188] S 28(1), s 28(8)(d).
[189] This will be the situation where the Director-General or Head of Department took the relevant measures upon themselves.
[190] S 28(10).
[191] S 28(8) provides that '[t]he Director-General or Provincial Head of Department may recover all costs incurred as a result of s 28(7) from any or all of the following persons'; and s 28(11) provides that '[w]here more than one person is liable under subsection (8), the liability must be apportioned according to the degree to which each was responsible for the harm to the environment'.
[192] S 49.

3.4.2.4.3 Duty to notify

Where an 'emergency incident' occurs,[193] the responsible person[194] is obliged to give proper notice of the incident,[195] and then as soon as is reasonably practicable after knowledge of the incident, take measures to contain and minimise the effect,[196] undertake clean-up measures,[197] remedy the effects of the incident,[198] and assess the effects on the environment and on public health.[199] The relevant authority may instruct the responsible person to take the necessary steps, or can take such steps on behalf of such a person.[200] The authority may then claim a reimbursement for all reasonable costs incurred, jointly and severally from all responsible persons involved in the incident.[201]

3.4.2.5 Enforcement

3.4.2.5.1 Department of Environmental Affairs and Tourism

As far as enforcement is concerned, the Director-General[202] can enforce these duties by giving a directive or compliance order to the relevant persons.[203] Failure to react allows the Director-General to take the required measures.[204] Any person may, after a notice period of 30 days, apply for a

[193] S 30(1)(a) defines 'an incident' as 'an unexpected sudden occurrence, including a major emission, fire or explosion leading to a serious danger to the public or potentially serious pollution of or detriment to the environment whether immediate or delayed'.
[194] As defined in s 30(1)(b), as the person who is responsible for the incident, owns or is in control of the hazardous substance.
[195] S 30(3).
[196] S 30(4)(a).
[197] S 30(4)(b).
[198] S 30(4)(c).
[199] S 30(4)(d).
[200] S 30(6), (7) and (8).
[201] S 30(9); *Truck and General Insurance Co Ltd and another v Verulam Fuel Distributors CC and another* 2007 2 SA 26 (SCA) par 12.
[202] This will be the Director-General of Environmental Affairs and Tourism in terms of s 1 item 9 of the NEMA.
[203] S 28(4).
[204] S 28(7).

court order to enforce the Director-General to give such a directive where required.[205]

Even more drastic powers are given to the Director-General to expropriate rights in respect of polluted land to the benefit of a person who is to remedy or rehabilitate such land.[206] To add insult to injury, the costs of the expropriation are also for the account of the person who was required to remedy or to rehabilitate.

3.4.2.5.2 Class actions

Class actions in a constitutional context have been examined above.[207] In general, as far as the legal standing of persons other than the State to bring an application in order to enforce environmental laws is concerned,[208] both the Constitution and NEMA create the right to bring a class action to protect the rights of various persons where the action is in the public interest. It is submitted that an action may even be in the interest of protecting the environment for its own sake as it can be seen to serve the interests not only of the current generation, but also of future generations.[209] The latter inclusion[210] therefore does not require the pollution or degradation to cause harm to any person, but only allows a claim where harm to the environment itself is caused. The action envisaged in section 32 refers to a civil action, whereas section 33 as discussed below refers to a private criminal prosecution.

3.4.2.5.3 Criminal sanction

In a proposed amendment of section 31, a person convicted of an offence in terms of section 31N for failing to comply with a compliance notice will be held

[205] S 28(12).
[206] S 28(6).
[207] See par 3.2.3.4.2 above.
[208] NEMA Chap 7 Part 2.
[209] S 32(1); s 31N.
[210] S 32(1)(e).

liable to pay a fine not exceeding R5 million or to imprisonment for a period not exceeding 10 years or both.[211]

3.4.3 The Environment Conservation Act[212]

3.4.3.1 The ECA General Policy

In the General Policy issued in terms of section 2(1) of the ECA, [213] '[e]very inhabitant of the Republic of South Africa has the right to live, work and relax in a safe, productive, healthy and aesthetically and culturally acceptable environment and therefore also has a personal responsibility to respect the same right of his fellowman. Every generation has an obligation to act as a trustee of its natural environment and cultural heritage in the interest of succeeding generations'.

The General Policy of ECA under its heading 'Pollution Control' broadly provides that pollution should be prevented by the formulation of a comprehensive effective policy, by the enactment of legislation, by establishing and maintaining certain specified norms and standards, by applying the best practicable environmental options based on the most recent and suitable technology, by fostering positive attitudes among people and by co-operating internationally.

3.4.3.2 Liability in terms of the ECA

In terms of section 29 of ECA, contravention of the ECA's provisions incurs criminal liability.[214] The various subsections stipulate the maximum prison terms, penalties and fines to be paid, and as a drastic remedy, also allow for

[211] National Environmental Management Amendment Act 46 of 2003 s 4.
[212] Act 73 of 1989.
[213] General Policy in accordance with ECTA as enacted by GN 51 in *Government Gazette* No 15428 (21 January 1994).
[214] In Part VII of ECA titled 'Offences, Penalties and Forfeiture'.

the attachment of goods.[215] Any vehicle or anything used in committing the offence may be forfeited to the State.[216]

3.4.3.3 Policy on Hazardous Waste Management

The Policy in terms of ECA on Hazardous Waste Management[217] includes the international guiding principles for the management of waste in order to prevent pollution of the environment.[218] The Waste Management Bill that is in the process of being finalised,[219] imposes tough penalties that include a fine of R 1 million or a 10-year jail term, or both.[220]

3.4.3.4 Enforcement

Section 31A of ECA deals with the powers of various authorities where the environment is, or has been, seriously damaged, endangered or detrimentally affected by any activity. These include the powers to direct a person to cease any activity and take such steps as the authority deems fit to eliminate, reduce or prevent the damage, danger or detrimental effect.[221] The person may also be directed to rehabilitate the environment at his own expense.[222] Where a person fails to comply, the authority may take or instruct any other person to take these steps and all expenditure may then be claimed from the former.[223] This may include more than just the minimum environmental clean-up costs

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[215] See also for example the Schedule on Plastic Carrier Bags and Plastic Flat Bags as enacted in GN R625 *Government Gazette* No 24839 (9 May 2003) s 3; the Regulations issued in terms of s 25 of ECA regarding Noise Control as enacted in GN R154 *Government Gazette* No 13717 (10 January 1992) reg 9.
[216] S 30 of the ECA.
[217] As enacted by GN 1064 in *Government Gazette* No 15987 (30 September 1994).
[218] See the more detailed discussion in par 3.3.2 above on the status of these international environmental principles.
[219] The final hearing was held on 11 March 2008, yet the Act has to date not been enacted.
[220] Waste Management Bill published in terms of General notice 1832 / 2007 in *Government Gazette* 29487 of 12 January 2007 3.
[221] S 31A(1).
[222] S 31A(2).
[223] S 31A(4); see also *MEC: Department of Agriculture, Conservation and the Environment, Dr ST Cornelius v HTF Developers (Pty) Ltd* par 2.

incurred, as remediation and restitution to the previous position in addition to the basic clean-up costs can be extensive and expensive.[224]

3.4.4 Other Environmental Statutes

3.4.4.1 Animals Protection Act[225]

In terms of the Act any contravention of the provisions of the Act is a criminal offence. [226]

It is important to note that a court has the power to award an amount of damages to any person upon a court application, to cover any loss or expenses incurred by any person due to the contravention of the Act merely on the criminal charges presented to the court where the accused was found guilty of committing the offence.[227] This award has the same effect as a judgement given in a normal civil action.[228]

3.4.4.2 Compensation for Occupational Injuries and Diseases Act[229]

Where any employee meets with an accident in the workplace, out of or in the course of his employment, resulting in his disablement or death, the employee or his dependants may claim the benefits payable in terms of the Act.[230] This will also apply where an employee suffers due to pollution-related accidents or

[224] A similar view is reiterated by Havenga (1995)197.
[225] Act 71 of 1982.
[226] S 2(1).
[227] S 2(4)(1), s 2(5)(4).
[228] S 2(4)(2).
[229] Act 130 of 1993.
[230] S 22(1), 22(4). In a landmark case for occupational health law in South Africa a 49-year old ex-miner is suing the mining company AngloGold Ashanti for damages of R 2.7 million for silicosis and silico tuberculosis caused by his exposure to dangerous quantities of dust and gas in the mine where he worked for 16 years. AngloGold is challenging the plaintiff's right to sue the company based on s 35 of the Occupational Injuries and Diseases Act, that he is limited to the once-off claim amount that he received from the compensation commissioner in terms of the Act, and that it precludes any other claims for compensation. The constitutionality of the limitation in s 35 is being challenged in this case. Judgment is only expected by middle 2009 http://www.busrep.co.za/index.php?fArticleId=4245288 (last accessed on 2 August 2008).

incidents. An award can then made by the Director-General in accordance with the provisions of the Act. The Director-General may order that the employer is individually liable and require the employer to deposit financial securities that are, in the Director-General's discretion, sufficient to cover the liability towards the employee or his dependants in terms of the Act.[231]

The Act specifically limits claims for compensation to the statutory benefits allowed under the Act. No other action against an employer, such as one in delict, is available to the employee or his dependants for any occupational injury or disease that falls within the scope of this Act.[232] This restriction does not, however, preclude an employee from claiming compensation in terms of the Act, and to recover amounts not covered by his statutory claim from a third party who was also responsible for the injuries or caused the disease.[233] Where the employer or Director-General was held liable for payment in terms of the Act, they may recoup any compensation paid to the employee from the third party who was responsible for the loss.[234]

A current issue that is extremely relevant are the claims of employees against their employers based on 'sick building syndrome'. Where a factor or combination of factors creates poor indoor air quality, causing health complaints, liability can be incurred.[235]

3.4.4.3 Game Theft Act[236]

Where a court convicts any person for the theft, or specifically with regard to environmental damage for damage caused to game, it may award compensation to the person suffering the loss.[237]

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[231] S 31.
[232] S 35.
[233] S 36(1)(a).
[234] S 36(1)(b).
[235] See in this regard Mitchell WJ "CGL Pollution Exclusion Provisions and the Sick Building Syndrome" *Defense Counsel Journal* 1999 (January) 124, as well as the discussion of this issue and its effects on pollution exclusion clauses in chap 6 par 6.5.6.7 below.
[236] Act 105 of 1991.
[237] S 7.

3.4.4.4 Genetically Modified Organisms Act[238]

In terms of section 17 the 'user'[239] of a genetically modified organism (hereinafter 'GMO') shall ensure that appropriate measures are taken at his own costs to avoid an adverse impact on the environment and human and animal health arising from the use of these organisms.[240] Users must notify the relevant authority immediately of any 'accident'[241] and its circumstances, and must provide all information necessary to assess the impact of the environment and to enable the implementation of emergency measures.[242]

The liability for damage caused by the use or release of a GMO organism shall be borne by the user concerned.[243] Liability is excluded where the GMO was in the possession of an inspector and the user could not foresee or have foreseen such damage but failed to take reasonable action to prevent it.[244] It appears from the wording in this section that the intention is to impose strict liability on the user while he is in possession and control of the GMO, irrespective of the conduct of third parties such as an inspector, as his liability is based only on his lack of foreseeability while the GMO was in the possession of the third party.

The relevant authorities[245] may take all reasonable measures to remedy the situation where a user fails to do so,[246] and may recover all costs proportionally from any person who benefits from these measures.[247] These

[238] Act 15 of 1997; the Act is in accordance with the UN Convention on Biological Diversity as listed in Annexure A.
[239] S 1(m) defines a 'user' as 'a person who conducts an activity with a genetically modified organism'.
[240] S 17(1A); s 17 has been comprehensively amended by s 11 of the Genetically Modified Organisms Amendment Act 23 of 2006.
[241] S 1(a) defines 'accident' as 'any incident involving the unintended general release of a genetically modified organism that is likely to have an immediate or a delayed averse impact on the environment or human or animal health'.
[242] S 17(1A) of Act 15 of 1997; s 5(h) of Act 23 of 2006.
[243] S 17(2).
[244] S 17(2) of Act 15 of 1997.
[245] In this case The Executive Council for Genetically Modified Organisms.
[246] S 17(3).
[247] S 17A(1).

costs must be reasonable and may include, but are not limited to, administration, labour and overhead costs incurred by the Council.[248]

Where more than one person is held jointly and severally liable, the Council is entitled, upon request, to apportion liability. It is important to note that this apportionment does not relieve the persons from their joint and several liability for the costs.[249] Any order given by the relevant authority shall have the effect of a civil judgment.[250]

3.4.4.5 Hazardous Substances Act[251]

The Act provides that any person who sells, imports, manufactures or packs classified hazardous substances is presumed to have done so and incurs liability for his actions under the provisions of the Act.[252]

Employers, mandators and principals incur vicarious liability for the conduct of their employees, mandatees and agents unless they can prove that they did not permit or connive in the conduct, that they took all reasonable measures to prevent the conduct and that it did not fall within the course of employment, mandate or authority of the above persons.[253] An action merely to forbid such conduct does not serve as proof of reasonable measures to prevent it.[254]

3.4.4.6 Marine Pollution (Control and Civil Liability) Act[255]

It is interesting to note that 'environment', 'marine environment' and 'pollution' are not specifically defined in this Act, even though the purpose thereof is to provide for the protection of the marine environment against pollution by oil and other harmful substances, and to prevent and combat such pollution. The

[248] S 17A(3).
[249] S 17A(4).
[250] S 17A(5).
[251] Act 15 of 1973.
[252] S 13(1).
[253] S 16(1).
[254] S 16(2).
[255] Act 6 of 1981.

Act places extensive duties upon owners, operators of ships and off-shore installations,[256] and also covers issues regarding the liability of persons for contravention of the provisions of the Act.[257]

The person who is the owner of any ship, tanker or offshore installation at the time of an incident leading to the discharge of oil, whether through a single occurrence or a series of occurrences, is liable for any loss or damage caused elsewhere than on such a ship, tanker or installation.[258] The owner is also liable for the costs of any measures taken by the Authority[259] to prevent or reduce loss or damage after any such incident.[260] Such an owner must deposit an amount or furnish the guarantees as requested and determined by the Authority in its discretion, to cover the loss or damage.[261]

The loss or damage includes costs and expenses for the measures taken to remove pollution,[262] as well as an amount deemed by the Director-General to be sufficient to compensate any organisation for expenses incurred in any rescue, treatment, feeding and rehabilitating of any coastal birds polluted by the discharged oil.[263] The Act does not refer to the rescue or treatment of any sea animals, but only to the ocean itself. This Act must be read in conjunction with the Sea Birds and Seals Protection Act[264] discussed below.[265]

The owner is held strictly liable unless he can prove that the incident was caused by an act of war or other form of *force majeure*.[266] Certain limits of

[256] See in this regard for example the duty of an operator of an offshore installation to apply for a pollution safety certificate issued by the Authority in terms of s 24.
[257] See the Preamble to the Act.
[258] S 9(1)(a).
[259] The South African Maritime Safety Authority as defined in s 1 of the Act.
[260] S 9(1)(b).
[261] S 16.
[262] S 9(2)(a).
[263] S 9(2)(b).
[264] Act 46 of 1973.
[265] Par 3.4.4.17 of the text below.
[266] S 9(3) provides that the owner is liable unless he proves that the discharge was caused by (a) an act of war, hostilities, civil war, insurrection or an exceptional, inevitable and irresistible natural phenomenon; or by (b) an act or omission by any person who is not the owner, the latter's servant or agent, and who acted intentionally to do damage, or (c) was wholly caused by the negligence or other wrongful act of any government or other authority responsible for the maintenance of lights or navigational aids.

liability are also prescribed by the Act in these circumstances.[267] Co-owners are held jointly and severally liable where their respective liabilities cannot be distinctly separated.[268] It is important to note that the legislature intended the act to create a comprehensive liability regime, as it provides expressly that no other liability except for the liabilities dealt with in the Act, can be incurred towards any other person.[269]

The Act lastly provides for the seizure and detention of ships pending payment of costs due, and the subsequent realisation of the asset to use the proceeds for the satisfaction of any claims for loss, damage or costs.[270] These rights enjoy preference over any lien or mortgage over the ship or goods.[271]

Vessels such as warships or tankers used in the service of the State are exempted from this Act.[272]

3.4.4.7 Mine Health and Safety Act[273]

Various statutory duties are placed on employers, operators and owners of mines, manufacturers and suppliers of any article or substance that is used for or by a mine, regarding the health and safety of persons involved in some way or another in a mine and its operations, for example by the employees in the mine.[274] The Act also places a duty of care on the employees at a mine to protect their own health and safety as well as the health and safety of other persons involved and creates a statutory duty to mitigate their own losses, as well as to create a statutory duty of care to mitigate the losses of others.

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[267] S 9(5), s 10.
[268] S 9(4).
[269] S 10.
[270] S 19.
[271] S 19(3).
[272] S 11.
[273] Act 29 of 1996.
[274] See, for example, s 5 that requires the employer to maintain a healthy and safe mining environment; s 11 that requires the employer to assess and respond to risks; and s 21 that places a duty on any manufacturer or supplier of articles or substances to be used in mining activities to ensure the health and safety of persons. See also the landmark case referred to in n 196 above.

Any contravention of the Act constitutes an offence and the Act prescribes specific fines and terms of imprisonment for the different contraventions.[275] No reference is made to a claim for damages. The Act specifically provides that the State or its organs cannot incur civil liability for the conduct of one of its officers where he acted without negligence and in good faith.[276]

3.4.4.8 Mineral and Petroleum Resources Development Act[277]

The holder of a reconnaissance permission, prospecting right, mining right or permit or retention permit is responsible for any environmental damage, pollution or ecological degradation as a result of his or her reconnaissance, prospecting or mining operations that occurs in the area for which the right or permits were issued.[278] Various sections in Chapter IV of the Act deal mainly with the rehabilitation of the surface of land.

In the first place the Act provides that the holder mentioned above,[279] must as far as is reasonably practicable, rehabilitate the environment affected by his operations to its natural or predetermined state or to a land use that conforms to the generally acceptable principle of sustainable development.[280] Financial provision must also be made for the remediation of environmental damage.[281]

The Minister has the power to effect such a remediation in certain situations where a person fails to rehabilitate in accordance with the provisions of the Act.[282] The Minister may then recover these costs where the Department had to take emergency remedial measures before contacting the person who had to remedy the position.[283]

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[275] S 92.
[276] Mine, Health and Safety Act 29 of 1996 Sched 2, s 104; Sched 7, s 22(2).
[277] Act 28 of 2002.
[278] S 38(1)(e).
[279] The holder of rights, permits or permissions in terms of s 38(1).
[280] S 38(1)(d).
[281] S 38–41.
[282] S 46.
[283] S 45.

The Minerals and Petroleum Resources Development Act furthermore contains a specific section that drastically extends liability, in that it provides that 'irrespective of the Companies Act[284] or the Close Corporations Act,[285] the directors of a company or members of a close corporation are jointly and severally liable for 'any unacceptable negative impact on the environment, including damage, degradation or pollution advertently or inadvertently caused by the company or close corporation which they represent *or represented'.*[286] This is a rare example of a statutory limitless long-tail liability, which type of liability is examined and discussed in detail in chapter 6 below.[287]

In the regulations to the Act various actions are prohibited, including dumping, disposal of waste material, oil pollution and more. As mentioned above, section 41 contains a pecuniary provision in terms of which the applicant of any right or permit issued in terms of the Act has to demonstrate in his environmental management programme that he has made sufficient financial provision, or has the necessary financial means, to rehabilitate or manage negative environmental impacts caused by his activities, and that he can comply with his management programme in accordance with his statutory duties.

The Act also requires that surfaces be sanitised and that 'acceptable hygienic and aesthetic practices must be adhered to'.[288] This means that the environment must be clean, unpolluted, aesthetically pleasing and appear to be fully rehabilitated to the extent that it is acceptable to the community.

[284] Act 61 of 1973.
[285] Act 69 of 1984.
[286] S 38(2); see also Winstanley T 56 for an evaluation of the judgment given this case.
[287] See chap 6 par 6.3 below.
[288] Reg 71(2) in terms of RGN 527/26275/3 of 23 April 2004 *Government Gazette* No 26942 (29 October 2004).

3.4.4.9 National Environmental Management: Air Quality Act[289]

In terms of chapter 7 persons are guilty of offences where they act in contravention of the Act, and may be imprisoned or fines may be levied.[290]

The Act does not provide for a claim for any other damages or compensation.

It should be noted that section 50 covers transboundary air pollution that originates in the Republic but has a significant detrimental impact on the environment or health in another country. The Minister may take measures to prevent, control or correct the releases within the Republic that migrate to other countries.[291]

3.4.4.10 National Forests Act[292]

In Chapter 7 of this Act various imprisonment terms, community service terms and fines are prescribed for the various categories of offences as stipulated in the Act.[293]

It is further interesting to note that the Act also provides for an order made in criminal proceedings for the payment of compensatory damages to a person who suffered a loss due to the offence.[294] The Act also provides for the seizure of assets and forest produce by any forest officer.[295]

3.4.4.11 National Heritage Resources Act[296]

Certain sections of the environment, both natural and built, have been declared national heritage sites and must be conserved in terms of the Act. A

[289] Act 39 of 2004.
[290] S 52(1).
[291] S 50(2).
[292] Act 84 of 1998.
[293] S 58; also s 61–s 64.
[294] S 59(1)(b).
[295] S 68.
[296] Act 25 of 1999.

compulsory repair order may be given to any person by the heritage resources authority, and failing compliance the authority may effect the repairs and recover the costs from such a person.[297] As the Act is a statute concerned with the protection of the environment, any plaintiff or applicant who based his claim on the provisions of the Act had *locus standi* to bring his claim or present his case.[298]

Various fines, imprisonment terms, orders for the repair of damages, community service and forfeiture of assets are prescribed for other contraventions of the Act.[299]

This Act specifically excludes strict liability for any contravention of the Act for conduct committed in good faith and without negligence.[300]

3.4.4.12 National Nuclear Regulator Act[301]

In order to give effect to this statute, the Act provides for co-operative governance as contemplated in section 3 of the Constitution.[302] All organs of the State are required to co-operate effectively to ensure compliance with the provisions of the Act in the monitoring and control of nuclear hazards.[303] An organ of State can therefore incur statutory liability where it does not fulfil its statutory duties.

This Act also provides for a strict liability regime for nuclear damage caused by the holder of a nuclear installation licence.[304] This places an onerous duty of care upon the holder of such a licence.

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[297] S 45, s 51(7).
[298] See in this regard the judgment in *Raubenheimer NO v Trustees, Johannes Bredenkamp Trust and Others* 2006 1 SA 124 (C) in this regard.
[299] S 51.
[300] S 55.
[301] Act 47 of 1999.
[302] See par 3.2.1 in the text above.
[303] S 6(1).
[304] S 30.

In order to provide for financial security, the Act requires the Minister of Minerals and Energy, in consultation with the Minister of Finance, to determine the levels of,[305] and manner[306] in which financial security has to be provided for each specific category[307] of installation. In addition, the Act further requires the holder of such a licence to provide proof annually to the Minister that sufficient financial security is in place so that any claim for compensation[308] can be met.

There is also a statutory limitation of liability in that the amount claimable is limited to the amount determined by the Minister of Minerals and Energy in terms of section 29(2). This is strange in that the limitation of liability depends merely on the projection of the Minister of possible losses for which the level and nature of the instrument that provides financial security, are determined. This means that any claim against the installation for compensation can never exceed the amount covered by the financial security, even though the actual damages suffered exceed this limit. Where the amount claimed exceeds or has the potential to exceed the amount for which financial security has been given under section 29 of the Act, the person against whom the claim is or could be instituted has to notify the Minister immediately, who could obtain additional funding from Parliament to cover the claim.[309] This is clearly contrary to the polluter-pays principle.

It is debatable whether it would be possible to institute a claim against the Ministers where their projection and determination of the amount of the financial security was too low, therefore not providing for adequate financial compensation where nuclear damage is suffered, and where Parliament decides not to appropriate funds to cover any deficit.

The holder of the licence retains any contractual right of recourse or contribution against any other person causing the loss for which the holder is

[305] S 29(2)(a).
[306] S 29(2)(b).
[307] S 29(1).
[308] This refers to any claim made in terms of s 30 of the Act.
[309] S 33(1), s 33(2) and s 33(3)(a).

held liable.[310] Persons acting without a licence are also held strictly liable for any nuclear damage caused,[311] as well as persons who are present on the property of a nuclear installation without the permission of the holder of the licence[312] or who intentionally cause or contribute to any nuclear damage.[313] The chief executive officer of the Regulator, as appointed under the Act,[314] may determine alternative conditions for liability for nuclear damage caused by vessels.[315] The holder of a certificate of registration issued under the Act[316] is not held liable under the Act itself, but may be held liable in terms of the common law or any other relevant statute.[317]

A person could take recourse in terms of this Act or in accordance with the provisions of other relevant statutes, or he could base his claim on other causes of action such as a civil liability claim.[318] The Act provides clearly that a person may not benefit from both the Act and from any other act.[319]

Claims under the Act prescribe after 30 years from date of occurrence or from the date of the last event where there is a succession of occurrences,[320] unless the claimant became aware or could reasonably have been expected to become aware of the identity of the defendant and the facts that lead to the claim. In this case the claim prescribes 2 years from the date on which the person became, or should have become, aware of said information.[321] Prescription is suspended from the date on which written negotiations

[310] S 30(6).
[311] S 30(8).
[312] S 30(6)(a).
[313] S 30(6)(b).
[314] S 15.
[315] S 31; 'vessel' is not defined in s 1 of the Act, yet described in s 21(2) as 'a vessel which is propelled by nuclear power or which has on board any radioactive material capable of causing nuclear damage'.
[316] S 22(1). Such a certificate is issued upon application of a person who wishes to engage in any action that could cause nuclear damage, as stated in s 2(1)(c).
[317] S 32.
[318] For example, in terms of The Compensation for Occupational Injuries and Diseases Act 130 of 1993, or in bringing a common-law delictual claim in accordance with the principles discussed in chap 4 below.
[319] S 30(5).
[320] S 34(1).
[321] S 34(2).

regarding a settlement commence until notice of termination of negotiations is received from either party.[322]

Where a site does not comply with the provisions of the Act,[323] an inspector appointed in terms of the Act[324] may order the rehabilitation of a site. This would also be a liability that could be insurable as the costs for rehabilitation could be very high and are not covered by the financial security provided to cover nuclear damage claims.[325]

Section 52 provides for offences and penalties for non-compliance with the provisions of the Act.

3.4.4.13 National Parks Act[326]

Section 24 contains many subsections prescribing different penalties for various offences committed in terms of the Act.

3.4.4.14 National Water Act[327]

In terms of section 20 a 'responsible person'[328] has to report an 'incident'[329] in accordance with the provisions of the Act,[330] take all reasonable measures to contain and minimise the effect, clean-up and remedy the effects of the incident and take all measures as instructed by the authority. Where the person fails to do so, it may be done on his behalf by the authority and the reasonable costs incurred may be recovered from him.[331] Where more than

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[322] S 34(3).
[323] In terms of s 5, s 20, s 32, and s 36.
[324] S 41(1).
[325] S 29.
[326] Act 57 of 1976.
[327] Act 36 of 1998.
[328] S 20(2) provides that 'any person who is responsible for the incident, owns or was in control of the substance involved in the incident at the time of the incident'.
[329] S 20(1) provides that 'any incident or accident in which a substance pollutes or has a detrimental effect on, or the potential to pollute or have a detrimental effect on a water resource'.
[330] S 20(3).
[331] S 20; costs also include labour, administration and overhead costs.

one person can be held responsible, they are held jointly and severally liable.[332]

3.4.4.15 Nuclear Energy Act[333]

The Act prohibits the disposal of radioactive waste and the storage of irradiated nuclear fuel unless a specific statute[334] expressly authorises a person to do so.[335] The Act prescribes fines and imprisonment terms upon conviction for contravening the Act.[336]

3.4.4.16 Sea Birds and Seals Protection Act[337]

Any person contravening this Act may be imprisoned or ordered to pay a fine in terms of section 12 of the Act.

3.5 REMEDIES FOR BREACH OF STATUTORY DUTY

3.5.1 General

Various statutes provide for compliance measures and for remedies in the event of a breach of peremptory statutory provisions.

3.5.2 The Constitution

Compliance measures are found in the more general environmental statutes as well as in the Constitution itself.[338] In terms of section 24 of the

[332] S 20(9).
[333] Act 46 of 1999.
[334] The Hazardous Substances Act 15 of 1973 provides for either written permission of the Minister of Minerals and Energy, or for a ministerial authority where such written permission is absent.
[335] S 46.
[336] S 56.
[337] Act 46 of 1973.
[338] See par 3.2 above.

Constitution[339] '[e]veryone has the right to have the environment protected for the benefit of present and future generations through *reasonable legislative and other measures*'.[340]

The exercise and control of public power and public administration is always a constitutional matter and subject to constitutional control.[341] It therefore requires the application of the principles and values found in the Constitution. The Constitution itself entrenches the basic principle of legality.[342] It must be kept in mind that a failure to comply with any statutory duty is not *per se* wrongful.[343] Policy considerations of fairness and reasonableness have to be taken into account in each situation to determine whether breach of a statutory duty is wrongful in view of the facts and circumstances of a particular situation.[344]

3.5.3 Statutory Legal Liability

3.5.3.1 Civil and/or criminal consequences

Most statutes contain provisions regarding the consequences of a breach of statutory duties.[345] The consequences may be criminal, civil or both, depending on the intention of the legislator.

Some statutes create a specific remedy that allows for a statutory civil damages claim by a specific person or class of persons who suffer a specific loss resulting from the failure to comply with the provisions of the statute that

[339] See the comprehensive discussion in par 3.2.2.1 of the text above.
[340] Own emphasis.
[341] The Constitution chap 10 s 195; see in this regard the court's view in both *Steenkamp NO v Provincial Tender Board* 2006 3 SA 151 (SCA) 155, and *Steenkamp NO v The Provincial Tender Board, Eastern Cape* (CC) par 20, also n 11 in the latter case.
[342] *Affordable Medicines Trust and others v Minister of Health* 2006 3 SA 247 (CC) 265.
[343] See the comprehensive discussion of the wrongfulness of failing to comply with a statutory provision for purposes of a common-law delictual claim in chap 4 par 4.2.3.3.3 and par 4.2.3.3.4 below.
[344] *Steenkamp NO v The Provincial Tender Board, Eastern Cape* (CC) pars 37–42.
[345] See all the relevant environmental statutes discussed in par 3.4 of the text above.

results in damage to the environment.[346] A statute could also allow the State or other authority to prosecute the offender for his criminal actions, or it could issue an abatement notice, withdraw previously allocated permits, refuse to renew permits[347] and attach goods.[348]

3.5.3.2 Strict liability

Some statutes create a strict liability regime in terms of which fault is not a requirement for liability.[349] Certain categories of persons (for example, the licencee of a nuclear power plant) can be held liable merely because of the official position that they occupy.[350]

3.5.3.3 Compliance order or directive

Other statutes expressly require rehabilitation, sanitation or remediation of the environment.[351] Various authorities have the right to require or enforce compliance with statutory measures. [352] A compliance directive may be given

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[346] See, for example, s 38(1)(e) and s 38(2) of The Mineral and Petroleum Resources Act as discussed in par 3.4.4.8; s 7 of The Game Theft Act in par 3.4.4.3; s 17(2) of the Genetically Modified Organisms Act in par 3.4.4.4 above; s 9(1)(a) of The Marine Pollution (Control and Civil Liability) Act in par 3.4.4.6; s 59(1)(b) of The National Forests Act in par 3.4.4.11 that allows for an order of compensatory damages to be made in criminal proceedings; s 30 of The National Nuclear Regulator Act in par 3.4.4.13 above.

[347] Mineral and Petroleum Resources Development Act 28 of 2002 s 18.

[348] National Environmental Management: Air Quality Act 39 of 2004 as discussed in par 3.4.4.9 above.

[349] See s 38(2) of the Mineral and Petroleum Resources Development Act in par 3.4.4.8 in terms of which the directors of a company or the members of a close corporation are jointly and severally liable for environmental damage caused advertently or inadvertently by the company or close corporation they represent or represented; also s 38(1)(e) that provides that '[t]he holder of a reconnaissance permission, prospecting right, mining right or permit or retention permit is responsible for any environmental damage, pollution or ecological degradation as a result of his or her reconnaissance prospecting or mining operations that occurs in the area for which the right or permits were issued'. As no mention is made of any form of the requirement or the lack of, fault, it can be reasonable assumed in view of the provisions of s 38(2) that the Act enforces a strict liability in this section; s 28 of NEMA also imposes strict liability.

[350] See, for example, the Nuclear Energy Act (1999) s 61(3); The Environment Conservation Act 73 of 1989 s 31A(1), s 31A(2).

[351] Reg 71 of the regulations enacted in terms of ECA; see also the discussion of the relevant statutes in par 3.4 above.

[352] See, for example, s 38–41, and s 45–46 of the Mineral and Petroleum Resources Act 28 of 2002 in par 3.4.4.8 above, that requires compulsory rehabilitation of the surface of land and in terms of which the Minister of the relevant governmental department may order compliance.

by the Director-General of a specific government department, and the costs and expenses they incur may be reclaimed from the polluter.[353]

3.5.3.4 Statutory liability to qualify as 'legal liability' for liability insurance cover

Statutory liability such as the liability to pay clean-up costs, qualifies as a 'legal liability' for which cover is provided in most liability insurance policies.[354] It should in this context also be noted that it is not possible to contract out of any peremptory statutory duty by including an exclusion, exemption or limitation clause in a contract in order to escape liability.[355] The issue of the insurability of liabilities is discussed extensively in chapters 5 and 6 below.

3.5.3.5 Interdict

One would obviously be able to obtain a prohibitive interdict to prevent conduct that causes environmental damage from occurring or continuing, or to obtain a mandatory interdict to enforce compliance with the duty to clean-up or pay the costs of the remediation of the environment.[356] As far as pollution damage to the environment is concerned, an application for an interdict succeeded in the case of *Minister of Health and Welfare v Woodcarb (Pty) Ltd and another*[357] to prevent the defendant from continuing the activities that caused pollution of the atmosphere.[358]

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[353] NEMA s 28(4).
[354] *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* par 14.
[355] *Drifters Adventure Tours CC v Hircock* 2007 2 SA 83 (SCA). For a detailed discussion of the extent and enforceability of these clauses, see chap 6 par 6.5.
[356] See also par 3.2.3.5.1 above where the interdict as a remedy is discussed in greater detail in a constitutional context.
[357] 1996 3 SA 155 (N).
[358] It is submitted that the doctrine of ripeness cannot apply where an interdict is sought to prevent an infringement of a constitutional right, as the purpose of the interdict is to prevent a person from being affected and it cannot be a requirement that he must already be affected before the relief is provided; see also *National Coalition for Gay and Lesbian Equality & Others v Minister of Home Affairs & Others* par 21 for the application of the doctrine of ripeness in a constitutional context.

Our courts can also come to the assistance of the State by issuing an order of contempt of court in an attempt to enforce compliance with the statutory provisions. A supervisory or structural interdict that keeps the progress of the defendant under the court's supervision can be of great value and assistance where an interdict to prevent damage to the environment, or where an interdict to repair environmental damage is concerned.[359]

3.5.3.6 Damages

3.5.3.6.1 Constitutional damages

It is submitted that one would, in view of case law supporting the possibility of claims for constitutional damages and in terms of the discussion above be able to claim damages as 'appropriate relief' in terms of section 24. Courts will not be reluctant to make an order specifically for constitutional damages where it is the most appropriate remedy in the circumstances, provided the remedy clearly fits the injury.[360]

3.5.3.6.2 Statutory civil damage claims

It is also possible to claim statutory civil damages where a specific statute makes an express allowance for such a claim. Examples include the damages that can be claimed in terms of The Mineral and Petroleum Resources Act,[361] The Game Theft Act,[362] The Genetically Modified Organisms Act,[363] The Marine Pollution (Control and Civil Liability) Act,[364] and The National Forests

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[359] *Sibiya & Others v DPP: Johannesburg High Court & Others* par 22.
[360] Constitution s 38; *Steenkamp NO v The Provincial Tender Board, Eastern Cape* (CC) par 22, 29; *MEC Department of Welfare, Eastern Cape v Kate* 491; *President of the Republic of South Africa v Modderklip Boerdery (Pty) Ltd (Agri SA and others* amici curiae*)*; see also s 59(1)(b) of the National Forests Act in par 3.4.3.10 of the text above, as well as the more detailed discussion of constitutional damages in par 3.2.3.5.4 above.
[361] Par 3.4.4.8 in the text above.
[362] Par 3.4.4.3 above.
[363] Par 3.4.4.3 above.
[364] Par 3.4.4.6 above.

Act that allows for an order of compensatory damages to be made in criminal proceedings;[365] and The National Nuclear Regulator Act.[366]

It must be emphasised that these remedies are available for claims against individuals as well as for claims against the State where it acts in a blameworthy manner or fails to act as required. Public remedies suited to vindicate breaches of administrative justice are to be found in section 8 of Promotion of Administrative Justice Act,[367] conferring upon a court the powers to make orders that it considers to be 'just and equitable', which includes an order to pay compensation in 'exceptional matters'.[368]

Our Constitutional Court has acknowledged the possibility of successfully suing the State based on a private law matter in a delictual claim, yet only where the plaintiff succeeds in proving that the State had a duty of care towards the plaintiff.[369] As the State also must procure insurance cover in some situations, this issue is relevant to the insurability of liabilities, statutory or otherwise for environmental damage caused. It is submitted that the conduct required by international treaties, agreements and protocols, and that which is required under the Constitution in section 24(b), create a duty of care that requires the State to act accordingly. It is, however, not always clear where the boundary between a statutory duty or a common law duty and ensuing liability lies, and it is also not clear which remedy will prove to be the most suitable.[370] The position will clearly depend on the facts and circumstances of each situation, and will be clarified by the development of the legal position over time by case law or by statute.

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[365] Par 3.4.4.10 above.
[366] par 3.4.4.12 above.
[367] Act 3 of 2000.
[368] S 8(1)(c)(ii)*(bb)*; *see in this regard Steenkamp NO v Provincial Tender Board* (SCA) 161; see also *Earthlife Africa (Cape Town) v Director-General: Department of Environmental Affairs and Tourism* 2005 3 SA 156 (C) par 21 *et seq*.
[369] See also the discussion in par 3.5.3 above; see also the minority judgement in *Steenkamp NO v The Provincial Tender Board, Eastern Cape* (CC) par 37; pars 82 to 99.
[370] *Steenkamp NO v The Provincial Tender Board, Eastern Cape* (CC) par 76.

3.5.3.7 Class actions

The Constitution provides legal standing for a class action or application brought by persons other than the State to enforce compliance with environmental laws.[371] The general position of class actions has already been discussed above.[372]

In an environmental context, NEMA also creates the right to bring a class action specifically to protect the rights of persons where it is in the public interest and even in the interest of protecting the environment for its own sake.[373] The latter inclusion[374] therefore does not expressly require the pollution or degradation to cause harm to any person, but merely where harm to the environment itself is caused.[375] A class action for environmental interests should be developed to the extent that is regularly allowed for other situations, such as the class action for consumers that is readily allowed in most countries, can be supported.[376]

3.6 CONCLUSION AND RECOMMENDATIONS

The fundamental right to the environment provided for in the Constitution has established solid foundations for the development of an effective environmental damage liability regime in South African law.

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[371] See the discussion of class actions in par 3.2.3.4.2 on the Constitution s 38(c) and (d) above.
[372] See par 3.2.3.5.3.
[373] NEMA Chap 7 Part 2 s 32(1).
[374] S 32(1)(e).
[375] This includes a class action by any environmental interest protection group such as the South African National Foundation for the Conservation of Coastal Birds or Earthwatch; see also the conclusion in par 2.4 in chap 2 of this work on this issue that damage to the environment merely for the environment's sake, and not for the benefit in some way for human beings, is not considered in this thesis.
[376] See the similar viewpoint by Winter G "Perspectives for environmental law – entering the fourth phase" 1989 *Journal of Environmental Law* 46; see also chap 4 par 4.2.4.5.2 below for a brief discussion of the effect that the legislation as proposed by the Consumer Protection Bill [B 19B–2008] will have on South African law once it comes into operation.

As the Constitution primarily has a vertical application, section 24 has enabled citizens to enforce their rights against the State where the latter acts in a manner that infringes upon their rights and causes damage to the environment, or has the potential to do so. In its indirect horizontal application, the right to the environment has enabled individuals to enforce their right to the environment against each other, especially as it is in the public interest to do so because of man's common interest in the environment. The right in section 24 informs this criterion of public policy. Although the Constitution contains many rights that have the potential to conflict with the right to the environment, it is quite clear that these rights may not simply be exercised at the expense of the environment. Any infringement of the right to the environment must meet the criteria for the limitation of constitutional rights as set out in section 36.

Information is crucial for a successful claim for environmental damage, whether the claim is by the prejudiced party against the polluter, by the prejudiced party against his insurer in terms of first-party insurance cover, or by the polluter against his insurer in terms of his liability or third-party insurance cover. The right of access to information in section 32 of the Constitution, and the subsequent enactment of the Promotion of Access to Information Act 2 of 2000 has facilitated the process of obtaining information that in the past would have been difficult to obtain. Where disclosure of information is in the public interest, overriding the non-disclosure provisions of the Act is justified. The Act specifically refers to the fact that the danger of imminent and serious environmental risk is one of the factors that justify disclosure of related information as it is clearly in the public interest.

The Constitution also provides for a variety of remedies for the party who is prejudiced by the infringement of his constitutional rights due to environmental damage. The court may grant 'appropriate relief' in terms of section 38, which, due to its broad wording, entails an unlimited number of possibilities. In the first instance, it enables a court to declare any law or conduct invalid. This can be a very effective remedy against the State where its conduct infringes upon a person's constitutional right to the environment.

A prejudiced party may also obtain injunctive relief. This relief may be mandatory, with the purpose of enforcing compliance with a duty or process. An order to force a polluter to clean-up serves as an example. The interdict may also be prohibitive, in that it prevents imminent conduct or the continuation of infringing conduct.

The relief could also include a declaration of rights. This would be of great value where the interpretation of the scope and effect of an environmental statute is in issue.

It is possible to claim compensation in the form of constitutional damages, where it is the most appropriate remedy in the specific circumstances and provided that it fits the injury caused by the infringement of the constitutional right. It is submitted that an award for constitutional damages for damage caused to the environment would have to be limited to clean-up or remediation costs, because the focus of the constitutional right should remain on restoration of the environment to its original state. There is no reason why the *quantum* of damages should not, in view of the right of the Constitutional Court to award such a claim, also be determined by the Constitutional Court.

Section 38 of the Constitution and section 32 of NEMA have also created the possibility of instituting a class action for a claim relating to environmental issues. As the protection of the environment is of common interest and usually to the benefit of the community at large, a class action by or on behalf of a class of persons can be effective. The class action proposed by the Consumer Protection Bill[377] where the interests of consumers are affected, should be introduced for actions brought by prejudiced parties where their environmental interests are infringed upon.

As will be seen from the next chapter on civil liability, the constitutional right to the environment has, in the final instance, also facilitated meeting the burden

[377] The Bill was signed on 24 April 2009 and is required to come into operation within 10 months from date of signature which is expected only early in 2010.

of proving that conduct that causes environmental damage is wrongful. It also creates a duty to act in order to prevent environmental damage, which eases the burden of proving the wrongfulness of an omission to do so.

South African environmental legislation and environmental processes should be guided by the distinctive principles of international environmental law. This has been the case in most of the recently enacted statutes, for example, in the enactment of NEMA and the ECA. Where a statute, however, requires the State to carry the costs of remediation of the environment without a proper right of recourse against the polluter, the statute does not advance the implementation of the polluter-pays principle. Section 33 of The National Nuclear Regulator Act serves as an example of this point.

As far as the future application and implementation of these principles is concerned, the following recommendations may be made. The polluter-pays principle should form the basis for the introduction of a statutory liability for the payment of common-law damages for environmental damage. It should also be the principle on which a common-law liability to pay compensation for pollution damage is based. The precautionary principle and the principle of preventative action should furthermore inform the criteria of wrongfulness for omissions when determining common-law liability. In the last instance, the principle of strict liability should form the basis for the introduction of a strict liability regime for environmental damage. The increased introduction of statutory strict liability regimes, similar to the proposed strict product liability regime, is discussed further in chapter 4 below.[378]

Internationally, states are already co-operating in the oil, marine and nuclear industries. Due to the increase in incidents that cause transboundary pollution, for example, transboundary air and soil pollution, global co-operation, monitoring and enforcement of measures in other high-risk industries should increase.

[378] See chap 4 par 4.2.4.5 below.

Although there are many statutes that are concerned with environmental matters, very few focus on creating civil liability towards parties prejudiced by the polluter's statutory non-compliance that leads to environmental damage. Most statutes prescribe authorised acts and procedures, and provide for criminal sanctions as compliance measures, whether a fine or imprisonment or both. The payment of a R5 million fine as punishment for a conviction in terms of section 31N of NEMA, and the penalties and fines levied in terms of section 29 of the ECA, serve as examples. Fines are not allocated to restoration funds that primarily aim to finance the restitution or remediation of the polluted environment to undo the effects of pollution damage. It is submitted that the introduction of these restitution schemes that are primarily financed by the criminal fines levied, will have the desired effect in terms of the polluter-pays principle. Additional financing can be obtained from mandatory financial guarantees from participants in the specific industries for which the fund exists.

Since the 1990s, statutes that require polluters to clean-up the damage they caused at their own cost have increased. Section 28 of NEMA serves as the predominant statutory measure to enforce environmental remediation at the cost and expense of the polluter. Where the latter fails to do so, the State Department may do so on his behalf and recoup the costs from him. In the absence of available funds, section 28(6) of NEMA goes so far as to authorise the State to expropriate the polluter's land. A similar provision that enables the State to claim all costs and expenditures from the polluter can be found in section 31A of the ECA.

The problem is therefore that very few statutes create a statutory duty to pay civil-law damages to a third party who is prejudiced by the pollution. The possibility of succeeding with a statutory civil damages claim still remains slim unless statutes are enacted that expressly provide for such a remedy. To date this remedy has been created for the benefit of third parties, only under very specific and limited circumstances in The Game Theft Act, The Genetically Modified Organisms Act, The Marine Pollution (Control and Civil Liability) Act, The Mineral and Petroleum Resources Act, The National Forests Act and the

National Nuclear Regulator Act. Because the standard primary statutory remedies are mainly compliance orders or directives with statutory provisions that require prevention prior to pollution or remediation after the fact, the rights of prejudiced third parties to claim damages require urgent attention.
It is important to note that, due to the wide definition of the 'environment' in NEMA, any person who presents his case based on any statutory provision concerned with the protection of the environment has *locus standi* in terms of section 32(1) of NEMA and will have to present his case accordingly.

As far as statutory exemptions from liability are concerned, section 29(1) of NEMA contains a provision with one of the most far-reaching consequences in this regard. It provides that a person is exempted from any liability, whether statutory or civil, where he refuses or fails to participate in any activity required from him that could cause pollution or degradation of the environment.

Few statutes therefore contain statutory remedies that trigger cover under liability insurance policies. This can be seen from the relatively small number of statutes that are relevant to the scope of this study and were examined above.

No statutory mandatory insurance to provide cover for environmental damage is required in South Africa, except for those in the marine and nuclear industries that are regulated in accordance with international law. It is proposed that the possibility of introducing mandatory insurance cover, or where the market cannot accommodate such an insurance scheme, the submission of mandatory financial guarantees, which can add to the funding of restitution schemes, must be investigated for specific high-risk industries.

Where a prejudiced third party is unable to claim the damages that he suffers from the polluter based on statutory liability, or where he fails to recoup all his losses by the statutory measures available, the third party has to rely on a civil-law damages claim against the polluter. Civil liability claims by a prejudiced party against the polluter are addressed in the next chapter.

CHAPTER 4

CIVIL LIABILITY

'We must not overlook the fact that the greatest, most effective and, most important, *presently available* factor for immediate action is the common law. The common law is ready to move forward, this time in the field of environmental law.'[1]

4.1 INTRODUCTION

As the statutory and regulatory responses to the growing threat of environmental damage have been largely ineffective and slow and appear not to be able to offer comprehensive solutions in the near future, the national law of civil or private law liability for 'environmental delicts', also known as 'toxic torts', will at the moment continue to play the largest role, even on a multinational or global level.[2] A civil liability system is, however, far from adequate. As can be seen from the discussion in this chapter, a civil claim, because of its inherent limitations, cannot always guarantee effective and comprehensive compensation solutions.[3]

In the economic analysis of law, tort or liability law is seen as an instrument to effectively indemnify against losses suffered, and also as an effective

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[1] In the words of Van Niekerk B "The Ecological norm in law" 1975 (92) *SALJ* 80 n 7, which still holds true today.

[2] Larsson M *The Law of Environmental Damage: Liability and Reparation* (1999) 118 states that of the various options, the instrument generally referred to in international instruments and preferred by states is civil liability, although it does not provide a complete strategy for the restitution of environmental damage; see also Andersen M "Transnational Corporations and Environmental Damage: Is Tort Law the Answer?" 2002 (Spring) *Washburn Law Journal* 2 (hereinafter 'Andersen') 3.

[3] See Neethling J "Aanspreeklikheid vir 'nuwe' risiko's: Moontlikhede en beperkinge van die Suid-Afrikaanse deliktereg" in Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003) (hereinafter 'Faure & Neethling') 17; see also the contribution by Havenga P "Nuwe risiko's in Suid-Afrika: Versekering en alternatiewe vergoedingsmeganismes as antwoord daarop" in Faure & Neethling 135.

instrument to deter accidents.[4] Environmental damage is costly to remedy and because of its magnitude, could even lead to insolvency. This has the potential to act as a strong deterrent, as the expectation to be held liable should induce parties to take care to prevent accidents completely or to change their activities to reduce accident risk, and to minimise accident costs as well as the costs of accident avoidance.[5] The potential of causing irreparable and permanent pollution damage to the environment has become one of the crucial reasons why stricter and more effective environmental damage liability regimes have to be established in law.[6] The most logical starting point for claiming environmental damages would be to do so with a civil liability claim.[7]

Social policy requires that 'harm rests where it falls', meaning that a person has to bear the loss that he suffers.[8] Only in legally recognised instances can the wrongdoer become legally liable to compensate the plaintiff.[9] Aquilian

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[4] Winter RA "Liability Insurance, joint tortfeasors and limited wealth" http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V7M-4KF6BPH (last accessed on 18 July 2006) 4 who put it thus: '[g]iven the cost of using tort liability and liability insurance for allocating risk-bearing, the more important role of the tort system is however the creation of incentives to avoid accidents.'

[5] See in this regard Faure M & Hartlief T "Aanprakelijkheid en verzekering voor nieuwe risico's" in Faure & Neethling 41 (hereinafter 'Faure & Hartlief'); see also 53 for recognition that the threat of insolvency has a deterrent effect on the conduct of polluters; see Faure M & Skogh G *The Economic Analysis of Environmental Law and Policy* (2003) (hereinafter 'Faure & Skogh') 263–267 for an explanation of the role that insurance plays as a risk aversion technique.

[6] Bell S & McGillivray D *Environmental Law* 6th ed (2006) (hereinafter 'Bell & McGillivray') 382 *et seq* highlight the difficulties with private law claims. They caution that private law remedies are not always the most suitable to claim environmental damage. The private law acts only as the protector of private interests, and not necessarily for the protection of the public interest. Private law rights are also based on imprecise and unduly absolute standards, and problems exist in the proving of claims. See also Larsson 119 who is of the opinion that in view of ineffective statutory or fault-based civil liability regimes, a non-contractual strict liability system as a first-generation liability regime would appear to be most effective.

[7] In the words of De Ketelaere D (ed) *Handboek Milieu- en Energierecht* (2006) 1351 on the Belgian *Voorontwerp Decreet Milieubeleid,* 'Het mees logische aanknopingspunt voor het herstel van milieuschade is via het aansprakelijkheidsrecht'.

[8] *Res perit domino* is a fundamental premise in law; *Telematrix (Pty) Ltd t/a Motor Vehicle Tracking v Advertising Standards Authority* 2006 1 SA 461 (SCA) 462; see Van der Walt JC & Midgley JR *Principles of Delict* 3rd ed (2005) (hereinafter 'Van der Walt & Midgley') 31; Larsson 383 calls this the 'victim pays principle'.

[9] As explained by Neethling J, Potgieter JM & Visser PJ *Law of Delict* 5th ed (2006) (hereinafter 'Neethling *et al*') 3.

liability is, for example, such an exception to the rule of *res perit domino*.[10] According to current public policy the prejudiced party should not carry the loss he suffers because of pollution damage caused by others. This is seen to be unreasonable and would cause an internalisation of costs. It would also be against the polluter-pays principle, which has been acknowledged as one of the distinctive principles of environmental law.[11] On the other hand, it would also be unreasonable to expect the state to carry or cover all losses caused by pollution, especially in developing countries where, because of other pressing needs, insufficient funds are available for this purpose.

As development and protection of the environment are direct opposites, the one working against the other, it is necessary to find a balance between the two needs. The right to develop needs to remain subject to a reciprocal duty to act to the benefit and wellbeing of other individuals and of the community at large. This can only happen where the environment for these communities and individuals is protected to their benefit.[12]

In South Africa the history surrounding and leading to the inclusion of the right to environment in the Constitution[13] and the classification of this right, as well as the right to development contained in the Constitution, are clear indications of the approach of the government to stimulate the economy, yet to control

[10] See n 8 above; *Telematrix (Pty) Ltd t/a Motor Vehicle Tracking v Advertising Standards Authority* 468.

[11] Par 3.3.2 in the text above; see Havenga PH "A Few Steps Closer to the Polluter-pays principle" 1997 (9) *SAMercLJ* 89; see Cowen DV "Toward Distinctive Principles of South African Environmental Law: Some Jurisprudential Perspectives and a Role for Legislation" 1989 (52) *THRHR* 3, 7; see also Kidd M *Environmental Law, A South African Guide* (2008) (hereinafter 'Kidd') 53.

[12] See in this regard 'The Declaration of the Right to Development: UN General Assembly Resolution' 41/128 of 4 December 1986, that provides in Article 1.1 that '[t]he right to development is an unalienable human right'. Article 1.2 states that '[i]t includes the exercise of this right to full sovereignty over all their natural wealth and resources'. Article 2.1 states that '[t]he human person is the central subject of development and should be the active participant and beneficiary of the right to development'. In Article 2.2 it is stated that '[t]he need for full respect of their human rights and fundamental freedoms as well as their duties to the community' has to be taken into account. In accordance with Article 2.3 all states are obliged to formulate development policies that aim at the constant improvement of the well-being of the entire population and all individuals; see also in general the World Commission Environment and Development Report *Our Common Future* known as the Brundtland Report (1987).

[13] Constitution s 24.

development by considering environmental issues.[14] Except for criminal sanction against a polluter or specified statutory liability, the only other alternative to claim losses from a polluter is by applying the rules of civil liability.[15]

The plaintiff should be able to hold the polluter liable based on the fact that an acknowledged legal obligation entitles him to do so. As stated, the down-side of holding the polluter liable[16] is that it will also give rise to the internalisation of costs, which then in real terms replaces the loss right back on the shoulders of the citizens and the consumers in society.[17] It is therefore crucial to grasp that mere civil liability cannot provide the only answer regarding the question as to who has to shoulder the loss caused by environmental pollution damage. It is also necessary to develop a general effective compensation system, with realistic aims to cover losses, restore the environment and attempt to hold polluters liable, in order to create the maximum benefit for society as a whole.

Because the intrinsic nature of the law of delict is to provide effective remedies for wrongful acts, and also because of the development of extensive delictual principles and experience gleaned from their vast application in a wide range of claims dealt with in the past, delictual liability is most attractive as an alternative to statutory liability.[18] The benefits are clearly that the

[14] See the full discussion of the right to environment in chap 3 par 3.2.2.1; the right is classified as a green or third generation right. These rights are referred to as so-called 'people's rights' as they are rights for the public a large rather than rights of individuals; on the other hand the Constitution s 195(1)(c) provides that 'public administration must be development-orientated'; see in this regard Kidd 19; see also Glazewski J "The Environment, Human Rights and a New South African Constitution" 1991 (7) *SAJHR* 167.

[15] See the early discussion by Loots C "Making Environmental Law Effective" 1994 (1) *SAJELP* 17.

[16] See par 3.3.2.2 of the text above.

[17] See the brief discussion in chap 5 par 5.1.3.2 on the disadvantage of insurance in that it causes an unavoidable internalisation of costs. As an illustration on this point, the State of California is suing six car manufacturers for monetary compensation for the damage caused to the health of the people, the economy and the environment by the greenhouse gas emissions of their cars. Should the claim succeed, it is highly probable that the manufacturers will merely increase the prices of new cars to recoup their losses; see http://news.bbc.co.uk/2/hi/business/5365728.stm (last accessed on 27 September 2006).

[18] Neethling in Faure & Neethling 73 argues that this is due to its generalised nature: 'Die rede hiervoor is dat die algemene beginsels juis weens hulle buigsaamheid en vloeibaarheid

Footnote continues on the next page.

wrongdoer is held liable for his wrongful actions,[19] and must pay a quantifiable monetary compensation to the plaintiff. This has the potential to enable the party prejudiced by the delict to recoup the losses he has suffered and provides funding for effective environmental remediation and recuperation.

Another positive side-effect is brought about by the fact that the potential liability of the wrongdoer will act as a deterrent and discourage polluting or environmentally degrading activities.[20] A liability system also proves to be cheaper to manage than a regulatory system that involves governmental participation.[21] It can therefore be expected that most claims will be brought under a delictual liability regime. As issues relating to pollution insurance appear to be universal issues, liability issues are not, which requires the South African position to be discussed in detail. However, to date there is very little jurisprudence in a South African context on environmental damage liability and even less on its insurability. Alternative causes of action include breach of contract and unauthorised agency and are only dealt with briefly at the end of this chapter as their application will be limited. Reinecke agrees that liability insurance most often covers the delictual liability of the insured towards a third party.[22]

4.2 DELICTUAL LIABILITY

4.2.1 Introduction

In terms of the South African law of delict, a delict is a culpable, wrongful act by a person (the wrongdoer) that causes patrimonial loss to another or which

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meestal net 'n aanpassing of nuwe toepassing deur die howe verg.'; Van der Walt & Midgley 31 also support this view that the law of delict offers 'elastic and adaptable principles' that can be applied to novel situations and new risks.

[19] See chap 3 par 3.3.2.2 above on the international environmental principle that the polluter must pay.

[20] As identified by Andersen 5.

[21] In the opinion of Faure & Hartlief 43.

[22] See Reinecke MFB, Van der Merwe S, Van Niekerk JP & Havenga P *General Principles of Insurance Law* (2002) (hereinafter 'Reinecke *et al*') par 10.

causes loss to, or impairs the latter's personality.[23] English tort law follows a more casuistic approach as specific wrongful acts or torts must meet specific requirements to lead to tort liability.[24] Our law, which is founded on general principles of liability, has not been free from some beneficial influence by tort law, leading to the hybrid character of our current law of delict.[25] The global experiences in environmental tort cases provide fertile ground for the adoption of successful practices and legal rules of other countries by our law, as can be seen, for example, in cases of nuisance.[26]

In terms of South African law, five requirements must be met for delictual liability, namely an act or conduct; wrongfulness; fault; causation and damage must therefore be present before delictual damages can be claimed from the polluter.[27]

Each of these poses unique challenges in an environmental context. Some of these requirements, especially the criteria of wrongfulness, causation and the apportionment of damages are very difficult to prove in the case of an environmental delict, and create serious obstacles which have to be cleared for a claimant to succeed with his claim.[28] Examples include problems caused by the impossibility of identifying a single occurrence, the wrongdoer or the place of origin of the pollution causing the damage,[29] or where the manifestation of the damage becomes apparent long after the damage-causing occurrence, where it manifests in many different places and in many

[23] As described by Visser PJ "A note on some aspects of prospective loss and factual causation" 2004 (13) *Speculum Iuris* 137 138; see also Neethling *et al* 3 for a similar description.
[24] See in this regard Neethling *et al* 4; see also Van der Walt & Midgley 18 where they compare tort law to the South African law of delict.
[25] See *Trust Bank van Afrika Bpk v Eksteen* 1964 3 SA 402 (A) 410; as stated by Neethling *et al* 4 n 12.
[26] See par 4.2.3.4.1 for the South African position, and par 7.3.3.3 for the position in the UK.
[27] See in general Neethling *et al* 3, 4, 23.
[28] For an exposition of the challenges, see Neethling J "Aanspreeklikheid vir 'nuwe' risiko's: Moontlikhede en beperkinge van die Suid-Afrikaanse deliktereg" 2002 (65) *THRHR* 574 576.
[29] The Bhopal gas leak occurred due to a decision taken by the parent company in the USA, that was subsequently communicated to its subsidiary company in India, where the compliance with the instruction caused the massive gas leak and subsequent pollution.

different guises,[30] and even in different countries beyond the jurisdiction of national law.[31]

Although mainly common-law principles apply to environmental delicts, some statutory rules and principles could govern or impact on these delictual claims. The principles of the fundamental rights contained in the Constitution have to be applied to determine and interpret those requirements where open-ended standards apply, for example, in the determination of wrongfulness, negligence and legal causation.[32] In some instances a statutory exclusions could exclude fault as a requirement for the liability of the wrongdoer, and thus create a strict liability regime for specific situations or industries.[33] Claims against employers for occupational injuries and diseases are, for example, limited to the statutory benefits provided and expressly exclude the possibility of a civil claim against the employer.[34]

As there are relatively few statutory provisions on liability as can be seen from the discussion in chapter 3 above, and as the few that do exist do not offer satisfactory solutions in most situations, common-law claims appear to be the answer. As stated, the occurrence and recurrence of claims have led to the international development of a 'toxic or environmental tort law'.[35] Internationally the concept of a claim based on the principles of nuisance

[30] See chap 4 par 4.2.5.2 on causation and par 4.2.6 on forms of damage that could be caused; see also chap 6 par 6.6 on the extent of damages claimable.

[31] The Sandoz chemical leak that occurred in Basel Switzerland, caused pollution of the waters of the Rhine river, that in turn caused extensive damage in both Germany and France. The Chernobyl nuclear disaster not only caused massive local damage in the USSR, but radioactive material was blown as far as Germany and the Netherlands, causing abnormal crop growth. Transboundary pollution damage and liability raises issues of its own, and cannot be dealt with in great detail within the scope of this study; see, however, some brief references in chap 3 par 3.3.2.1(g) and chap 3 n 121 above.

[32] S 8, s 38 and s 39 as discussed in par 3.2.2, par 3.2.3. and par 3.5.2 of the text above are relevant; see also Van Aswegen A "The Implications of the Bill of Rights for the Law of Contract and Delict" 1995 (11) *SAJHR* 50 51–60; see also Van der Vyfer JD "The Private Sphere in Constitutional Litigation" 1994 (57) *THRHR* 378–379.

[33] S 30 of the National Nuclear Regulator Act as discussed in par 3.4.4.12 of the text; liability in terms of s 17 of The Genetically Modified Organisms Act 15 of 1997 in par 3.4.4.4 above; see also the discussion in par 3.5.3.2 on statutory strict liability; and par 4.2.4.5 in the text below.

[34] See par 3.4.4.2 below on the Compensation for Occupational Injuries and Diseases Act s 22.

[35] See Larsson 30 for one of the first references to the term 'toxic tort'.

appears to have become the classic environmental tort that can accommodate a variety of claims.[36] An example of a nuisance claim would be where air, water or soil pollution is caused by an owner or occupier to adjacent properties or to other properties in close proximity of the source of the pollution. In terms of general principles an owner or occupier of land is entitled to enjoy his rights to the property without unreasonable interference from others. The South African position on nuisance and its position in other countries are discussed more extensively below.[37]

4.2.2 Conduct

4.2.2.1 General

An act can be described as a person's conduct as determined by his will, in other words a voluntary human act or omission.[38] The wrongdoer, therefore, who makes a conscious and voluntary decision to act or not to act in a certain way, can be held liable for the consequences where his actions cause some form of environmental damage.

4.2.2.2 Positive conduct and omissions

Conduct may take the form of positive conduct (*commissio*) or negative conduct (*omissio*), although in some cases it is difficult to distinguish which

[36] Nuisance in the South African context of the abuse of rights is discussed in pars 4.2.3.3, 4.3.3.9 below; see in this regard also Neethling *et al* 107–108; 336; see also the judgment in *Laskey and Another v Showzone CC and Others* 2007 2 SA 48 (C) par 16–18 where the court held that a claim based on excessive noise was a situation for correct application of the common-law remedy of private nuisance. The plaintiffs were entitled to interdictory relief only where they succeeded in indicating 'occasioned harm'. Madden MS & Boston GW *Law of Environmental and Toxic Torts: Cases, material and problems* 3rd ed (2005) (hereinafter 'Madden & Boston') 55 also reiterate a similar viewpoint that nuisance remains at the core of environmental torts; Faure & Skogh 216 examine the potential extent of nuisance by considering the acceptable norms when exercising one's property rights.

[37] See chap 4 par 4.2.4.5 for the South African position; chap 7 par 7.3.3.4.2 for the position in the UK; chap 7 par 7.6.3.3 for the position in the USA; and pars 7.4.3.3.2 for the position in Belgium and par 7.5.3.2 for the position in the Netherlands.

[38] See the descriptions in Neethling *et al* 23; see also Van der Walt & Midgley 51.

one it is.[39] Liability for an omission or failure to act is more restricted than liability for a commission. A person can be held delictually liable for an omission to act only if it constitutes an exception recognised in the South African positive law as forming the basis of such liability. This will be where a legal duty or duty of care rests upon a person to act in a certain way and he fails to do so.[40] Failure to take positive steps to prevent environmental damage could be an example of such an omission, yet one should keep in mind that not all omissions are actionable.[41] Examples of actionable omissions, especially omissions by the State, are discussed in the examination of the requirement of wrongfulness below.[42]

4.2.2.3 Multiple wrongdoers

The conduct of various persons could be the cause of a single loss occurring. Where there is potentially more than one wrongdoer (for example, in the event of general air pollution by motor vehicles, or in the event of soil or water pollution where various industries involved in similar activities, are grouped together on a piece of land), it is often difficult to determine whose actions were the main cause or even a contributory cause for pollution damage. This issue is discussed in the section on multiple and cumulative causation below.[43]

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[39] Van der Walt & Midgley 66 state that that 'the mere fact that linguistic alternatives enable us to describe a positive action in a negative way is legally irrelevant to the determination of the nature of the conduct.'

[40] See *Bareki NO and another v Gencor Ltd and others* 2006 1 SA 432 (T) 439–441; and *Minister of Safety and Security v Carmichele* 2004 3 SA 305 (SCA) 321, 324 for the court's views on the extent of a legal duty to act; see also Neethling *et al* 28; 29; especially n 59.

[41] For authoritative case law, see the Constitutional Court judgment in *Carmichele v Minister of Safety and Security* 2001 4 SA 938 (CC) 962, 968; and the judgment in *Premier Western Cape v Faircape Property Developers (Pty) Ltd* 2003 6 SA 13 (SCA) 31.

[42] See par 4.2.3.3.3 nd 4.2.3.3.4 below.

[43] See par 4.2.5.2 and chap 6 par 6.4.3 below.

4.2.3 Wrongfulness

4.2.3.1 General

The act of infringing on a person's subjective rights[44] or conduct that violates a legal duty is deemed to be wrongful if it has detrimental consequences.[45] Legal subjects have a general legal duty not to infringe upon another person's subjective rights.[46] Where an individual interest has been prejudiced, a dual investigation is required. One must first determine whether the holder of the right was disturbed in the use and enjoyment of his right, and then whether the infringement took place in a legally reprehensible way. Legal norms must be used to determine whether the actual infringement occurred in such a legally reprehensible or unreasonable manner.[47]

4.2.3.2 Criteria to determine wrongfulness

The legal convictions of the community, the *boni mores,* are the criteria to determine whether specific conduct is wrongful or not.[48] This test is an after-the-fact objective assessment based on reasonableness, taking into account all the facts and circumstances of a specific situation.[49]

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[44] For a discussion of the doctrine of subjective rights, see *Universiteit van Pretoria v Tommie Meyer Films* 1977 4 SA 376 (T) 386 *et seq*; see also Neethling *et al* 45–49.

[45] See in this regard *Mukheiber v Raath* 1999 3 SA 1065 (SCA) 1075; Visser PJ "Die verhouding tussen onregmatigheid en skade" 1991 (54) *THRHR* 782 784; Coetzee LC "Onregmatigheid in die afwesigheid van belange-aantasting" 2004 (67) *THRHR* 661, 662, 669.

[46] *Telematrix (Pty) Ltd t/a Matrix Vehicle Tracking v Advertising Standards Authority*484; *Malahe v Minister of Safety and Security* 1999 1 SA 528 (SCA) 540; see also the discussion in Neethling *et al* 41. The courts often use the term 'duty of care', although it remains an English law concept and should not be adopted in our law. See in this regard the recent case of *Van der Eecken v Salvation Army Prop Co and another* 2008 4 SA 28 (T) where a wrongdoer lost control of a fire on his property that then spread to neighbouring properties; par 36–39 that he 'breached his duty of care' by failing to take adequate precautions in terms of s 12 of the National Veld Fire Act 101 of 1998.

[47] See in this regard Neethling *et al* 31, 48; *Herschel v Mrupe* 1954 3 SA 464 (A) 490.

[48] *Steenkamp NO v The Provincial Tender Board, Eastern Cape* 2007 3 SA 121 (CC) pars 21, 41; *Minister van Polisie v Ewels* 1975 3 SA 590 (A) 597.

[49] *Steenkamp NO v The Provincial Tender Board, Eastern Cape* (CC) par 41; Faure & Skogh 310 make the point that setting stricter regulatory standards can assist in setting the levels of care required to the standard of the *bonus paterfamilias*. This can be especially relevant as increased regulation of activities that affect or use the environment could provide this type of assistance.

Where the subjective rights of various legal subjects are in competition, for example, where someone protects his own rights, such as his right to trade freely or to ply his trade or profession[50] which in his view enjoys priority, by infringing upon another's rights right to a clean environment, the infringement is *prima* facie wrongful.[51] The objective criterion of reasonableness must be applied to balance the rights or interests, by taking into account, for example, the nature and extent of the harm or loss; the value of the loss to the prejudiced party and to society; possible preventative measures as well as the probable degree of success of such measures, the nature of the relationship between the parties, the motive and knowledge of the wrongdoer, and so forth.[52]

Because of the application of the *boni mores*-test, the fundamental rights entrenched in the Constitution also play an important role to determine whether a specific action is wrongful. As reasonableness is an open-ended criterion, the Constitution, specifically the Bill of Rights,[53] requires that the *boni mores* must incorporate and protect constitutional values and norms.[54] The Constitution does not replace the *boni mores*. Wrongfulness must be interpreted more widely now than in the past, in order to give better protection to the values underpinning the Bill of Rights.[55] The criterion allows for

[50] S 22 of the Constitution.
[51] See the view held by Havenga (1997) 92; see in this regard also the judgment in *Malahe v Minister of Safety and Security* 540 where it was held that the mere fact that an injury is caused gives right to an inference of wrongfulness; see also the corresponding views of Neethling *et al* 41.
[52] As identified by Neethling *et al* 35; *Administrateur, Transvaal v Van der Merwe* 1994 4 SA 347 (A) 361–362; s 36 of the Constitution; see specifically the discussion in par 3.2.1.2 of the text above.
[53] Specifically s 8, s 38, s 39.
[54] See the discussion of the constitutional right to the environment in chap 3 par 3.2.2 and the conclusion in par 3.6 above; see especially *Carmichele v Minister of Safety and Security* (CC) 962, pars 42–43; s 35(3), s 39(2) and s 195(1) on the basic values and principles governing public administration; *Steenkamp NO v The Provincial Tender Board, Eastern Cape* (CC) pars 20 – 23; see also in general Neethling J and Potgieter JM "Toepassing van die Grondwet op die Deliktereg" 2002 (65) *THRHR* 265.
[55] *Van Eeden v Minister of Safety and Security* 2003 1 SA 389 (SCA) 396; see also Fagan A "Rethinking Wrongfulness in the Law of Delict" 2005 (122) *SALJ* 90; see in general the discussion by Neethling *et al* 36.

changes in the law to reflect the changing values and needs of the community.[56]

4.2.3.3 Wrongfulness of omissions and the legal duty to act

In the event of a claim based on an omission, or where the claim is one for pure economic loss,[57] one must ask whether a legal duty to act has been breached.[58] As environmental damage could more likely be caused by omissions than by positive conduct, the discussion of the wrongfulness of omissions is extremely relevant. Where a wrongdoer was supposed to take precautionary or preventative measures, a standard of due care has been set.[59] 'When determining whether the law should recognize the existence of a legal duty in any particular circumstances, what is called for is not an intuitive reaction to a collection of arbitrary factors, but rather a balancing against one another of identifiable norms'.[60]

The following omissions have been generally acknowledged as actionable omissions that are relevant in an environmental context as far as liability claims in our law for environmental damage are concerned. As public policy considerations change, these categories are not a *numerus clausus* and may

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[56] See the discussion by Scott TJ "Die Regsplig by 'n Late en die Veroorsaking van Suiwer Ekonomiese Verlies" 1995 (28) *De Jure* (hereinafter 'Scott (1995)'), especially 158–164 for an examination of the variety of interpretations of the 'principle of public policy', see also the judgement given in *Minister of Law and Order v Kadir* 1995 1 SA 303 (A).

[57] See the comprehensive discussion of claims for pure economic loss in par 4.2.6.2.5 and chap 6 par 6.6.2.6 below; see also Scott (1995) 158–164 in this regard.

[58] *Minister of Finance and others v Gore NO* 2007 1 SA 111 (SCA) 138; *Bareki NO and another v Gencor Ltd and others* 439–441; *Minister of Safety and Security v Carmichele* (SCA); Neethling *et al* 137 recognise that the term 'duty of care' has occasionally been used by our courts and was adopted from the 'duty of care' doctrine in English law, but that as it is foreign to our law, it should be rejected and replaced by the norm of a breach of a legal duty.

[59] Faure & Skogh 246 identify that this is in accordance with the international environmental precautionary principle, and in accordance with the principle of preventative measures as discussed in chap 3 par 3.3.2.1(b), (c), and par 3.3.2.3 above.

[60] *Minister of Safety and Security v Van Duivenboden* 2002 6 SA 431 (SCA) par 21; see also *Lubbe & Four Others v Cape Plc and related appeals* 27-7-2000 (HL) on the duty of care that an asbestos mining company has towards its employees.

also change accordingly.[61] There may also be an interaction between the various categories discussed below, especially in an environmental context.[62]

4.2.3.3.1 Omissio per commissionem

Where a person who creates a potentially dangerous situation and then fails to remove the danger, known as an *omissio per commissionem* or prior conduct, it serves as a strong indication of the existence of the wrongdoer's legal duty to prevent the potential danger from becoming a real danger.[63] Any resulting loss or damage caused to another person by such an omission may be claimed from the wrongdoer. This type of omission is especially relevant as far as liability for pollution damage is concerned.[64] An example would be where, because of lack of capacity, there is a toxic waste overflow from the waste storage facility of a factory, and the problem is not addressed but ignored, resulting in pollution damage. Three requirements exist, namely there must be (a) the creation of a new source of danger; (b) a failure to remove this danger; and (c) another person must suffer the resulting loss, impairment or injury. [65]

4.2.3.3.2 Control of a dangerous object or substances

Where a person is in control of a dangerous object, such as a polluting substance or facility, and fails to exercise proper control over it with the result

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[61] *Telematrix (Pty) Ltd t/a Matrix Vehicle Tracking v Advertising Standards Authority* 484.

[62] See, for example, the case of *Minister van Polisie v Ewels* where a policeman failed to prevent an assault. The following were all applied to determine whether there was a legal duty to act: a statutory duty(see par (c) in the text below), a special relationship (see par (e) in the text below), and a public office held by the policeman (see par (d) in the text below); see also *Carmichele v Minister of Safety and Security* (CC) 938.

[63] See in general Neethling *et al* 52; Van der Walt & Midgley 86 explain that in this situation liability is founded on a combination of the preceding or previous conduct and the subsequent omission, based on the facts and circumstances of each case; see also Knobel JC "Aanspreeklikheid weens 'n Late in die Geval van 'n Munisipaliteit" 1987 (50) *THRHR* 480 for the application of these principles in an analogous situation; see also *Minister van Polisie v Ewels* 596; *Regal v African Superslate* 1963 1 SA 102 (A) 109, 116.

[64] See in this regard *Lubbe & Four Others v Cape Plc and related appeals* on claims for asbestos poisoning; see also par 3.3.4 above on the liability of the State for its wrongful omissions.

[65] See this issue as addressed in the various judgments in the case of *Regal v African Superslate* respectively at 109, 111, 116, 121.

that loss or damage is caused to someone else, the wrongdoer can be held liable for the loss or damage caused by his omission.[66] Should a manufacturer who utilises dangerous chemicals during his manufacturing processes, fail to maintain proper control of the chemicals, causing environmental damage through pollution, he could be held liable to compensate persons for the loss or damage caused by his omission. One must first ask whether there was actual control, and secondly whether a legal duty existed to prevent damage caused by an omission to exercise proper control.[67] A situation that has appeared regularly before the courts, and one which has the potential to cause immense environmental damage, is the failure to control a fire, which then rages out of control.[68] The occupier of property on which dangerous conditions exist, has a legal duty to prevent injury to persons who access the property or enter the premises.[69]

4.2.3.3.3 Requirement to act in accordance with a rule of law

Where either common law or statute requires a person to act in a specific way, any failure to act in accordance with such a rule of law is *prima facie* wrongful.[70] Firstly, the infringement must be justified, and then the infringement must not exceed the boundaries set by the statute.[71] An example would be where a statutory duty rests upon a polluter to rectify the harm

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[66] *Cape Town Municipality v Bakkerud* 2000 3 SA 1049 (SCA); *Daniël Mostert v Cape Town City Council* 2001 1 SA 105 (SCA) 120; see also *Administrateur Transvaal v Van der Merwe* 361; Van der Walt & Midgley 86 explain that mere control and supervision of property does not create a legal duty *per se*; see also in this regard Neethling *et al* 56.

[67] See, for example, *Van der Eecken v Salvation Army Prop Co and another* on the failure to control a fire when creating a firebreak, which then allowed the fire to spread to neighbouring properties; see also *Steenberg v De Kaap Timber (Pty) Ltd* 1992 2 SA 169 (A); *Administrateur, Transvaal v Van der Merwe* 359; as well as the case note by Scott TJ "Die Onregmatigheidstoets in die Deliktereg in die geval van 'n Late: *Administrateur, Transvaal v Van der Merwe* 1994 4 SA 347 (A)" 1995 (28) *De Jure* 234.

[68] See in this regard *Steenberg v De Kaap Timber (Pty) Ltd*); *Minister of Forestry v Quathlamba (Pty) Ltd* 1973 3 SA 69 (A).

[69] See *Oosthuizen v Homegas (Pty) Ltd* 1992 3 SA 463 (O), where liquid petroleum gas stored and decanted in an inadequately ventilated room caused harm to persons on the premises; Neethling *et al* 57, especially n 144–145.

[70] See also *Van der Eecken v Salvation Army Prop Co and another* on the statutory duty as created in s12 of the National Veld Fire Act, and whether a failure to comply with the statutory duty to control fires when creating firebreaks was wrongful in a civil law context.

[71] Neethling J and Potgieter JM "Statutêre bevoegdheid: Die rol van redelike voorsienbaarheid by onregmatigheid en nalatigheid" 2004 (25) *Obiter* (hereinafter 'Neethling & Potgieter (2004)') 477.

caused to the environment at the cessation of industrial activities,[72] or where a polluter is held liable for clean-up costs in the event of a polluting act.[73] Failing to comply could be found to be wrongful and would enable the plaintiff to claim delictual damages for the damage suffered.[74] Where there is a possibility of unfairness, a statute that imposes a duty will not enjoy retroactive operation.[75]

In order to prove wrongfulness, the plaintiff must also prove that the statutory measure provides him with a civil remedy. This will depend on the nature and objectives of the measure.[76] A criminal sanction does not rule out the existence of an additional common-law remedy that can be used in conjunction with the former.[77] The plaintiff must also be a member of the group for whose benefit and protection the statutory duty was imposed,[78] the statute must have contemplated the nature and occurrence of the harm,[79] the defendant must have transgressed the statutory provision and a causal link must exist between the transgression and the harm.[80] An example of a common-law duty would be where a contractual undertaking is given to ensure the safety of another. As contractual liability and its insurability fall outside of the scope of this study, they are not considered extensively.[81]

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[72] See Chap 7 of NEMA s 28, and , for example, s 28(1) reg 2 where a person using a vehicle in a coastal zone has to rectify harm that he causes; see also *Bareki NO and another v Gencor Ltd and others* 439–441.
[73] See, for example, s 25(12), s 28(8)(c) of NEMA; s 45 of the National Heritage Resources Act and other relevant statutes as discussed in par 3.4.4 above.
[74] Relevant case law in this regard includes *Minister van Polisie v Ewels*; *Olitzky Property Holdings v State Tender Board* 2001 3 SA 1247 (SCA); *Knop v Johannesburg City Council* 1995 2 SA 1 (A) 35; *Carmichele v Minister of Safety and Security* (CC); *Minister of Safety and Serurity v Carmichele* (SCA); see also in general Neethling *et al* 59–62.
[75] *Bareki NO and another v Gencor Ltd and others* 439 on the position in terms of NEMA s 28(1), s 28(2).
[76] *Premier Western Cape v Faircape Property Developers (Pty) Ltd* 29.
[77] As was already held in *Patz v Greene and Co* 1907 TS 427.
[78] Where a statutory duty is imposed for the benefit of society in general, an interdict would be a more suitable remedy, and not a claim for damages instituted by a particular individual.
[79] Neethling *et al* 70, specifically n 237.
[80] See in this regard *Da Silva v Coutinho* 1971 3 SA 123 (A) 141–148.
[81] See in this regard par 4.3 below.

4.2.3.3.4 A particular office

A person who occupies a public office (such as the Minister or the Director-General of Environmental Affairs and Tourism) can possibly incur liability for his failure to act in a certain way.[82] Should his failure to act cause loss or damage to another, the holder of the office or position could possibly incur liability for the loss or damage so caused.

Public accountability as far as organs of state are concerned, has not evolved into a general liability for damages caused by improper administrative actions.[83] The recent case of *Steenkamp NO v The Provincial Tender Board, Eastern Cape* before our Constitutional Court dealt extensively with the question whether a breach of a statutory duty was in fact wrongful for purpose of proving delictual liability.[84] This case dealt with the negligent yet *bona fide* award of a tender. It was held that in the absence of a clear legal duty in statute or in common law, or on constitutional principles, a failure to act in an administrative just manner is not wrongful *per se*.[85] In view of this decision, and the duty in terms of section 24 of the Constitution as well as the various other statutory duties of the State provided for in environmental legislation as discussed above, it is submitted that it would appear to be easier to prove wrongfulness for omissions leading to environmental losses, than was the case in the exercise of a ordinary run-of-the-mill administrative act in a tender process in respect of which no express statutory duty exists.[86]

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[82] For example, the duties of the Director-General in terms of NEMA s 28 as discussed in par 3.4.2.3 above.

[83] *Telematrix (Pty) Ltd t/a Matrix Vehicle Tracking v Advertising Standards Authority* 487; *Olitzki Property Holdings v State Tender Board and another* par 31.

[84] See also the discussion of grounds of justification, specifically the breach of statutory duty and official capacity, in par 4.2.3.4.4 below in this regard.

[85] See the Constitution s 172(1)(a) on the exercise of public power; see specifically pars 37, 39 of the case.

[86] See the discussion by Neethling J "Delictual Protection of the Right to Bodily Integrity and Security of the Person against Omissions by the State" 2005 (122) *SALJ* 572; also Neethling J "Die *Carmichele*-Sage kom tot 'n Gelukkige Einde" 2005 (2) *TSAR* 402 in reaction to the *Carmichele* judgments.

4.2.3.3.5 Special relationship between the parties

Where there is a special relationship between parties, such as that between the Koeberg Nuclear Power Station as an employer, and its employees, one can expect the employer to act in a specific manner. Should he fail to do so, and in the process cause loss or injury to his employees, he could be held delictually liable because of his omission. Where a person is contractually obliged to protect another from harm and fails to do so, his omission is wrongful. A contractual undertaking creates a legal duty to act in accordance with the undertaking freely given by agreement.[87]

4.2.3.3.6 Creating the impression that interests will be protected

Where one person is placed under a reasonable reliance by another that the latter will protect the interests of the former, a legal duty rests upon the person creating the (false) impression to act in accordance with the reliance that he created. Where the creation of such an impression or reliance is wrongful (in terms of the *boni mores* as tested according to reasonableness), and also blameworthy, delictual liability can follow. Where a person innocently creates a false impression, he cannot be held delictually liable, as fault is absent. This will be the case where a local authority who allows industrial development in close proximity of a residential area, creates the impression to the residents that environmental impact assessments have been done and approved and that the development will not harm the environment, but in reality where the proper procedure was not followed.

4.2.3.4 Grounds of justification

Circumstances, which occur regularly in practice, allowed for the development of supplementary criteria to determine whether conduct is seen as wrongful for purposes of delictual liability. In some cases the law recognises grounds that justify a person's conduct, which then has the effect that even where such

[87] As stated by Neethling *et al* 58 n 146.

conduct has infringed upon another person's rights, causing loss, damage, harm or injury, it will not be deemed wrongful because of special circumstances. These are called grounds of justification.[88] The following are factual circumstances, and is not a *numerus clausus*, that could provide adequate justification for the polluter's conduct and eliminate the wrongfulness thereof in an environmental context.

4.2.3.4.1 Doctrine of the abuse of rights and nuisance

Nuisance has been accepted internationally as one of the most prolific environmental torts. Examples of nuisance can be found where smoke or gases that escape from one property drift over another,[89] or where water or chemicals such as oil from underground storage tanks seep into the soil of another's property.[90] The doctrine of nuisance has not been expressly accepted as part of our law, yet similar principles that underlie the doctrine of the abuse of rights have been implemented and accepted by our courts.[91] This applies especially in the so-called 'neighbour law',[92] also in general referred to as 'nuisance'.[93] The basic question remains whether a person

[88] *Malahe v Minister of Safety and Security* 534; see in general the discussion by Neethling *et al* 70 *et seq*.

[89] See the reference in chap 3 par 3.2.3.2 n 43 above on the case of *Lopez Ostra v Spain* (1995) 20 EHRR 277, where the State was held liable for allowing a factory to be erected for the purpose of processing waste from various unlicenced tanneries, which caused air pollution and bad smells to the surrounding residential areas.

[90] See par 4.2.4.3.5 n 169 and chap 6 par 6.3.2.1 below, on the aviation fuel leak and seepage at the OR Tambo International Airport; see also *Lascon Properties (Pty) Ltd v Wadeville Investment Co (Pty) Ltd* 1997 4 SA 578 (W), where polluted water from mining activities escaped without having been rendered innocuous, causing damage to adjacent land, and that caused the mine to incur liability for the loss.

[91] Various cases serve as authority on this point, namely *Regal v African Superslate (Pty) Ltd* 106; *Gien v Gien* 1979 2 SA 1113 (T) 1121; and *Union Government (Minister of Railways and Harbours) v Marais* 1920 AD 240 247; see the opinion of Van der Walt & Midgley 123 who submit that the abuse of rights are in essence an integral part of the fundamental principle that conduct contrary to *boni mores* is wrongful, and that it should not be seen as a separate and distinct doctrine in our law; see, however, Neethling *et al* 102 n 510 for criticism on this point.

[92] Own translation of 'die burereg'.

[93] The tort of nuisance has been developed extensively in UK law as discussed in chap 7 par 7.3.3.3 below, and in the USA as discussed in chap 7 par 7.6.3.4. Although it is not part of our law, the principles correspond with those of the doctrine of abuse of rights in Suth African law. See in this regard *Flax v Murphy* 1991 4 SA 58 (W) 61; *East London Western Districts Farmer's Association v Minister of Education and Development Aid* 1989 2 SA 63 (A) 88; see the comprehensive discussion by Neels JL "Tussen Regmatigheid en Onregmatigheid: Die Leerstuk van Oorskryding van Regte en Bevoegdhede" (Part I) 1999 (1) *TSAR* 63; (Part II)

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abused any of his rights to his benefit, causing his neighbour some form of prejudice. The benefit and the prejudice must be weighed up against each other, based on the relative concepts of reasonableness and fairness.[94] The constitutional right to the environment will also inform the concept of reasonable behaviour relating to the environment.[95]

Nuisance can be divided into public nuisance, where the rights of the general public are infringed upon,[96] private nuisance where one individual infringes upon the rights of another[97] and lastly statutory nuisance, where a legislative authority declares specific conduct to be a nuisance for which liability can then be incurred.[98] The general delictual requirements still apply to determine liability, although a nuisance is actionable irrespective of any proof of negligence or intent. A full discussion of whether fault is a requirement follows below.[99]

The general principles that apply in our law are the following: (a) An owner of property may use his property as he sees fit yet within legal boundaries;[100] (b)

2000 (2) *TSAR* 317; (Part III) 2000 (3) *TSAR* 469; and (Part IV) 2000 (4) *TSAR* 643; also Neels JL "Die Onderskeid tussen Oorlas en die Oorskryding van Eiendomsreg op Onroerende Goedere" 2000 (33) *De Jure* 19.

[94] As stated in *Dorland v Smits* 2002 5 SA 374 (C) 384; see also Neethling *et al* 103.

[95] See the statement by Bell S & McGillivray D *Environmental Law* 6th ed (2006) (hereinafter 'Bell & McGillivray') 388 that '[h]uman rights law may force through some welcome developments, for example, to bring nuisance actions.'

[96] The Restatement (Second) of Torts 1976 § 821B deals with common-law public nuisance; Madden & Boston 56 describe a public nuisance as 'an unreasonable interference with a right common to the general public'.

[97] See *PGB Boerdery Beleggings (Edms) Bpk and another v Somerville 62 (Edms) Bpk and another* 2008 2 SA 428 (SCA) where a private nuisance was caused by the transfer of diseased game from one property to another; see also *Van Rensburg and another NNO v Nelson Mandela Metropolitan Municipality and others* 2008 2 SA 8 (SECLD) where the erection and extension of buildings contrary to title conditions caused a private nuisance to neighbouring properties; see *Allaclas Investments (Pty) Ltd and another v Milnerton Golf Club and others* 2008 3 SA 134 (SCA) where golf balls striking an appellant's property which was situated adjacent to a golf course, did not constitute unusual use and therefore was not an actionable private nuisance.

[98] See par 4.2.3.4.1 below for a detailed discussion of the application of the doctrine of the abuse of rights and nuisance in South African law.

[99] See par 4.2.4 below.

[100] See the judgment in *Trustees Two Oceans Aquarium Trust v Kantey & Templer (Pty) Ltd* 2006 3 SA 138 (SCA) par 11 for the reference by JRL Milton that '[a]n interference with the property rights of another is not actionable as a nuisance unless it is unreasonable. An interference will be unreasonable when it ceases to be a 'to-be-expected-in-the-

Footnote continues on the next page.

the owner's interests and the benefit of exercising his rights of ownership must be weighed up against his neighbour's interests and the prejudice he suffers;[101] (c) the owner's reasonable or unreasonable conduct relates to whether he is acting wrongfully.[102] Improper motive does not make the conduct wrongful *per se*;[103] and (d) the presence or threat of danger is also not a nuisance *per se*, unless is it objectively unreasonable.[104]

Our courts have in the past been unwilling to allow claims based purely on aesthetic considerations, visually or otherwise, as they are notoriously subjective and personal.[105] In a recent case where a respondent erected and extended buildings contrary to restrictive title conditions on his property that proved to be a nuisance to neighbouring property, his unlawful conduct allowed the court not only to issue a demolition order, but the court was also afforded the discretion to allow a claim for damages. In this case, however, the court held that damages would not be a suitable remedy, as it would not put an end to the nuisance.[106]

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circumstances' interference and is of the type which does not have to be tolerated under the principle of 'give-and-take, live and let live.' See also *Gien v Gien* 1120.

[101] See *Regal v African Superslate (Pty) Ltd* 106 for a reference to the relevant principles in Roman Dutch law; see also *Gien v Gien* 1121; *Union Government (Minister of Railways and Harbours) v Marais* 270; Neethling *et al* 105.

[102] See also *Trustees Two Oceans Aquarium Trust v Kantey & Templer (Pty) Ltd* par 11 for the reference by JRL Milton that '[t]he criterion used is not that of the reasonable man but rather involves an objective evaluation of the circumstances and milieu in which the alleged nuisance has occurred'.

[103] *Gien v Gien* 1113; *Regal v African Superslate* 107, 108; Neethling *et al* 107.

[104] *Dorland and another v Smits* 384; *Regal v African Superslate* 110.

[105] In *Paola v Jeeva NO & Others* 2003 4 All SA 433 (SCA) 439, 440 the court held that the view of a property affects its market value, and that it should be taken into consideration when approving building plans that could detrimentally affect the views of surrounding properties; see in this regard Kidd M "The view I behold on a sunshiny day" 2004 (121) *SALJ* (hereinafter 'Kidd (2004)') 556 on the 'right to a view' and whether an infringement of this right should be seen as an actionable nuisance; see also the statement in *Director: Mineral Development Gauteng Region and Sasol Mining (Pty) Ltd v Save the Vaal Environment* 1999 2 SA 709 (SCA) par 6(c) that pollution from a strip mine would destroy the 'sense of place' of the wetland in question, destroying the spiritual, aesthetic and therapeutic qualities associated with the area. See also *Dorland and another v Smits* 383 where the court held that one is not to use one's property unreasonably to the undue detriment of one's neighbour, and that it is not necessarily limited to one's next-door neighbour.

[106] *Van Rensburg and another NNO v Nelson Mandela Metropolitan Municipality and others* 11, 12.

Kidd correctly supports the view that an interference with aesthetics should be actionable where it is proven to be unreasonable.[107] The right to the natural environment should entitle one to enjoy the aesthetic appeal of nature. This issue is also of relevance where the scope of 'damages' claimable is examined, and where environmental pollution causes an appreciable diminution in the value of property because of its loss of aesthetic appeal and its subsequent reduced use and enjoyment.

4.2.3.4.2 Impossibility to act

The impossibility to act does not amount to necessity, but in specific circumstances it could exclude wrongfulness.[108] In the well-known case of *Regal v African Superslate (Pty) Ltd* an owner of land allowed loose slate from his land to wash downstream, causing damage to another's property. It was held that because the measures that would have to be taken by the former to prevent the slate from washing down were so extensive, compared to the interests of the latter, the failure to prevent the loss was not wrongful as prevention was impossible in the circumstances.[109]

4.2.3.4.3 Consent to injury and voluntary assumption of the risk

A person may waive his rights and consent to damage or harm being done to him, or to the risk of such harm or injury.[110] This would be relevant for

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[107] See Kidd (2004) 559, specifically referring to Knobel JC "Inbreukmaking op die estetiese oorlas" 2003 (66) *THRHR* 500; in *Raubenheimer NO v Trustees, Johannes Bredenkamp Trust and Others* 2006 1 SA 124 (C) the court held that a 'sentimental and emotional attachment' to a building that was to be demolished was not harmful to his 'well-being.' ;see also the views of Du Bois F & Glazewski J "The environment and the Bill of Rights" in *The Bill of Rights Compendium* (1996) 2B-38 that the use of the term 'well-being' in s 24 of the Constitution undermines the traditional view that aesthetic nuisance is not actionable. See also the discussion in chap 6 par 6.6.2.3 below on claims for potential extensive 'damages' that can affect a person's enjoyment of life's amenities; see also Kidd 21–22.

[108] See Van Oosten FFW "Die Aard en Rol van die Stelreël *lex non cogit ad impossibilia* in die Strafreg" 1986 (49) *THRHR* 375 for an analogy to this position in a civil law context.

[109] *Regal v African Superslate (Pty) Ltd* 111–122.

[110] See in this regard *Santam Insurance Co Ltd v Vorster* 1973 4 SA 764 (A); *Lampert v Heever* 1955 2 SA 507(A); Neethling *et al* 89 *et seq*; Van der Walt & Midgley 140; this is in accordance with the Roman and Roman-Dutch law maxim *volenti non fit iniuria* as discussed by De Groot 3.35.8; Voet 47.10.4, meaning consent to actual injury or merely to the risk of an injury.

purposes of this study where the proper authorisation for a certain action is given after a proper environmental impact assessment has been completed and approved, and where the authorised conduct then subsequently causes pollution damage as was envisaged when the permit was issued. The question remains on whether the polluter can be held liable for the damage caused in terms of the 'regulatory compliance defence'. Not all countries allow this as a defence against blameworthiness.[111]

The question arises whether the state can be held liable for improperly providing authorisation on behalf of its citizens. All the requirements listed below must be met. The justification of official capacity would be another possible ground of justification. [112] In context, consent might also be given by a landowner to allow another to conduct mining explorations on his land, which then causes environmental damage.

The following requirements have to be met: (a) Consent is a unilateral act that does not require an agreement between the parties involved and must be voluntary, apparent and evident and given as a conscious expression of the injured party's will, with the serious intention actually to consent to the injury;[113] (b) consent can be given expressly or tacitly before the injuring conduct commences,[114] and can be revoked at any time before the injurious conduct takes place; (c) consent must be lawful, and not against the public interest or good morals;[115] (d) the consenting party must be fully aware of a risk in that he carries full knowledge of the rights he is waiving and of the harm that he could incur or of the risk that he is taking;[116] and (e) the

[111] See also Faure M *Tort and Insurance Law Vol 5: Deterrence, Insurability and Compensation in Environmental Liability: Future Developments in the European Union* (2003) (hereinafter 'Faure (ed)') 55 on the justification that such a licence or permit provides.
[112] See par 4.2.3.4.4 below.
[113] As stated in *Lampert v Heever* 509; see also Neethling *et al* 90.
[114] *Union Government (Minister of Railways and Harbours) v Matthee* 1917 AD 688 703; Neethling *et al* 91.
[115] See the discussion by Knobel JC "HIV-toetse, Toestemming en Onregmatigheidsbewussyn" 1997 (60) *THRHR* 533 on the policy of a governmental department as a factor to establish *boni mores*, in the light of *C v Minister of Correctional Services* 1996 4 SA 292 (T); Neethling *et al* 94.
[116] *Santam Insurance Co Ltd v Vorster* 781; see also Van der Walt 143 that the materialisation of the risk must be subjectively foreseen, appreciated and assumed.

wrongdoer must act within the scope of the consent given by the injured party.[117]

Although consent to injury can be confused with voluntary assumption of risk, the injured party in the latter instance merely expresses his willingness to subject himself to the risk of subsequent injury. Mere knowledge of the potential risk is not sufficient. The injured party must have consented to actually run the risk, as per the requirements set above. The 'first use' defence can also be addressed here. This will apply to a situation where a factory was located in an uninhabited area, and a person who, knowing of the existing risk of pollution by the factory, assumes the risk by settling on property adjacent to the factory. The 'newcomer' is then precluded from acting once the risk realises and the polluting event occurs.[118]

If a person acts in order to protect the interest of another, but without the latter's consent, it is recognised as a situation of unauthorised agency. The conduct of the former (the *negotiorum gestor*) is lawful, although the latter suffered a loss or damages in the process. The test applied by the courts is whether the other person, had he been present, would have acted in the same way as the *negotiorum gestor*, and whether the *negotiorum gestor* was reasonably of the opinion at the time of his conduct that it would be to the benefit of the other person.[119]

4.2.3.4.4 Statutory authority and official capacity

Where a statutory provision authorises a person to act in a certain way, his actions performed in terms of the statute will not be wrongful even if someone else is harmed thereby. A statute must clearly authorise the type of infringement upon private interests if it was the clear intention of the legislator

[117] *Santam Insurance Co Ltd v Vorster* 783.
[118] See Faure (ed) 63 for a consideration of the merits of this defence. It is proposed that the possibility that the factory could reduce or prevent the pollution should be investigated and should be taken into account in determining whether the polluting conduct is in fact wrongful.
[119] See in this regard Neethling *et al* 82 n 340; see also the brief examination of *negotiorum gestio* in par 4.4 below.

to authorise and sanction such an infringement and the consequent conduct falls within the limits of the authorisation.[120] Where the statute is merely directory, an infringement of interests is clearly authorised. Where it is permissive, there is a presumption that infringement of another's interests is not expressly authorised. The presumption falls away if the authority is entrusted to a public body acting in the public interest. Whether the authorised act is circumscribed or described in the specific situation will also play a role in the interpretation of the extent of the authorised act.[121]

Factors that have to be taken into account to determine whether statutory infringement is authorised, include: (a) whether it would have been possible to exercise the powers without infringing upon another's interests; (b) whether the conduct causing the infringement is reasonable, and (c) whether other measures or methods exist which are similar in cost and efficiency that could have provided the same results without causing the infringement.[122] Two requirements have to be satisfied for statutory immunity, namely, that reasonable practicable measures were taken to prevent harm, and that there was no negligence.[123] Once again reference must be made to *Steenkamp NO v The Provincial Tender Board Eastern Cape* on whether a breach of statutory duty was in fact wrongful for purpose of delictual liability, as there is a statutory duty to protect the environment in terms of the Constitution. The court held that in the absence of a clear legal duty in statute or in common law, or on constitutional principles, a failure to act in an administrative capacity is not wrongful *per se*.[124]

Where a person occupying an official position must perform certain acts, or has to execute an official lawful order given to him and another person is

[120] See Neethling & Potgieter (2004) 477; *Premier Western Cape v Faircape Property Developers (Pty) Ltd* 29; *Govender v Minister of Safety and Security* 2001 4 SA 273 (SCA); *Johannesburg Municipality v African Realty Trust* 1927 AD 163 172; Neethling *et al* 96 *et seq*.
[121] *Johannesburg Municipality v African Realty Trust* 163; see in general Neethling *et al* 96.
[122] *Minister of Community Development v Koch* 1991 3 SA 751 (A) 761; *Johannesburg Municipality v African Realty Trust* 177; *Breede River (Robertson) Irrigation Board v Brink* 1936 AD 359.
[123] *Johannesburg City Council v Television & Electrical Distributors* 1997 1 SA 157(A) 165.
[124] See pars156, 161 of the case; see also Neethling & Potgieter (2004) 481 in this regard.

harmed thereby, the official's actions will not be wrongful.[125] An example would be where an environmental impact assessor carries out his official duties, or properly instructs someone to act in a certain manner, but the assessment leads to environmental harm or damage.

The infringing act must also not exceed the scope of infringement allowed by the statute or the official authority.

4.2.3.4.5 Necessity

Necessity is a ground of justification where a state of superior force or necessity, caused by human conduct or by forces of nature, forces a person to act towards protecting the interest of another, resulting in loss or harm caused to an innocent third party. This may be the case where a bush fire necessitates a person to make a counter-burn to protect the interests of another, causing environmental damage in the process. Another example would be where the managers of the Koeberg power plant have to release radioactive material into the atmosphere as an emergency measure to prevent a nuclear meltdown, which would cause far more damage than that caused by the controlled release of the radioactive material.[126] In a state of necessity the interests of another innocent party may be infringed upon lawfully.[127] The test to determine whether there was a reasonable response to a particular situation that presented itself is an objective one.[128]

The requirements for a successful plea of necessity are the following: (a) The state of necessity must be imminent or should already have commenced.[129]

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[125] *Moeketsi v Minister van Justisie* 1988 4 SA 707(T); see also in this regard the Promotion of Administrative Justice Act 3 of 2000 that gives effect to and the Constitution s 33(1), s 233(2), s 195 on public administration on the right that administrative action that must lawful, reasonable and procedurally fair. The Act does not include a claim for damages under the list of remedies available for failure of administrative justice, yet allows for an award of 'compensation' in exceptional circumstances.

[126] See in general *S v Goliath* 1972 3 SA 1 (A) .

[127] See in general Neethling *et al* 80; also Van der Walt & Midgley 127; *S v Adams, S v Werner* 1981 1 SA 187 (A) 220.

[128] *Crown Chickens (Pty) Ltd t/a Rocklands Poultry v Rieck* 2007 2 SA 118 (SCA) 122.

[129] See Neethling *et al* 82 for an examination of this requirement.

(b) A person could protect his own rights or the rights of another during the state of necessity. Life, physical integrity, property and other interests such as privacy and freedom may be protected. (c) Conduct during a state of necessity will only be justified if it is the only way in which the threatened interest can be protected. A person acting in a state of necessity may not cause more harm than that which is absolutely necessary and unavoidable in the specific circumstances. The interest which is infringed upon should not be greater than the interest which is protected.[130] (d) To determine whether the conduct is reasonable, the gravity of the risk of harm must be weighed against the interest protected and the effectiveness of the conduct, which must not have been excessive.[131] Two conflicting principles relevant to the scope of this study are the right to sustainable development[132] and the right to the environment. The rights of a property developer should be weighed against the right of having the natural environment protected from damage, where the property developer applies for a rezoning for a proposed activity on land zoned as a 'protected natural environment'.[133]

4.2.3.4.6 Pure economic loss

Conduct that causes pure financial or economic loss is not *prima facie* wrongful, and claims to compensate for these losses are only actionable where a legal duty to act was breached. As the issues are extensive, claims for pure economic losses because of pollution damage are examined in greater detail in this chapter,[134] and in chapter 6 on the nature and assessment of damages below.[135]

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[130] The principle of commensurability or proportionality of interests applies in this situation, as stated by Neethling *et al* 83.
[131] *Crown Chickens (Pty) Ltd t/a Rocklands Poultry v Rieck* 123.
[132] See also the Constitution s 195(1)(c) that 'public administration must be development-orientated'.
[133] See the case of *Myburgh Park Langebaan (Pty) Ltd v Langebaan Municipality and others* 2001 4 SA 1144 (C).
[134] See par 4.2.6.2.5 below.
[135] Chap 6 par 6.6.2.6 below.

4.2.3.4.7 Defence

Where a person's necessary defence[136] against an attack, launched by human conduct that is objectively wrongful and that threatens or violates the defendant's or another's individual interest, the defence that in turn violates the attacker's rights or interests is justified. The defence must be reasonably necessary to ward off the attack, and its effects must not be out of proportion to the effects of the attack.[137] Although the interests must not be in actual proportion, there should at least be some form of balance. The test is one of reasonableness. The value and nature of the interests may differ, and the method used for the defence does not have to correspond to the methods used in the attack.[138] It is submitted that although it appears to be unlikely that environmental damage caused during an act of defence during an enemy attack will be a regular occurrence, the possibility does exist.

4.2.4 Fault

4.2.4.1 General

It is often problematic for a claimant to prove that the defendant's conduct was intentional or negligent. Doing so requires policy judgements where once again the provisions of the Constitution become relevant.[139] Before someone can be held liable in delict, one must determine whether the conduct was wrongful and whether it was blameworthy (culpable).[140] These are two distinct requirements, and conceptually, the requirement of wrongfulness should

[136] See in general Neethling *et al* 70–80.

[137] *Ex parte Die Minister van Justisie: In re S v Van Wyk* 1967 1 SA 488 (A); *Ntsomi v Minister of Law and Order* 1990 1 SA 512 (C) 526–530; *Kgaleng v Minister of Safety and Security* 2001 4 SA 854 (W) 865; Van der Walt & Midgley 128 state that courts are required to look *a posteriori* at all the circumstances and not from the point of view of any person, and that the perspective is more that of a reasonable person in the position of a mere bystander.

[138] As held in *Ex parte Die Minister van Justisie: In re S v Van Wyk* 492.

[139] See chap 3 par 3.2 above.

[140] As addressed in *Minister of Safety and Security v Carmichele* (SCA) 318–327; *Cape Town Municipality v Bakkerud* 1055; *Administrateur Transvaal v Van der Merwe* 364; *Sea Harvest Corporation (Pty) Ltd and another v Duncan Dock Cold Storage (Pty) Ltd and another* 2000 1 SA 827 (A) 838.

precede the requirement of fault. It is, however, possible to follow a flexible approach by testing for the presence of fault first, and then for the presence of wrongfulness.[141] What remains certain is that delictual liability remains firmly based on the principle of fault, unless there is a specific exception such as a statutory strict liability.[142]

Fault is present where a person acted in a reprehensible state of mind or with insufficient care.[143] Although intent is seen as the subjective element of delict as it deals with a person's disposition or attitude during his wrongful conduct, negligence retains a more objective nature. The accountability of the polluter regarding his legal capacity to be held at fault, as well as his disposition at the time of his blameworthy conduct are prerequisites for the presence of fault.[144] Each case has to be judged on its own facts and merit, and each person's own abilities judged in order to determine whether he could be legally blamed for his conduct. In terms of the fault theory, negligence or intent forms the basis of delictual liability.[145] Any damage caused by a *force majeure* event should not be imputable to the wrongdoer, as it serves as a defence against liability.[146]

4.2.4.2 Intent

A wrongdoer's conduct is intentional if he directed his will at achieving a particular result while being aware that his conduct is wrongful.[147] It is the

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[141] Knobel JC "Die volgorde waarin delikselemente onregmatigheid en skuld bepaal moet word" 2008 (71) *THRHR* 1 12 supports a flexible approach, where considerations of utility may favour the approach that the one is not a prerequisite for the other, and that one could test for negligence before testing for wrongfulness. Both must at the end of the day, however, be present before delictual liability can exist. See also n 244 below, where Knobel holds the opinion that one could also test for causation and the presence of damages first, before testing for the other requirements such as for wrongfulness and fault.

[142] For a discussion of strict liability see par 4.2.4.5. below.

[143] See in general Van der Walt & Midgley 155.

[144] *Weber v Santam Versekeringsmaatskappy* 1983 1 SA 381(A) 389 410; Neethling *et al* 110.

[145] As stated by Neethling (2002) 585; see also the South African Law Review Commission Project 96 "The Apportionment of Damages Act 34 of 1956" par 3.10.

[146] This is in accordance with the position in other countries as discussed in chap 7 par 7.3.3.2.1 and n 207 below; see in this regard also Faure (ed) 53.

[147] *Dantex Investment Holdings (Pty) Ltd v Brenner* 1989 1 SA 390 (A) 396; see also Neethling *et al* 112.

legally reprehensible state of mind or mental disposition when directing one's will at producing a particular consequence while knowing that it is unlawful or wrongful.[148]

Three forms of intent can be identified, namely direct intent (*dolus directus*) where the wrongdoer desires the consequence of his conduct, indirect intent (*dolus indirectus*) where the wrongdoer intends a specific consequence while knowing that another will be unavoidable or inevitable, and lastly *dolus eventualis* where the wrongdoer foresees the possibility of a specific consequence and reconciles himself with it.[149] One would expect the last form to be especially relevant for actions that cause environmental damage, as one could only hope that persons do not pollute with either direct or even indirect intent.[150] *Dolus eventualis* must be distinguished from reckless conduct, the latter being a form of negligence as discussed below.[151] A mistake regarding a relevant fact or the law, as to whether the conduct is wrongful, generally excludes intent. The approach is a subjective one and is limited only by the requirement that the mistake must be *bona fide.*[152]

Motive is only of evidentiary value in proving intent or consciousness of wrongfulness. A mistake concerning the causal chain of events only affects intent where there is a marked deviation from what the wrongdoer perceived the chain to be, and the actual causal chain of events.[153] This could be the case where a person is mistaken as to how extensive the consequences of his polluting activities are.

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[148] As described by Van der Walt & Midgley 157.
[149] *S v Beukes* 1988 1 SA 511(A); see also Neethling 113.
[150] See Neethling 114 who state that even though there is a distinction between the three forms of intent, it is generally irrelevant which one is present in a particular case.
[151] See par 4.2.4.3 below.
[152] *Dantex Investment Holdings v Brenner* 396; see also Neethling 114; Van der Walt & Midgley 163 hold the opinion that requiring the mistake to also be reasonable is not reconcilable with the subjective nature of the mistake.
[153] *S v Goosen* 1989 4 SA 1013 (A) 1026; see also Burchell JM "Mistake or Ignorance as to Causal Sequence – A New Aspect of Intention" 1990 (107) *SALJ* 168.

4.2.4.3 Negligence

4.2.4.3.1 General criteria

Where a person's conduct does not conform to the standard of conduct, which could legally be expected of him in those specific circumstances, his conduct is negligent. Three elements combine to constitute a delict based on negligence, namely a legal duty in the circumstances to conform to the objective standard of the reasonable person, conduct that is careless, thoughtless or imprudent and which falls short of that standard, and resultant loss consequent upon that conduct.[154]

4.2.4.3.2 The reasonable person

The question is whether a *diligens paterfamilias* or reasonable person in the position of the wrongdoer concerned would have foreseen the reasonable possibility of loss,[155] and would have taken any steps to prevent loss or harm from occurring at all, and then failing to do so.[156] An objective test is used to determine what is reasonable or not and this depends on the facts and circumstances of each case.[157] The conduct is therefore tested according to the objective criterion of the reasonable person, and conduct would be negligent where a person acts recklessly, carelessly or thoughtlessly.[158]

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[154] *First National Bank of South Africa Ltd v Duvenage* 2006 5 SA 319 (SCA) 19, 320, 325; Van der Walt & Midgley 166 state that one must adapt one's conduct to the ideals and standards of a particular community and not *vice versa*; see also Neethling *et al* 117 on this point.

[155] *Kruger v Coetzee* 1966 2 SA 428 (A) 430; see in general Neethling 126.

[156] *Kantey & Templar and Another v Van Zyl NO* 2007 1 SA 610 (C) 623; *Kruger v Coetzee* 430.

[157] *Crown Chickens (Pty) Ltd v Rieck* pars 11–13; *Jones v Santam Bpk* 1965 2 SA 542 (A) 542.

[158] For relevant case law on this point, see *Kruger v Coetzee* 430; *Jones v Santam Bpk*; *Jurgens Steenkamp NO v The Provincial Tender Board, Eastern Cape* (CC) par 39; *Minister of Safety and Security v Carmichele* (SCA) 325; *Minister of Safety and Security and another v Rudman* 2005 2 SA 16 (SCA) 39; *Minister of Safety and Security v Van Duivenboden* 441; *Premier, Western Cape v Faircape Property Developers (Pty) Ltd* 36; see also Neethling & Potgieter (2004) 483.

In an environmental context, this would require that the reasonable person would have foreseen the probability of causing any harm, and would have guarded against the loss. The nature of the person's interest that is infringed upon should be one that the law would prefer to protect against negligent conduct. The characteristics of a reasonable person have to adapt with and to changing circumstances.[159] Although the *Van Duivenboden* case dealt with the possession and use of dangerous fire-arms, an analogy can easily be drawn as far as the sanctioned possession and use or abuse of hazardous pollutants are concerned. Greater environmental awareness and the availability of information and data indicating the risk and the severity of environmental damage and possible ways of avoiding this are all factors that influence the criterion of the reasonable person. As 'mere negligence in the air will not do',[160] the two crucial elements of negligence that have to be proven are foreseeability and preventability.

4.2.4.3.3 Foreseeability and preventability

Foreseeability requires damage in general to be reasonably foreseeable in a specific situation.[161] There can be no general hard and fast rules.[162] As to preventability, reasonable steps must have been taken to prevent or mitigate damage. What is reasonable will depend on the degree, nature and extent of the risk, the gravity of the damage, the utility of the wrongdoer's conduct, and lastly the burden of costs, expenses and difficulties in taking precautionary measures.[163]

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[159] *Weber v Santam Versekeringmaatskappy Bpk* 410; see Neethling *et al* 121–126, and 133–138 for a comprehensive discussion of the various applications of this test.
[160] *Premier, Western Cape v Faircape Property Developers (Pty) Ltd* 31.
[161] *Sea Harvest Corporation (Pty) Ltd and another v Duncan Dock Cold Storage (Pty) Ltd and another* 840; *Ocean Accident and Guarantee Corporation Ltd v Koch* 1963 4 SA 147(A) 152; Neethling *et al* 127 are of the opinion that any approach, be it absolute (that only the general possibility of harm must be foreseen) or relative (that only the specific consequence must be foreseen) could prove to be sufficient.
[162] As held by the court in *Minister of Safety and Security v Carmichele* (SCA) 326;Van der Walt & Midgley 177 state that it cannot be founded on statistical and mathematical calculations, but only legal evaluation of the risk in a particular situation, in terms of broad and flexible guidelines; see also in this regard Neethling *et al* 129.
[163] See *Kruger v Coetzee* 428 where the court held that the burden of eliminating the risk must clearly not outweigh the magnitude of the risk.

4.2.4.3.4 Gross negligence

In specific cases a distinction must be drawn between ordinary negligence and gross negligence. This has no relevance for Aquilian liability, yet it may be possible for a statute to require gross negligence for liability and the distinction will then be critical.[164] One should also not confuse *dolus eventualis* as a form of intent with gross negligence. The latter may be described as conduct that, although falling short of *dolus eventualis*, involves such an extensive departure from the standard of the reasonable person that it borders on intent, and clearly justifies liability.[165]

4.2.4.3.5 Burden of proof and res ipsa loquitur

The plaintiff must prove fault on a balance or preponderance of probabilities, unless the burden of proof has shifted to the defendant, for example, because of a statutory provision.[166] Brief reference must also be made to the doctrine of *res ipsa loquitur*, as its application is suitable to prove negligence in order to succeed with a delictual claim in cases of environmental or pollution damage.[167] Hoffmann and Zeffert explain it as follows: 'If an accident happens in a manner which is unexplained but which does not ordinarily occur unless there has been negligence, the court is entitled to infer that it was caused by negligence.'[168]

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[164] There are currently no environmental statutes that require gross negligence instead of ordinary negligence for purpose of statutory liability, yet the possibility of future legislation setting this requirement cannot be ruled out; see also in this regard the comments by Neethling *et al* 119.

[165] As stated in *MV Stella Tingas Transnet Ltd t/a Portnet v Owners of the MV Stella Tingas* 2003 2 SA 473 (SCA).

[166] This would be the case where a statutory presumption of fault exists, and the defendant can only avoid liability where he can use specific defences to disprove it. Neethling *et al* 138 acknowledge that an example of such a shift is where the media can be held liable in defamation cases; see also Neethling 79 in Faure & Neethling where he advocates the extension of its application to product liability claims, and to claims within the specialised information technology industry. This can be endorsed. See also the judgment in *Ciba-Geigy (Pty) Ltd v Lushof Farms (Pty) Ltd* 2002 2 SA 447 (SCA) 470.

[167] This issue was addressed in *Daniël Mostert v Cape Town City Council*; see also in general Neethling *et al* 139.

[168] Hoffmann LH & Zeffertt DT *The South African Law of Evidence* 4th ed (1988) 551.

This will be the case where there is an oil spillage at sea or oil seepage on land where oil is not naturally present, that would not have occurred had it not been, for example, due to negligence in failing to maintain and repair oil storage facilities from damage caused by normal wear and tear.[169]

4.2.4.4 Contributory fault

4.2.4.4.1 Application in an environmental context

Where the damage caused by more than one person is divisible, clearly each person will be liable in full for that part of the divisible damage he caused. Yet where the damage is indivisible, an apportionment of damages must be made.[170] Honoré, referring specifically to pollution, dealt with the divisibility of damage as follows:

'There are a large number of cases, moreover, apart from the destruction of objects which can be counted, weighed and measured, in which the harm can be regarded as divisible. For example, it may have extensive magnitude without being divided into separate items. The collapse of a wall is an instance. It may be that without the tortfeasor's contribution only part of the wall would have collapsed. Other instances are the pollution of a river, and the emission of noise, smoke and stench. In these instances the separate items of harm, if they exist, certainly cannot be counted, yet the notion of more or less harm makes perfectly good sense. Even if the magnitude is intensive (pain, suffering, loss of amenities, discomfort and inconvenience), it is possible in certain cases to say that less pain etc. would have befallen the

[169] ACSA (The 'Airport Company of South Africa') was responsible for three separate aviation-fuel leaks at the OR Tambo International Airport http://www.news24.com/News24/South_Africa (last accessed on 8 November 2006).

[170] *Wright v Mediclinic* 2007 4 SA 327 (A) 327 at 360, 378; *Minister of Safety and Security and another v Rudman and another*; Van der Walt & Midgley 239 explains that the Roman law, as does the English law, applied the 'all or nothing' rule, yet that its harsh and inequitable results eventually lead to the development of the so-called 'last opportunity' rule. This rule proved just as difficult to apply, as it required the creation of artificial exceptions and qualifications to satisfy notions of fairness in its application. This, in turn, necessitated legislative intervention which lead to the enactment of the statute discussed below; see the comments in Neethling *et al* 144 based on the text by Voet 9 2 7.

injured party in the absence of the tortfeasor's conduct. The only problem is that of quantifying the difference in monetary terms.' [171]

Where the two parties, for example, a polluting industry as the defendant and a neighbouring polluting industry as the plaintiff are both at fault in respect of specific damage caused, there is contributory fault that requires the apportionment of liability incurred for environmental damage. This can be either in the form of contributory intent or contributory negligence.[172] The plaintiff's blameworthy conduct must have occurred prior to the commission of the delict if it is to be relevant to the issue of apportionment. Subsequent conduct by the plaintiff clearly falls within the scope of the issue of causation or under the duty that rests upon him to mitigate the loss he suffers.[173]

4.2.4.4.2 Statutory apportionment

Where both parties, the claimant and the defendant, acted negligently by causing the same damages, the damages must be apportioned in accordance with the provisions of the Apportionment of Damages Act 34 of 1956.[174] Section 1 of the Apportionment of Damages Act provides for the reduction of the delictual damages claimed only where there is contributory negligence, and not for contributory intent. Where the defendant's conduct was intentional and the plaintiff had contributory negligence, the common-law position prevails in that the defendant cannot claim a reduction of damages.[175]

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[171] Honoré AM "Causation and Remoteness of Damage" in Tunc A (ed) *International Encyclopedia of Comparative Law* Part I vol 7 chap 7 114.
[172] *Kantey & Templar (Pty) Ltd and Another v Van Zyl NO* 627.
[173] See the statements by Van der Walt & Midgley 240, 244 on this point.
[174] Act 34 of 1956 s 1(1)(a): 'Where any person suffers damage which is caused partly by his fault and partly by the fault of any other person, a claim in respect of that damage shall not be defeated by reason of the fault of the claimant, but the damages recoverable in respect thereof shall be reduced by the court to such extent as the court may deem just and equitable having regard to the degree in which the claimant was at fault in relation to the damage.' S 1(1)(b): 'Damage shall for the purpose of paragraph (a) be regarded as having been caused by a person's fault notwithstanding the fact that another person had the opportunity of avoiding the consequences thereof and negligently failed to do so.'
[175] Van der Walt & Midgley 240 argue that the question remains whether the Act applies to intentional conduct as well, and that the defendant raising the plaintiff's intentional conduct successfully as a defence is moot; see in this regard also the views of Neethling *et al* 146; Midgley in Van der Walt & Midgley 147, however, holds a different view from Van der Walt as the former believes that no reason in principle exists that prevents contributory intention to
Footnote continues on the next page.

The court may, to the extent that it deems fair and equitable, reduce the amount of damages[176] in proportion to each party's contribution to the same damage.[177] Where the wrongdoer caused some part of the damage, it might be impossible to identify precisely which portion of the damage he caused. A pragmatic approach must therefore be followed, based on a reasonable guess or estimate on the facts of the case, where the exact reduction cannot be formulated on the grounds of logic or reason.[178] An example would be where two parties contribute to the pollution of ground water on which they both depend for agricultural purposes.

The principles that have to be applied to determine causation and principles on the exact quantification of damages are addressed in greater detail in the discussion of causation and damages below.[179] Where more than one person caused the damage, but the claimant was innocent, the claimant can, in terms of section 2 of the Act, sue them all in the same action.[180]

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serve as a ground of justification. This cannot be accepted, in view of the old adage that 'two wrongs cannot make a right', and because the application of other principles of the law of delict do offer solutions to this issue as discussed above.

[176] In accordance with Neethling *et al* 147, the claim must be reduced in accordance with the apportionment of blame, and not merely be divided between the parties.

[177] In terms of s 2(8)(a) '[t]he Court may (i) order that such joint wrongdoers pay the amount of damages awarded jointly and severally, the one paying the other to be absolved.' S 2 (8)(a)(iii) states that '[w]here it gives judgement against the joint wrongdoers jointly and severally as aforesaid, at the request of any of the wrongdoers, apportion the damages payable by the joint wrongdoers *inter se,* amongst the joint wrongdoers, in such proportions as the Court may deem just and equitable having regard to the degree in which each joint wrongdoer was at fault in relation to the damage suffered by the third person';see *Kantey & Templar (Pty) Ltd and Another v Van Zyl NO* 627; see specifically *Jones NO v Santam Bpk* 555 for a summary of the various methods adopted to determine the respective degrees of fault; see also *Harrington NO and another v Transnet Ltd and others* 2007 2 SA 228 (C) 250–254. One should keep in mind that the entire process of comparison remains subject to considerations of justice and equity.

[178] See *Wright v Mediclinic* 368, 371; *De Klerk v ABSA and others* par 37; see also Van der Walt & Midgley 242, 243 for older case law that serves to illustrate this point.

[179] See pars 4.2.5, 4.2.6 below; see also chap 6 pars 6.3.5, 6.4.3, 6.6.2 on problems relating to multiple causation and the quantification of damages in the text below; see also the allocation of liability between insurers as discussed in chap 6 par 6.3.5 below.

[180] S 2(1): 'Where it is alleged that two or more persons are jointly or severally liable in delict to a third person, for the same damage, such persons may be sued in the same action.'

4.2.4.5 Strict liability

4.2.4.5.1 Recognition of strict liability

A person could be held liable for his conduct in some situations even where fault is absent.[181] Strict liability[182] can only be incurred in exceptional circumstances as an alternative to the fault principle where a specific legal rule, found in the common law[183] or in modern legislation,[184] creates or recognises liability where the wrongdoer's innocent conduct is held to be blameworthy even though fault is absent.[185] Strict liability develops primarily from legislation. When imposed by legislation, the claims are usually statutorily capped to a maximum amount to soften the effect of the strict liability,[186] although this is not the case for damage caused by GMOs as discussed above.[187]

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[181] See specifically Van der Walt JC "Strict Liability in the South African Law of Delict" 1968 (1) *CILSA* 49 (hereinafter 'Van der Walt (1968)'); Neethling (2002) 578; see in general Van der Walt & Midgley 35; also Neethling *et al* 329. The well-known English rule decision of *Rylands v Fletcher* 1868 LR 3 HL 330 discussed in chap 7 par 7.3.3.4 below, has not been received into our law, which remains based on Roman-Dutch principles. As stated in par 4.2.3.4.1, the principles are, however, similar to the doctrine of the abuse of rights found in South African law.

[182] Also called 'objective liability' or 'risk liability'.

[183] Other similar actions that apply in an environmental context include the *actio aquae pluviae arcendae*, that requires a wrongdoer who obstructs the natural flow of water to cease his infringing actions, see in this regard also Neethling *et al* 83 n 348 on the requirement of necessity; the *actio de pauperie*, in terms of which the owner of domestic animals is liable for the damage caused by his animals acting *contra suam naturam*, for example, where the animals cause damage to neighbouring land or a water source; *O'Callaghan v Chaplin* 1927 AD 310; *SAR&H v Edwards* 1930 AD 3; the *actio de pastu* for damage caused by grazing animals as applied in *Van Zyl v Kotze* 1961 4 SA 214 (T); and lastly the *actio de effusiis vel deiectis* for damage caused by objects (such as toxic substances or waste) thrown or poured from buildings as applied in *Colman v Dunbar* 1933 AD 141. These actions all have the potential to be applied to situations where environmental damage is caused.

[184] S 28(1), s 28(2) NEMA; s 30 of the National Nuclear Regulator Act as discussed in par 3.4.4.12 of the text; see especially s 55 of the National Heritage Resources Act as discussed in par 3.4.4.11 above that expressly *excludes* strict liability.

[185] See Van der Walt (1968) 51 who explains that the rapid development in technology and the advance of industrialisation towards the end of the 19th century made the development of liability without fault, which is in contrast to the dominating doctrine of fault, highly desireable. The same still holds true today. See also South African Law Review Commission Project 96 Report 2003 chap 3 par C; see also Havenga (1995) 202 who accepts this as an important point of departure when one considers the introduction of a strict liability regime specifically for environmental damage liability.

[186] See Van der Walt (1968) 63.

[187] See in this regard chap 3 par 3.4.4.4 on the examination of the Genetrically Modified Organisms Act.

4.2.4.5.2 Justification for strict liability

A strict liability regime will usually exist where a specific industry causes extraordinary increases in the risk of harm to the community.[188] Strict liability regimes are based on the application of this 'risk or danger theory', where liability is justified only by participation in a dangerous or risky activity or by the creation of such a risk.[189]

This reasoning forms the basis of a producer's strict product liability.[190] It has, however, not been developed as extensively in South African law as has been the case in other countries such as in the USA,[191] yet this will be the case once the Consumer Protection Bill is enacted.[192] The wrongfulness of the conduct lies in the failure to prevent loss caused by a defective product. Delictual requirements therefore include only conduct, wrongfulness, causation and loss. The Bill aims to introduce a long-awaited strict statutory product liability in the form of a strict joint and several liability of producers, importers, distributors and retailers of goods.[193]

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[188] This has been the case, for example, for product liability, and some forms of statutory environmental liability, for example, the strict liability of ship owners for incidents involving hazardous and noxious substances in accordance with the 1992 Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage; liability in terms of NEMA s 28; The Nuclear Energy Act (1999) s 61(3); the ECA s 31A(1), s 31A(2); see also especially Neethling (2002) 578, 585, 591 on new risks; see Neethling *et al* 293 for a general discussion of the development of strict delictual liability.

[189] As stated by Van der Walt (1968) 63.

[190] See in this regard Neethling in Faure & Neethling 75; see also Merkin RM *Colinvaux's Law of Insurance* 8th ed (2006) (hereinafter 'Merkin') 717 for an examination of strict liability as well as contractual liability that resort under product liability in an insurance context.

[191] Neethling in Faure & Neethling 76 puts it as follows: 'Die Suid-Afrikaanse reg staan nietemin op hierdie gebied nog in sy kinderskoene'. It is clear that future developments can be expected.

[192] See the Consumer Protection Bill [B 19D–2008] which was signed on 24 April 2009, yet will only be implemented at the end of 2009 or early in 2010; see http://www.busrep.co.za/index.php?Farticle ID=4734423&fSectionId=561 "Department of Trade and Industry to improve trade laws" (last accessed on 1 December 2008); see also chap 6 par 6.3.5.2.1 below for a more detailed discussion of the scope of the proposed legislation.

[193] S 61(1) provides that any consumer who is harmed by unsafe goods, has the right to hold anyone involved in getting the product into the market, irrespective of negligence, liable for any hazard arising from or associated from such risks. Joint and several liability is introduced by s 61(3), s 61(6). A court may determine the extent and monetary value of any damages. Specific defences are allowed in terms of s 61(4), namely where a person acts in accordance with compliance with a public regulation; or where it would be unreasonable to expect the producer or supplier to discover the hazard at the time of his involvement. 'Harm' in terms of s 61(5) of the Bill includes death, injury, illness, loss of or physical damage to property, and any

Footnote continues on the next page.

The interest or profit theory serves as a possible second basis of justification for strict liability. According to this theory, a person who causes harm or loss to another while he acts in his own interest or for a profit, should carry the burden of all the advantages as well as disadvantages of his economic activities. Where a producer or manufacturer therefore pollutes the environment during his production or manufacturing process, he should bear the responsibility for the resulting damage that is caused to the person or property of another. Although this form of justification has been criticised, it is submitted that where a person directly *exploits* the environment for the primary purpose of operating a profitable commercial venture, yet irrespective of whether he succeeds in enjoying an eventual profitable gain, he should accept the ensuing responsibility that the environment could be harmed based on this justification.[194] This would, for example, justify strict liability where a manufacturer of goods uses water from a stream and pumps polluted water back into it, which causes loss to persons who are dependent on the water downstream, and for damage caused to the natural environment consisting of the stream itself and its environs.

Force majeure and contributory intent or contributory negligence on the side of the plaintiff serve as defences in most strict liability cases.[195]

Strict liability is thus a rare exception to the norm that fault is required and requires an express rule to that effect.[196] It does appear from national and international legislative measures that there is a universal increase in the introduction of strict statutory liability regimes, especially for activities in high-

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'economic loss'. The latter is important for the discussion of claims for pure economic loss as discussed in chap 4 par 4.2.6.2.5, and in chap 6 par 6.6.2.6 below. The term used is, however, only 'economic loss' and the Bill does not refer to 'pure economic loss'.

[194] See Neething *et al* 330 who find this position unacceptable, as nearly every form of human activity is for the person's own interest or benefit, and that where an economic advantage is required, a lack of profitability could negate a successful claim by the plaintiff.

[195] As recognised by Van der Walt (1968) 63; see also Neethling *et al* 331.

[196] See the discussion by Neethling in Faure & Neethling 75 on the development of strict liability specifically in the emerging field of product liability; Faure & Skogh 242 note that there is an international tendency to move towards strict liability where there is a risk of environmental damage, and that it is justified as strict liability is in accordance with the polluter-pays principle.

risk industries.[197] There should be no reason why any activity that harms the environment should not also be classified as such.

4.2.4.5.3 Strict liability in South African law

Strict liability at common law can be found in terms of the traditional *actiones* as discussed below,[198] and can also apply to situations where claims are based on the abuse of rights or nuisance as discussed above.[199] Strict liability can also be introduced by statute, in which case the extent of liability can be capped by the statute to a maximum amount per occurrence or in the aggregate.[200]

Various statutes also create a strict liability regime within specific industries. The Mineral and Petroleum Resources Development Act,[201] in particular, contains a specific section that opens the door for general strict liability for pollution damage. It provides that 'irrespective of the Companies Act[202] or the Close Corporations Act,[203] the directors of a company or members of a close corporation are jointly and severally liable for any unacceptable negative *impact on the environment*,[204] including damage, degradation or pollution advertently or inadvertently caused by the company or close corporation which they represent or represented'.[205]

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[197] See the South African Genetically Modified Organisms Act in chap 3 par 3.4.4.4 above. The court held in *Loriza Brahman v Dippenaar* 2002 2 SA 477 (SCA) 485 that '[d]ie verskynsel van risiko-aanspreeklikheid brei in die moderne tyd uit en vervul op gepaste terreine 'n nuttige funksie'.
[198] See par 4.2.7.5 below.
[199] *Van Schalkwyk v Van der Wath* 1963 3 SA 636 (A); see also the discussion of 'the doctrine of the abuse of rights and nuisance' in 'wrongfulness' par 4.2.3.4.1 above.
[200] This is especially the case in the nuclear industry as can be seen from limits imposed by The Vienna Convention on Civil Liability for Nuclear Damage referred to in chap 3 pars 3.3.4.4.3 and 3.4.4.13 above; see also Van der Walt (1968) 63 par (v) in this regard.
[201] Act 28 of 2002; see also par 3.4.4.8 above.
[202] Act 61 of 1973.
[203] Act 69 of 1984.
[204] Own emphasis.
[205] S 38(2).

In addition to the Consumer Protection Bill considered in the discussion of the justification of strict liability above,[206] other examples of statutory strict liability in an environmental context can be found in the Hazardous Substances Act,[207] the Marine Pollution (Control and Civil Liability) Act,[208] the National Nuclear Regulator Act,[209] and the Genetically Modified Organisms Act.[210] The latter is one of the most recent implementations of this type of liability in the 'new risk' area created by the engineering of genetically modified organisms. The Genetically Modified Organisms Act provides that where a user's failure to ensure that appropriate measures are taken when using the GMO causes an adverse impact on the environment and human and animal health, he remains liable for the damage.[211] Liability is only excluded where the GMO was in the possession of an inspector and the user could not foresee or have foreseen such damage but failed to take reasonable action to prevent it.[212] It appears from the wording in this section that strict liability is imposed upon the user while he is in possession and control of the GMO, as his liability is only limited by his lack of foreseeability while the GMO was not in his possession. The uncertain risks posed by the processes of genetic engineering are clearly seen as participation in a dangerous and risky activity, and risk also lies in the possession or control of a dangerous living substance, both which impose strict liability on the user while he is in possession and control of the GMO.[213]

An example of where the common law introduces a strict liability regime that applies specifically in an environmental context is in terms of the old Roman law *interdictum quod vi aut clam*. This action was subsequently modified by Roman-Dutch law and accepted as such in South African law, and is applied where a person causes damage to another by his interference with the natural

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[206] See par 4.2.4.5.2 above.
[207] Act 15 of 1973; s 16 creates a regime for vicarious liability for contravention of the provisions of this Act; see chap 3 par 3.4.4.5; see also in general par 3.5.3.2 on statutory strict liability.
[208] S 9(3) of Act 6 of 1981 as discussed in chap 3 par 3.4.4.6.
[209] S 30 of Act 47 of 1999 as discussed in chap 3 par 3.4.4.12.
[210] Act 15 of 1997 as discussed in chap 3 par 3.4.4.4 above; this Act is in accordance with the UN Convention on Biological Diversity as listed in Annexure A.
[211] S 17(2).
[212] S 17(2) of Act 15 of 1997.
[213] S 17(2) as discussed in chap 3 par 3.4.4.4.

flow of surface water, for example, by dumping waste or pollutants into a river, that results in harm or loss to another.[214]

In the case of *Daniël Mostert v Cape Town City Council*[215] the court confirmed that, as far as liability in common law and liability insurance cover is concerned, a person cannot take out insurance where an insurable interest is absent. No such interest can exist under third-party insurance unless that person as a wrongdoer incurs liability towards someone who actually suffered damages. As the court held that liability can only be incurred by the wrongdoer where he acted negligently or deliberately, it followed that 'to hold otherwise would be to impose a general strict liability on the wrongdoer, in other words to make him nothing else than an insurer'.[216]

Vicarious liability at common law is also a form of strict liability based on a particular relationship where the conduct of the one causes indirect liability to the other.[217] An employee or agent could, for example, cause environmental damage by his negligent conduct during the course of his employment, mandate or authority, for which his employer, mandator or principal can then be held vicariously liable.[218]

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[214] De Groot 39 3 4 2, 39 3 5; Voet 43 24; see also *Baldric Farms (Pty) Ltd v Wessels* 1994 3 SA 425 (A); *Wassung v Simmons* 1980 4 SA 753 (N) 760; *Thormahlen v Gouws* 1956 4 SA 430 (A); *Cape Town Council v Benning* 1917 AD 315. For a more comprehensive discussion of all these actions, see the previous edition of Van der Walt JC & Midgley JR *Delict: Principles and cases* (1997) pars 25–30.

[215] 2001 1 SA 105 (SCA); see also par 4.2.3.3.2 above.

[216] See par 127 of the judgment.

[217] Neethling *et al* 338; see in this regard Calitz K "Vicarious Liability of employers: reconsidering risk as the basis for liability" 2005 (2) *TSAR* 215; see also Faure & Skogh 159 who hold that the benefit of vicarious liability for environmental damage is that public enforcement is simplified and effective in that there is usually a solvent party to turn to. See also for a comparison the USA statutory position on the attachment of the liability of subsidiaries to their parent companies in terms of CERCLA § 107(a), see chap 7 par 7.6.2.2 below, as well as Bowers JM "A Parent Corporation's Potential Liability for Act of Its Subsidiaries" http://www.mobar.org/journal/ 1997/mayjun (last accessed on 26 August 2008).

[218] Calitz 215; Atkins NG "Contractual Liability: Public liability insurance" 1992 (21) *Businessman's Law* 207 209 evaluates the requirements that have to be met to hold a principal vicariously liable for the wrongful conduct of his independent contractors.

4.2.4.5.4 Proposed strict liability regime for environmental damage

Although strict liability does apply to environmental situations as discussed above, it is submitted that the application is very limited. It is proposed that a general strict liability regime can easily be extended for application where environmental damage is caused by pollution.[219] The reasoning is that participation in polluting production processes is not that far removed from the risks in a product liability scenario, where more than one potential wrongdoer could be the cause of harm or loss.

The classic argument for the introduction of a strict liability regime is that it increases the plaintiff's chances to receive compensation, and it also assists in deterrence. A strict liability regime provides the optimal incentive not only for the polluter to take effective care, but also forces the plaintiff to do so as his contributory fault could provide the polluter with a defence, which provides for effective deterrence.[220] This regime will be in accordance with both the international environmental precautionary principle and with the principle of strict liability. Although the latter is not an absolute principle, it must be taken into consideration.[221] Another benefit is that it also attempts to reinforce or facilitate the implementation of the important polluter-pays principle.[222]

It is submitted that this type of regime will contribute to alleviate the burden of proving fault, especially negligence. It can also offer the additional benefit in providing a practical allocation mechanism of the loss according to the introduction of a statutory joint and several liability. Persons who could potentially have caused or contributed to a specific pollution occurrence must be held jointly and severally liable for the ensuing damage. A person can only deny his liability where he can prove that the loss was caused solely by a

[219] See also Faure (ed) 31 *et seq* who endorses this idea and justifies it not only from a legal, but also from an economic perspective. A more detailed examination of the latter sadly cannot be included in this thesis.
[220] Faure (ed) 27 *et seq*.
[221] See chap 3 pars 3.3.2.1, 3.3.2.3 above.
[222] See chap 3 par 3.3.2.2 above.

force majeure occurrence or by the intentional or negligent conduct of another. Where he contributed to the loss, he can limit his liability to reflect only his share in causing the loss, provided he can prove its extent.

As the fault element is not the greatest civil liability problem in issue, importing a strict liability regime for environmental pollution damage will not offer solutions to the other issues such as wrongfulness and to the nature and extent of actionable damages.

Although this type of regime eases the plaintiff's burden of proving and allocating liability, it would force potential polluters to increase their insurance cover. This would lead to the internalisation of these costs, which then revert back to the purse of the consumer or of society in general. It will on the other hand, especially in an environmental insurance context, bring the plaintiff a few steps closer to a successful claim against the polluter, or against his own insurer or the insurer of the polluter.

4.2.4.6 Voluntary assumption of risk

Voluntary assumption of risk is not a form of consent to injury or risk of injury that serves as a ground of justification, but is conduct that cancels the element of fault.[223] In the absence of fault, delictual liability cannot be incurred. Blame in the form of contributory intent falls on the injured party. Where the acting party consciously takes an unreasonable risk, the defendant's negligent conduct is cancelled.[224]

[223] See in general the discussion by Van der Walt & Midgley 140, 211.
[224] *Netherlands Insurance Co of SA Ltd v Van der Vyfer* 1968 1 SA 412 (A); see also Knobel JC and Steynberg L "Vrywillinge aanvaarding van risiko en medewerkende opset" 2003 (66) *THRHR* 695; as confirmed by Neethling *et al* 154.

4.2.5 Causation

4.2.5.1 General

Causation is discussed as the fourth requirement for general delictual liability,[225] and is notoriously difficult to prove in actions involving pollution damage, especially where there is a gradual pollution that was caused over a long period of time,[226] where the pollution manifests itself in a place other than the area in which the initial pollution was caused, where there is contributory, joint or multiple causation, or where the pollution causes a prospective loss.[227] An example of the problems confronting a claimant in this type of situation would be where a number of farmers dump fertilizers in a river, and the damage only manifests much later downstream where the ecological balance is severely disturbed. This could potentially cause a loss to the farmers who draw water downstream as drinking water for their cattle or wild game.

Causation gives rise to two distinct questions. The first is the question regarding factual causation, on whether the conduct caused or materially contributed to the harm that gives rise to the claim. The second is the question on legal causation, that is whether the harm is not too remote and is linked sufficiently closely or directly to justify ensuing legal liability.[228] Furthermore, it becomes problematic to determine the degree of causation where more than one person causes damage in the form of either multiple or contributory causation, and to determine the resulting proportion of liability for a specific portion of the damage so caused. In the words of Honoré,

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[225] *Ocean Accident and Guarantee Corporation Ltd v Koch*; Van der Walt & Midgley 196; Neethling *et al* 159.
[226] See chap 6 par 6.3 on long-tail liability.
[227] See specifically Van der Walt CFC "Deliktuele aanspreeklikheid weens nadeel deur onbekende lede van 'n groep toegebring" 1995 (58) *THRHR* Part I 421; Part II 613; see also Visser (2004) 138.
[228] *Kantey & Templer and Another v Van Zyl NO* 624; *Minister of Safety and Security v Carmichele* (SCA) 327; *Minister of Safety and Security v Van Duivenboden* 448; *Minister of Police v Skosana* 1977 1 SA 31 (A) 34; see also Schlemmer E "Oorsaaklikheid in die Versekeringsreg" 1997 (3) *TSAR* 531 532.

'[c]ausation is one thing and quantification is another, though I readily concede that it is not always possible to distinguish clearly between them'.[229]

4.2.5.2 Factual causation

The loss or damage must be caused by wrongful, culpable conduct. Where there is no factual nexus between a specific act (either a commission or an omission) and the loss or damage suffered, the wrongdoer cannot be held liable in delict. It is a question of fact whether such a causal link exists, and whether one fact arises out of another.[230]

4.2.5.2.1 Test for factual causation

In most cases this is determined by the application of the *conditio sine qua non* or 'but for' test.[231] This is used to determine whether a certain act or conduct had a certain result, and is recognised as the most simple and practical way in which to determine factual causation. Where the unlawful conduct is taken out of the equation, causing the result also to fall away, a causal nexus in fact does exist.[232] The 'but for' test has an all or nothing effect.[233] The conduct, therefore, must be a *sine qua non* for the result. The application of the test is a matter of everyday common sense, and calls for 'a retrospective analysis of what would probably have occurred, based upon the evidence and what can be expected to occur in the ordinary course of human

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[229] *De Klerk v ABSA and others* pars 33, 36, 42; *Burger v Union National South British Insurance Company* 1975 4 SA 72 (W) 74; see the decision in *First National Bank v Duvenage* 2006 5 SA 319 (SCA) 324; see also the views of Visser (2004) 138; and Knobel JC "Die Samehang tussen Onregmatigheid en Skade" 2005 (68) *THRHR* 645. Knobel is of the opinion that it might be the proper approach to address the issue of the existence of loss and a causal connection first, before other requirements for delictual liability are tested and applied, in cases where this is most practical; see also Reinecke MFB "Die Elemente van die Begrip Skade" 1976 *TSAR* 26 38; as well as Reinecke MFB "Nabetragtinge oor die Skadeleer en Voordeeltoerekening"1988 (21) *De Jure* 221 225, who states that once damage has been established by a comparative method, it has also been demonstrated that the damage-causing event is a *conditio sine qua non* of the damage.

[230] *S v Mokgethi* 1990 1 SA 32(A); Neethling *et al* 169.

[231] *Minister of Police v Skosana* 31; *Minister of Safety and Security v Carmichele* (SCA) 327; *Minister of Safety and Security v Van Duivenboden* 449; *Da Silva v Coutinho* 128; see in general the discussions in Van der Walt & Midgley 198; Neethling *et al* 161.

[232] *Minister of Police v Skosana* 43.

[233] *Minister of Finance and others v Gore NO* 125.

affairs rather than an exercise in metaphysics'.[234] Authority exists for the argument that it is not a test, but rather only an expression of a foregone conclusion.[235]

4.2.5.2.2 Problems in application of test

Where there is a situation of multiple causation,[236] concurrent causation[237] or cumulative causation,[238] or where, as is theoretically possible in most situations regarding pollution damage, a single act may cause an endless chain of events, the problem needs to be addressed not only by the application of the principle of causation on its own. It could in the first instance be addressed by the fact that the wrongdoer will only incur liability where his conduct, which caused the damage, was also wrongful,[239] as well as culpable.[240] Where there are multiple wrongdoers who contribute to the loss, the court must first determine how far the defendant's acts or omissions are causally linked to the damage in issue, and then how much they deviated from the objective norm of the conduct required by a *bonus paterfamilias*.[241] In Germany, for example, the fact that a polluter could have been the cause of the pollution is deemed to be sufficient to hold such a polluter jointly liable with

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[234] *International Shipping Co (Pty) Ltd v Bentley* 1990 1 SA 680 (A) 700; *Minister of Finance and others v Gore* 125; Van der Walt & Midgley 198 explain that the application of the test requires a particular process of reasoning, as a method of mental elimination has to be applied by hypothetically eliminating the defendant's positive conduct from a complex set of circumstances.

[235] *Minister of Safety and Security v Carmichele* (SCA) 329; *Minister of Safety and Security v Van Duivenboden* 449; see *S v Mokgethi* for an effective determination of causation without specific reference to the *conditio sine qua non*-test; Visser PJ, Potgieter JM, Steynberg I & Floyd TB *The Law of Damages* 2nd ed (2003) (hereinafter 'Visser *et al*') 43 state that *conditio sine qua non* is the only way of expressing a factual nexus that has already been determined, yet that it is no real *test* for causation; see also Neethling *et al* 165–171 for a discussion of the fact that the 'test' is merely an *ex post facto* way to express a pre-determined causal nexus.

[236] See the discussion of multiple wrongdoers in par 4.2.4.4; see in this regard Van der Walt CFC (1995) Part I 421; also 613 in Part II.

[237] Visser *et al* 89 consider the assessment of damages in a situation of, in their words, a 'double (multiple) or alternative (concurrent) causation'.

[238] See in general Van der Walt & Midgley 199, 201 on this type iof causation; Visser PJ "*Conditio sine qua non"* 1989 (52) *THRHR* 558 562.

[239] Par 4.2.3 above on the requirement of wrongfulness.

[240] Par4.2.4 above on the requirement of culpability or fault.

[241] *Jones NO v Santam Bpk* 555; see also the more detailed discussion of contributory fault discussed under par 4.2.4.4 above; Van der Walt & Midgley 201 advocate that once a factual link is established, the relevance of these links in law should be established, which involves appraising legal causation policy issues such as the divisibility of harm and the onus of proof.

other polluters who fall in the same category.[242] In the Netherlands and in the USA a market-share allocation is applied.[243] No proof of actual causation is required. In South Africa the Apportionment of Damages Act[244] applies where it can be proven that more than one person's conduct caused the same loss.[245]

Based on principles of policy and fairness, the law cannot allow limitless liability as can very well be the case in a pollution situation, and one must determine to which extent or limit a person should be held liable for damages caused.[246] In the first instance, all the other requirements for delictual liability, such as wrongfulness and fault, must be present, and then an additional test, namely one to test for legal causation as discussed below, must be applied.[247]

4.2.5.2.3 Novus actus interveniens

Where a new, independent unconnected and extraneous factor or event occurs (a *force majeure* occurrence) or intervening conduct by a person (by the plaintiff himself or conduct by another individual) a new intervening cause or *novus actus interveniens* occurs. As this intervenes with the factual chain of events, the causal connection is extinguished.[248] It is possible that the new intervening cause diminishes or erodes physical evidence of the initial damage-causing conduct. It must also be kept in mind that gradual pollution

[242] See the views of Fuggle & Rabie 97; see also Kerr 9.
[243] For an international perspective, see Snijder E "Van market-share liability naar pollution share liability?" 1990 *TMA* 6.
[244] Act 34 of 1965.
[245] S 2(1); see the full discussion of joint liability in par 4.2.4.4 above; the court in *First National Bank of South Africa Ltd v Duvenage* 319, 325 also held that, as a practical measure in specific circumstances, the issue of causation must be addressed first, before other requirements are tested and applied; Knobel (2005) 645 also argues that it might be the proper approach to address the issue of the existence of loss and a causal connection first, before other requirements for delictual liability are tested and applied, in cases where this is most practical. This is though not the standard procedure in most situations concerning the determination of delictual liability, where wrongfulness and fault of the conduct is usually tested before testing for causation and loss.
[246] See Neethling *et al* 159, 171.
[247] See par 4.2.5.3 below.
[248] *Standard Chartered Bank of Canada v Nedperm Bank Ltd* 1994 4 SA 747(A) 765; *S v Mokgethi* 46; Van der Walt & Midgley 207 expain that the causative potency of the defendant's original conduct is neutralised by such a *novus actus*.

damage can also be aggravated by a new intervening cause. Care must be taken to review the facts and circumstances of each situation carefully, to determine whether the new occurrence actually stops the factual chain of events, whether it was foreseeable,[249] or whether the chain is in fact not interrupted and where the application of legal causation could limit or reduce the original actor's liability.[250]

4.2.5.3 Legal causation

Where all the other requirements for delictual liability have been met, legal causation is used to limit potential endless factual causation.[251] Open-ended policy standards must be interpreted in terms of the Constitution and have to be applied to test for legal causation. Legal causation is used to determine whether a consequence is too remote to justify liability. Various policy considerations, based on the flexible criteria of reasonableness, fairness and justice, as well as the more classic theories of adequate causation,[252] of fault,[253] of direct consequences,[254] as well as the more practical theory of reasonable foreseeability,[255] can be applied.[256] For many years the theory of reasonable foreseeability was held to be the most decisive theory.[257]

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[249] *OK Bazaars (1929) Ltd v Standard Bank of South Africa Ltd* 2002 3 SA 688 (SCA) 697.

[250] See in this regard Knobel JC "*Novus Actus Interveniens* and Causation in the Law of Delict: A Reappraisal in Anticipation of New Legislation" 2004 (67) *THRHR* 409.

[251] Relevant case in law includes *Minister of Safety and Security v Carmichele* (SCA) 332; *Minister of Safety and Security v Van Duivenboden* 451; *S v Mokgethi* 39; *International Shipping Co (Pty) Ltd v Bentley* 700; Knobel (2005) 645; Neethling *et al* 159.

[252] As discussed extensively by Van der Walt & Midgley 177, 207; see also Neethling *et al* 176.

[253] *Standard Bank v of South Africa Ltd v Coetsee* 1981 1 SA 1131(A) 1139.

[254] As cnsidered by Van der Walt & Midgley 206; see also Neethling *et al* 178;

[255] *Ocean Accident and Guarantee Corporation Ltd v Koch* 152, 158; *Smit v Abrahams* 1994 4 SA 1 (A) 19. It is submitted that where foreseeability is addressed, it must be kept in mind that foreseeing mere 'pollution' is insufficient as it is too wide, but that the nature and extent of the pollution should at least be foreseen. This supports the judgement in *Cambridge Water Co v Eastern Countries Leather plc* [1994] 1 All ER 53: see the discussion of this case in context of UK law as discussed in chap 7 par 7.3.3.2.3 below.

[256] Neethling *et al* 173.

[257] *S v Mokgethi*; see in this regard Neethling J and Potgieter JM "Deliktuele Aanspreeklikheid weens Bevrugting as gevolg van 'n Nalatige Wanvoorstelling: Die Funksies van Onregmatigheid, Nalatigheid en Juridiese Kousaliteit" 2000 (63) *THRHR* 162; see in general the examinations by Van der Walt & Midgley 168, 173, 202, 208; also Neethling *et al* 173, 192.

In recent judgments the application of the more flexible criteria, in accordance with the principles of the Constitution, have been preferred,[258] not as the only criterion but with the other theories and criteria still playing a subsidiary role.[259] Which theory or theories will assist in each given situation, depends on policy considerations and whether justice will be served.[260]

4.2.6 Damage or Loss

4.2.6.1 General

The purpose of a delictual claim is to enable the party prejudiced by the delict to claim compensation for damage and satisfaction from the wrongdoer for the harm caused.[261] Damage can therefore be defined as 'the diminution, as a result of a damage-causing event, in the utility or quality of a patrimonial or personality interest in satisfying the legally recognised needs of the person involved'.[262] It is the monetary equivalent to compensate for or eliminate the detrimental impact upon any patrimonial or non-patrimonial interest deemed worthy of protection by the law.[263] As a general rule, not all damage suffered is compensable. As the law of damages as an independent subject is extensive, only the aspects that are most relevant to the scope of this study are discussed.[264] Problematic issues relating to the nature and quantification

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[258] For relevant case law on this point, see *S v Mokgethi* 39; *OK Bazaars (1929) Ltd v Standard Bank of South Africa Ltd* 699; *International Shipping co (Pty) Ltd v Bentley* 700; *Smit v Abrahams* 18.

[259] *Standard Chartered Bank of Canada v Nedperm Bank Ltd* 765; *S v Mokgethi* 40; see also Neethling *et al* 175.

[260] Van der Walt & Midgley 169 note that even when assessing negligence the focus appears to have moved away from foreseeability and preventability to the actual more objective standard; this is also confirmed by Neethling *et al* 176.

[261] Van der Walt & Midgley 43, 217; Neethling *et al* 195; see the decision in *First National Bank of South Africa Ltd v Duvenage* 319, 325; and also the views of Knobel (2005) 645.

[262] Visser *et al* 24.

[263] As stated by Neethling *et al* 196; see also Van der Walt CFC "Die Voordeeltoerekeningsreël – Knooppunt van Uiteenlopende Teorieë oor die Oogmerk van Skadevergoeding" 1980 (43) *THRHR* 1 at 5; *Standard Chartered Bank of Canada v Nedperm Bank Ltd* 76.

[264] See Neethling *et al* 195 n 3 for a comprehensive list of authoritative works on the South African law of damages.

of damage to the environment in an insurance context are also dealt with in chapter 6 below.[265]

The burden of proving damages on a balance of probabilities lies upon the plaintiff. The term 'damages', for purpose of this thesis, includes patrimonial or pecuniary damages, as well as non-patrimonial damages.[266] Patrimonial loss can be directly expressed in money, its extent can be ascertained with greater precision and it is of the same nature as the impaired patrimonial interest infringed upon, whereas non-patrimonial loss is only indirectly measurable, is assessed by an equitable estimate, is different in nature and has no true relationship with the impaired interest.[267] For wrongfulness, the question is whether there is an infringement of interests in violation of the legal norm. The law is concerned with the diminution in utility or quality of interests where an assessment of damages must be made.[268]

Patrimonial damages (*damnum iniuria datum*), may be claimed with the *actio legis Aquiliae*, and non-patrimonial or non-pecuniary loss for the wrongful and intentional injury to personality (*iniuria*), may be claimed with the *actio iniuriarum* as infringements upon *fama, corpus*, dignity, privacy, and to a lesser extent feelings and identity are afforded recognition and protection in our law.[269] Lastly, compensation for the wrongful and negligent impairment of bodily or physical-mental integrity can be claimed with the action for pain and suffering.[270] Claims that are very relevant where environmental damage infringes upon a person's physical and mental integrity, namely, claims for pain, suffering and disfigurement, as well as claims for the loss of, or for

[265] See chap 6 par 6.6 below.
[266] The differences in opinion of whether 'damages' refers only to patrimonial losses or also to non-patrimonial loss, is of an academic nature and is not dealt with in this work. See in this regard the general discussion by Neethling *et al* 197– 199.
[267] As described by Visser *et al* 32.
[268] See Visser *et al* 35; it is important to note as stated by the authors at 36 that neither wrongfulness nor fault qualifies damage, even though the general statement that damages 'flows' from wrongful and culpable conduct, could create this impression.
[269] Neethling *et al* 5, 15 confirm that in some cases negligent conduct has been accepted as the fault requirement for claims under this action, whereas claims based on strict liability can also occur.
[270] Neethling *et al* 5; 13, this action only developed in Roman-Dutch law and was unknown in Roman law. It has also in its development and application by our courts been strongly influenced by English tort law as discussed in chap 7 par 7.3.3.2.5, 7.3.3.2.4.

shortened, life-expectancy, loss of amenities of health and life, and emotional shock are also included under this action.[271]

4.2.6.2 Patrimonial loss

4.2.6.2.1 General description and extent

One's patrimony can be described as the sum-total of a person's rights, duties and expectations.[272] 'Patrimonial loss' can be defined as 'the diminution in the utility of a patrimonial interest in satisfying the legally recognised needs of a person entitled to such interest' and as 'the loss or reduction in value of a positive asset in someone's patrimony or the creation of or increase in the negative elements of his patrimony'.[273]

Positive elements include real rights, intellectual property rights and personal rights, as well as expectations of patrimonial rights or benefits. Negative elements include patrimonial debts or expenses, or an expectation thereof.[274] Loss in the form of damages can therefore be caused by either the loss of a patrimonial element,[275] by the reduction in the value of patrimony[276] or by the creation, acceleration or increase of a debt or even the expectation thereof.[277]

As a general rule, the market value of a person's estate or patrimony determines the monetary value thereof. The following forms of patrimonial

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[271] As identified by Neethling *et al* 15.
[272] *Rudman v Road Accident Fund* 2003 2 SA 234 (SCA) 241; Visser *et al* 45; see also 47 for criticism by Reinecke that the definition is too wide, as 'rights' also include personality rights, and too narrow, as protection of other interests that are not subjective rights is also envisaged; Neethling *et al* 202.
[273] Visser *et al* 45 as to a 'patrimonial debt'.
[274] Visser *et al* 45 *et seq*.

[275] For example, where property such a agricultural land has been damaged or destroyed, or where the expectancy to use it is lost; see in this regard *Smit v Abrahams* 17; see in general also Neethling *et al* 203.
[276] Where the object of a patrimonial right has been infringed, for example, the right to earn income or make a profit has been damaged or destroyed; see in this regard *Rudman v Road Accident Fund* 241.
[277] In *Smit v Abrahams* 17, 20 the court held that incurring costs for renting a vehicle for a reasonable time where the plaintiff had no other alternative was reasonable and a damages claim succeeded; see in general Visser *et al* 56; see also Neethling *et al* 203.

loss can be distinguished and are relevant to the concept of environmental damage caused by pollution.

4.2.6.2.2 General damages

The damages include loss of past or future profit (*lucrum cessans*), which is the loss of patrimonial expectancy that would have materialised with a sufficient degree of certainty.[278] All other damage falls under direct damages (*damnum emergens*) which is the loss caused directly by the conduct causing the damages.[279] Forms of damage recognised as *lucrum cessans* in practice include future expenses due to the damage-causing event,[280] loss of earning capacity,[281] business or professional profit[282] or of prospective support,[283] and the loss of a chance to gain a benefit. In terms of the loss of chance doctrine our courts in principle allow a claim for the loss of chance or possibility to exploit.[284] This is relevant where damage to the environment could prevent or limit a person from exploiting his land, for example, where unsightly pollution damage prevents him from continuing a tourism enterprise of running a viable game farm, or where soil and water pollution could impact on potential farming activities. It still remains notoriously difficult to calculate the monetary value of the above losses.

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[278] For example, loss of future earnings or income, or the loss of a chance to gain certain a benefit; see in general the discussions by Van der Walt & Midgley 222; by Visser *et al* 58; and by Neethling *et al* 206.
[279] See , for example, the discussion of 'property damage' in chap 6 par 6.6.2.3 below.
[280] *De Klerk v ABSA Bank and others*; Neethling *et al* 207.
[281] *Dippenaar v Shield Insurance Co Ltd* 1979 2 SA 904(A) 917; *President Insurance Co Ltd v Mathews* 1992 1 SA 1 (A) 5; see also Neethling J "Persoonlike Immaterieelgoedereregte: 'n Nuwe Kategorie van Subjektiewe Regte?" 1987 (50) *THRHR* 316; the opinion of Van der Walt & Midgley 223 is supported that it is not a claim for future loss of earnings, but for loss of earning capacity that could generate future income.
[282] In *Transnet Ltd v Sechaba Photoscan (Pty) Ltd* 2005 1 SA 299 (SCA) 305 the court held that there is no historical foundation, and nothing in principle, that can be see as a justification to prevent a claim for loss of profit under a delictual damages claim.
[283] See in this regard Neethling *et al* 207.
[284] For relevant case law, see *SDR Investment Holdings Co (Pty) Ltd, Springgrove Cellar (Pty) Ltd, Zorgvliet Farms & Estates (Pty) Ltd v Nedcor Bank Ltd, Honey & Partners* 2007 4 SA 190 (C) par 56; *De Klerk v ABSA Bank and others* par 28.

The case of *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another*[285] provides some guidance on the question on whether a claim for 'damages' includes a claim for clean-up costs under South African law. An indemnity clause in an insurance policy in respect of liability to third parties for property damage was interpreted and found to include cover for the insured's liability to pay clean-up costs for ecological damage caused. The court warned that it would advise policyholders to include cover *eo nomine* for clean-up and rehabilitation costs in order to prevent unnecessary disputes.[286] The assessment and quantification of 'clean-up' costs are less difficult than in the case of future losses as real expenditure forms the basis of these claims, as discussed below.[287]

4.2.6.2.3 Indirect or consequential damages

Whereas direct damages are the immediate or direct result of the loss-causing event, indirect or consequential damages are the losses that flow from the direct loss caused by the loss-causing event, and are often not recoverable as being 'too remote' to justify a claim.[288] Special or 'extrinsic' damages are damages that are not presumed to be the consequence of a damage-causing event, and must be specially pleaded and proved, and include all pecuniary expenses and losses up to date of trial.[289]

4.2.6.2.4 Damage to property

Where the physical object of a real right is damaged, the term 'property damage'[290] is used, even though the term can be given a broader meaning. Damage to 'property' in the context of environmental damage includes but is

[285] 2007 2 SA 26 (SCA); see also as discussed in chap 3 par 3.4.2.5.1, par 3.5.3.5 above.
[286] Special Risks Underwriters *Yesterday's Policies won't meet tomorrow's needs:* The *PLIP policies* (1992) 3.
[287] Chap 6 par 6.6.2.3.3 below.
[288] For a more detailed consideration of 'remoteness', see Neethling *et al* 204; Neethling *et al* 171; see also Visser *et al* 59.
[289] See in this regard the examination by Visser *et al* 60.
[290] So-called 'saakskade'.

not limited to the diminution of the value of property,[291] compensation for the loss of use of occupied space,[292] discomfort caused by the harm,[293] as well as the cost of repair, replacement, clean-up, restoration and rehabilitation of the property or one of its components. In the case of *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* discussed above, 'property damage' was interpreted and insurance cover against property damage was found to include cover for environmental remediation costs.

'Stigma damages' are a very important component of 'property damage', specifically where pollution damage is concerned, and are caused only by the public's perception of damage.[294] This perception causes the diminution of market value due to the public's perception of the reduced value of the property because of its proximity to contamination.[295] Stigma damages also occur where land was physically damaged yet cleaned up but where a reduction in market value due to the stigma of possible residual contamination or even the knowledge that the land was contaminated, occurs. Damage to interests in private goods or property as well as damage to interests in public goods such as in the communal environment can occur.[296] It is submitted that stigma damages are just as real as a factual reduction in the value of land, and should be actionable in specific circumstances where an owner of

[291] *Paola v Jeeva NO and Others* 2004 1 SA 396 (SCA) 404.
[292] See, for example, the Finnish 1994 Environmental Damage and Compensation Act that provides that a "reasonable" compensation may be provided for a plaintiff for non-pecuniary losses linked to the reduced use of his property. The term 'reasonable' is to be defined in terms of duration of the nuisance and the degree to which the plaintiff could have reduced or prevented it.
[293] In the case of *Lopez Ostra v Spain* (1995) 20 EHRR 277, recognition was given to infringement of use of property where the court held at 295 that 'Naturally, severe environmental pollution (in this case bad smells from a neighbouring tannery) may affect individuals well-being and prevent them from enjoying their home environment in such a way as to affect their private and family lives adversely without however, seriously endangering their health'.
[294] See in this regard Fogleman V *Environmental Liabilities and Insurance in England and the United States* (2005) (hereinafter 'Fogleman') Part A 394 for a consideration of the nature and extent of stigma damages.
[295] See especially *Director: Mineral Development Gauteng Region and Sasol Mining (Pty) Ltd v Save the Vaal Environment* 1999 2 SA 709 (SCA) par 6(e) where rumours of a proposed open-cast mine affected property values in the area.
[296] Faure & Skogh 319 acknowledge endangered species as an example of international public goods.

property, for example, manages to sell his property for far less than its objective market value due to the stigma attached to his property.

4.2.6.2.5 Pure economic loss

Pure financial or economic losses do not result directly from property damage or personal injury, and include, for example, wasted expenses incurred and profits foregone, revenue losses and affected reputation.[297] Claims for pure economic loss are regularly brought under environmental insurance cover, as damage to the environment does not *per se* cause damage directly to a person or to his patrimony, but usually has the potential to cause pure economic loss. This will especially be the case where the 'natural environment' as such is damaged.[298] Although this loss is just as real as any other loss suffered, the right not to suffer a pure economic loss is not entrenched as a fundamental right in the Constitution, and does not enjoy the same reinforced protection as the other fundamental rights.[299] Causing pure economic loss is not *prima facie* wrongful, whereas breach of the duty to prevent property damage is *prima facie* wrongful, as the right to property is a constitutionally entrenched right.[300]

Nationally,[301] as well as internationally[302] courts have been reluctant to allow claims for pure financial or economic losses. It remains difficult to define and

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[297] *Telematrix (Pty) Ltd t/a Matrix Vehicle Tracking v Advertising Standard Authority SA* pars 1, 13; *Minister of Finance and others v Gore NO* 138,140; *Minister of Finance and others v Gore NO* 138; *Kantey & Templar (Pty) Ltd v Van Zyl NO* 611, 625–628; Commité Maritime International *CMI Yearbook:Admissibility and Assessment of Claims for Pollution Damage* Part II (1993) 95.

[298] See in general chap 2 par 2.2.4.2, also chap 2 n 28 on the concept of 'nature' and the 'natural environment'; claims for pure economic loss under environmental liability insurance policies is also dealt with in chap 6 par 6.6.2.6 below.

[299] See in this regard Neethling & Potgieter (2004) 481.

[300] The right to property in s 25 of the Constitution; see in this regard *Knop v Johannesburg City Council* 26; Neethling & Potgieter (2004) 481.

[301] A claim in South Africa was disallowed in the *Steenkamp*-case as discussed in this chapter, and in *Minister of Law and Order v Kadir;* but was allowed in *Joubert v Impala Platinum Ltd* 1998 1 SA 463 (B).

[302] For an international perspective, see Bussani M, Palmer VV & Parisi F "Liability for Pure Economic Loss in Europe: an Economic Restatement" 2003 (51) (hereinafter 'Bussani *et al*') The *American Journal of Comparative Law* 113 161; in the USA claims were disallowed, for example, in *Adkins v Thomas Solvent Company* 440 Mich 293 487 NW2d 715 (1992); *Robins*

Footnote continues on the next page.

claim for a non-speculative and substantial economic loss, and to distinguish between consequential losses, the losses sustained because of damage to property, and pure economic losses that are sustained without the interposition of related physical damage.[303]

Where there is environmental damage, a 'ricochet loss' where the direct damage caused to the primary prejudiced party results in economic losses for the secondary prejudiced party, and 'transferred loss' where physical damage of the property of the primary prejudiced party is passed contractually to a third party who then incurs only economic loss, are classic or standard forms of pure economic loss.[304] Where a party places his reliance upon flawed information or professional services, he could incur pure financial or economic losses where he acts upon this reliance to his detriment.[305] This appears to have been the situation in the *Steenkamp* case discussed below.

Although it is not easy, it still remains possible to successfully recoup pure economic losses under the South African law of delict, provided that the defendant owed the plaintiff a legal duty to act in the circumstances where the defendant acted negligently in causing the pure economic loss.[306] As the conduct that causes a person pure economic loss is not *prima facie* wrongful,

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Dry Dock & Repair Co v Flint US Supreme Court 275 US 303 (1927); *General Public Utilities v Glass Kitchens of Lancaster Inc.,* 374 Pa Super 203 542A2d 567 (1988); and *Chance v BP Chemicals Inc* 77 Ohio st3d 17 670 NE2d 985 (1996); but were allowed in *Brown v Southeastern Pennsylvania Transportation Authority (In re Paoli Railroad Yard PCB Litigation)* 35 F3d 717 (3d Cir 1994); and *Terra-Products Inc v Kraft General Foods Inc* 653 NE2d 89 (Ind Ct App1995); *Local Joint Executive Bd. & Culinary Workers Union, Local No. 226 v Stern* 98 Nev 409.651 P.2d 637 (1982); *Burgess v M/V Tamano* 370 Supp 247 (DMe1973).

[303] The so-called "bright-line rule" as put by Larsson 395; see Faure (ed) 136 for an extensive discussion of the scope of this rule; see also Van der Walt & Midgley 93 for a South African perspective.

[304] See Bussani *et al* 118 for these examples.

[305] Bussani *et al* 120; see also 121 for an international perspective on the possibility of recovering damages based on such a reliance.

[306] *Administrateur, Natal v Trust Bank van Afrika Beperk* 1979 3 SA 824 (A); *Minister of Finance and others v Gore NO* 140; *Telematrix (Pty) Ltd t/a Matrix Vehicle Tracking v Advertising Standards Authority* 468; Scott (1995) 158; for an early discussion see Basson DA "Die Nalatige Veroorsaking van Suiwer Ekonomiese Verlies" 1983 (1) *Codicillus* 8; Van der Walt & Midgley 93; It is important to emphasise that the phrase 'duty of care' should be used with caution where it is used to describe the South African concept of 'legal duty', as it must not be seen as an acceptance of the concept of the English law 'duty of care' that does not form part of our law. This has been addressed in par 4.2.3.3 above.

wrongfulness depends entirely on the breach of the general legal duty that rests upon persons not to cause damage to others.[307] Once again the criterion remains one of reasonableness.[308]

The following case serves as an illustration of the reluctance of the courts to allow these claims. In *Steenkamp NO v Provincial Tender Board, Eastern Cape*[309] a delictual claim for pure economic loss was heard by the Constitutional Court. The provincial tender board failed to adhere to prescribed tender procedures and awarded the tender to the plaintiff, who was unaware of the failure and incurred costs and expenses in anticipation of the completion of the project. The board denied their contractual liability based on the fact that there could be no contract due to their procedural failure. The plaintiff's delictual claim for pure economic loss was based on the board's wrongful conduct as they failed to comply with their general duty of care towards tenderers. He failed to recover his losses as the court held that The Promotion of Administrative Justice Act[310] does not include damages in the list of remedies available for a failure of administrative justice. The Act does, however, allow for an award of 'compensation' in exceptional circumstances, which circumstances were absent and therefore found to be irrelevant in this case.[311] The court was also not prepared to acknowledge a general duty in law to prevent pure economic losses, and had to disallow the claim as the conduct of the state tender board was found not to be wrongful.[312] This will also apply where the conduct of the State, by allocating a permit, for example, allows a third person to act in such a way that causes environmental damage.

Some countries contain express statutory measures that allow claims for pure economic or financial losses to avoid the complications of such a claim.[313]

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[307] *Minister of Finance and others v Gore NO* 138.
[308] Van der Walt & Midgley 94 specifically also discuss the issue of the duty to *prevent* pure economic loss in their discussion of wrongfulness.
[309] 2006 (SCA) specifically 141, 149, 152, 156.
[310] Act 3 of 2000.
[311] S 8(1)(c)(ii)*(bb)*.
[312] See the discussion of this case in the context of wrongfulness in par 4.2.3.3.5 above.
[313] See, for example, the 1994 Finnish Act for an exception to the general principle that pure economic loss is not claimable. This statute expressly allows claims where the loss or
Footnote continues on the next page.

This is not the current position in South African law. An exception is, however, readily accepted internationally in marine pollution cases where the claims of fishermen and beachside tour operators for financial losses suffered due to marine pollution are readily acknowledged.[314] The provisions of the proposed consumer protection legislation specifically enables a consumer to claim the 'harm caused that includes a claim for "economic loss"', as described in the Bill.[315]

4.2.6.2.6 Natural resource damages

These include damages caused to the environment *per se* and not specifically damage to property as discussed above,[316] and include damage to biodiversity and to the landscape.[317] It is extremely difficult to put a price tag on public air, water, wildlife and scenery. Claims cannot include damage to the 'voiceless elements of nature' that do not in some way or another affect the interests of a person.[318] A more comprehensive discussion of restoring natural resources or elements thereof after pollution damage occurred is provided in the examination of the quantification of damages below.[319]

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reduction of professional use of natural resources due to pollution leads to financial losses for fishermen and beach-front tourism operators; see also the discussion in chap 6 par 6.6.2.6 below.

[314] Larsson 395; as well as the USA case *Petition of Cleveland Tankers Inc (The Jupiter)*, 791 F Supp 669 (ED Mich 1992); the Outer Continental Shelf Lands Act (OSCLA) Fisherman's Contingency Fund 43 USCA δδ1841–1846.

[315] 'Harm' includes 'death, injury, illness, loss of or physical damage to property and *any economic loss*' (own emphasis), which may be claimed in terms of s 61(5) of the Consumer Protection Bill 2008; see also par 4.2.4.5.2 for a brief examination of the provisions of the Bill.

[316] See par 4.2.6.2.4 above.

[317] Once again reference may be made to *Lopez Ostra v Spain* (1995) 20 EHRR 277 where a claim was allowed not for the detrimental effect that a bad smell had on the value of the surrounding properties, nor for the damage to the health of the occupiers of the properties, but for the infringement of their general well-being that prevented them from enjoying their home environment and that affected their private and family lives adversely; Faure (ed) 138; see also *Director: Mineral Development Gauteng Region and Sasol Mining (Pty) Ltd v Save the Vaal Environment* 1999 2 SA 709 (SCA) par 6(c) that pollution from a strip mine would destroy the 'sense of place' of the wetland in question.

[318] This links specifically to chap 1 that nature is to be protected for the sake of mankind and not only for nature's sake.

[319] See par 4.2.6.4.4 below.

4.2.6.2.7 Prospective damages

Future or prospective damages are defined as patrimonial or non-patrimonial damages, which will with a sufficient degree of probability or reasonable possibility, materialise after the date of assessment of damage resulting from an earlier damage-causing event.[320] What is required is at least a *reasonable* possibility, which will have to be interpreted in each specific situation depending on the facts and circumstances before the court. It can consist of either the delay of a future profit, such as a reduction in agricultural productivity or utility due to pollution of the land, or the acceleration of future expenses such as increased clean-up costs of the pollution on the land.

As damage is relative to time, damage can be divided into (a) damage caused before the accrual of the cause of action; (b) damage from the moment of liability until the moment of commencement of the action; and (c) damage from the time of commencement of the action up to the time of the judgment. Visser *et al* note that its basis in all of these situations remains founded on the present impairment of a future expectation.[321]

Not only the present events but also probable future events that co-determine the expectancy have to be taken into account.[322] The court found that damages cannot be limited to only those suffered at the time of the delict, and that a claim for future losses would not constitute an improper benefit.[323]

Internationally, claims for prospective losses caused by pollution damage are increasingly addressed. There has not yet been a satisfactory analysis of this concept in South African law, although one is urgently required. 'Compensation for prospective or future damage undoubtedly plays a

[320] See in general Visser *et al* 116; see also Visser (2004) 137.
[321] Visser *et al* 117.
[322] Very little case law exists. See, however, *General Accident Insurance Co SA Ltd v Summers; Southern Versekeringsassosiasie Bpk v Carstens NO; General Accident Insurance Co SA Ltd v Nhlumayo* 1987 3 SA 577 (A) 613.
[323] *General Accident Insurance Co SA Ltd v Summers; Southern Versekeringsassosiasie Bpk v Carstens NO; General Accident Insurance Co SA Ltd v Nhlumayo* 615.

significant role in our legal practice. It is therefore all the more puzzling why this concept has not been the subject of more theoretical analysis.'[324]

Prospective losses can be described as 'the total or partial frustration of an expectation that a patrimonial asset will accrue or that a personality interest will exist, or it can be the creation of an expectation of debt'.[325] Forms of prospective loss include future expenses, loss of future income, prospective maintenance, business, contractual or professional profit, and a loss of chance to receive a patrimonial benefit.

Another complication that contributes to the problem is the refusal of courts to allow a claim for prospective damage on its own, as it may only be awarded as ancillary to accrued damages.[326] The universal issues regarding claims for prospective losses are also examined in chapter 6 below.[327]

4.2.6.3 Non-patrimonial loss

Non-patrimonial loss is defined as ' the diminution, as the result of a damage-causing event, in the quality of highly personal (or personality) interests of an individual in satisfying his legally recognised needs, but which does not affect his patrimony'.[328] It includes those values allocated to compensate for the detrimental impact, change, impairment or disturbance of physical-mental integrity or personality interests worthy of protection in law.[329] This includes compensation for bodily harm, disability, disfigurement, pain and suffering, emotional disturbance, shock or distress, injured feelings, infringement of reputation or dignity, loss or impairment of present and future earning

[324] In the words of Visser (2004) 137.
[325] Visser *et al* 116.
[326] *Coetzee v SAR&H* 1933 CPD 565; *Jowell v Bramwell-Jones* 2000 3 SA 274 (SCA) 287; Visser *et al* 123 agree that prospective loss alone is not acknowledged as an independent cause of action for a compensation claim as it is not regarded as 'actual' damage.
[327] See chap 6 par 6.6.2.6 on the issues relating to obtaining cover against the risk of suffering these losses as discussed below.
[328] See Visser *et al* 94.
[329] As described by Neethling *et al* 221.

capacity, reimbursement of medical and other expenses, loss of amenities or quality of life, and a shortened life expectancy.[330]

These damages are relevant for claims made in terms of the so-called 'asbestos cases' or in case of other illnesses caused by the detrimental effects of environmental pollution.[331] The valuation of the amount of compensation (*solatium*) for impairment of the plaintiff's personality remains a speculative process.[332] The specific facts and circumstances of each case must be taken into account for such calculation, and must be based on fair and reasonable criteria.[333] As specialised matters relating to bodily injuries fall outside of the scope of this study, a more extensive discussion of the extent and assessment of these injuries and related forms of loss or damage are excluded from this thesis.

4.2.6.4 Assessment and quantification of damages

4.2.6.4.1 General introduction to assessment

It is clear that a comparative method must be applied to assess the extent of damages suffered. The aggrieved party's hypothetical patrimonial position, prior to the wrongful conduct, must be compared to his current patrimonial position after the wrongful conduct, to determine the loss for purpose of the

[330] Visser *et al* 97 conclude that the objective element refers to the external or generally recognisable manifestation of the impairment, whereas the subjective element is the emotional reaction experienced on account of the presence of the objective element; see also Neethling *et al* n 316–329 for an extensive list of cases; Van der Walt & Midgley 218–232 provide examples of the various forms of damages that can be claimed.

[331] Thousands suffered from vomiting, stomach pains, nausea, breathing difficulties and nosebleeds, and seven people suffered a painful death due to the dumping of toxic waste in the Côte d'Ivoire(http://www.mg.co.za/articlePage.aspx?articleid= 284785&area=/ breaking_ news/break (last accessed on 27 September 2006); see also Larsson 394–395 for a general discussion of these damages.

[332] As stated by Visser *et al* 125 *et seq*.

[333] As stated above, these losses have an objective element, being the external manifestation of the impairment, and a subjective element on how the injured party perceives the impairment. In some cases the emphasis is placed on the former (for example, observing a shortened life-expectancy), and in other the latter (for example, experiencing and feeling the pain and suffering), see also Neethling *et al* 222 *et seq*.

claim. This is called the sum-formula doctrine or approach.[334] This formula offers the benefit that it provides for loss already suffered as well as for prospective or future losses, which necessitates a speculative process to deal with the future hypothetical situation.[335]

Damage must be assessed at a specified time. For delictual liability the decisive moment is seen as the date of the commission of the delict. Damage must be assessed at this time at a standard of value (patrimonial or otherwise), followed by the quantification of the exact monetary amount in accordance with specific principles of measurement.[336] Factors that can affect the quantification are the plaintiff's failure to mitigate damages, his contributory negligence and any possible benefits that accrue to him.[337]

In situations where damage to the environment occurs, it is not always possible to determine the loss with absolute mathematical precision. It is in the first place difficult if not impossible to place a value on environmental damage such as pollution of public air, water, wildlife and scenery, and furthermore many losses are also of a prospective and therefore of a hypothetical nature.

As a plaintiff cannot be faulted for being unable to quantify his damages accurately, the court may set an amount of damages that is based on no more than an informed guess.[338] The courts require at least a logical basis for the calculation of the amount of damages. Absolutely exact quantification may, for example, depend on uncertain future events such as the effect of successful clean-up as well as nature's ability to restore itself. It is trite law that the

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[334] *Transnet Ltd v Sechaba Photoscan (Pty) Ltd* par 15 *et seq*; *Rudman v Road Accident Fund* 240; see Visser *et al* 65; 69 for on criticism on this approach and a brief consideration of the merits that the alternative 'concrete concept of damage' approach offers; see also in general Neethling *et al* 205, 223.

[335] Visser *et al* 72; see also 125 the examination of the assessment of prospective losses in particular.

[336] As stated by Visser *et al* 84; Neethling *et al* 217 explain the distinction between assessment and quantification of damages.

[337] See the discussion in pars 4.2.4.4 above; and 4.2.6.7 below.

[338] *SDR Investment Holdings Co (Pty) Ltd, Springgrove Cellar (Pty) Ltd, Zorgvliet Farms & Estates (Pty) Ltd v Nedcor Bank Ltd, Honey & Partners* pars 51, 56; see also the discussion of the quantification of losses in chap 6 par 6.6.2 below.

questions regarding quantification are not decided on a balance of probability, but rather on the court's assessment based on the facts of a particular case.[339] A best estimate on available evidential material is all that is required.[340] This cannot be anything more than a speculative process.[341] Where more than one party contributed to the loss or damage, it is sometimes impossible to identify with precision exactly which share, part or element of the damage each one caused. A pragmatic approach must then be followed where divisibility cannot be formulated on the grounds of logic or reason, requiring a reasonable guess or estimate. For prospective damage, only speculation, general probabilities and assumptions can be used since future damage does not factually exist at the time of assessment.[342]

4.2.6.4.2 Patrimonial damage

In case of damage to or destruction of property, damages are generally calculated according to the market value of the property at the place of loss. Reasonable repair costs do not necessarily reflect the actual reduction in value of the property, as losses such as stigma damages can also occur.[343] Due to the difficulties in assessing the exact quantum of damages where natural resource damage is caused, the costs incurred to reinstate the resources to their original state is often the preferred assessment method. In most of the statutes discussed in chapter 3 above, liability for payment of a specific amount is therefore linked to the actual costs and expenses incurred for 'clean-up' or 'remediation' of the environment.[344] Alternative wording for this concept as found in South African statutes includes 'reasonable costs to remedy the effects of pollution',[345] 'the expenses to rehabilitate',[346] 'costs for

[339] See the judgment in *De Klerk v ABSA and others* pars 28, 37, 38.
[340] *SDR Investment Holdings Co (Pty) Ltd, Springgrove Cellar (Pty) Ltd, Zorgvliet Farms & Estates (Pty) Ltd v Nedcor Bank Ltd, Honey & Partners* par 58; *De Klerk v ABSA par 29*, Neethling *et al* 223.
[341] In the words of Visser *et al* 125.
[342] Visser (2004) 139; *Wright v Mediclinic* 371; see also Van der Walt & Midgley 225 on the importance that allowances must be made for the contingency that the loss would not have occurred at all.
[343] See the reference to 'stigma damages' in par 4.2.6.2.4 above.
[344] National Water Act s 20(7) in chap 3 par 3.4.4.14 above.
[345] NEMA s 28(3)(f), s 30(a) in chap 3 par 3.4.2 above.

the remediation of environmental damage',[347] 'reasonable expenses for rehabilitation costs',[348] 'costs and expenses to remove pollution',[349] 'compensatory damages',[350] 'compensation awarded to cover loss for damage to game',[351] 'costs of making good' damage to any national heritage resource,[352] and 'loss and expenses incurred by any person due to contravention of the specific Act'.[353] Specific principles also apply to the calculation of damages for medical expenses, loss of income, and for claims based on nuisance.[354]

4.2.6.4.3 Non-patrimonial loss

The claim must bear some relation to the extent of the loss suffered, by taking into account the nature, seriousness, intensity and extent of the loss. A comparative approach must also be followed.[355] Courts must also apply the principles of fairness and conservatism, yet refrain from allowing sympathy to cloud the assessment.[356] Courts must take care to see that the award is fair to both sides, and not simply award compensation to the plaintiff.[357] Awards are often made using actuarial evidence and awards made previously in similar and comparable cases are used as guidelines, although the latter may not restrict the court's discretion in a specific situation.[358]

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[346] ECA s 31A(2) in chap 3 par 3.4.3 above.
[347] Mineral and Petroleum Resources Development Act s 38– 46 in chap 3 par 3.4.4.8 above.
[348] National Nuclear Regulator Act s 29, s 35 in par 3.4.4.12 above.
[349] Marine Pollution (Control and Civil Liability) Act s 9(2) in chap 3 par 3.4.4.6 above.
[350] National Forests Act s 59(1)(b) chap par 3.4.4.10 above.
[351] Game Theft Act s 7 in chap 3 par 3.4.4.3 above, that also covers harm or damage caused to wild game by the conduct of another.
[352] National Heritage Resources Act s 51(8) in chap 3 par 3.4.4.11 above.
[353] Animals Protection Act s 2(4) and 2(5) in chap 3 par 3.4.4.1 above.
[354] See in general the authoritative work by Corbett MM & Honey DP *The Quantum of Damages* (2001); see Visser *et al* 405; see also Neethling *et al* 219; Church J & Church J "Nuisance" in Joubert WA(ed) *LAWSA* (Vol 19) 1st reissue (2002) par 180 on mitigation of harm; see par 204 for the value placed on the 'comfort of human existence'; see also par 205 on liability for this type of damage; and in the last instance par 216 on *locus standi* to sue.
[355] Visser *et al* 107.
[356] *De Jongh v Du Pisanie* 2005 5 SA 457(SCA) 475; as stated by Visser *et al* 438.
[357] This warning was issued by the court in *Pitt v Economic Insurance Co Ltd* 1957 3 SA 284 (D) 287.
[358] As held in *Protea Insurance Co Ltd v Lamb* 1971 1 SA 530 (A) 535.

4.2.6.4.4 Prospective loss

Prospective damage should be assessed through a comparison of the hypothetical course of events before and after the damage-causing event. The former has become the unreal situation, whereas the latter has become a reality.[359] The possibility of claiming this type of loss is relevant in the context of pollution damage and is more extensively discussed in chapter 6 below.[360] Where the policy is a valued policy, it is permissible for the insured to include consequential or prospective loss such as lost profits in his claim, provided that the insurer agreed that the valuation is *prima facie* conclusive and that it is recoverable. In unvalued policies consequential losses can only be claimed where they were expressly included under the cover provided.[361]

The correct formula to calculate the quantum of prospective damage must be found under either the sum-formula approach or the concrete concept of damages, with the focus on the withdrawal or deterioration of a particular part or element of a person's patrimony.[362] It can be said that the hypothetical element of the sum-formula approach renders it more suitable for the assessment and quantification of prospective losses. The hypothetical position that existed before the damage-causing event that has become 'unreal', and the hypothetical position after the damage-causing event that has become real must be compared and the difference seen as the quantum of the damage suffered.[363] The admissible evidence available must be extensive in view of these uncertainties and should include permissible aids such as statistical data, relevant experience, probabilities and possibilities, and all reasonable deductions and conclusions to supplement factual data.[364] This includes contingencies that are described as 'the hazards that normally

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[359] Visser *et al* 120 hold the opinion that when applying the *conditio sine qua non* 'test', the comparative method is not actually used as the alleged antecedent is eliminated and the consequence then disappears; Van der Walt & Midgley 225 confirm the unavoidable interaction between causation and the quantification of loss, as stated previously in this chapter in par 4.2.4.4.1 above.

[360] See chap 6 par 6.6.2.2 on 'compensable damages'.

[361] As confirmed by Merkin 344–347.

[362] Reinecke (1988) 226 supports the idea that the concrete approach offers more advantages than the abstract approach.

[363] In the words used by Visser *et al* 119.

[364] As identified by Visser *et al* 120 *et seq*.

beset the lives and circumstances of ordinary people' and that can reduce or increase the damages.[365] The court must furthermore discount or capitalise the amount as the plaintiff receives it in advance.[366]

Where the damage is caused before the accrual of the cause of action or between the time of commencement of the action and the moment of judgment, the calculation of the existence and quantum of the prospective losses are not that complex, as the court has factual evidence at the time of judgment although it was not necessarily available at the time of summons. This must affect the amount of compensable damages ordered.

4.2.6.5 Time of assessment

As stated above, the decisive moment for the assessment of damage for purposes of delictual liability is generally seen as the date of the commission of the delict. As some environmental damage, for example, damage caused by slow-seepage, manifests itself only in future, the recognition of the date of manifestation of loss in these situations, as the actual date of assessment, is required.[367] For practical reasons, this has already been included in the general discussion of a claim for prospective damages above.[368] Where a person does not suffer immediate harm due to the wrongful culpable conduct of another, but there is a chance of him suffering it in future, the plaintiff only has an action once the loss manifests itself.[369] This problem is dealt with more specifically in chapter 6 below, with specific reference to environmental damage and in the context of time clauses in insurance policies.[370]

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[365] As stated by Visser *et al* 128.
[366] *SA Eagle Insurance Co Ltd v Hartley* 839.
[367] See Neethling *et al* 206.
[368] Par 4.2.6.4.4.
[369] *Jowell v Bramwell-Jones* 286; Van der Walt & Midgley 43 explain that harm does not have to be contemporaneous with the wrongful conduct, but that the action remains incomplete until the harm arises; see also in general Visser (2004) 144; as well as Neethling *et al* 208; see also Corbett & Honey (Part I) 11 in this regard.
[370] Chap 6 par 6.6.2.6 below.

4.2.6.6 The 'once-and-for-all' rule

In terms of this rule all damage suffered, whether already sustained or prospective damage expected in future, must be claimed in a single action, before the claim prescribes.[371] Due to the time that often lapses between the polluting incident and the manifestation of the damage caused, it is often difficult to ascertain the exact scope of the damage caused by the pollution in time to claim.[372] However, where conduct causes a nuisance, a new claim may be instituted for every separate incident causing a repetition of the nuisance,[373] where an unlawful excavation causes incidents of continuous soil subsistence, for example.

4.2.6.7 Mitigation of losses and compensating advantages

The prejudiced party has a duty to mitigate his damages and not to allow it to accumulate or increase. The burden of proof rests on the wrongdoer to prove that the plaintiff did not take reasonable steps to limit or mitigate his losses.[374]

Also, as a plaintiff is never allowed to recover damages in excess of the actual loss suffered, any additional or collateral benefit, or compensating advantage that a prejudiced party received due to the wrongful conduct, has to be set-off against his claim for damages caused by such conduct.[375] Where a plaintiff has insurance cover for his losses, the following rules apply: (a) the plaintiff may claim damages to compensate for his loss from the wrongdoer, and claim from his insurer; (b) where he receives both amounts mentioned in (a) above, he has to repay the insurer to the extent that he is overcompensated; and (c) the insurer may claim from the wrongdoer in the insured's name where the latter has not claimed from the wrongdoer.[376]

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[371] See par 4.2.9 below; Van der Walt & Midgley 226 caution that the plaintiff forfeits the right to claim for damages that are not included in his first action.
[372] See chap 6 par 6.3 on the discussion of long-tail liability; *Oslo Land Co Ltd v Union Government* 588, 593.
[373] See in this regard pars 4.2.3.4.1; see also Neethling *et al* 209.
[374] *Da Silva v Coutinho* 147; see also *Sentrachem Bpk v Wenhold* 320; Neethling *et al* 216.
[375] See in this regard Neethling *et al* 211, 216.
[376] See in this regard Van der Walt CFC (1980) 15.

Benefits that are not taken into account when quantifying damages include amounts claimed in terms of non-indemnity (including money payable to dependants for the death of their breadwinner) and indemnity insurance, discretionary payments from statutory and medical funds, discretionary sick leave and pension benefits.[377] Other exclusions that could be relevant to environmental damage claims include savings on income tax where a loss of income is suffered,[378] or the benefit of concluding a beneficial contract due to the delict,[379] or where an award was paid as a *solatium*.[380] A benefit can only be taken into account where (a) there is a causal link between the damage-causing event and the benefit; (b) only actual benefits, and not prospective or potential benefits may be taken into account; and (c) the benefits must have been given with a compensatory purpose or object.[381]

4.2.7 Remedies and Delictual Actions

4.2.7.1 *Locus standi* and class actions

See the discussion in chapter 3 above of the legal standing of persons other than the State to enforce environmental laws.[382] On the possibility of a class action, NEMA creates the statutory right to bring a class action to protect the rights of various persons, in the public interest and even in the interest of protecting the environment.[383] It is not required that the pollution or degradation should have caused harm to any individual, but merely that harm

[377] Assessment of Damages Act 9 of 1969 s 1; *Dippenaar v Shield Insurance* 920; This excludes benefits where a statutory or contractual obligation to allow a claim for these benefits exists; Compensation for Occupational Injuries and Diseases Act 130 of 1993 s 36; see also *Ngcobo v Santam Insurance Co Ltd*; and Neethling *et al* 211, 212.
[378] Damages to replace lost income are not taxable as they are of a capital nature; see specifically Neethling *et al* 212 n 163.
[379] For a case note, see also Lotz JG "The *Sandown Park* Case" 1986 (103) *SALJ* 704; Neethling *et al* 213.
[380] See the discussion of claims for solace money in Neethling *et al* par 299.
[381] Reinecke (1988) 221, 229; see also Neethling *et al* 215.
[382] NEMA Chap 7 Part 2; see in this regard pars 3.2.3.4.2, 3.4.2.5.2 above.
[383] NEMA s 32(1)(e); see also the judgment in *Raubenheimer NO v Trustees, Johannes Bredenkamp Trust and Others* 2006 1 SA 124 (C).

to the environment itself must be caused.[384] It is submitted that class actions available to consumers should be extended to class actions for the protection of environmental interests.[385] The quantification of each individual's loss under a consumer class action would appear to be more difficult as a faulty product could affect them all differently, whereas in the case of a public interest claim for damage caused to the natural environment, individuals would most likely be affected equally.[386]

The injured party can institute various actions as discussed below to claim the damages or loss that he suffered.

4.2.7.2 The *actio legis Aquiliae*

This action is instituted to claim damages for patrimonial loss caused by all forms of culpable conduct. It devolved both passively and actively, and can be ceded to another person, since it is concerned with the recovery of patrimonial damage to an estate.[387] An existing claim by an owner of land whose land is polluted by another can, upon the sale of the land to another, be ceded to the new owner.[388]

4.2.7.3 The *actio iniuriarum*

This action is instituted to claim satisfaction, in order to provide the injured party with personal or psychological satisfaction for the injury to his bodily and mental integrity. This action is actively and passively heritable, yet only after *litis contestatio*.[389] Because this action is bound to the person of the injured

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[384] See the conclusion in par 2.4 in chap 2 of this work on this issue that damage to the environment merely for the environment's sake, and not for the benefit in some way for human beings, is not considered in this study.

[385] Winter G "Perspectives for environmental law – entering the fourth phase" 1989 *JEL* 46.

[386] For a public interest action brought in an environmental context, see *Petroprops (Pty) Ltd v Barlow and Another* on an application to protect the environment in general in order to contribute to environmental protection in the common good. The court voices its concerns on 185 that the prospect of costs orders can have an undesirable deterring impact on individuals drawn into public interest actions , for example, for protection or clean-up and remediation of the environment.

[387] As stated by Neethling *et al* 235.

[388] See in this regard *Lascon Properties (Pty) Ltd v Wadeville Investment Co (Pty) Ltd* 583.

[389] See in this regard Neethling *et al* 235.

party, it cannot be ceded to another. Awards are assessed according to what is right and fair under the circumstances.

4.2.7.4 The action for pain and suffering

A special action, with its roots in Germanic law, may be instituted for the compensation of impairment of a person's personality through his pain and suffering. The action devolves both actively and passively, but also only after *litis contestatio*.[390] The amount is only for the personal benefit of the injured party, and cannot be ceded to a third party.[391] Pain and suffering is a very real consequence of pollution and damage to the environment, and this action is therefore relevant to environmental liability claims.[392]

4.2.7.5 Various other actions

Although the three actions discussed above cover most delictual claims, special actions exist for specific cases that are of some relevance to liability for environmental damage. These include actions for which no fault is required, the action for damage caused by a person's animals,[393] for damage caused by objects thrown or poured from the windows of a building such as a factory into the neighbouring environment,[394] and for damage caused by owners of neighbouring properties to their neighbours.[395] These include the action for the disturbance of lateral support, the *actio aquae pluviae arcendae* and the *interdictum quod vi aut clam* as discussed under strict liability

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[390] Above 235.
[391] Although the claim may be instituted on behalf of the injured party or parties by another in terms of the class actions discussed in pars 3.2.3.4.2 and 3.5.3.7.
[392] See especially in this regard chap 1 n 3; also http://www.mg.co.za/articlePage.aspx?articleid=284785&area=/breaking_news/breaki (last accessed on 27 September 2006) on the pain and suffering of victims caused by the dumping of toxic waste by a French company in the Côte d'Ivoire, where thousands suffered from vomiting, stomach pains, nausea, breathing difficulties and nosebleeds; as well as the suffering caused by asbestosis as was the case in *Lubbe & Four Others v Cape Plc and related appeals* 27-7-2000 (House of Lords).
[393] *Actiones de pauperie*, *de pastu, de feris*; *Walker v Redhouse* 516; see the discussion by Knoetze E & Hoctor SV "Liability for Damage caused by and to wild animals" 2000 (21) *Obiter* 177 184 on civil liability, and 186 on the *actio legis Aquiliae*.
[394] Specifically the *actio de effusis vel deiectis;* and the *actio positi vel suspensi*.
[395] In this situation see the comprehensive discussion of nuisance in par 4.2.3.4.1 above.

above.[396] Lastly, a breach of contract that causes patrimonial damage can also constitute the delict of *damnum iniuria datum*.[397]

4.2.7.6 The interdict

Injunctive relief is a suitable and relevant remedy to address conduct that causes or has the potential to cause environmental damage. A court order that is mandatory, to compel a person to do something[398] or that is prohibitory, to refrain from doing something[399] is often the best action to be taken in environmental context. The purpose of an interdict is to prevent, limit or avoid harm, and not to recover compensation or satisfaction.[400] The interdict has an obvious preventative function and effect, and may limit continuing environmental damage and prevent increased future liability for the polluter.

A requirement is that wrongful conduct (either a commission or an omission) must occur or be imminent.[401] Fault and actual loss or damage are not requirements.[402] The suffering of loss or damage must be imminent. Lastly, no other remedy must be available on an urgent basis to protect the applicant's rights.[403] The courts will allow an interdict where other legal remedies are in fact available to the applicant, yet only in special circumstances where the determination of the exact amount of damages is difficult;[404] where further harm could be caused to the prejudiced party; or where the respondent does not have the necessary financial means to satisfy the applicant's claim for

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[396] Neethling *et al* 236; see par 4.2.4.5.1 above.
[397] See the more extensive discussion by Van der Walt & Midgley 58 *et seq*; see in general Van Aswegen A *Die Sameloop van Eise om Skadevergoeding uit Kontrakbreuk en Delik* LLD Thesis University of South Africa (1991) (hereinafter 'Van Aswegen'); see also Neethling *et al* 240. See the discussion of contractual liability for purposes of this study in par 4.3 below.
[398] For example, to take precautionary measures to prevent the threat of pollution.
[399] For example, to stop industrial activity that is causing pollution.
[400] As amplified in the discussion by Van der Walt & Midgley 212–214.
[401] *Setlogelo v Setlogelo* 1914 AD 221 227; see in general from a civil law perspective Neethling *et al* 237.
[402] As confirmed in *Aruba Construction (Pty) Ltd v Aruba Holdings (Pty) Ltd* 2003 2 SA 155 (C) 175.
[403] For case law on this point, see *LF Boshoff Investments (Pty) Ltd v Cape Town Municipality* 1969 2 SA 256(C) 267.
[404] This is often an option where it is difficult to determine the extent of the pollution damage, and one wants to force the cessation of the polluting actions.

damages or satisfaction. These are, because of their nature and due to the nature of the polluting conduct that cause liability, all relevant as far as environmental claims are concerned.

4.2.8 Exclusion, Exemption and Limitation Clauses

It is possible to exclude or limit a delictual claim contractually, or to exempt a wrongdoer from delictual liability. As these clauses raise many important issues for the vesting of liability and also for insurance coverage, the South African as well as the international position is dealt with comprehensively in chapter 6 below.[405]

4.2.9 Prescription of Claims

4.2.9.1 General principles

The general common-law prescription period for delictual and contractual claims is three years.[406] The prescription period starts running as soon as the debt becomes due and the damages are claimable.[407] The creditor must have acquired knowledge of the cause of action,[408] all the elements of the delict in question must be present and the identity of the defendant must be known.[409] It is possible for the parties to conclude a 'standstill agreement' where the liability is negotiated and prescription is suspended.[410] It is possible for the parties to reach an agreement on a time-bar period, after which the claim

[405] See chap 6 par 6.5 below.
[406] Prescription Act 68 of 1969 s 11(d)
[407] Prescription Act s 12(1).
[408] The court held in *Oslo Land Co Ltd v Union Government* 588 that the focus is on the damage-causing event in accordance with the 'single-cause' theory, and not on the manifestation of the damage; also *et al* 209; Van der Walt & Midgley 226 consider the effect of the 'once and for all' rule and prescription on a civil claim.
[409] Prescription Act s 12(3); known as the *facta probanda*; The court held in *Deysel v Truter and another* 2005 5 SA 598 (C) 609 that a 'meaningful knowledge of facts' is required; see also *Evins v Shield Insurance Co Ltd* 1980 2 SA 814(A) 838; Neethling *et al* 243.
[410] See Merkin 323 for a discussion of the effect of this type of agreement.

against the wrongdoer is extinguished, even though the prescription period was not completed.[411]

In case of environmental damage claims, the prescription periods are relatively short due not only to the nature and magnitude of potential claims for environmental damage, but also for the following reasons: (a) The true extent of the damage often materialises or emerges only years after the actual polluting incident.[412] This could complicate potential claims in that a long delay could compromise the factual evidence that is required to prove the merits of the claim.[413] (b) The identity of the polluter can be difficult to determine, as is the case in most situations where general environmental damage to natural resources was caused over a longer period of time. This is complicated further by a situation of concurrent or multiple causation where more than one polluter could potentially incur liability. (c) In the last instance, the assessment and quantification of the damages within the required time limit is often problematic as it can be a lengthy, specialised and costly process. This is especially relevant where consequential or prospective losses are concerned as discussed above.[414]

The quantification of these losses is discussed more specifically in an insurance context in chapter 6 below.[415] The prescription of the insured's claims against his insurer is discussed specifically in chapter 5 on environmental insurance cover below.[416]

[411] Time bar clauses and their constitutionality and enforceability are examined at length in chap 6 par 6.5.2 and par 6.5.4 below.
[412] See in this regard the discussion prospective losses in par 4.2.6.2.7 of the text above; as well as chap 6 par 6.6.2.2.
[413] See chap 6 par 6.2 below for the issues regarding the access to sufficient information required to properly assess risks for insurance purposes, and to quantify an insurance claim. This indicates the problems experienced in practice regarding the assessment of environmental damage or losses.
[414] See par 4.2.6.2 and 4.2.6.4 above.
[415] See chap 6 par 6.6 below.
[416] See chap 5 par 5.3.6 below.

4.2.9.2 Statutory exceptions

A number of statutory exceptions regarding prescription periods do exist, although few are relevant to environmental pollution cases.[417] Claims for environmental and other damages that fall within the scope of the National Nuclear Regulator Act[418] prescribe after 30 years from the date of occurrence or the last event in the course of a succession of occurrences,[419] unless the claimant became aware or could reasonably have been expected to become aware of the identity of the defendant and the facts that lead to the claim. In this situation the claim then prescribes two years from the date on which the person became, or should have become, aware of the information.[420] Prescription is suspended from the date on which written negotiations regarding a settlement commence until notice of termination of negotiations is received from either party.[421]

The Institution of Legal Proceedings against certain Organs of the State Act will regulate claims against the State for environmental damage caused.[422] The Act consolidates prescription periods in general by stating that the periods found in Chapter III of the Prescription Act[423] apply to all debts, including debts owing by organs of the State. It is important to note that this Act prescribes a standard notice period before a claim may be instituted.[424]

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[417] Road Accidents Fund Act 56 of 1996.
[418] Act 47 of 1999; for a comprehensive discussion of the Act see par 3.4.4.12; The Vienna Convention on Civil Liability for Nuclear Damage referred to in par 3.4.4.12 above prescribes specific prescription periods for claims for nuclear incidents.
[419] S 34(1).
[420] S 34(2).
[421] S 34(3).
[422] Act 40 of 2002. In terms of s 1(iii) a 'debt' is defined as 'any debt arising from any cause of action – (a) which arises from delictual, contractual or any other liability, including a cause of action which relates to or arises from any – (i) act performed under or in terms of any law; or (ii) omission to do anything which should have been done under or in terms of any law; and (b) for which an organ of state is liable for payment of damages, whether such a debt became due before or after the fixed date (being the date of the commencement of this Act).'
[423] Act 68 of 1969.
[424] S 3, s 4.

4.3 CONTRACTUAL LIABILITY

4.3.1 Introduction

Although liability insurance deals mostly with delictual liabilities, an alternative cause of action could be a claim based on breach of contract.[425] Although, due to the nature of the conduct that mostly causes environmental damage, one would not generally readily find contracts between a polluter and another in which the polluter undertakes not to pollute, or to clean-up when pollution does occur. These agreements do, however, exist.

It is, for example, possible for the government or another authority to identify certain industries as potential polluters and to conclude such contracts with them in exchange for financial guarantees of some sort that could cover loss where a breach of contract occurs, or to issue permits or licences subject to contractual warranties or undertakings given by the potential polluter.
Where a contractual liability for clean-up exists and becomes enforceable, the insurance policy covering this liability will be triggered.[426] Should a contract be breached, normal *ex lege* remedies for breach of contract, as well as remedies expressly agreed to could be enforced against the polluter.[427] Whether these are covered by insurance will depend on the nature of the policy and the intentions of the parties.[428]

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[425] See Reinecke *et al* par 10 for their limited discussion of contractual liability for purpose of liability insurance claims. Most studies on environmental liability insurance, for example, those by Fogleman, Larsson, Abraham, De Ketelaere, Faure & Skogh and other authorities referred to in this study, focus primarily on statutory and delictual or tort liability, and not on contractual liability. This type of liability traditionally resorts under alternatives to insurance, which does not fall within the scope of this study.

[426] Reinecke *et al* provide very little text on the insurability of contractual liabilities, and refer to it, for example, only where the quantification of loss for purpose of liability insurance is discussed in par 300 that '[w]here a liability (contractual or otherwise) is the object of the insurance, the amount of the liability must of course also be determined'. See also par 582 that an insured can cover himself for not performing is obligations properly; for case law, see *Russell & Loveday v Collins Submarine Pipelines Africa (Pty) Ltd* 1975 1 SA 110 (A) 139.

[427] See in general the following two authoritative works on South African law of contract: Van der Merwe S, Van Huyssteen LF, Reinecke MFB & Lubbe GF *Contract General Principles* 3rd ed (2007) 379; Christie RH *The Law of Contract in South Africa* 5th ed (2006) 521.

[428] See, for example, other instruments such as performance warranties and indemnity guarantees.

As contractual liability falls outside of the scope of this study, the conclusion of valid and binding contracts, and breach of contract are not discussed extensively. A few relevant aspects in an environmental context are, however, briefly addressed below.

4.3.2 Concurrent Actions

It is possible for a polluting act or occurrence to give rise to both delictual and contractual liability. The prejudiced party must elect one of these causes of action, or claim in the alternative where the claims have the same purpose or goal. No duplicity of actions for damage can be allowed.[429]

Obviously all the requirements for both these claims must be met. Some requirements such as causation and the principles that govern the assessment and valuation of damages do overlap. However, the right of election appears to be limited as there is no duty of care to prevent damages caused by breach of contract, whereas there is a more generalised duty of care in a delictual sense.[430] This obviously facilitates bringing a delictual claim rather than one based in contract.

Because the damages claimed in delict can be more extensive damages than those claimed in contract, for example, consequential losses, lost profits, prospective losses, and amounts for bodily injuries, emotional trauma and pain and suffering, a delictual claim can prove to be more attractive.

[429] Van Aswegen 77 identifies this as a form of strict concurrence of claims, whereas at 76 she states that if the same set of facts gives rise to claims with separate goals, there is only concurrency in the wide sense.

[430] Van Aswegen 81 is of the opinion that this refers as far as pure economic loss is concerned. On 82 she considers the possible exclusivity of claims where rules of law or contract limit the prejudiced party to contractual claims only. See the effect that pollution exclusion and limitation clauses in insurance contracts could have that exclude specific claims, as discussed in chap 6 par 6.5 below.

4.3.3 Insurability of Contractual Liabilities

Whether contractual liability qualifies as a 'legally liability' for purpose of liability insurance is examined specifically in chapter 6 below.[431] One cannot simply deduce that contractual liability is automatically included under liability insurance cover, as it will depend on the intentions of the insurer and the policyholder whether the cover includes contractual liability cover.[432] Most liability insurance policies contain a standard clause that excludes contractual liability from general liability cover, in order to clarify the extent of the scope of the insurance cover provided. It is also possible to ensure contractual performance by alternative means, for example, by financial instruments such as performance guarantees issued by banking institutions or by insurers.

4.3.4 Remedies in an Environmental Context

4.3.4.1 General remedies

It is possible to conclude a binding contract with a potential polluter in terms of which he is obliged to clean-up the polluted environment. In some situations, permits or authorisations must be obtained before specific activities can take place, for example, before waste disposal sites or industrial and manufacturing plants can become operational. The State could, for example, negotiate with a potential permit holder to obtain a contractual undertaking that it would clean-up environmental pollution prior to issuing the permits or authorisations. This could prove to be beneficial as the polluter can be held responsible in terms of the agreement to pay the costs of environmental remediation. Contractual remedies or other contractual securities have the advantage that where a loss occurs, they could offer financial redress in addition to a claim for damages, for example, to include a claim for administration and valuation costs. It would also be possible to include

[431] See par 6.5.6.6 below.
[432] As confirmed by Larsson 32.

contractual penalty clauses to attempt to cover all potential environmental losses.

4.3.4.2 Burden of proof

Proving breach of contract is traditionally easier than proving the elements of delict. A contractual duty not to pollute should be no different from any other form of contractual restraint, and the same principles that apply to positive malperformance, for example, will apply where the duty is breached.

As contractual liability falls beyond the scope of this study, it does not require further extensive examination.

4.4 *NEGOTIORUM GESTIO*

4.4.1 General

In the final instance, a claim can be based on one of the obligations *ex variis causarum iuris figuris*,[433] where *negotiorum gestio* or unauthorised agency occurs. This has the potential to lead to civil liability for any environmental pollution caused in the process.

An example would include the situation where the government, another authority or any individual acts in response to the threat or continuation of a polluting incident, and incurs costs and expenses to prevent or minimise loss. It would be possible to claim a refund for these out-of-pocket expenses.

Claims based on agency by environmental groups have, however, drawn criticism, as it is debatable whether public interest groups have the right to act

[433] See in general Harms LTC "Negotiorum Gestio" in Joubert WA (ed) Vol 19 *LAWSA* 1st reissue (2002); see also especially par 217 n 2.

on behalf of society in general and then institute a claim based on unauthorised agency.[434]

4.5 CONCLUSION AND RECOMMENDATIONS

Although civil or common-law claims provide the most attractive and comprehensive solution to claim for environmental damage, these claims are clearly not without their complications. Due to the distinctive issues relating to these claims, an entirely new field of law, internationally referred to as toxic tort law, has emerged. The general principles of the law of delict offer the advantage that they are flexible and that a vast field of case law has developed that can provide guidance in environmental damage cases. These delictual principles have to be adapted to accommodate the difficulties encountered when dealing with these claims. As issues relating to civil liability claims have been addressed extensively in the tort law of other countries such as the UK and the USA, solutions gleaned from other legal systems can be supplied for lacunas and deficiencies in the South African law of delict.[435]

In the first place it is required that the conduct of the polluter must be wrongful. Liability will only ensue where conduct is in the form of an omission, and where a legal duty to act, a duty if care, rests on the polluter. The inclusion of section 24 in the Constitution has created a firm basis for such a duty to act in order to prevent damage to the environment.[436] It is only possible to claim for pure economic loss where a legal duty to act has been breached.

Failure to act in accordance with a rule of law is recognised as an actionable omission. The constitutional right to the environment has informed the general criterion of public policy in that it has provided more clarity regarding the

[434] For the European position on the merit of claims based on agency see the evaluation in Larsson 538.
[435] See in this regard chap 6 and chap 7 below.
[436] See the conclusion in chap 3 par 3.6 above.

determination of the wrongfulness of conduct that causes environmental damage. The following actionable omissions have been found to be relevant to the scope of the discussion in this study. Where there is an *omissio per commissionem* by the polluter in that he creates a potential polluting situation and fails to remove the danger. Another situation would be where the polluter fails to control a dangerous object or substance that is in his possession or is under his supervision or control. The failure to act in accordance with other environmental statutes such as NEMA, the ECA and the other statutes addressed in this study is recognised as a failure to act in accordance with peremptory rules of law.[437] Where a person holding a particular office allows or fails to prevent polluting conduct, or where a special relationship exists between the polluter and the prejudiced party that requires the former to act and he fails to so, are also deemed to be actionable omissions and therefore wrongful. In the final instance, when one creates an impression to protect the interests of another and then fails to do so, the failure is also actionable.

Grounds of justification that are relevant in the context of environmental damage claims include the following. The rules relating to the doctrine of the abuse of rights and nuisance provide firm guidelines to determine wrongfulness in most cases where environmental pollution is caused. Although the doctrine of nuisance does not form part of our law, the rules pertaining to this tort have informed our doctrine of abuse of rights. To determine wrongfulness, a balance of the interests of the parties is required. A polluter may only exercise his rights, for example, the rights to use his property, to his benefit where the infringement that this causes upon the rights or interests of another is not excessive or unreasonable. Although the danger lies therein that it can be notoriously subjective and personal, an interference with environmental aesthetics should be acknowledged as actionable where it appears from the facts and circumstances to be unreasonable. This will require careful consideration by the courts.

[437] For an examination of the relevant statutes, see chap 3 par 3.4 above.

Where it is impossible for a polluter to act to prevent pollution damage, or where the prejudiced party has consented to or voluntarily assumed the risk of damage, the actions by the polluter are justified and therefore not wrongful. Where the polluter is authorised by statute or other authority to act in a manner that causes environmental damage, his conduct is justified. Although this will seldom be the case, a state of necessity that requires a polluter to act, or his actions in self-defence that cause environmental damage and harm or loss to another, will also be recognised as grounds of justification.

Once it has been proven that the polluter's conduct or omission is wrongful, the plaintiff has to prove that fault was present, in that the polluter's conduct was intentional or negligent. The conduct of the polluter must meet the standard of that of the reasonable person who would have foreseen that his conduct would cause environmental damage. Greater environmental awareness regarding the environment has had the effect that a higher standard of care to foresee and prevent environmental damage has been recognised than in the past.

The introduction of strict liability regimes in our law[438] and the proposal in this study that a statutory strict liability regime must also be established for environmental damage liability can provide relief as far as proving the element of fault is concerned. This can clearly be justified in terms of the risk-danger theory that is based in a person's participation in a high-risk activity that concerns the environment. It can also be justified by the interest or profit-theory where a person exploits the environment to his advantage and in the process causes environmental damage. This will ease the burden of proof that currently rests on the prejudiced party to prove all the elements required for delictual liability. The burden of proof shifts to the polluter to prove one of the defences against strict liability, which include *force majeure* and contributory negligence by the prejudiced party.

[438]See the consideration of the Genetically Modified Organisms Act discussed in par 3.4.4.4; the Consumer Protection Bill in par 4.2.4.5.2 above, and the existence of strict liability regimes in terms of the doctrine of abuse of rights discussed in par 4.2.3.4.2, and in terms of the common-law actions, for example, the *interdictum quod vi aut claim* discussed in par 4.2.7.5 above.

Although it has the potential to undermine the consistent implementation of the polluter-pays principle, it is possible to place a statutory limit on the amount for which the polluter can incur liability. The statutory cap must remain within reasonable limits for the situation to which it applies. This will keep the success of obtaining effective damage compensation realistic, without unnecessarily endangering or threatening the solvency of polluting industries.

The arguments against a strict liability regime include the fact that the potential liability will force persons to increase their insurance cover, provided cover is available in the insurance market, which will cause an internalisation of costs.

Where contributory fault requires the apportionment of damages, the determination of the extent of each party's contribution to the damage remains a problematic issue, and will depend on the application of the Apportionment of Damages Act, and the court's discretion based on the facts and circumstances of each case. The difficulty in proving the extent of a party's contribution to pollution damage will require a pragmatic approach based on a reasonable guess or estimate.

The introduction of a statutory joint and several liability will provide an additional effective allocation mechanism where there is more than one potential polluter in a specific situation. Once again, the burden of proof will shift to the polluter who has to prove that the damage was caused either by *force majeure*, or by the culpable conduct of another. Where he alleges that another's contributory negligence diminishes the extent of his liability, he will have to prove his share in causing the damage. Where the introduction of a statutory joint and several liability appears to be impossible, impractical or ineffective, another allocation method such as the market-share liability as applied in the Netherlands and in the USA could provide an alternative solution.

Many of the problems encountered with environmental damage claims concern the requirement of causation. This is especially the case where damage is caused by gradual pollution that occurred over a long period of time and could potentially have been caused by various polluters. The introduction of a joint and several liability regime could also address these issues. The difficulties in providing factual proof of the identity of the polluter and the extent of his liability are extensive. Physical proof can be eroded or diminished over time. Pollution damage can also be aggravated by external circumstances such as a *novus actus interveniens*. The application of the *conditio sine qua non*-test to prove factual causation does not appear to be consistently effective in environmental pollution cases, and courts will have to approach the problem with circumspection. The open-ended policy standards that are required to determine legal causation have to be informed and interpreted primarily in accordance with constitutional values. Other flexible criteria such as reasonable foreseeability and adequate causation will still play a subsidiary role.

The last delictual requirement concerns damages. Issues relating in general to the concept of 'general damages' that include *damnum emergens* and *lucrum cessans* do not pose as many problems as some of the other forms of damages discussed in this study.

As the fundamental right to property is entrenched by section 25 of the Constitution, it is *prima facie* wrongful to cause damage to another's property. The determination of the exact scope of what 'property damage' entails in an environmental damage context poses some challenges. In order to entertain claims for environmental damage, it is submitted that the concept must incorporate the following: diminution of property value, compensation for loss of use and enjoyment of the property, discomfort, clean-up, repair, replacement and rehabilitation costs.

A specific form of damage that has not yet received a lot of attention in South African law is stigma damage. This type of damage relates to the reduction of the value of property based purely on the public's negative perception that the

property was in some way affected by pollution. This is in some cases inevitable even where the property has been restored to its original state. It is submitted that the effect that stigma damage has on a person's patrimony is just as real as other forms of direct damage, and that it should be possible to claim for this form of damage.

Internationally courts are reluctant to allow claims for pure economic loss. As causing pure economic loss is not directly linked to property, it is not seen as *prima facie* wrongful. A claim for this type of loss will only succeed where it was caused by the polluter's failure to act in accordance with a recognised legal duty to act. Damage caused to the 'natural environment' that affects the aesthetic appeal of property usually causes pure economic loss. A damage claim cannot include damage merely to the 'voiceless elements of nature', unless the damage to these natural resources detrimentally affects or prejudices the interests of a person.

Currently, very few statutes define or describe the extent of the damages that can be claimed under environmental damage claims. The scope of the various forms of environmental damage that can be caused by an infringement of statutory provisions should be defined more effectively in the specific statutes. The possibility to claim pure economic loss, stigma loss and to claim for loss of use of natural resources and their aesthetic appeal needs to be extended. A claim for 'economic loss' is included under remedies in the proposed Consumer Protection Bill and can serve as an example of the statutory recognition that this type of loss can be claimed in a specific situation.[439]

Prospective losses are a reality where environmental damage that is caused by pollution occurs. A claim for future losses cannot constitute an improper benefit and must, due to the once-and-for-all rule, be allowed, provided that their exact nature and extent are determined at the time of claim. This will of course require some speculation, but once again, courts will have to follow a

[439] See the discussion in chap 6. par 6.6.2.6 below.

pragmatic approach and base their award on a reasonable estimate. The principle remains that prospective losses can only be claimed where they are claimed ancillary to accrued damages.

The quantification of these forms of damage remains a complicated process. Reasons include the fact that it is difficult, if not impossible, to determine the loss of natural resources with mathematical precision. Pure economic loss and prospective loss are also of a hypothetical nature, which requires the court to base the quantification of its award on the best available evidence before it. In these situations the court could rely on permissible aids such as general statistical data, relevant experiences and other probabilities and possibilities to supplement actual factual data. An effective measure of natural resource damages is, in most cases, the actual clean-up or remediation costs and expenses incurred.

The remedies available to the plaintiff include a claim for damages in terms of the *actio legis Aquilia*, the *actio iniuriarum* and the action for pain and suffering. The plaintiff can also obtain injunctive relief. Three common-law actions that are of relevance to environmental damage claims include the action for damage caused by another's animals, the action for damage caused by objects or substances thrown from buildings and for damage caused by a person to neighbouring property.

The time at which prescription of the claim starts to run is the time when the damage or loss manifests itself. This will be the decisive moment on which the plaintiff becomes aware, or should reasonably have become aware that he has suffered a loss, what caused the loss and the identity of the defendant. The common-law prescription period of three years for a civil damages claim is relatively short, because obtaining the required information to institute an environmental claim in time could be problematic. Complications in this regard include that the damage might only manifest a long time after the polluting incident and the long delay could compromise factual evidence. It could take time to determine the true identity of the polluter, and to assess and quantify the extent of the damages claimed especially where prospective loss or pure

economic loss is suffered. Specialised statutes should provide for more realistic periods.[440]

The possibility of a successful civil damages claim also offers a final benefit that deserves mentioning, namely that it can act as a powerful deterrent to discourage potential polluters from causing damage to the environment.

Where the polluter is contractually bound to prevent pollution or to refrain from polluting the environment, and he breaches the contract, the normal remedies for breach of contract, whether *ex lege* or agreed upon, apply. The polluter could be held liable for contractual damages to compensate for the damage suffered by the prejudiced party. It should be noted that consequential loss could only be claimed where the parties reached an agreement to that effect. Issues surrounding the extent and quantification of damages as discussed in this chapter will also be relevant in a claim for contractual damages. As a detailed discussion of contractual liability falls beyond the scope of this study, the issue is not addressed in greater detail.

The last source of a legal obligation that could relate to an environmental damage claim is unauthorised agency. In this situation, the agent who acted on behalf of another in preventing or cleaning-up environmental damage can claim all the reasonable costs and expenses incurred in the process.

As a civil liability regime is, on its own, clearly insufficient, a more comprehensive compensation system is required. This would entail a system where statutory and civil liability complement each other as recommended in the preceding chapter,[441] combined with effective insurance coverage to ensure that liability claims can be met. The latter point is discussed in the next chapter.

[440] The effect of long-tail liability of insurers is examined in detail chapter 6 par 6.3 below.
[441] See chap 3 par 3.6 for the call for the increase in the introduction of statutory civil damage claims.

Insurance plays a huge role where environmental risks are concerned. Even where a prejudiced party has succeeded in proving his claim, whether statutory or civil, against the polluter, the latter may not have sufficient funds to satisfy the claim. Where the polluter has sufficient liability insurance cover, the expectation is that the prejudiced party will receive payment to cover his losses. The right to claim from the insurer, however, vests in the polluter. The success of the claim, and the eventual payment of the funds received from the insurer to the prejudiced party, depend on the polluter's conduct. The prejudiced party is therefore, even where there is third-party or liability insurance cover, not always guaranteed to receive the amount of damages that he is entitled to. The issue of the insurability of liability for environmental damage under third-party insurance, and the possibility of introducing first-party insurance to the benefit of a third party are discussed in the next chapter.

Where a prejudiced party fails to succeed in a claim against the polluter, where the latter's identity is unknown, or where the prejudiced party has himself caused the environmental damage, he may have a claim to recover the environmental damage from his insurer in terms of his first-party insurance cover. The position regarding claims for environmental damage under first-party insurance cover is also discussed under the following chapter.

CHAPTER 5

ENVIRONMENTAL INSURANCE COVER

5.1 INTRODUCTION

5.1.1 General

History has taught us that the famous saying that 'where liability goes, insurance is sure to follow'[1] does not necessarily apply where environmental pollution insurance coverage is concerned. On the other hand, the availability of insurance is directly influenced by the probability that a certain type of loss or liability may be incurred. The fact that environmental pollution damage and ensuing liability has become more of a certainty than an uncertainty over the last decade has led to a recent increase in environmental or pollution insurance cover offered in the insurance market.[2]

Although this chapter primarily covers the position in South African law, it also includes references to international authorities that confirm and illustrate similar or corresponding principles.

5.1.2 Interaction between Liability and Insurance

There is support for the view that the limits of liability should be determined by the insurability of certain risks.[3] Although insurability can be seen as an

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[1] See Abraham KS "Cleaning up the environmental liability insurance mess: Monsanto Lecture" 1993 (27) *Valparaiso University Law Review* 601 with reference to the statement by Traynor J in the case of *Escola v Coca-Cola Bottling Co* 150 P2d 436 (Cal 1944) 441.

[2] As stated by Havenga P "Liability for Environmental Damage" 1995 (7) *SA Merc LJ* 187 188; Van Niekerk JP "Liability Insurance: Successive but Overlapping 'Claims-made' Policies and a Question of Quantum" 2006 (18) *SA Merc LJ* 382 (hereinafter 'Van Niekerk (2006 *SAMLJ*)') notes that as in many delictual actions there is an insurer behind both parties, insurance law has become the new law of delict.

[3] See the discussion by Faure M & Grimeaud D "Interdependencies between Liability and Insurance" chap VIII in Faure M (ed) *Tort and Insurance Law Vol 5: Deterence, Insurability*

Footnote continues on the next page.

argument to define the rule of efficient liability, the insurability of a risk should not be a limiting factor that restricts or enforces legal liability, as the latter must remain an objective evaluation and not be affected or hampered by insurability issues.[4] Only once loss or liability has been established, must its insurability be evaluated. Harpwood is of the rather realistic opinion that it is not worth the trouble and expense of claiming in tort at all unless the defendant is in fact insured, or is very wealthy.[5] The influence of insurance on a decision regarding liability would move the focus away from the question as to whether the parties met the due standard of care to establish civil liability. It is submitted that it would also cause an inequality, as the same objective criteria are not applied to the parties, but their economic positions and ability to obtain insurance cover affect the outcome of the decision regarding liability.[6] And it remains a fact that lawmakers will always define liability broader than insurers are willing to define their cover.[7]

Liability and insurance clearly remain congruent in that a fault-based liability regime will lead to an increase in first-party insurance, whereas strict liability would lead to increased third-party insurance.[8] Legislators should not be affected by the issue of the insurability of an environmental damage risk when creating a liability regime for that specific risk. The availability of insurance in the market should also play no role in the objective assessment of liability,

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and Compensation in Environmental Liability: Future Developments in the European Union" (2003) 207 (hereinafter 'Faure (ed)').

[4] In the opinion of Faure (ed) 207; Winter RA "Liability Insurance, joint tortfeasors and limited wealth" http://www.sciencedirect.com/science?_ob=ArticleURL&_udi= B6V7M-4KF6BPH-1 (last accessed on 18 July 2006) 16 illustrates by his extensive publication the theory of how tort rules and liability insurance decisions interact; see also Sieburgh CH *Toerekening van een onrechtmatige daad* (2000) (hereinafter 'Sieburgh') 235 for a consideration of the importance of separating the determination of liability from the fact that insurance coverage for the liability exists.

[5] See Harpwood V *Modern tort law* (2005) 5.

[6] This would be contrary to s 9(1) of the Constitution that '[e]veryone is equal before the law and has the right to equal protection and benefit of the law'. Although economic position is not one of the factors listed in s 9(3), in my opinion it remains an unjustified inequality of the application of legal rules.

[7] See in this regard Busenhart J "The insurability of ecological damage" 2004 (March) *Environment Business Magazine* 26.

[8] As stated by Faure (ed) 210; according to Faure M & Skogh G *The Economic Analysis of Environmental Law and Policy* (2003) (hereinafter 'Faure & Skogh') 263 who are of the opinion that in a strict liability regime the incentive to take care is actually reduced.

although it is taken into account where the open-ended criteria for the determination of liability are interpreted.[9]

5.1.3 Advantages and Disadvantages of Insurance over Civil Liability Claims

5.1.3.1 Advantages

The greatest advantage of insurance is that it plays an important social role by selling safety to consumers.[10] The various reasons why insurance is preferred to civil liability compensation claims are that the civil or tort claims are inexact, costly to administer, take longer to finally deliver compensation, and a greater burden of proof rests on the plaintiff to prove a civil claim than to succeed with an insurance claim. The difficulty in proving causation and the nature and extent of damages suffered creates a huge hurdle for the plaintiff.[11] Although civil liability claims still have merit in those situations where the law has a distributive goal of favouring indigent plaintiffs at the expense of wealthier wrongdoers,[12] insurance does appear to offer a better solution.[13] It is submitted that obtaining due compensation from insurance is obviously a faster and cheaper process than the one required for obtaining an order for the payment of civil damages.

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[9] See the discussion by Niekerk JP "The Effect of Insurance on the Imposition of Civil Liability: A Review of and some Preliminary Thoughts on Recent Judicial Announcements" 1999 (11) *SA Merc LJ* 514 specifically 516 *et seq* on the influence of insurance on the determination of the delictual criterium of wrongfulness; see also Faure (ed) 211 that the choice of liability regime and the scope of liability should primarily be determined by objective legal rules, and 'not according to vague notions concerning insurability'.

[10] As stated by Wansink JH "Verzekering, een Juridisch Product in een Kritische Buitenwereld – Een Impressie uit Nederland" 1999 (4) *TSAR* 706.

[11] See the discussions in chap 4 par 4.2.5 and par 4.2.6 above.

[12] This is in terms of the approach known as the 'deep pocket' approach.

[13] See Faure & Skogh 280–283 who are of the opinion that the chances that circumstances cause the prejudiced party to remain uncompensated in a civil liability regime, are definitely greater than where there is insurance, as the risk for incomplete compensation in tort law is higher due to various factors as discussed in their study.

5.1.3.2 Disadvantages

One should, however, not lose sight of the potential of the internalisation of the costs of insurance. Polluters make the consumer pay to cover possible risks leading to insurance claims, as comprehensive insurance is very costly. The insurance costs are therefore relayed directly to the consumer, which means that the polluter-pays principle[14] is in reality not applied effectively. The much quoted statement made by Traynor J in the 1940s in California, that 'the risk of injury can be insured by the manufacturer and distributed among the public as a cost of doing business', reflects the true nature of insurance in that a risk is spread among many individuals, who in principle should not be expected to shoulder the load of the polluter's liability for environmental damage he has caused.[15]

5.2 OVERVIEW OF GENERAL PRINCIPLES OF INSURANCE IN AN ENVIRONMENTAL CONTEXT

5.2.1 Description

For the purposes of this study it is sufficient to describe insurance as a contractual arrangement between the insurer and the policyholder for the transfer and distribution of risk in exchange for the payment of a certain premium, and that the risk covered concerns the uncertainty of the occurrence of events enumerated in the agreement.[16]

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[14] The polluter-pays principle as addressed in chap 3 par 3.3.2.2 above.
[15] *Escola v Coca-Cola Bottling Co* 441.
[16] In accordance with Reinecke MFB, Van der Merwe S, Van Niekerk JP & Havenga P *General Principles of Insurance Law* (2002) (hereinafter 'Reinecke *et al* ') par 5; see also Wansink JH *Het nieuwe schadeverzekeringsrecht en Oude olielampjes en dwaallichtjes* Oratie van 28 maart 2006 bij de aanvaarding van het ambt van bijzonder hoogleraar op het gebied van het verzekeringsrecht aan de Universiteit van Leiden 3 for confirmation of the principle that what is required, is the subjective awareness in the minds of the parties at the time of conclusion of the insurance contract that the loss-causing occurrence is in fact uncertain, as provided for in art 7:925 BW, and for relevant case law in this regard; see also Reinecke MFB "Interesting aspects of the new Belgian insurance act: a few comparative remarks from a South African point of view" 1993 (1) *TSAR* 91 92 for the commendable
Footnote continues on the next page.

5.2.2 Elements of Insurance

5.2.2.1 General description

Insurance requires a contract between an insurer and an insured (hereinafter the 'policyholder') whereby the insurer undertakes in return of payment of a price or premium to render an insured a sum of money, or its equivalent, on the happening of a specified uncertain event in which the insured has some form of interest.[17] The contract must be lawful and not contrary to the Constitution, other statutes or to principles that determine civil legality.[18] This applies especially to the nature and effect of contractual pollution exclusion clauses in insurance contracts and is discussed extensively in chapter 6 below.[19]

It is a basic rule of insurance law that insurance is to cover fortuities and not certainties. A loss is not fortuitous if it is, for example, the result of the natural behaviour of the subject matter insured, or a result of the intentional act of the insured, or due to ordinary wear-and-tear, natural deterioration or internal deficiencies of the subject matter that would eventually cause damage in any case.

This principle complicates the insurability of post-remedial risks also known as 'brownfield' risks.[20] Where an owner acquires a brownfield site, which is a site that has been cleaned up and can be redeveloped, there is an unavoidable transfer of all existing environmental liabilities, some of which are obviously known. Post-remedial liabilities mostly include known conditions and their exacerbation, clean-up cost overruns and even some unanticipated

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definition of the contract of insurance as provided in the Belgian Wet op landesverzekeringsovereenkomst, which is examined in chap 7 par 7.4.4.1 below.

[17] *Lake v Reinsurance Corporation Ltd* 1967 3 SA 124 (W) 127; see also Reinecke *et al* par 100 for an identification of the essential elements of insurance contracts.

[18] Reinecke *et al* chap 6.3; also par 284 that the insured may not enjoy cover for his intentional conduct. Where his conduct is negligent public policy will dictate whether it is lawful or not for purpose of insurance cover.

[19] See chap 6 par 6.5.

[20] Chap 2 par 2.3.3.5.3 and chap 2 n 202 for a description of a 'brownfield site'.

conditions. Site pollution liability policies provide cover only where the policy clearly provides cover for these specific losses. This type of insurance cover is expensive and is usually obtained to facilitate the sale of a contaminated yet cleaned-up site where the new owner requires a security that he will be adequately indemnified for future costs.[21]

5.2.2.2 Insurable interest

Both the concept of insurable interest and its role in insurance have been uncertain.[22] Insurable interest includes every interest in property or life that is not illegal or immoral. But whether it is a validity requirement for an insurance contract has been the subject of debate. It has been argued that as insurable interest is an English-law and therefore foreign concept, its introduction into our insurance law was unnecessary.[23] Briefly, the position in South African law is that where an insured suffers loss or damage, an insurable interest existed. The concept 'loss or damage' in law, which is discussed extensively in chapters 4, 5 and 6, has bearing upon and informs the concept of 'insurable interest' and its presence in an insurance relationship.[24] Both property loss and other loss or damage, for example, natural resource damages as discussed in the context of first-party insurance cover below, as well as legal liability incurred for causing loss or damage to another via the environment, indicate the presence of an insurable interest and would trigger insurance cover.[25]

Ascertainable interests as well as future interests could serve as insurable interests for purpose of insurance cover, and must exist at the time when the

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[21] As stated by Neuman S "Adequate Insurance Coverage for Post-Remedial Risks" 2007 *Environmental Claims Journal* 26 27; Larsson M *The Law of Environmental Damage: Liability and Reparation* (1999) (hereinafter 'Larsson') 525 explains that it should be noted that knowledge of loss disqualifies the risk from cover, yet not the knowledge of a potential loss.

[22] See the detailed discussion by Reinecke *et al* pars 34–38.

[23] See the opinion of Van Niekerk JP "Maintaining the Principle of Indemnity: Theory and practice" 1996 (3) *TSAR* 572; see also in this regard Schulze WG "Extension Clauses in Insurance Contracts – Uncertainty Rules OK?" 1997 (9) *SA Merc LJ* 64.

[24] See in this regard Reinecke *et al* par 26.

[25] For a general discussion of interests that qualify as insurable interests in South African law, see Reinecke *et al* chap 3.2.2; and chap 3.3.2.

cover is triggered.[26] The potential triggers that trigger cover specifically in respect of environmental insurance are discussed in chapter 6 below.[27]

Where the pollution coverage is in the form of capital insurance, the insurer is liable to pay the insured the agreed amount. Where pollution insurance is in its nature indemnity insurance, it must be kept in mind that as the essence and purpose of indemnity insurance remains one of indemnity, the extensive discussion of liability for environmental damage in the preceding chapters, and the nature and extent of damages covered are crucial for an effective study of pollution damage insurance.[28]

As this study does not lend itself to an extended discussion of insurable interest *per se*, this brief summary should suffice.

5.2.2.3 The premium

The payment of some form of premium is an essential element of insurance. Where pollution insurance cover forms part of a more general cover, for example, a property owner's policy, the premiums are not as high as in the case of specialised environmental pollution insurance. The additional benefit that insurance in an environmental context offers is that it promotes the enforcement of duties to protect the environment through the adaptation of insurance premiums, depending on the policyholder's risk management and profile. A risk reduction could lead to lower premiums and reduced deductibles.[29] Although the assessors in the property insurance industry and in the liability insurance industry are experts at calculating and pricing the risk

[26] As stated by Reinecke *et al* pars 67*et seq*.
[27] See chap 6 par 6.3 below; Reinecke *et al* par 64 formulate it as the time of materialisation of the peril insured against. Although 'materialisation' creates the impression of 'acts committed', 'occurrence' or 'loss occurrence', in context of pollution damage the term can refer to various triggers which does not necessarily include only these two triggers as mentioned.
[28] See Reinecke *et al* pars 109; see also chap 4 par 4..4 above.
[29] Faure & Skogh 263 support the argument that it would be more beneficial to offer a deductible rather than to obtain cover to insure minor environmental losses; see also Larsson 108 for a more detailed discussion of the role of premiums as an environmental compliance mechanism.

they insure, the uncertainties relating to the predictability of the risk of environmental damage causes a general over-inflation of premiums for pollution cover.[30]

5.2.2.4 Insurer's duty to indemnify

In general, the insurer is liable to deliver direct compensation in the form of a reinstatement, or indirect compensation in the form of money.[31] This will be the case for first-party insurance such as property insurance as discussed below. In the context of indemnity insurance, the insurer's performance usually consists of the payment of monetary damages to a third party. See the discussion in chapter 6 below on the various issues surrounding the extent of the indemnification.

5.2.2.5 Risk and causation

Risk can be described as the possibility and probability of an undesirable change in circumstances or the possibility or probability of harm.[32] Insurance contracts are usually based on the assumption that the risk has not yet materialised and is not a certainty, as already discussed above.[33] Risk that is altered or increased during the insurance period is clearly excluded from the original cover.[34] Contractual clauses are usually included to limit or exclude risks from cover. These are dealt with in great detail in chapter 6 below.[35] The risk that materialises must cause the insured loss, harm or liability.[36] As causation also remains one of the key issues of environmental damage insurance, it is addressed extensively in chapter 6 below.[37]

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[30] See in this regard Faure & Skogh 264; see also chap 6 par 6.2 on the predictability of the risk as a specific issue in environmental insurance.
[31] See in general Reinecke *et al* par 116.
[32] As stated by Reinecke *et al* par 261; see also in this regard par 265.
[33] See par 5.2.2.1 above; see also in this regard chap 6 par 6.1 n 1 below.
[34] See in this regard *Lourens v Colonial Mutual Life Assurance Society Ltd* 1986 3 SA 373 (A) 384.
[35] See chap 6 par 6.5 below.
[36] See in general Reinecke *et al* par 10.4 on causation in insurance law, par 277 that 'there must be a link between the peril and the loss or occurrence as described in the contract'.
[37] See chap 6 par 6.4 below.

5.2.2.6 Duty of disclosure

All insurance policies are subject to the duty of good faith.[38] The policyholder must disclose every material fact or circumstance known to him, or which he is deemed to know or should have known, to the insurer prior to conclusion of the contract, as well as during the existence of the contract where he is required to do so.[39] What is material will depend on the application of the reasonable person test.[40] Failure to disclose could render the contract voidable at the election of the insurer who may resile from the contract or exclude a specific risk from cover. It is also possible to claim delictual damages for damage or loss caused by the misrepresentation.

In case of pollution insurance sufficient information relating to the potential risks and their extent is crucial for purposes of risk determination and for providing effective insurance cover to the insured. On the flip side of the coin, sufficient information is crucial for the insurer's insurance business. Any knowledge that a site is contaminated, or that a process causes pollution, or that these have the potential to cause pollution or to cause pollution to eventually migrate to other properties or public property, should be disclosed. It is obviously more difficult to expect full disclosure of environmental pollution risks if the policy is a general public or private liability policy or where the cover is provided under another type of general policy such as a homeowner's policy, than can be expected where the policy specifically provides environmental pollution coverage.

Where the policyholder has to do a due diligence investigation and complete a proposal form based on a questionnaire, proving misrepresentation becomes

[38] As held in *Mutual & Federal Insurance v Oudtshoorn Municipality* 1985 1 SA 419 (A) 433; it should be noted in passing that there is no standard duty of good faith in the general South African contract law; see also Fogleman V *Environmental Liabilities and Insurance in England and the United States* (2005) Part B (hereinafter 'Fogleman') 1574 on the impact of the duty of good faith as acknowledged in the UK on the duty to disclose information.
[39] See in general the discussion on the extent of the duty to disclose in Reinecke *et al* par 7.5.2; see also Fogleman 1574 who evaluates the duty to disclose only material facts.
[40] See Reinecke *et al* par 199 for a discussion of the test; see also *Liberty Life Association of Africa Ltd v De Waal* 1999 4 SA 1177 (SCA) following the judgment in *Mutual & Federal Insurance v Oudtshoorn Municipality* 435.

easier.[41] The application does not form part of the insurance contract unless it is expressly included as part of the policy.[42] This is usually done by way of a 'basis of contract' clause which declares as follows: (a) that the policyholder confirms that he has investigated his responses; (b) that he warrants that they are correct;[43] (c) that the insurer issues the policy on the basis of these responses; and (d) that the proposal forms part of the insurance policy.

5.2.2.7 Duty to mitigate loss

Although it is an implied duty, some policies specifically state that the policyholder has the duty to mitigate his losses.[44] In an environmental insurance context this offers the benefit that a policyholder has to act proactively in order to prevent environmental harm, which ensures compliance with both the precautionary principle[45] and with the principle of preventative action in international environmental law.[46]

5.2.2.8 Quantification of loss or damage

Once a loss has occurred, the claim has vested and the insurer's liability in terms of the policy has been determined, the loss must be quantified. In order to avoid the problematic issue of compensation valuation and quantification, clauses in the policy document such as a reinstatement clause, a valued policy or a policy for new value may offer some relief.[47] These will be of great

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[41] De Meo RA, Eldred C, Utiger LA, Scruggs LS "Insuring against Environmental Unknowns" Fall 2007 *Journal of Land Use and Environmental Law* 23 discuss the inadequacy of liability insurance products, and argue that the proposer's duty of due diligence is an integral step to ensure effective insurance cover.

[42] See Fogleman 1575 on general insurance practice in this regard.

[43] Care must be taken to ensure that the policyholder is in fact providing a warranty, and that it is not merely a representation of fact, due to the serious nature of the consequences of a breach of warranty.

[44] See Reinecke *et al* par 10.6 for a discussion of the policyholder's duty to minimise his losses; see especially the examination in Fogleman 599 on the 1966 version of the CGL standard policy that expressly requires the policyholder to prevent or mitigate his losses. See also the discussion in chap 6 par 6.5.3 on the history and effect of the wording of the various pollution exclusion clauses in CGL policies over time.

[45] As referred to in chap 3 par 3.3.2.1(b) above.

[46] As referred to in chap 3 par 3.3.2.1(c) above.

[47] See in general Reinecke *et al* par 300 for a discussion of the general principles of quantification of a claim and the value of these clauses; see also Reinecke *et al* chap 16.2 for

Footnote continues on the next page.

value where the reinstatement refers to the remediation or clean-up of the environment, as the value as determined in the policy will apply irrespective of the real remediation costs. As the issues of quantification are universal and extensive, they are addressed specifically in chapter 6 below.[48]

5.2.2.9 Subrogation

The insurer retains his rights of subrogation, *ex lege* or contractual, to conduct proceedings against the third party who caused the loss or damage to the insured. This will apply specifically in a situation where a policyholder succeeds in claiming under his first-party insurance for damage caused by another to the insured interest. The claim of the insurer against the third party is an independent claim, and in an environmental context will also resort under the evaluation of liability discussed in chapters 3 and 4 above.[49]

Issues regarding the interpretation of insurance contracts in general and the pollution exclusion clause in particular, are discussed not in this chapter, but in chapter 6 below.[50]

5.2.3 Classification of Insurance Contracts

5.2.3.1 General criteria

The general criteria for classification include (a) the nature of the interest insured; (b) the nature of the risk; (c) the way in which the amount recoverable under the policy is determined; and (d) the way in which the insurer's profits are distributed.[51] Some or all of these criteria are applied in the classification of the types of policies that offer environmental insurance cover.

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an examination of reinstatement as the performance due by the insurer; see Merkin RM *Colinvaux's Law of Insurance* 8th ed (2006) (hereinafter 'Merkin') 337–345 specifically for an examination of the distinction between the measure of indemnity under a valued and an unvalued policy.

[48] See par 6.6 below.

[49] For a general discussion of these aspects of subrogation, see Reinecke *et al* pars 390–399.

[50] See par 6.5.5 below.

[51] As identified by Reinecke *et al* par 8.

5.2.3.2 Indemnity and non-indemnity insurance

Whereas the nature of indemnity insurance is to indemnify the insured, the principle of indemnity does not apply to non-indemnity or capital insurance. The difference lies in the nature of the insurable interest. For indemnity insurance the interest reflects a financial loss or damages and is therefore of a patrimonial nature, and for capital insurance the interest is regarded as non-patrimonial in substance.[52] Health, bodily injury and life insurance fall under the latter, and as they fall outside the scope of this study, they are not examined in greater detail.[53] Where insurance is, however, classified according to the nature of the event insured against, it might 'cut across the fields of both indemnity and non-indemnity insurance'.[54]

For purposes of this study, indemnity insurance can basically be divided into property or asset insurance, as dealt with in the examination of first-party insurance below,[55] and liability insurance. The latter is examined in the context of first-party insurance to the benefit of a third party and third-party insurance in the text below.[56]

5.3 ENVIRONMENTAL DAMAGE INSURANCE

5.3.1 General

At a first glance, insuring one's liability against pollution damage appears to be a mere matter of obtaining liability insurance cover. Internationally, environmental damage claims were traditionally made against the insurers in terms of 'Comprehensive General Liability Policies' or 'Commercial General

[52] As stated by Reinecke *et al* par 9.
[53] See par 5.3.2.7 below for a brief classification of environmental insurance policies.
[54] In the words of Reinecke *et al* par 11.
[55] As discussed in par 5.3.2.3 below.
[56] See par 5.3.3 and par 5.3.4 below.

Liability Policies' (hereinafter referred to as 'CGL').[57] Over the years insurers have adapted their policies to trends and incidents in the insurance market to the extent that it has become nearly impossible to succeed with pollution claims under these policies.[58] In South Africa the first steps to allow cover in this regard were made by the extension of the PLIP Policies[59] to cover liability due to environmental damage caused by pollution. Over time, cover has been affected due to the increased inclusion of pollution exclusion clauses into policies. This has been the case globally, as discussed extensively in chapter 6 below.[60]

In addition to the cover provided under the more 'general' insurance policies such as property and pure liability policies, there is a limited availability of specialised environmental insurance policies both in national and international markets.[61] Due to the complexities within their specialised industry, environmental insurance underwriters have always been on the cutting edge of new products and new wordings.[62] The reality remains that pollution liability policies are expensive and uncommon in the general insurance market.[63] Specialised environmental liability products are discussed in this chapter below,[64] whereas the terminology used in these policy documents is examined in chapter 6 below.[65]

To summarise, insurance against environmental damage claims can broadly be divided into first-party insurance, for example, property and life insurance,

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[57] See the discussion of the history and current statutes of the CGL policy in chap 6 par 6.5.3 below.
[58] Insurers continued to add more exclusion and limitation clauses by issuing policy revisions on a regular basis to effectively narrow the scope and extent of the cover provided; see in general the discussion in chap 6 par 6.5 below.
[59] Special Risks Underwriters *Yesterday's policies won't meet tomorrow's needs: The PLP policy* (1992) 3.
[60] See chap 6 par 6.5 below.
[61] As stated by Abraham 602.
[62] See the opinion held by Siesko DM & Weiss N "Use and Evolution of the Claims-Made Policy Form in Environmental Insurance: Selected Issues" 2008 (20) *Environmental Claims Journal* 39 (hereinafter 'Siesko & Weiss') 53 in this regard.
[63] Italiano ML "Environmental Impairment: Dealing with the Legalities" 1990 (August) *Risk Management* 38 (hereinafter 'Italiano') 39 refers to and endorses this finding of the General Accounting Office Report in the USA in this regard.
[64] See par 5.4.4 below.
[65] See par 6.5.6 below.

disability and health insurance as a hybrid form, and liability insurance as a form of third-party insurance. Pollution-related claims brought by third parties against a policyholder are obviously better suited under liability insurance cover. These forms of insurance and specific refinements of the cover provided and their application in the field of specifically pollution-related insurance claims are discussed in this chapter.

5.3.2 First-party Insurance

5.3.2.1 Nature of first-party insurance

The aim of first-party insurance is to obtain compensation for restitution of the first-party interest, and is generally more effective than a civil liability claim. The insurer is liable to deliver direct compensation in the form of a reinstatement, or indirect compensation in the form of money. It is the possibility of reinstatement that makes this type of cover attractive for purposes of the remediation of environmental damage. A potential plaintiff or claimant can protect himself prior to the polluting occurrence by obtaining specialised private first-party insurance cover.[66] Property, fire, all-risk car and life and personal injury policies are all forms of first-party insurance that offer incidental pollution damage cover.[67]

5.3.2.2 Advantages and disadvantages of first-party cover

The advantages include that it is easier to provide effective compensation for environmental harm under first-party insurance, as it is easier for insurers to narrow down the risk pools for first-party insurance than it is for liability insurance.[68]

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[66] See in this regard Havenga in Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003) (hereinafter 'Faure & Neethling') 137.

[67] See in general Bocken H "Alternatives to Liability and Liability Insurance for the Compensation of Pollution Damages: Part I" 1987 (4) *TMA* 83 for an identification of the possible policies.

[68] Faure (ed) 208 states as follows, that in third-party insurance, however, '[t]he insured will not know whether he hits a poor or a rich victim'.

The disadvantage of first-party cover for pollution risks is that the policyholder or prejudiced party has to carry the financial burden of paying for the protection of his own interests, because he is unable to pass these costs on to the polluter which is clearly a violation of the polluter-pays principle.[69] Amounts that are effectively paid out under first-party insurance are usually lower than amounts paid out in terms of a civil liability scheme and liability insurance.[70]

5.3.2.3 Property Insurance

5.3.2.3.1 General description

Property policies cover any impairment, loss or damage sustained directly by the policyholder by the realisation of a risk concerning the policyholder's property. Some property policies are all risks or multi-peril policies, such as a general homeowner's policy, whereas others are for named perils only, for example, a fire insurance policy.[71] Property insurance policies often include a classic first-party insurance cover component as well as a third-party insurance component. The latter provides cover for a liability incurred due to the infringement of someone else's interest, and is thus a form of liability insurance, which is discussed under that heading below.[72]

5.3.2.3.2 Nature of and requirements for property insurance

First-party property insurance provides cover for the protection of one's own interest, such as insurance cover for fire or flood damage to property.[73]

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[69] As in accordance with the polluter-pays principle as discussed in chap 3 par 3.3.2.2 above; Faure & Skogh 280 also comment on this disadvantage of first-party insurance cover.
[70] As stated by Faure (ed) 218.
[71] See in general Howard MH & Mackowsky MA "Defending claims for environmental damage under first-party property insurance policies" 2002 (Spring) *Tort & Insurance Law Journal* 883 (hereinafter 'Howard & Mackowsky') 886 for a discussion of the various types of policies.
[72] See par 5.3.4 below.
[73] Larsson 525 argues that it therefore covers all property damage and acknowledges that it includes even damage with ecological dimensions.

Policyholders are protected irrespective of any tort liability. Cover is usually obtained for the maximum potential loss that the policyholder may suffer.[74]

General requirements for coverage are (a) direct physical loss or damage;[75] (b) caused to the insured property; (c) in which the policyholder has an insurable interest; (d) caused by or resulting from a covered fortuitous event;[76] (e) during the policy period. Cover is clearly not provided for damage that the policyholder knew was in progress prior to the inception of the policy.

It is less likely that cover for pollution-related claims will be provided under a property policy than under a liability policy.[77] There are specialised property policies available in the market that are specifically designed to cover pollution damages.[78] It has, however, been general practice since the 1960s to severely limit cover by the inclusion of specific exclusion clauses for damage caused by 'pollution and contamination' in property policies as well.[79] These clauses are discussed extensively in chapter 6 below.[80]

5.3.2.3.3 'Insured property'

The term 'insured property' often requires interpretation in disputes between an insurer and a policyholder. It seldom includes the soil or the water under or adjacent to the property, where, for example, there is a stream or river that forms the boundary of the property. Whether this will be the case will depend

[74] See Fogleman 622 for an evaluation of the distinction between property and liability policies based on these elements.
[75] Howard & Mackowsky 909 state that damages resulting from delay, loss of market, interruption of business and lost profits are not seen as direct physical losses.
[76] The following practical description of the term 'fortuitous' can be found in the Restatement of Contracts §291: 'a fortuitous event is an event which, so far as the parties to the contract are aware, is dependent on chance'; Howard & Mackowsky 897 declare that the modern trend remains to view fortuity from the subjective standpoint of the individual policyholder.
[77] See in this regard the pollution exclusion clauses found in first-party insurance policies as examined extensively in chap 6 par 6.5 below, and the limited extent of damages claimable as evaluated in chap 6 par 6.6 below.
[78] Bocken H "Alternatives to liability and liability insurance for the compensation of pollution damages: Part 2" 1988 (1) *Tijdschrift voor Milieuaansprakelijkheid* 83 provides examples of these policies.
[79] See specifically Fogleman 1580 for applicable case law in the UK in this regard; and see 628 on the position in the USA.
[80] See the extensive discussion in par 6.5 below.

on the exact scope of the policy and on the interpretation of the specific description of 'insured property'. In some situations 'covered property' includes property 'owned, used, intended for use, or for which the policyholder is responsible or legally liable for'.[81]

5.3.2.3.4 'Physical loss or damage'

The exact meaning of 'direct physical loss or damage' is often contested. It is often found to exclude a decrease in property value, pure economic loss and consequential or intangible loss. The word 'direct' in this context has been interpreted as meaning 'proximate' or 'dominant'.[82]

5.3.2.3.5 'Caused by or originating from'

The requirement that the damage must have been 'caused by or originating from' has been held to mean that the incident was the 'efficient proximate cause' of the damage.[83] Alternative wording used is that the policy covers 'resulting' or 'ensuing' property damage or loss.[84]

5.3.2.3.6 Period of cover

Standard property policies provide that the insured property must be damaged during the period of cover, which then in accordance with the 'manifestation' or 'loss occurrence' trigger would disqualify any claim for gradual or long-tail pollution under these property policies.[85] Cover is provided for a specific number of 'insured events', and for each of these deductibles, self-insured

[81] See specifically Howard & Mackowsky 892 for case law that even includes cover for property 'held in trust'.
[82] See in this regard *Columbiaknit Inc v Affiliated FM Insurance Co* 1999 WL 619100 (D Or Aug 4 1999).
[83] Howard & Mackowsky 894 confirm that this has been held in the majority of USA case law.
[84] Chesler RD & Schulman JL "Key Concepts in Property Insurance for Water Loss" 2007 (October) *Environmental Claims Journal* 249 (hereinafter 'Chesler & Schulman') 251 provide and examine examples of this type of policy wording and its application in relevant case law.
[85] Howard & Mackowsky 895 confirm that this is the general rule, and that in the majority of cases it was held that there is no cover where damage manifests itself subsequent to the policy period; see the detailed discussion of 'long-tail liability' in chap 6 par 6.3 above.

retentions and limitations of claim apply.[86] Property policies generally contain lower limits of indemnity when compared to liability policies.

5.3.2.3.7 Exclusions from cover

Insurers are constantly evaluating their policies to minimize their exposure to risks. Standard exclusions from property policies include some of the following.

Fraudulent conduct or intentional realisation of the risk by the policyholder excludes claims from cover. Other exclusions from cover often include exclusions of very large claims, or where a claim is for a loss caused by an occurrence of gradual and non-accidental damage.[87]

Claims for damage caused to the property by 'inherent vice' or 'latent defect' that is not discoverable upon reasonable inspection are excluded under the policy. An 'inherent vice' refers to the situation where the internal composition of the property or some aspect thereof causes its damage or destruction.[88]

Damage caused by normal 'wear, tear and deterioration', and by 'rust and corrosion' is as a general rule excluded from cover.[89]

As the infiltration of water onto premises can have catastrophic results, claims for water damage or 'water losses' are mostly excluded. The management of

[86] Howard & Mackowsky 900 warn of the complications that arise where a single event can be caused by single or multiple causes, as is also addressed in greater detail in chap 6 par 6.4.3 below.
[87] See specifically chap 6 par 6.5 on the extensive examination of the issues relating to these exclusions.
[88] In the words of Howard & Mackowsky 904 in their discussion of case law, that the property must 'contain the seeds of its own destruction'.
[89] Howard & Mackowsky 905 elaborates that is covers the degeneration of the substance of an object arising from decay, corrosion or disintegration, and is especially relevant in an environmental context where these cause leaks in underground storage tanks, causing seepage of toxic substances; see in this regard *SW Energy Corp v Continental Insurance Co* 974 P2d 1239 (Utah 1999).

a water damage claim is time-consuming and damage such as mould, decay, rot and structural damage is often costly to repair or remedy.[90]

A typical property policy exclusion concerns loss caused by 'the enforcement of any law or ordinance' that regulates the construction, use, repair or removal of the property. It is important to note that this has the potential to affect a claim to recoup statutory 'clean-up costs'.[91]

The specific interpretations of various elements of pollution exclusion clauses that are of relevance to policies that provide property cover are discussed in chapter 6 below.[92]

5.3.2.3.8 Additional cover

It is also possible to obtain 'clean-up cost' insurance, as well as 'debris removal' cover, as discussed below, under specialised property insurance cover.[93] Some policies also provide limited coverage for the process of 'pollutant removal'.[94] Property policies often contain a 'debris removal' clause that covers removal of the remains of the insured property, in which case 'debris' then serves as a synonym for the 'insured property' itself, unless debris is very specifically defined.[95]

Where a 'brownfield site' is insured, cover is provided for post-remedial liabilities that could also include known conditions. Site pollution liability or 'SPL' policies provide cover only where the policy clearly intends to provide

[90] This is especially relevant due to increased flooding and a worldwide increase in violent storms, which is being blamed on global warming; see in this regard also Chesler & Schulman 249.
[91] Howard & Mackowsky 908, however, recognise that the exclusion does not apply where the occurrence of the insured event results in the application of such a law or ordinance.
[92] Par 6.5.3.
[93] As referred to by Larsson 528; see also Fogleman 625 for an evaluation of this type of clause in view of relevant USA case law.
[94] According to Howard & Mackowsky 900 'pollutants' are usually specifically defined.
[95] An example is a clause that provides cover 'within the sum insured, for expenses incurred in the removal of debris of the property covered which may be destroyed or damaged by the peril insured against.'; see also Howard & Mackowsky 898 who state that the clause is usually qualified and provides only for limited cover for the removal of only specific forms of debris.

cover for these specific losses. The purpose of this type of insurance cover is usually to facilitate the sale of a contaminated yet cleaned-up site where the new owner feels that he will be adequately indemnified against future claims.[96] Tailored 'SPL' policies usually provide cover for clean-up costs for known or unknown pre-existing conditions, third-party bodily injuries and third-party property damage that could include a claim for the diminution of third-party property values, or even natural resource damages.[97] Cover obviously depends on the disclosure of the known risks when obtaining the insurance.[98]

5.3.2.3.9 Claims procedures

Property policies mostly require the policyholder to give 'prompt' or 'immediate' notice to the insurer of the loss within specified time limits, which provides the insurer with the opportunity to investigate, determine or adjust a claim.[99] The interpretation of whether the policyholder complied with this provision will clearly depend on the facts and circumstances, as well as the policy wording, of each case. First-party insurance policies generally contain suit limitation clauses that determine the time period within which the policyholder must sue the insurer upon rejection of his claim by the latter.[100]

5.3.2.3.10 Burden of proof

For 'all risk' policies the policyholder typically carries the burden of proving that the damage to the insured property was caused by a proximate insured

[96] See in general Neuman 27 on the insurability of these sites.
[97] As identified by Neuman 28.
[98] See in general also Ferrey S "Converting brownfield environmental negatives into energy positives" 2007 (34) *Boston College Environmental Affairs Law Review* 417 420 on the duty of disclosure.
[99] Called the 'claims limitation' clauses; see specifically the discussion of the validity of time bar clauses in chap 6 par 6.5.2 and 6.5.4 below; see also Howard & Mackowsky 912 for a discussion of the procedural requirements; see also in general Merkin 695 on the insured's notification obligations.
[100] Howard & Mackowsky 913 hold the view that courts generally uphold suit limitation clauses under property policies.

peril. The insurer then carries the burden to prove that the claim falls within a policy exclusion.[101]

In case of 'named-peril' policies the policyholder shoulders a heavier burden, as he has to prove that the damage resulted from one of the specifically named perils.[102] See a further examination of these two forms of policies below.[103]

5.3.2.4 All risk insurance

5.3.2.4.1 History and nature of cover provided

The principle of universal cover against all risks was peculiarly a Continental one. The principle against named perils only developed during the eighteenth century. Although a general all-risks policy in its nature provides universal coverage, legislation, the nature of the insurance contract and the agreement between the parties could lead to certain exclusions from the comprehensive cover.[104] The benefit of this type of cover is that the policyholder does not have to prove any causal link between a specific peril and the loss he suffers.[105]

The use of the term 'all risk' insurance is misleading as it appears to the average policyholder that the policy covers all loss, however caused, and that the nature of the casualty causing the loss is immaterial. This title used for the cover provided by a Commercial General Liability insurance policy or 'CGL' creates a similar impression.[106]

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[101] See in this regard specifically chap 6 par 6.5 below on the nature of pollution exclusions and the burden of proof that rests upon the insurer; see in general also Merkin 308.
[102] Howard & Mackowsky 895 state that in both cases the policyholder still has to prove that the loss occurred within the 'policy period'.
[103] See par 5.3.2.4, and par 5.3.2.5 in this regard.
[104] As identified by Van Niekerk JP *The Development of The Principles of Insurance Law in the Netherlands from 1500 – 1800* Vol 1 (1998) 347–349.
[105] As reiterated by Reinecke *et al* par 275; see also *Blackshaws (Pty) Ltd v Constantia Insurance Co Ltd* 1989 3 SA 478 (C) 482.
[106] See the discussion in chap 6 par 6.5.3 below specifically on CGL insurance exclusion clauses.

5.3.2.4.2 Exclusions from 'all risk' cover

As mentioned, legislation, the nature of the particular insurance contract and the policy document itself could limit the extensive cover. In the market these policies usually include extensive standard exclusion clauses.[107] As far as pollution-related claims are concerned, pollution exclusion clauses can be either an absolute pollution exclusion or merely a qualified or limited pollution exclusion clause. The wording that loss caused by 'pollution or contamination' is excluded from cover is often used.

5.3.2.4.3 Burden of proof

The normal situation applies in that the policyholder has to prove that the loss was proximately caused by an insured peril, and that he suffered the loss. The burden of proof then rests with the insurer to show that the loss arose from an excluded cause and is therefore not covered under the policy, or that another defence exists that denies his liability such as prescription of the claim. It is important to note that any clause that restricts an insurer's liability under an 'all risks' policy must, however, be interpreted restrictively.[108]

5.3.2.5 Named peril insurance

5.3.2.5.1 Nature of cover provided

This form of insurance provides cover for assets and property owned by the policyholder, against risks posed by specified named events or perils that cause a direct physical loss. This limits the proximate cause to an immediately destroying factor. These are usually written on a 'discovered and reported' basis, and comprehensively cover damage found 'on, within, under or onto'

[107] As confirmed by McGee A *The Modern Law of Insurance* 2nd ed (2006) (hereinafter 'McGee') 630.
[108] As discussed by Reinecke *et al* par 275; see also *Auto Protection Insurance Co Ltd v Hanmer-Strudwick* 1964 1 SA 349 (A) 354 in a South African context.

the insured property.[109] Full restitution under these policies is guaranteed as it also provides cover for costs and expenses incurred.

5.3.2.5.2 Burden of proof

In this case the policyholder carries the burden of proving that the loss was in fact caused by one of the specific 'named perils'.[110]

5.3.2.5.3 Exclusions from cover

Policies often include limitations relating to the type of ensuing loss or damage, for example, where it provides cover for loss of use of the property only, and not for the deterioration of its value.[111] Another form of exclusion that is readily found is where 'water loss' is excluded from cover.[112] Various other exclusions are discussed in this chapter as well as chapter 6 below, for example, the standard pollution exclusion clauses which can also be found in these policies.

5.3.2.6 Additional cover policies

This type of cover mostly includes the 'removal of debris' clause that covers the expenses incurred to remove debris caused by the direct property loss.[113] Cover for 'clean-up costs' can also be taken up at an extra premium in addition to the cover provided under traditional first-party property insurance.

It is also possible to include insurance cover for consequential losses suffered due to business interruption, which is a reality where damage to

[109] Larsson 529 states that 'discovery' means where the policyholder has 'become aware' that there is environmental damage on site.
[110] Merkin 308 *et seq* elaborates on the insured's obligations as far as meeting his burden of proof is concerned.
[111] This limitation is not generic and would depend in each case on the wording of the policy reflecting the intentions of the parties to the insurance agreement.
[112] See also in general the 'water loss' exclusion referred to in par 5.3.2.3.7 above.
[113] See the explanation of the scope and effect of this type of clause in par 5.3.2.3.8 above.

environmental resources, such as clean water, affects a production process that depends on the resource.[114]

5.3.2.7 Health, disability, personal injury and life insurance

As liability may not be settled for these forms of insurance, they are cheaper to administer.[115] Although environmental damage could potentially cause bodily injury, impairment of health or loss of life, the scope of this study is limited because it cannot include an extensive examination of these forms of damage as well.

5.3.3 Insurance to the Benefit or on Behalf of a Third Party

5.3.3.1 General purpose and extension clauses

It is possible for a first-party or a third-party policy to offer cover to a third person who is not the insured. This is usually done by the inclusion of a contractual extension clause that extends the cover to allow for claims under the policy by persons other than the insured. These are frequently included in a variety of insurance policies.[116] An example would be where property or fire insurance cover also provides cover for the property of the insured as well as for the goods of third parties brought onto the insured property. As extension clauses are also found in liability policies, they apply to all of the types of policies that provide cover for pollution damage.

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[114] As discussed by Larsson 529, 532.
[115] In the opinion of Faure & Skogh 280.
[116] See in this regard Schulze WG "Extension Clauses in Insurance Contracts – Uncertainty Rules OK?" 1997(9) *SA Merc LJ* 64; also Schulze WG "Extension Clauses in Insurance Contracts – A New Angle" 1997 (9) *SA Merc LJ* 216; see also Reinecke *et al* chap 15 for a detailed discussion of these 'third-party contracts'; especially par 431 to 433 on extension clauses. See also the Dutch EDI-policy as discussed in this chap par 5.3.3, par 5.4.2 and chap 7 par 7.5.4.6 below.

This will also be the case where the statutory exception in the Insolvency Act[117] creates rights for a third party against the insurer of an insolvent insured or policyholder.[118]

Where the insurance is on behalf of the third party, the third party as co-insured can claim directly from the insurer, regardless of the liability of the insured policyholder for the loss. The third party must only prove the causal link between his loss and the insured event based on the contractual relationship between the insurer and the policyholder. The third party is bound to the limits of the coverage provided.[119]

5.3.3.2 Nature of insurance cover

This type of cover can in general be identified as direct casualty insurance taken out by a policyholder for the benefit of unnamed third parties.[120] The exact structure of these clauses has been hotly debated in South African law for some time.[121]

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[117] Act 24 of 1936.

[118] S 156 states: 'Whenever any person (hereinafter referred to as the insurer) is obliged to indemnify another person (hereinafter referred to as the insured) in respect of any liability incurred by the insured towards a third party, the latter shall, on sequestration of the estate of the insured, be entitled to recover from the insurer the amount of the insured's liability towards the third party, but not exceeding the maximum amount for which the insurer has bound himself to indemnify the insured.'. As this type of direct right by a third party against the insurer is acknowledged in this situation, it would not be unusual to also extend this direct right to environmental liability claims as is the position in the Netherlands as discussed in chap 7 par 7.5.4.6.2 below.

[119] See the Dutch EDI policy as discussed in par 5.3.3, par 5.4.2 and chap 7 par 7.5.4.6 below as an example.

[120] In the words of Bocken H "Financial Guarantees in the environmental liability directive: Next time better" 2006 (15) *European Environmental Law Review* 13 21 on the nature of the environmental damage insurance or EDI policies; see also 23 that it could also offer effective protection where it provides cover upon the insolvency of the insured.

[121] This is illustrated by the following case law that pertains to a variety of insurance contracts that intend to benefit a third party who is not the insured. For recent cases, see *Pieterse v Shrosbee NO* 2005 1 SA 309 (SCA) par 9 where the court held that regarding the vesting of the rights of nominated beneficiaries in life insurance policies, a contract between the third party (as the person who suffers harm or loss due to the pollution) and the *promittens* (the insurer) is established upon the third party's acceptance of the benefit; in *Wessels NO v De Jager en 'n ander NNO* 2000 4 SA 924 (SCA) 928 it was held that the third party does not have a right once the initial contract to the benefit for a third party is concluded, but that he only gets a competency to accept the benefit, upon which his right against the *promittens* vests; for the older yet still authoritative cases on the construction of *stipulatio alteri*, see *Mutual Life Insurance Co v Hotz* 1911 AD 556; *Crookes v Watson* 1956 1 SA 277 (A);
Footnote continues on the next page.

It is trite law that where the clause is in effect a stipulation for the benefit of a third party, the third party obtains rights against the insurer upon acceptance of the benefit. Uncertainty, however, reigns on whether the third party receives rights from the original contract between the *stipulans* and the *promittens*, upon or even before acceptance, and becomes a party to that contract,[122] or whether he receives rights only against the *promittens* upon acceptance of the benefit in terms of a second independent contract between himself and the *promittens*.[123]

Where the clause merely makes the proceeds payable to the third party as a beneficiary, the cover itself is not extended to include cover for the beneficiary.[124] Where the intention is to extend the cover, it is proposed that the third party does not require an insurable interest at the time when the cover is obtained, but that he should at least have such an interest upon acceptance of the benefit that affords him the rights against the insurer.[125] The fact that the third party does not pay a premium to the insurer for the insurance cover he receives, does not affect the nature of the contract.[126] Reinecke is of the opinion that one cannot require the insured to have an insurable interest in the contingent liability of the third party were the contract intends to compensate the third party.[127]

McCollogh v Fernwood Estate Ltd 1920 AD 204; *Croce v Croce* 1940 TPD 251; *Joel Melamed & Hurwitz v Cleveland Estates (Pty) Lt; Joel Melamed & Hurwitz v Vorner Investments (Pty) Ltd* 1984 3 SA 155 (A); see also Reinecke MFB "Insurable Interest and Extension Clauses" 1996 (4) *TSAR* 784; the issue is also addressed by Scott S "Cession of Whole Life Insurance Rights" 2003 (14) *Stell LR* 89.

[122] Known as the 'one contract' approach.

[123] Known as the 'two contract' approach; in the early case of *Crookes v Watson* 288 it was held that the beneficiary has a competency to accept, but not a vested right to do so; for a similar viewpoint, see *Wessels NO v De Jager en 'n ander NNO* 928.

[124] See in general Reinecke *et al* par 15.2 on the merits of the construction of the stipulation in terms of the 'one contract' and in terms of the 'two contract' approaches.

[125] For a detailed examination of the stipulation see Sonnekus JC "Enkele opmerkings om die beding ten behoewe van 'n derde" 1999 (4) *TSAR* 594; see also Schulze (1997) 69, and 75 where he states that the third party's right to claim directly from the insurer is based on the third party's own insurable interest.

[126] As confirmed by Reinecke *et al* par 123.

[127] Reinecke (1996) 788, with specific reference to the judgment in *Croce v Croce* 264.

The exact construction will in each situation depend on the facts, the intentions of the parties and the construction of the contractual rights of the parties.[128]

Reinecke concedes that the proper understanding of these clauses in the context of insurance is hampered by these uncertainties and controversies, yet is of the opinion that as this instrument has not yet been fully exploited further development can be expected. This view offers authoritative support for the implementation of this structure in order to introduce mandatory first-party insurance for the benefit of a third party for environmental damage caused in specific industries.[129] What is required, is that the parties express their intentions in terms of the contract clearly and precisely in order for their respective performances to comply with the required measure of certainty.[130]

Although the advantages offered by this type of insurance include lower transaction costs and easier risk differentiation, Bocken, however, concedes that its implementation has not been a huge success in the European market due to an apparent lack of demand.[131]

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[128] Schulze (1997) 225 elaborates on the following possibilities: that upon interpretation some clauses may be stipulations to the benefit of third parties, whereas others may be mere modal clauses in terms of which a duty in the form of a benefit to the third party has to be performed, yet some might be neither; See also the position in the Netherlands as discussed in chap 7 par 7.5 below; see also in this regard Wansink (2006) 431 par 11.5 for an explanation of the statutory position of the prejudiced party's direct claim against the wrongdoer's insurer.

[129] See the views held by Reinecke *et al* 295; Bocken (1987) 84 was initially, however, of the opinion that the difficulties of a generalised application of first-party insurance to the benefit of a prejudiced party in environmental damage insurance would be too large to overcome, yet acknowledged that it would have its use in specific risk situations, for example, where hazardous waste is transported. This view that it might enjoy a limited application only within specific industries can be supported.

[130] A similar viewpoint is reiterated by Scott S "Begunstigdeaanwysings en sessie in lewensversekeringskontrakte" 2002 (4) *TSAR* 766 777 who states that the parties to the contract must regulate their relationship contractually with care and precision to prevent uncertainty in this regard.

[131] Bocken H "General Report Theme 1B: Alternative Compensation Systems for Environmental Liabilities" presented at the AIDA XIth World Congress New York (2002) (hereinafter 'Bocken (2002)') 38; see also 39 for a reference to the Dutch 'Milieuschadeverzekering' as discussed in greater detail in chap 7 par 7.4.3.6 below.

5.3.4 Third-party Insurance

5.3.4.1 General

In third-party insurance the policyholder pays for the protection of someone else's interests. Liability insurance also offers a means to compensate prejudiced parties effectively, and is not solely aimed at protecting wrongdoers from the economic consequences of liability. It also serves as an instrument to spread costs among larger segments of the public, the other policyholders, who benefit from the activity that is the cause of the accidents.[132] It is further an attractive instrument to provide cover as premiums are tax deductible, and policies can be adjusted to suit individual needs and financial possibilities.[133] Very little South African case law exists on liability policies. Due to its history and lack of authority South African insurance practice is from time to time obliged to follow or rely on the practice in the UK and in other countries.

5.3.4.2 Nature and scope of liability insurance

5.3.4.2.1 History and description of liability policies

The first liability policies were issued in the late 1800s, and developed rapidly in sync with the development of liability law, more specifically in sync with the tort of negligence.[134] Under the South African Short-term Insurance Act[135] a 'liability policy' is defined as 'a contract in terms of which a person, in return for a premium, undertakes to provide policy benefits if an event, contemplated in the contract as a risk relating to liability, otherwise than as part of a policy

[132] Bocken (2002) 6 states that although the burden is assumed by the insurer, it is in reality funded by the other policyholders.
[133] Bocken (2002) 7 recognises that there are, in his words, less 'burdensome formalities' in this process of tailoring individual policies.
[134] See in general Fogleman 461 *et seq* on the historical development. Liability insurance developed from simple policies that covered the employer's liabilities towards his employees, to more general public liability policies in use today.
[135] Act 53 of 1998.

relating to risk more specifically contemplated in another policy relating to another definition in this section occurs'.[136]

5.3.4.2.2 Legal liability as the trigger of coverage

Liability towards third parties can arise from statute, delict or contract.[137] A general liability policy usually provides cover against third-party claims for bodily injury and property damage due to the negligent act or omissions of the policyholder, or for statutory claims that can include claims for environmental clean-up costs.[138] It is in the public interest that, in the absence of an express agreement to the contrary, the insured's liability based on his intentional or reckless conduct is excluded from cover.[139]

The insured's liability towards a third party determines the insurer's resultant liability toward the insured, and it is therefore moot that a 'legal liability' must exist before any claim against the insurer accrues in terms of liability insurance cover.[140] This is irrespective of whether the policyholder, who was in fact not legally liable, reached a settlement with a third party, which then creates a separate liability based on the settlement agreement.[141] The form and nature of the settlement or compromise to avoid or satisfy claims should not influence the issue on whether or not there was an initial valid claim under the policy.[142]

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[136] S 1(1)(xix).

[137] As recognised by Reinecke *et al* 428 *et seq*; for liability cover based on contractual liability see *Russell & Loveday v Collins Submarine Pipelines Africa (Pty) Ltd* 1975 1 SA 110 (A) 139.

[138] See in general Fogleman V "The Widening Gap in Cover for Environmental Liabilities in Public Liability policies" 2007 (June) *Journal of Planning and Environmental Law* 816; also Fogleman 461.

[139] As reiterated by Reinecke *et al* 206 *et seq*.

[140] In *Daniël Mostert v Cape Town City Council* 2001 1 SA 105 (SCA) 117 the court confirmed the general principle that a person cannot take out insurance where insurable interest lacks, and that no such interest can exist for liability insurance cover unless the policyholder as the wrongdoer incurs liability towards a prejudiced party who suffered damages; see the more extensive examination of this case in chap 4 par 4.2.4.5.3 above.

[141] See specifically *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* 2007 2 SA 26 (SCA) pars 15–18 on the insured's liability towards third parties specifically for 'ecological damage' caused.

[142] As held by the court in *P&O Steam Navigation Co v Youell* [1997] 2 Lloyd's Rep 136; see also in this regard the opinion by McGee 636.

Some liability policies provide cover not from the moment that the insured incurs legal liability towards the third party, but only once the insured's liability has been established by a judgment, another award such as an arbitration award, or by agreement.[143] Policyholders may often not admit liability or conclude a settlement agreement with the third party unless they obtained the prior consent of their insurer to do so.

Some policies even contain a specific 'pay to be paid' clause in terms of which the insured's claim against the insurer only accrues once the insured has in fact compensated the third party in full, and not once the legal liability to pay compensation exists or has been established.

It must be stressed that the third party has no rights to claim directly from the insurer, unless the policy itself by the inclusion of an extension clause, or the law, by example in terms of the Insolvency Act, provides for such a direct claim as discussed in above.[144]

5.3.4.2.3 Liability for breach of contract

Even less case law exists on the insurability of 'damages' arising from a breach of contract.[145] Atkins is of the opinion that contractual damages can trigger cover under a public liability insurance policy.[146] What 'legally liable' for environmental damage means for purpose of liability insurance is also examined specifically in chapter 6 below.[147] As liability depends on the judgment, arbitration or agreement, there can be no indication that a contractual liability should be excluded automatically from liability insurance cover.

[143] As recognised by Reinecke *et al* 328.
[144] See par 5.3.3 above.
[145] See in general the brief discussion of contractual liability in chap 4 par 4.3 above.
[146] Atkins NG "Contractual liability: Public liability insurance" 1992 (21) *Businessman's Law* 207.
[147] See par 6.5.6.6 below.

Breach of contract can enjoy only a limited insurability, obviously where it is included in the cover provided.[148] Where a contract is binding and enforceable, it could serve as a 'liability claim' under an indemnity policy and can also fall within the scope of the definition of a 'pollution claim' where the parties intended this liability to fall under the cover so provided.[149] Policies often exclude contractual liability from general liability cover. An example of such a clause reads as follows: 'Liability assumed by agreement is excluded from cover unless liability would have attached to the policyholder notwithstanding such an agreement.'[150]

As stated, most of these issues have not yet been brought before our courts and case law is limited. Reference can be made to an atypical case in an environmental context in the USA where the phrase 'legally obligated to pay damages' was given its ordinary and popular meaning to include all forms of damage, including damages awarded under a contractual damages claim.[151]

5.3.4.3 Duty to defend

Primary general liability policies also include either the right of the insurer, or the duty of the insurer, to defend the policyholder against third-party claims made against him. Insurers often prefer to exercise their right to defend where they are of the opinion that the insured may not attempt a proper or effective defence, or where they have better resources and a greater chance to succeed than the insured. The insurer's *duty* to defend remains a separate contractual duty and does not automatically form part of the insurer's duty to

[148] A similar viewpoint is reiterated by Larsson 32.
[149] As confirmed by Fogleman 1557.
[150] See the example provided by Atkins 208; see in general the discussion of exclusion clauses in chap 6 par 6.5 below.
[151] See the discussion by Fogleman 495 on the judgment in *Vandenberg v Superior Court of Sacramento County* 21 Cal 4th 815 88 Cal Rptr 2d 366, 982 P2d 229 (1999) where the insured lessee breached the terms of his lease agreement by installing underground storage tanks containing waste oil, and subsequently incurred contractual liability where leaks from the tanks caused soil and groundwater pollution, causing the landlord to incur liability to pay clean-up costs.

indemnify the policyholder.[152] The duty to defend requires the defence to be conducted properly, and continues until the insurer proves that the policyholder's liability does not fall within the cover provided under the policy.[153] Although the cover provided is usually capped to a monetary limit, there is usually no limitation or cap on the costs of defence.[154]

5.3.4.4 Types of liability insurance cover

5.3.4.4.1 Private liability insurance

Private third-party liability insurance cover is the most traditional form of liability insurance in the market.[155] This form of cover is provided for under a separate policy, yet can also be included under property insurance, professional insurance and travel insurance.

5.3.4.4.2 Public liability insurance

The policyholder protects himself against the risk of incurring legal liability, usually based on delict or tort, towards unknown third parties. These policies can also be self-standing or be incorporated into broader-based policies as an optional extension. Prior to the 1990s most public liability policies covered losses arising from pollution without any specific pollution exclusion.[156]

Public liability policies are traditionally 'occurrence-based', triggering the claim when the bodily injury or property damage occurs. The wording is as a rule not standardised, and the cover provided will clearly depend on the intentions of the parties as described by the wording of the policy. Where the

[152] See also in general Fogleman 482 for a discussion of the scope of the duty to defend and the role of extrinsic evidence in the interpretation of this duty.
[153] Fogleman 485 to 491 explains the procedures used in compliance with the duty to defend specifically when enforcing CERCLA.
[154] See Fogleman for a discussion of whether costs incurred by an policyholder when investigating a contaminated site are defence costs, which are unlimited, or are costs that fall under the liability indemnity as provided under the policy, which are in fact capped.
[155] As reiterated by Larsson 119.
[156] As stated by Fogleman 1503.

interpretation of the wording is disputed, cover may be compromised.[157] This issue becomes extremely relevant where claims for the policyholder's statutory liability for clean-up costs are brought under these policies.

5.3.4.4.3 Comprehensive or commercial general liability insurance

This type of policy, known as a 'CGL' policy, has been standardised in the global insurance industry since the 1940s. It appears to include most types of cover that could apply, although this is not really the case as many exclusions and limitations are to be found in the policy documents.[158] The more comprehensive discussion of the continuing revision of these policies, with a specific focus on exclusion clauses, follows in chapter 6 below.[159]

5.3.4.4.4 Excess policies

Excess general liability policies provide cover against claims for bodily injury, property losses and other specified harms that are in excess of any primary policy. Various layers of excess policies can be obtained. Insurance policies that provide cover specifically for environmental damage or liability for such damage are excess policies where their purpose is to provide cover for claims excluded by the primary policy such as a property policy. An 'umbrella policy' is also an excess liability policy, yet can provide cover for a loss that is not already covered at all under the primary policy. Excess policies usually include the right of the insurer to defend a claim against the policyholder,

[157] See in this regard Fogleman (2007) 817 *et seq*; in *Bartoline Limited v Royal & Sun Alliance Plc and another* [2007] 1 All ER (Comm) 1043 the court rejected a wide interpretation of the word 'damages' and denied a claim under a public liability policy for statutory clean-up costs, whereas in the only South African judgment on this point, the court held in *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* that 'property damage' included clean-up costs for 'ecological damage' caused.
[158] A similar impression is created by 'all risk' insurance policies, see par 5.3.2.4 above; for a comprehensive discussion of the effect of the exclusion of specific risks see chap 6.5 below.
[159] See par 6.5 below.

should he wish to do so. There is no duty on the insurer to defend. The limit of indemnity cover also usually includes all defence costs.[160]

5.3.5 Accumulation of Different Coverages

Where first-party and third-party insurance cover is accumulated in an environmental pollution situation, the insurer is entitled to enforce the rights of his policyholder, who is the prejudiced party who suffers the pollution damage, by way of subrogation against the wrongdoer's or polluter's liability insurer. The complication lies therein that the claim ends up being fought by the insurers involved, and the policyholders, that is the wrongdoer and the prejudiced party, are excluded from the claims process.[161]

5.3.6 Prescription of Insurance Claims

5.3.6.1 First-party insurance

Obligations in terms of insurance contracts are subject to the Prescription Act.[162] The payment, which the insurer owes the insured, prescribes three years from the time that the debt becomes due and the action accrues to the insured.[163] The general rule is that a right of action against an insurer accrues on the date on which the insured peril occurs, and that prescription starts to run on that date.[164] This will be once the event occurred, the identity of the insurer and the facts that give rise to the claim are known or would reasonably have been known.[165] This is especially the case under a first-party policy such as a property insurance policy. As there are different triggers for insurance coverage as discussed in chapter 6 below,[166] the prescription period will start

[160] See in general Fogleman 465 for a discussion of the various layers of excess policies, and also of the extent of cover for defence costs and for examples of clauses that either include or exclude these costs from cover.
[161] As reiterated by Faure (ed) 208.
[162] Act 68 of 1969; see also the discussion of the Act in chap 4 par 4.2.9 above.
[163] S 11(d).
[164] Merkin 321 acknowledges that it is in line with the standard accrual rule.
[165] S 12(3); see also Reinecke *et al* 327 *et seq* for an examination of these requirements.
[166] See chap 6 par 6.3 below.

running from the time when the loss-causing occurrence or event occurs where the cover provided is in terms of an 'occurrence' based policy.[167] Where cover is provided under a 'loss occurrence' policy, the prescription period only starts to run on the date on which the damage or loss manifests itself and the insured knows or should reasonably have known about the damage or loss.[168]

Prescription is interrupted by service on the insurer of legal process to enforce the claim, or by an acknowledgment of debt.[169]

Parties to an insurance contract can conclude a 'standstill agreement' in terms of which prescription is suspended. It is also general insurance practice to include a time bar clause in an insurance contract that extinguishes the insured's claim against the insurer where the claim is not brought within a specific period of time. The constitutionality and enforceability of time bar clauses in South African law are examined in chapter 6 below.[170]

5.3.6.2 Third-party insurance

As far as liability policies are concerned, the insured's claim starts to prescribe once the third party has established and quantified the insured's liability. This will be once a judgment or other award is made or a settlement agreement is concluded in the third party's favour.[171] Some of these policies contain a specific 'pay to be paid' clause in terms of which the insured's claim against the insurer only accrues once the insured has paid the third party in full. Merkin is of the opinion that this type of clause does not change the date on which prescription of the insured's claim against the insurer starts to run, and

[167] See specifically the discussion in chap 6 par 6.3.3.1 below for a detailed examination of this type of policy.
[168] See the discussion in chap 6 par 6.3.3.2 below for a detailed examination of this type of policy.
[169] See in general the discussion by Reinecke *et al* 328 for prescription in the context of an insurance claim.
[170] See par 6.5.2, par 6.5.4 below.
[171] See also the general discussion in Merkin 322 and also 694 *et seq*; for example, a settlement agreement.

that it remains the date on which the third party's liability has been established and quantified. It is submitted, however, that some of these clauses are worded in such a way that it is clear that it is the intention of the parties that prescription only starts to run on the date on which the insured pays the third party in full.[172]

Where there is a delay between the insurer's denial of liability prior to a claim being brought by the third party against the insured and the date on which liability is in fact established and quantified, prescription starts to run on the date of denial. In this situation, the insured could take remedial action by commencing with an action against the insurer for a declaration as to the insurer's liability in the event that a claim is successfully brought against the insured. Prescription is then suspended. The same rules apply where a third party has a direct claim against the insurer.[173]

5.3.6.3 Effect of prescription

It is important to note that agreements that limit prescription do not extinguish the insured's right of action, but only provide the defendant with a defence, whereas a time bar clause in an insurance contract extinguishes the insured's claim against the insurer.[174] See also the discussion of prescription in a delictual context in chapter above.[175]

5.4 SPECIALISED ENVIRONMENTAL INSURANCE PRODUCTS

5.4.1 General

Over the last decade, insurance 'freebies' have dried up because insurers have withdrawn or limited cover for pollution damage from general or public

[172] As reiterated by Merkin 323.
[173] See the discussion by Merkin 323 *et seq*.
[174] As held by Merkin 323; also the similar viewpoint reiterated by Reinecke *et al* 328.
[175] See specifically par 4.2.9.2 above.

liability policies, and substituted them with specialised environmental insurance products developed specifically for this purpose in the insurance market.[176] Insurers who initially saw the gap in the market and attempted to introduce environmental or pollution damage liability policies, were soon overwhelmed by the huge numbers and magnitude of claims, which proved that they were not to be profitable, and their availability dwindled rapidly. Some of these policies are discussed below.

5.4.2 The EDI policy in the Netherlands

In January 1998 the Netherlands introduced and implemented the Environmental Dutch Insurance or 'EDI' policy in their insurance market. It is in nature a first-party insurance for the benefit or on behalf of a third party. Where the third party suffers a loss, he may claim from the insurer regardless of the liability of the policyholder for the loss. Cover is provided only on the contractual terms of the policy and without any influence of tort law. The third party must only prove a causal link between the loss and the loss-causing event covered by the policy.[177] Damages as well as cleaning-up costs and legal defence coverage are covered.[178]

In order to force implementation, this policy was intended to substitute liability insurance previously available for these claims. Should a polluter not have EDI cover, he will be personally liable to pay the claim and will not be able to

[176] See Kalis PJ, Reiter TM, Segerdahl JR *Policyholder's Guide to the Law of Insurance Coverage* Part 2 (2004) chap 12 pars 12–03 on examples of specialised pollution liability coverages; for more examples of specialised insurance instruments available in the marketplace see http://www.environmentalinsurance.com/ss04.html (last accessed on 21 February 2008).

[177] See the universal issues and problems relating to causation as discussed in chapter 6 par 6.4 below.

[178] See the position as explained by Bocken (2002) that EDI cover in other countries such as Sweden and Finland essentially only provides compensation payable to third parties upon the insolvency of the insured wrongdoer. This is also the case in South African law as discussed in par 5.3.3.1 above

claim under any other liability policy. He is also precluded from claiming his legal costs from any other insurance source.[179]

5.4.3 The EIL and the ERI policies in the United States

Two specific insurance policies developed in the USA. Environmental Impairment Liability or 'EIL' policies usually cover third-party bodily injury and property damage, clean-up costs and defence costs. They are expensive and also difficult to find in the market due to their lack of profitability,[180] yet indirectly add the benefit that they encourage acceptable environmental risk management by policyholders. As these policies are more straight-forward than the CGL-policies discussed in chapter 6 below, they allow courts to respect the sanctity of contract during interpretation or construction by simplifying the process of upholding the reasonable expectations of the insured as well as the reliance interest of the insurer.[181]

A special named-peril insurance, namely an Environmental Remediation Insurance or 'ERI' policy, was developed in response to the effect of CERCLA in the USA.[182] It is a form of first-party insurance for previously undetected and pre-existing land contamination of commercial properties. Although ERI does not address third-party liability in the way that the EIL does, cover could be extended to include off-site clean-up of a third party's property. The cover could also be enhanced to cover contamination that occurred after the policy was taken up, on a 'discovered (where the policyholder becomes aware of the damage) and reported (to the insurer at risk at that time)' basis. This form of insurance covers environmental damage found 'on, within, under or onto' the insured property that has to be remedied in accordance with environmental laws.[183]

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[179] See also the detailed discussion by Wansink H "A new Environmental Damage Insurance Policy (EDI) in the Netherlands" 1998 (May) *The Bulletin on Pollution, Products and New Technologies (AIDA)* 12.
[180] Italiano 39 refers to, and reiterates this view as reported in the USA General Accounting Office Report.
[181] Italiano 40 also endorses this as one of the benefits that the EIL policies offer.
[182] See the more detailed discussion of the position in the USA in chap 7 par 7.6 below.
[183] As identified and examined by Larsson 529.

5.4.4 Other Environmental Insurance Policies

5.4.4.1 First-party property insurance

First-party pollution policies offer cover for property damage, on-site bodily injury and the cost of the remediation of accidental contamination on the policyholder's own sites. Property transfer policies offers wide coverage that include property damage, economic loss such as the diminution of third-party or first-party property, loss of rental income, clean-up costs, on- or off-site bodily injuries and personal liability of, for example, directors, administrators and trustees. Under a specific policy of homeowner's cover for undetected contamination cover is provided for very specific risks and defects, and is only provided once a property has been registered with a central body,[184] screened and assessed for potential contamination. Cover does not include personal injury, blight and contamination after completion of the sale, and is usually capped to specific property values.[185]

5.4.4.2 General environmental liability or impairment insurance

A specialised policy that offers extensive coverage is the general environmental impairment liability policy.[186] Cover can be provided for business interruption by policyholder or third-party claimants, diminution of third-party property value, loss of income, natural resource damage, relocation costs and loss arising out of asbestos removal. International insurers like Zurich, AIG Environmental, XL Capital and Kemper Environmental, for example, offer cover under the following specialised environmental insurance policies: (a) the EIL or 'environmental impairment liability' policy; (b) the ECL or 'environmental clean-up and liability policy; (c) the REEL or 'real estate environmental liability' policy; and (d) the CPL or

[184] In most cases this will be the 'National House-Building Council'.
[185] See also in general Fogleman 1588.
[186] Known as 'EIL'; or also 'pollution legal liability' or 'PLL' policies.

'contractors pollution liability' policy.[187] Other examples of insurance products available from a variety of insurers include specifically tailored policies as considered below.

5.4.4.3 Pollution in place insurance

This policy offers cover where there is already a low-level contamination on the insured property yet where no clean-up is required at that time. It covers any future liabilities of the policyholder to clean-up the property, and covers building, soil, groundwater as well as air pollution.

5.4.4.4 Remediation or clean-up cost cap insurance

Stop-loss remediation cover provides for unforeseen costs incurred by owners of property and property developers for the remediation of contaminated land, and are known as 'remediation or clean-up cost cap policies' as they offer additional cover for costs that exceed the cover provided by other policies. This form of insurance covers the economic risks where remediation costs exceed the projected costs during a remediation project. This is a very real scenario as the evaluation and assessment of the exact reinstatement or remediation costs and expenses remain an inexact and uncertain science. Cover includes off-site or third-party property clean-up costs for pollution that originated from the subject site and migrated to other sites.

5.4.4.5 Real estate pollution insurance

This specific form of policy covers lenders such as banks or other financial institutions against unknown pre-existing as well as new polluting conditions that occur on the property held as collateral for a loan or mortgage facility. Its main focus is to offer cover for pollution that manifests after the inception of

[187] These are some examples provided by one of the larger international insurers namely Zurich, at http://www.zurichna.com/environmental_liability_insurance.htm.(last accessed on 17 August 2008).

the policy, and also covers the diminution of a property's market value due to an on-site pollution condition.

5.4.4.6 Post-remediation insurance

This type of policy can be implemented after a successful remediation project was signed off, and covers own property on a first-party basis, for insured property from which the pollution emanated or originated, and also contains a third-party insurance component. The latter offers cover for potential future liabilities for contamination of the adjacent or down-gradient properties of third parties to which the pollution migrated. This also covers owners and operators on properties against claims from successors in title who incur the later liabilities, or where state regulation becomes stricter and further clean-up is required. This type of policy intends to provide cover for claims that cannot be brought under other policies due to policy time clauses or triggers as discussed in chapter 6 below.[188]

5.4.4.7 Toxic mould liability insurance

Due to the increasing awareness of the effects of toxic mould overgrowth, this recent addition to the stable of policies provides cover for the owners of property contaminated by mould, as well as for construction contractors in respect of defective measures or procedures that caused the mould growth, and contractors who test for mould or carry out the mould remediation or restoration.[189]

5.4.4.8 Lead poisoning liability insurance

Cover is provided against liability for lead exposure, usually from lead-based paints, on residential property in pre-1978 homes. Lead exposure and

[188] See chap 6 par 6.3 below.
[189] See Goodman GA "Insurance Triggers as Judicial Gatekeepers in Toxic Mold Litigation" 2004 (57) *Vanderbilt Law Review* 241 for a comprehensive discussion of the insurability of claims based on damage caused by toxic mould.

subsequent poisoning increases due to remodelling, renovation, weatherisation and poor property management that increase lead release.

5.4.4.9 Sick building syndrome insurance

Also seen as a 'new risk' such as asbestos and toxic mould risks, SBS policies provide cover for claims due to bodily injury such as sickness, fatigue and mental distress caused by SBS.[190]

5.4.4.10 Asbestos liability insurance

Cover under this policy is limited only to claims by asbestos consultants and testers, as well as asbestos abatement contractors, land developers and schools active within the contaminated area relating to the removal of asbestos. No retroactive or long-tail liability cover for the initial is provided for the victims of asbestosis.

5.4.4.11 Facility pollution liability

Various policies are available for different industries and facilities. Examples include cover for airports and filling stations where huge quantities of fuel are stored, industrial sites, hospitals in respect of the dangers of pollution caused by medical waste, dry cleaners for the release of harmful cleaning agents, waste water treatment facilities and others. One of the oldest specialised insurance policies in the market offers cover for the liabilities of waste disposal contractors, operators of waste disposal facilities and transporters of waste. In most countries these policies are mandatory for operators within the waste disposal industries. Due to their specialised nature and the extensive statutory regulation of liabilities within the waste disposal industry, no detailed discussion can be included in this thesis.

[190] For more on SBS or 'sick building syndrome', see chap 6 par 6.5.6.7 below.

5.4.4.12 Underground or aboveground storage tank cover

Cover is provided to satisfy the financial responsibility requirements set for operators of these storage facilities by the State or other authorities, and includes cover for third-party bodily injury and property damage, as well as corrective action coverage for mandatory remediation after the release of pollutants.[191]

5.4.4.13 Owner-controlled insurance policies

Property owners and property managers can purchase bespoke cover by tailoring cover that includes general, public, professional and pollution liability, as well as cover for asbestos and lead abatement, business interruption and so forth. The cover will depend on the risk profile of the policyholder as determined by a multitude of variables of each specific case or situation and depend on the capacity of the insurer to provide cover.

5.4.4.14 Secured debtor or creditor environmental risk insurance

Where a borrower who has secured his loan by a mortgage on his property defaults due to pollution conditions on or relating to that property, the policy provides cover for the outstanding loan balance. It can also be extended to provide cover for other third-party claims resulting from pollution conditions. Lender liability offers cover for a lender who has an interest in property provided by the borrower or a surety for the latter as a security for the borrower's loan.[192]

[191] For more on pollution through the seepage of pollutants from storage facilities, see chap 6 par 6.3.3 on long-tail liability issues.
[192] These include financial institutions, property developers, property portfolio managers and the like.

5.4.4.15 Policies for professionals and contractors

Cover under these policies is provided for the liabilities of persons involved in a professional capacity in the environmental field, such as environmental consultants and environmental laboratories. Most contractors such as industrial, construction and related activities, cleaning and remediation contractors can potentially incur huge liabilities for pollution damage caused to sites that they occupy for their operations. 'Contractor's Pollution Liabilities'[193] policies offer cover for mostly the inadvertent causing or aggravation of pollution or contamination.

5.5 MANDATORY INSURANCE COVER

5.5.1 General

Examples of existing mandatory insurance schemes include compulsory insurance cover for employees in employment relationships, for the carriage or transport of goods, and relating specifically to the environment, the mandatory insurance required in the nuclear and oil and petroleum industries.[194] In some countries such as Belgium, for example, liability insurance cover for specific environmental risks is mandatory.[195]

The questions remains whether the introduction of additional schemes in other industries and for other activities identified as high risk, will offer a solution to solve the current problems experienced with pollution insurance claims. Faure correctly argues that although this approach has merit, the existence and development of an effective liability system remains of primary importance.[196]

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[193] Known as 'CPL' policies.
[194] See the discussion in chap 3 par 3.3.4.4.2 and par 3.3.4.4.3 above.
[195] As addressed by Bocken (2002) 7; see also chap 7 par 7.4 on the position in Belgian law.
[196] Faure M & Hartlief T "Aansprakelijkheid en verzekering voor nieuwe risico's" in Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003) (hereinafter 'Faure & Hartlief') 53.

5.5.2 Advantages of Mandatory Insurance

The main advantages and benefits of implementing a mandatory or compulsory insurance scheme include the increased expected utility of the responsible parties. The problem, however, is that it creates a social loss, by forcing people to buy insurance that they would not normally have bought. Care must be taken to weigh the interests of these persons against the benefit that society gains by ensuring that insurance cover exists. The danger exists that the risk premium can be higher than the objective value of the risk.[197]

It also contributes to efficiency in that the policyholder receives compensation to cover his losses from the insurer, who has to exercise control over and monitor the behaviour of his policyholder.[198]

Mandatory cover can provide a solution for the prejudiced party irrespective of the liquidity of the polluter, for example, in the event of the policyholder's insolvency.

5.5.3 Disadvantages of Mandatory Insurance

The potential disadvantages or dangers of mandatory insurance include (a) that it can cause a concentration in and inflated dependence upon insurance markets; (b) another side-effect is the danger of increasing over-insurance caused by the lack of information on development risks and unpredictable hazards; (c) the necessity of increased co-operation with insurers and its effect on the market; (d) the imposition of a duty on insurers to accept their duties to provide cover in terms of the mandatory coverage required, where the market is unable to actually cover these risks.[199] In practice it appears to

[197] See also the view of Faure (ed) 180 *et seq* in this regard.
[198] Faure & Skogh 270 explain that insurance by which the insurer compensates losses at certain specified contingencies, as is the case in industrial accident insurance, is equivalent to a guarantee and has the advantage that it provides greater financial security.
[199] As identified by Faure (ed) 185–189; see also the view by Faure & Skogh 277.

be unsuitable as insurers are clearly reluctant to provide cover;[200] (e) the management of such a scheme remains a costly exercise.[201] A possible solution would be to place mandatory financial caps on the cover provided by mandatory insurance products.

5.5.4 Merits of Implementation

Faure concedes that it appears as if the disadvantages of mandatory insurance outweigh its advantages and the benefits that it can offer.[202] Bocken argues that mandatory insurance has the potential of providing a solution to insurance claims issues, but that it can only be effective where the operators who are required to obtain the cover actually do so. He concedes that mandatory insurance should, however, always be supported or strengthened by a back-up fund set up either by the insurers or by the government or another authority, in order to provide some form of additional security to prejudiced parties.[203]

It may in the last instance also appear that mandatory insurance schemes can only become a reality where the market buys into this type of insurance and the specific policies become available in the market.

5.6 CONCLUSION AND RECOMMENDATIONS

Insurance claims that relate to situations where environmental damage occurs, fall within two broad categories of indemnity insurance. It is possible to claim for pollution damage to property in terms of the cover provided by a first-party insurance policy. First-party cover against pollution damage is also provided under general fire, all-risk car and personal injury policies. Where a

[200] Faure & Hartlief concede that this also appears to be the case in the insurance market in the Netherlands; see also the similar viewpoint reiterated by Fogleman 1069.
[201] This disadvantage is also identified by Faure (ed) 208 *et seq*.
[202] See Faure & Hartlief 53.
[203] Bocken (2002) 12 states that this has seldom been the case where mandatory environmental insurance is concerned.

polluter becomes liable to compensate a prejudiced party for the damage caused, the polluter can claim under his third-party or liability insurance cover. In some cases, a single policy, for example, a property insurance policy, can provide both types of cover.

The advantages of first-party insurance are that it provides more effective and direct compensation to the prejudiced party, and that the insurer's risk determination is easier. The disadvantage of first-party insurance cover is that the prejudiced party has to finance his own indemnification. The polluter-pays principle is not implemented. Amounts paid out under first-party cover are usually less than those paid out under third-party cover. The term 'property' in property insurance policies is usually defined in such a way that it excludes elements of the natural environment from cover. It seldom includes groundwater beneath the insured property, for example. It is standard practice to include extensive pollution exclusion clauses in these types of policies, which either completely exclude or limit pollution claims. The nature and effect of these clauses are discussed in detail in the next chapter. It is therefore necessary for an insured to obtain additional pollution damage insurance, specifically named peril insurance, in order to ensure that he enjoys comprehensive cover.

It is important to note that even where a policy is identified as 'all risk' or 'comprehensive' insurance, the policy does not necessarily cover all possible risks as these policies also contain pollution exclusion clauses.

Where a polluter has third-party insurance cover, his claim against his insurer is triggered when he incurs legal liability against a prejudiced third party. Liability can be based on delict, unauthorised agency or breach of contract. Cover for liability due to a breach of contract is, as a general rule, not assumed. It must appear clearly from the intentions of the insurer and the insured that they intend to include this type of liability in the cover provided by the policy. In short, liability depends on a judgment, for example, where damages are awarded based on a delictual claim, an award made by an independent tribunal or forum, or an agreement.

Prejudiced third parties do not have direct access to the compensation paid out to the polluter under a liability insurance claim, unless the nature of the policy is a first-party to the benefit of a third-party insurance policy. It is possible for a first-party insurance policy to contain an extension clause that extends the cover to a third person who is not the insured. Where this clause is intended to be a stipulation for the benefit of a third party, the third party is only entitled to exercise his rights against the insurer once the third party accepts the benefit. This extension of cover enables prejudiced third parties to evade the burden of instituting a liability claim against the insured, and to claim directly from the insurer. The claim by a third party is only possible where the policy intends to create this benefit.

Due to the current debate on the exact structure of the stipulation for the benefit of a third party, it is necessary to word these clauses carefully in order to ensure that it is quite clear when the third party may exercise his right, and against whom he may do so. It is submitted that the stipulation itself is a contract between the insurer (as the *promittens*) and the policyholder (as *stipulans*) in terms of which the insurer must offer the benefit to the third party, who then, upon acceptance, obtains a right against the insurer to claim the benefit in terms of a separate agreement between them. It is not possible for the third party to be a party to the insurance contract upon its initial conclusion, even before the third party is aware of the benefit contracted on his behalf, or in accordance with the opinion of some writers, even before his existence. Where the insurer fails to act in accordance with the initial insurance contract, for example, where he does not offer the benefit to the third party, the insured remains the contracting party who must enforce the stipulation.

The introduction into South African law of a general right of a third party to claim directly from the insurer, that applies in Belgium and the Netherlands as discussed in chapter 7 below, must be considered. It is proposed that mandatory first-party insurance to the benefit of third parties, who are prejudiced by pollution damage, must be prescribed for specific industries.

This should apply only to those industries that pose a high pollution risk to society. Examples of these industries include those that manufacture hazardous substances such as chemicals, or those where polluting substances that are caused by manufacturing or mining activities, for example, are released into the environment. It is not clear whether the insurance industry has the capacity to implement such a scheme. Where a potential polluter enjoys some general liability cover under his existing policies, usually at a cheaper premium, the introduction of a mandatory excess policy could at least provide greater security to the persons prejudiced by his conduct. The risk premium must, however, not exceed the objective value of the risk. It also contributes to efficiency in that the policyholder receives compensation to cover his losses from the insurer, who has to exercise control over and monitor the behaviour of his policyholder. The prejudiced party will receive compensation irrespective of the liquidity or solvency of the polluter.

The potential disadvantages of mandatory insurance are an inflated dependence on insurance markets and the co-operation of insurers, the danger of increasing costly over-insurance, and the danger that the market will be unable to actually cover these risks. A possible solution for insurers would be to place mandatory financial caps on the cover provided by mandatory insurance products. Where persons are required to increase their insurance cover, it causes an inevitable social loss. It also causes an internalisation of costs, which counters the implementation of the polluter-pays principle. Moreover, the enforcement and management of such a scheme also remains a costly exercise, and the success of mandatory liability insurance cover will depend on stricter statutory control to ensure compliance within the various industries. Due to the current lack of mandatory insurance for pollution damage, and due to the delays in the implementation of new environmental legislation in general, this will not become a reality in the near future.

The right of the insurer to defend the policyholder against the claim brought by the prejudiced third party remains a separate contractual duty and does not

automatically form part of the insurer's duty to indemnify the insured under the cover provided.

Because it is problematic for the insured to obtain sufficient information regarding the extent of the environmental damage caused, in order to institute a claim against his insurer, the prescription periods for these claims, whether statutory or contractual, remain relatively short. It is submitted that the prescription periods for both civil liability and insurance claims that relate to the environment must be regulated by statute. Time bar clauses in insurance contracts should not limit time periods to less than the prescribed statutory minimum. These minimums should reflect a realistic time for the plaintiff or insured to determine the merits and quantify his claim.

The last decade has seen the development of specialised environmental liability insurance products that provide named peril cover for specific polluting events. These policies are, however, expensive and seldom procured by the smaller polluting industries, which still only maintain general liability insurance cover in the expectation that it will be sufficient to cover their liabilities. As indicated in the discussion in chapter 6 that follows, this type of cover is usually, due to the extensive damage that pollution can cause, woefully inadequate. Insurance claims relating to environmental damage introduce so many new complications into the field of insurance law that rapid change is required to provide solutions for these situations. The following serve as examples. Although insurance in general provides cover against fortuities, this standard principle is complicated by the post-remediation risks posed by brownfield sites that are known to the insurer and the insured. Cover can only be provided for these risks under expensive and specialised 'site pollution' liability policies, where they are available in the market. Other examples of 'new risks' that complicate matters concerning insurability include risks posed by asbestos, lead and toxic mould pollution, and risks posed by sick-building syndrome or 'SBS'.

Standard specialised policies have been introduced in the Netherlands and in the USA. The Netherlands introduced and implemented the Environmental

Dutch Insurance or 'EDI' policy in their insurance market that is a first-party insurance on behalf or to the benefit of a third party. Cover is provided for damage, clean-up costs and legal defence. To enforce implementation, this policy substitutes other liability insurance cover for these claims. A polluter who does not procure EDI cover incurs personal liability and cannot claim under any other liability policy. He is also precluded from claiming his legal costs from any other insurance source.[204]

In the USA, Environmental Impairment Liability or 'EIL' policies usually cover third-party bodily injury and property damage, clean-up costs and defence costs. They are expensive and also difficult to find in the market due to their lack of profitability, yet indirectly add the benefit that they encourage acceptable environmental risk management by policyholders. A special named peril insurance, namely, Environmental Remediation Insurance or 'ERI' policy, was also developed in response to the effect of CERCLA in the USA. It is in essence a form of first-party insurance for previously undetected and pre-existing land contamination of commercial properties. The ERI policy does not provide cover for third-party liability, yet cover can be extended to include off-site clean-up of a third party's property. The cover could also be enhanced to cover contamination that occurred after the policy was issued on a 'discovered and reported' basis.

Where it appears that insurance cover was procured for damages that fall within the scope of 'environmental damage' or 'liability' for 'environmental damage' as discussed in the preceding chapters, a successful claim brought under the policy is not a certainty. Various issues complicate the insurance claims brought under the environmental damage and environmental damage liability policies in question. These issues are of a universal nature and are addressed extensively in the next chapter.

[204] See the full discussion of the EDI in chap 7 par 7.5.4.6 below.

CHAPTER 6

UNIVERSAL KEY ISSUES IN POLLUTION DAMAGE INSURANCE COVERAGE

6.1 INTRODUCTION

Pollution insurance poses its own unique challenges in the insurance market. This chapter is dedicated to a discussion of the universal key issues and complications relating to insurance claims in an environmental context.

The most logical starting point for a discussion of pollution damage insurance and responsibilities would be to address the predictability of the risk and to establish the nature of the liabilities covered under a liability insurance policy. As can be seen from the discussion on civil liability in chapter 4 above, proving all the requirements to establish civil-law or common-law liability for an environmental damage claim remains complicated.

Moreover, the vesting of the claim or trigger of the insurance claim that determines which one of various insurers can be held liable to provide cover, for example, in a situation of gradual pollution or where a long-tail liability occurs, deserves attention. The question as to whether one can insure against loss or damage that has already occurred at the time of obtaining cover but which is not apparent, and whether one enjoys cover for prospective losses that will only occur in future, also causes complications in the insurance market.[1]

[1] Larsson M *The Law of Environmental Damage: Liability and Reparation* (1999) (hereinafter 'Larsson') 119 states 'that you cannot insure a house that has already burnt down,' as cited from a comment made by Dr Spühler at the Seminar on 'Environment and Insurability' Paris 1994 (November); see also Reinecke MFB, Van der Merwe S, Van Niekerk JP & Havenga P *General Principles of Insurance Law* (2002) (hereinafter 'Reinecke *et al*') par 306 on the insurability of expectancies.

Great uncertainty also reigns regarding the meaning of terms such as 'property damage', 'natural resource damages', 'bodily injury', and 'sudden and accidental'. The interpretation or construction of these words and phrases has been the source of extensive litigation between insurers and policyholders, as can be seen from the discussion below.[2]

Finally, the problems regarding causation need to be addressed, as it is often difficult for the prejudiced party to prove the nature and extent of pollution or its source. This is especially the case where there is a general atmospheric or groundwater pollution. A situation where there is multiple or collateral causation has the potential of adding further complications, for example, where there is a broad distribution of various pollutants each contributing to the damage, or where an interaction or synergy between various pollutants occurs. Determining the source and exact scope of damage or loss and whether they are causally linked is time-consuming, specialised and costly, and in some situations downright impossible.[3]

Once the insured proves that he has suffered a loss, or proves his liability to compensate the loss suffered by another, contractual exemptions of liability could deny the claim of the insured,[4] the claim could have prescribed,[5] or deductibles could reduce the amount recoverable.[6] Even where liability is proven and

[2] See the following statement by Mole A: 'Sticks and stones may break my bones, but words shall never hurt me - although, unless carefully chosen, they may have a somewhat unfortunate effect on my financial affairs', as cited by Clarke M "Liability Insurance on Pollution Damage: Market Meltdown or Grist to the Mill?" 1994 *The Journal of Business Law* 547; see the discussion of interpretation in par 6.5.5 below.
[3] Van der Walt CFC "Deliktuele aanspreeklikheid weens nadeel deur onbekende lede van 'n groep toegebring" 1995 (58) *THRHR* Part I 421; see also Part II 613.
[4] See the full discussion of the operation of exclusion, exemption and limitation clauses in par 6.5.
[5] For the prescription of civil-law claims in South African law, see the discussion in chap 4 par 4.2.9 above, and for prescription of insurance claims the discussion in chap 5 par 5.3.6 above.
[6] See Abraham KS "Environmental Liability and the Limits of Insurance" 1988 (88) *Columbia Law Review* 942 951 for role of deductibles in improving loss avoidance by the insured.

coverage actually exists, a financial claim may prove to be unsuccessful due to a lack of funds or the insolvency of the polluter.[7]

A separate issue concerns the great challenges posed by the transboundary nature of pollution damage claims, and the application of solutions proposed under various international law regimes.[8] In chapter 6 of The National Environmental Management: Air Quality Act[9] dealing with international air quality management, the Minister has the power to prescribe measures and enforce clean-up of transboundary air pollution caused by the migration of air pollutants into the jurisdiction of another country.[10] Due to the elaborate and specialised nature of international law and its complex application, the specific topic is not dealt with in greater detail in this thesis.

As a brief illustration of transboundary liability that is relevant to South African law, reference can be made to the *Lubbe* case that was heard in the House of Lords in the UK, regarding a claim based on a polluting incident that occurred in South Africa.[11] The court found that where a holding or parent company exercises 'significant control' over its polluting subsidiary, the former can incur

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[7] For a comprehensive discussion of the effect of insolvency on insurance claims, see De Ketelaere K (ed) *et al Handboek Milieu- en Energierecht* (2006) (hereinafter 'De Ketelaere') 1359; the viewpoint of Larsson 571 can be endorsed, that a potential solution in this situation would be to implement alternatives to insurance and rather require persons to obtain and present mandatory financial securities when participating in a specific activity or industry that poses a risk of causing damage to the environment.

[8] Henderson A "A step forward or a slap in the face? *Lubbe & Four Others v Cape Plc and related appeals* 27-7-2000 (House of Lords)" 2000 (October) *De Rebus* 47; Winstanley T 2000 (November) *De Rebus* 56; see also Larsson 542 for guidelines on the assessment of monetary damages for transboundary water pollution.

[9] Act 39 of 2004 as examined in chap 3 par 3.4.4.9 above.

[10] S 50.

[11] *Lubbe & Four Others v Cape Plc and related appeals* 27-7-2000 (HL); see also the International Law Commission Draft Principles on Environmental Liability specifically regarding transboundary pollution damage UN Document A/59/10 as published in 2005 (17) 155 *Journal of Environmental Law*; Van Dunne JM "Transboundary pollution and liability issues: private law vs public international law approaches" 1999 *Acta Juridica* 303; Sandrock O "German and European drafts on choice of law rules applicable to delictual liability: the direct claim against the insurer" 1999 (4) *TSAR* 734 753 who reports that EU countries appear to be unanimous in that either the law that governs the delictual liability, or the law that governs the insurance contract can be applied.

liability for the actions of the subsidiary even though they are not in physical proximity.[12]

These key issues are examined under separate headings below.

6.2 PREDICTABILITY OF RISK

6.2.1 General

Effective insurance practice requires a justified and appropriate risk differentiation.[13] Adapting the various policies to individual risks controls moral hazard and adverse selection.[14]

6.2.2 Lack of Information

It is difficult for insurers to obtain sufficient information to estimate the frequency and severity of potential losses where new risks are concerned, as they have to determine low-risk and high-risk situations for effective risk differentiation in a very uncertain and newly emerging global market.[15] Faure states that insurers

[12] See Winstanley 56 for a more detailed discussion of corporate liability.

[13] See in general Faure M (ed) *Tort and Insurance Law Vol 5: Deterrence, Insurability and Compensation in Environmental Liability: Future Developments in the European Union* (2003) (hereinafter 'Faure (ed)') 125; see also Reinecke *et al* chap 10.1 on the management and transfer of risk; Faure M & Skogh G *The Economic Analysis of Environmental Law and Policy* (2003) (hereinafter 'Faure & Skogh') 113–119 consider the effect of risk perception and the principles of risk determination in insurance practice specifically for incidents that cause environmental damage.

[14] Abraham 946 states that liability insurance must attempt to find the balance between complete ignorance of the risk, and complete knowledge of it, but cautions that this process is severely undermined by adverse selection, moral hazard, which is in essence an information problem, and generalised uncertainty in the development of the market and of industry and technology.

[15] See Italiano ML "Environmental Impairment: Dealing with the Legalities" August 1990 *Risk Management* 38; Faure & Skogh 241 state that information is not only necessary for risk differentiation, but also for the effective reduction of risks especially where occupational health hazards are concerned, some of which are caused by pollution; see also in this regard Wansink JH "Ontwikkelingen in de Werkgeversaansprakelijkheid voor Beroepsziekten: Aanleiding voor een nieuwe AVB-polis?" 1996 (6) *Aansprakelijkheid en Verzekering* 140 149.

are at risk because there is very little information in the market to determine the insurability of new risks, yet there is a demand for cover. They are forced to protect their interests by increasing premiums and by introducing mechanisms and creating onerous obligations that the insured must meet to prevent and manage the risk occurrence. The effect is that the insured does not always receive satisfactory indemnification.[16] An example of such an obligation is the policyholder's duty to comply with prescribed due diligence procedures.[17] Mendelowitz concurs that '[n]o underwriter can do more than guess the extent - if any - to which an insurance premium should be adjusted to reflect the possibility that the insured may, during the term of the policy, incur a liability which was previously unheard of'.[18]

It is submitted that the constitutional right of access to information as well as the Promotion of Access to Information Act[19] in South Africa as discussed extensively in an environmental context in chapter 3[20] above, will prove invaluable for environmental claims.[21]

6.2.3 Foreseeability and Assessment of Risks

The assessment of environmental risks requires specialised expert technical knowledge and judgment. The property and liability insurance industries are expert at calculating and pricing the risk that they insure, yet the predictability of

[16] Faure M & Hartlief T "Aansprakelijkheid en verzekering voor nieuwe risico's" in Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003) (hereinafter 'Faure & Hartlief') 49.
[17] De Meo RA, Eldred C, Utiger LA, Scruggs LS "Insuring against Environmental Unknowns" 2007 (Fall) *Journal of Land Use and Environmental Law* 23 caution that where the integral step of due diligence is lacking, the 'existence of environmental liability insurance will only yield futility and frustration.'
[18] See the Paper by Mendelowitz M "Insurance Cover for the Long-tail and the Unforeseeable" delivered at AIDA World Conference (Morocco June 1998).
[19] See the full discussion of this Act in chap 3 par 3.2.3.4 above.
[20] Par 3.2.3.4.
[21] For an illustration see the judgment in *The Trustees for the Time Being of the Biowatch Trust v The Registrar: Genetic Resources and others* Case No 23005/2002 where it was held that Biowatch established a clear right of access to information regarding field trials and the commercial release of genetically modified organisms that Biowatch claimed could be harmful.

environmental risks remains a challenge and impacts negatively on the pricing of premiums.[22] Factors that impact on this assessment include the severity and type of damage, the frequency of the damage occurring, and of course the trigger of retroactive liability as discussed below,[23] as well as the uncertainties pertaining to causation as discussed in chapter 4 and elsewhere in this chapter.[24]

6.2.4 Potential Solutions

It is nearly impossible to foresee all eventualities in the environmental insurance market. Abraham argues that the demise of products in the environmental liability insurance market is a clear symptom of the high levels of uncertainty created by the introduction and implementation of environmental liability regimes.[25] The rapid expansion of tort liability has increased the frequency and size of those claims, which the insurer did not foresee when issuing the policy.

Possible solutions to assist in dealing with this problem include the keeping of comprehensive public registers, monitoring via policy and licensing conditions, and an increase in environmental impact assessments and ecological audits.[26]

6.3 THE TIME ELEMENT OR TRIGGER OF INSURANCE CLAIMS

6.3.1 General

The time element, also called the trigger of claims under a policy, requires a

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[22] According to Faure & Skogh 264.
[23] See par 6.3 below.
[24] Par 4.2.5, par 6.4; see Busenhart J "The insurability of ecological damage" 2004 (March) *Environment Business Magazine* 25; see also Reinecke *et al* par 269 who discuss these circumstances that affect the risk.
[25] Abraham (1988) 944; this view was reiterated by Clarke M "Liability Insurance on Pollution Damage: Market Meltdown or Grist to the Mill?" 1994 *The Journal of Business Law* 545.
[26] As supported by Faure (ed) 157 *et seq*.

more intensive study as it, together with the interpretation of pollution exclusion clauses, remains the focus of most environmental insurance litigation. The insurer incurs the obligation to the insured upon the vesting or trigger of the claim.[27] One must distinguish the duration of the insurance contract from the duration of the cover. It is quite possible that the period of the policy has lapsed, but that cover under that policy is triggered at a later stage by an event that occurred while the policy was still in force, but where the claim is made only after the policy has lapsed.

Environmental damage can in principle be divided into sudden accidental damage, gradual damage or damage caused by old burdens of historic causation. Where there is a time lapse or delay between the polluting cause and the manifestation of its effect, for example, where gradual progressive environmental damage is caused, it is problematic to determine against which one of several insurers who insured the risk over time the claim vests.[28] 'Long-tail' liability or retroactivity also depends on the trigger dates for a claim against an insurer to provide insurance cover.[29] These triggers have been described as

[27] See chap 5 par 5.3 above, and par 6.3.2.2 below for the vesting of insurance claims under indemnity insurance cover.

[28] Although the classic division is discussed in the text below, various versions of the trigger rules or theories exist. Siesko DM & Weiss N "Use and Evolution of the Claims-Made Policy Form in Environmental Insurance: Selected Issues" 2008 (20) *Environmental Claims Journal* 39 (hereinafter 'Siesko & Weiss') 52 identify the following five rules: (a) the 'exposure' rule; (b) the 'manifestation' rule; (c) the 'double-trigger' rule that damage occurs when the first exposure of the environment to the pollutant occurs, and at the time the damage becomes apparent; (d) the 'triple-trigger' or 'continuous-trigger' rule that lasts from first exposure of the environment to the pollutant, until the time when damage first becomes apparent; and (e) the 'actual-injury' or 'injury-in-fact' rule. Fogleman V *Environmental Liabilities and Insurance in England and the United States* (2005) (hereinafter 'Fogleman') 509, on the other hand, recognises the following four trigger theories for risks covered by liability insurance policies: (a) the 'exposure' theory; (b) the 'manifestation-of-loss' theory; (c) the 'injury-in-fact' or 'actual-injury' theory'; and (d) the 'continuous', or 'multiple' trigger theory discussed from 510 *et seq*. She also discusses the fact that courts often apply the triggers held in asbestos liability cases when determining the trigger in other pollution cases; see also 1546. Italiano 41 identifies only the following four theories: (a) the 'exposure'; (b) 'manifestation'; (c) 'multiple-trigger'; and (d) 'injury-in-fact' trigger theories.

[29] Faure (ed) 46 refers to this type of liability as 'retroactivity'; for more detailed policy examples see Kalis PJ, Reiter TM & Segerdahl JR *Policyholder's guide to the Law of Insurance Coverage* (2004) Part 2 chap 2.

'judicial gatekeepers' that match specific claims to particular insurance policies, and that enable insurers to assess their potential liabilities adequately.[30]

Any polluting occurrence consists of the following four phases, as illustrated below:

(1)_____(2)_____(3)_____(4)_____ (X)

(1) the polluting occurrence (for example, the release of asbestos into the air);
(2) the pollution itself (inhaling the asbestos and the absorption into the lungs of the person affected, and subsequent damage to lung tissue);
(3) the manifestation of the damage (eventual coughing, bleeding and suffocation);
(4) the claim against the insurer; and
(X) payment of compensation.[31]

The standard trigger theories that are based on these moments in time are discussed below. It appears that the time of manifestation of loss or 'loss-occurrence' was the generally preferred trigger in the past,[32] whereas insurers now appear to move more towards a 'claims-made' trigger as a more practical alternative for new risks.[33]

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[30] In the words of Goodman GA "Insurance Triggers as Judicial Gatekeepers in Toxic Mold Litigation" 2004 (57) *Vanderbilt Law Review* 241, 245.

[31] A version of the schematic illustration by Van Daele G *Milieurisico's goed verzekerd* (2001) (hereinafter 'Van Daele') 26; see Wansink JH *De algemene aansprakelijkheidsverzekering* 3rd ed (2006) (hereinafter 'Wansink') 95 par 2.8 who identifies the following six phases in a liability insurance cover scenario, namely (a) the insured's wrongful conduct; (b) the mere factual occurrence that directly causes the damage; (c) the effect of the damaging facts and circumstances on the property or person; (d) the manifestation of the damage; (e) the liability of the insured towards the prejudiced party, and (f) the notification by the insured to his insurer of his liability towards the prejudiced party.

[32] Examples include the 'exposure', 'manifestation', 'injury-in-fact' and 'continuous-injury' triggers; see *Montrose Chemical Corporation of California v Admiral Insurance Company* 10 Cal 4th 645 897 P2d 1 (Cal 1995); see also Goodman 529 who is of the opinion that the 'manifestation' theory is the best for toxic mould claims, and proposes that lessons learnt from asbestos cases could, due to the similar nature of its latent manifestation, also be applied effectively in toxic mould cases.

[33] In the opinion of Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003) (hereinafter Faure & Neethling') 9.

6.3.2 Application of Trigger Theories

6.3.2.1 General problematic issues

It is necessary to determine which one of various potential insurers becomes liable to provide cover where an insured changes his insurers over time, but also where property changes hands and the different owners insure with different insurers. Where the previous insurer insured in terms of a 'loss-occurrence' or 'act-committed' policy, but the new insurer insures in terms of a 'claims-made' policy, two or more insurers could be liable to provide cover for the same loss, and the issue of the allocation of cover arises.

It is also possible for different policies that cover the same risk to follow on each other, and a claim could possibly, due to the different nature of the various policies, 'slip through the cracks' in that no claim is possible under any of the policies.[34] Where gradual or slow progressive pollution damage occurs, various insurers could have provided cover during the lengthy polluting occurrence, and their liability or share in liability to cover the damages becomes an issue.

Potential polluters must be made aware of these issues when they obtain insurance cover, especially when they change from one insurer to another and where the nature of the trigger of the policies differs, for example, where a change from cover with a 'claims-made' trigger to a 'loss-occurrence' trigger is made. An example of a recent gradual polluting incident occurred where ACSA (The Airport Company of South Africa) was responsible for three slow aviation-fuel leaks from degraded storage tanks at the OR Tambo International Airport that contaminated soil and groundwater in neighbouring residential areas.[35] The

[34] Where the previous insurer insured according to a 'claims-made' policy, and the new insurer insures according to an 'acts-committed' policy.
[35] http://www.news24.com/News 24/South Africa/0,,2-7-1442_2044822 (last accessed on 26 February 2007).

damage caused over a long period only manifested years later. The potential involvement and liability of various insurers are currently in dispute.

6.3.2.2 Requirements for vesting of claim

The following is required for indemnity insurance: (a) there must have been a valid contract of insurance; (b) all suspensive conditions that affect the enforceability of the claim must have been met; (c) the peril insured against must have occurred during the policy period; (d) the loss must be proximately caused by the peril insured against.[36]

Different types of policies have been developed in the insurance industry to provide cover for specific eventualities that have different trigger dates. These are examined below.

6.3.3 Classification of Policies according to Triggers

6.3.3.1 The 'act-committed' or 'occurrence-based' policy

6.3.3.1.1 Nature of cover

The insurance policy in force at the time when the incident, accident or the conduct that caused the loss occurred is the policy, which offers cover for the damages, irrespective of when the discovery of the wrongdoing is made or where the damage manifests itself.[37] An 'occurrence-based' policy does not provide retroactive cover, but can provide a potentially extensive prospective cover that is as yet uncertain. This type of liability, known as 'long-tail' liability, can be extensive as the insurer could be liable for claims even after his

[36] See Reinecke *et al* par 291 for an examination of the requirements for the vesting of a claim.
[37] Larsson 530 and Van Daele 27 examine the status of these policies; see also Wansink 97 for an examination of this type of policy in the context of liability insurance.

contractual relationship with the insured has ceased to exist. As a general rule, the insurer's liability under a property policy is based on the time of the occurrence of the peril and not on the time when the damage manifests itself. This may, however, be changed by an agreement.[38]

It is difficult, and in some situations impossible to determine exactly when the polluting incident occurred, as the manifestation or discovery of the damage could only occur years after the act was committed, causing a long-tail liability for the insurer.[39] This will be the case especially where gradual pollution or a migration of pollution from one property to another occurs. Warfel, for example, argues that each exposure of property to the same contaminant constitutes a new occurrence and 'new' damage, triggering a multitude of policies, but that it is not a 'continuous-trigger' as discussed below.[40] This view is, however, not generally supported.

6.3.3.1.2 Problems regarding the practical application of the trigger

Practical problems include the following: (a) proof of the policy and records could have been lost over time; (b) the insurance company no longer exist at the time of claim; (c) the original insured no longer exists at the time of claim; (d) there is insufficient cover; (e) policy limitations exist, where the cover is reduced in certain instances or where policy conditions do not provide for claims of this

[38] See in this regard Merkin RM *Colinvaux's Law of Insurance* 8th ed (2006) (hereinafter 'Merkin') 104 pars 5–16.

[39] Spier J "Apocalyptische scenarios, De prijs van de onzekerheid na de aanslagen in the Verenigde Staten op 11 September 2001 en de daarop volgende economische ellende" in Faure & Neethling 9 proposes that the solution to the problem of the retroactive effect on the insurer's liability lies in the increase in 'claims-made' policies; Larsson 531 highlights the problem that where first-party property insurance is concerned, the insurer at the time of the occurrence remains under a latent duty to indemnify the insured until the damage is discovered, even though the policy period has expired; Fogleman 1529–1537 evaluates the potential limitless extent that this retroactive duty to indemnify could have.

[40] Warfel WJ "Environmental Insurance Coverage Disputes: Is State Legislation the Solution?" 2005 (September) *CPCU eJournal* 1 4.

nature; and (f) determining exactly when the polluting act was committed is problematic, which can eliminate the possibility of a claim.

6.3.3.1.3 Duty to give notice of claim

Some of these policies contain a condition that could be interpreted either as a contractual duty or a suspensive condition as known in our law, known as a condition precedent in UK law, that requires the policyholder to give notice of a claim to the insurer within contractually specified time limits.[41] Where the policyholder gives the notice outside these limits, this will only preclude his claim where the insurer can show that he suffered prejudice as a result of the delay.

The notice must be given within the agreed time or in some cases within a more vaguely described 'reasonable time'.[42] The effect of non-compliance or breach of this clause depends on the purpose and wording of the clause. It effect is usually that the insurer faces no liability unless the insured meets the requirements. Where the policy does not expressly require such a notice, the insured has no obligation in law to give any notice to his insurer prior to his claim. The policy could require the insured to comply with an obligation to notify another entity such as a state department or other authority of the occurrence that caused damage or harm. This would be in accordance with, for example, statutory notice procedures, or obligations to give notice imposed by permits or licences to operate facilities.

[41] See also Merkin 250; also 695 *et seq* regarding the extent of the insured's notification obligations under liability insurance policies.
[42] This is in accordance with the 'notice-prejudice' rule; see also Siesko & Weiss 44 for the application of this rule in 'claims-made-and-reported' policies as discussed below in par 6.3.3.4 below.

6.3.3.2 The 'manifestation' or 'loss-occurrence' policy

6.3.3.2.1 Nature of policy

The insurance policy in force at the time of manifestation of loss is the policy that can provide cover for the damage or loss. The date on which the loss-causing conduct occurred, is irrelevant for purpose of the insurance claim. Case law in the UK, for example, endorses the implementation of the 'loss-occurrence' or 'injury-in-fact' trigger for coverage of progressive environmental damage under liability policies.[43] Germany and in France, for example, acknowledge the verifiable first discovery of the loss as the trigger for a claim.[44] Property insurance is usually issued on a 'loss-occurrence' basis.[45] Coverage clauses in public liability policies are also usually 'occurrence', 'event' or 'accident' based.[46]

6.3.3.2.2 Problems regarding the practical application of the trigger

A problem exists where an insured owner sells his property on which a business is located which was an industry that caused environmental pollution. The new insured owner continues with the industry, and once the pollution previously caused manifests itself, must deal with the claim under his insurance cover.[47]

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[43] *Kelly v Norwich Union Fire Insurance Ltd* [1990] 1 WLR139.
[44] See the discussion by Hoffman WC "Environmental liability and its insurance in Germany" 1993 (2) (Winter) *Federation of Insurance and Corporate Council Quarterly* 147; see also Ladeur K "Der Umweltshaftungsfonds – ein Irrweg der Flexibilisierung des Umweltrechts?" 1993 *Versicherungsrecht* 257 for the position in Germany.
[45] As reported by Larsson 530; see also the discussion of the nature of first-party property insurance in chap 5 par 5.3.2.3 above.
[46] As reported by Fogleman 1543; to date no court in English law or South African law has handed down a judgement on what the standard trigger for a claim for past pollution for a claim under a public liability policy should be.
[47] See in this regard the detailed discussion by Wansink 100 on the 'loss-occurrence' policy in the context of liability insurance.

6.3.3.2.3 Additional write-back cover

Due to the absolute exclusion of pollution-related risks, some insurers agree to write back cover by adding a time element pollution endorsement at an additional premium to cover bodily injury and property damage caused by the abrupt release of pollutants. Cover is only triggered once the incident occurs and once it has been properly reported to the insurer within the periods specified in the endorsements. See also for various versions of endorsement, write-back or buy-back clauses elsewhere in this chapter.[48]

6.3.3.3 The 'claims-made' policy

6.3.3.3.1 Nature of policy

The insurance policy in force at the time the claim is made is the policy which covers the damage, irrespective of when the damage was caused or when it occurs. Although this type of trigger has often been the focus of criticism,[49] it now 'constitutes a dominant presence in the specialised liability insurance marketplace',[50] and appears to be preferred by most insurers. In a pure claims-made policy coverage only exists where real claims are made during the policy period.

The two requirements for this trigger are that (a) the manifestation of the damage must still be present within the period of insurance cover, and (b) the claim must

[48] See par 6.5.3.8 below.
[49] Spier J "Aansprakelijkheidsverzekeringen: alles en niets" 1997 (4) *TSAR* 714 722 states that even though there are differences between the loss-occurrence and the 'claims-made' policies, one should question why so much criticism is levelled against the 'claims-made' policies, whereas the 'loss-occurrence' policies are left at peace in that 'loss occurrence-verzekeringen zich mogen verheugen in een rustig bestaan', although problems in this type of cover also exist; see also the considerations of Larsson 530 *et seq*.
[50] In the words of Siesko & Weiss 41.

be made strictly within the period of insurance cover. Most modern policies are written on a 'claims-made' basis.[51]

Two variants of this type of policy exist, namely where the claim is made by the prejudiced party against the insured, and where the claim is made by the insured against his insurer. Although it is usually presumed to be the latter, the wording of the policy will in each situation determine the nature of the 'claim' referred to.[52]

6.3.3.3.2 Problems regarding the practical application of the trigger

This trigger can also hold insurers liable for past sins, where manifestation only occurs long after the polluting incident occurred. Most of these 'claims-made' policies are therefore linked to fixed retroactive dates to prevent infinite liability. The effect is that where the cause for a claim exists before a specified date, a claim may not be lodged in terms of the 'claims-made' policy that offers cover for claims made after that date. An example of such a policy is the formula known as 'claims-made plus three years'.[53] The effect of this policy is that it limits the cover afforded severely.

The advantages from the insurer's perspective, therefore, include a more predictable risk as the time of cover is finite. The process of risk differentiation and adaptation of premiums is more precise. Although the risk of the insurer in

[51] See also Van Niekerk JP "Liability Insurance: Successive but Overlapping 'Claims-made' Policies and a Question of Quantum" 2006 (18) *SA Merc LJ* 382 (hereinafter 'Van Niekerk (2006 *SAMLJ*)') 391.

[52] See Wansink 107 for the consideration of this type of trigger to provide effective cover. He confirms that this type of cover can be criticised on a social level. Legislators have to intervene by the introduction of a 'circumstances-reporting' coverage. This affords cover to the insured where he timeously notified the insurer during the policy period that he has become aware of circumstances that could lead to a claim, even where the claim itself is made beyond the currency of the policy period.

[53] Siesko & Weiss 41, however, warn that retroactive date provisions bring with them a great deal of additional expense, as complex and lengthy investigations to determine the exact date of the polluting incident are required. The expense is though justified in the face of the potential effect of paying out a major claim.

the short run, for the time during which the policy is in place, is greater, there is no liability for potential future claims.

The advantages for the insured are that he generally pays a lower premium as he is not charged for cover for certain future claims, but that he is also afforded cover for losses predating the inception of the 'claims-made' policy.[54] This trigger also affords other benefits such as higher limits, and the inclusion of the latest terms and conditions into policies.

Nevertheless, it holds the following serious disadvantages. Where the insured has knowledge of an occurrence, and this is not disclosed before the insurance contract is concluded, a misrepresentation is made and the contract becomes voidable.[55] Cover is then lost. Where the occurrence is disclosed, the potential insurer may decide not to conclude a contract, as it already knows that it is at risk. Obtaining cover in this situation could then become difficult.

This form of pure 'claims-made' policy implicitly allows the policyholder the benefit of reporting the claim to the insurer within a reasonable time after the policy period has lapsed. This differs from the 'claims-made and reported' policies discussed below.

6.3.3.3.3 Additional endorsements

Additional 'tail endorsements' may be added to policies, in terms of which policyholders have to pay an extra premium to have their cover extended to earlier retroactive dates.[56]

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[54] Siesko & Weiss 40 conclude that advantages are offered to both insurers and policyholders especially in pollution cases.
[55] Van der Merwe S, Van Huyssteen LF, Reinecke MFB & Lubbe GF *Contract General Principles* 3rd ed (2007) (hereinafter 'Van der Merwe *et al*') 73.
[56] Tail endorsements provide the insured with retroactive or 'write-back' cover, as discussed in par 6.3.3, par 6.5.3.8.

6.3.3.4 The 'claims-made and reported' policy

6.3.3.4.1 Nature of policy

Some of the 'claims-made' policies are also written on a 'discovered-and-reported' basis to curtail an indefinite risk and prevent stale claims. 'Discovery' means that the insured has become aware that there is environmental harm on his property, and must then immediately report it to the insurer.[57]

In some cases, this type of 'circumstances-reported' coverage already upon report provides cover to the insured.[58] In other cases, the third party's claim must have been made against the insured or the loss discovered by the insured, and it must also have been reported to the insurer by way of proper notice during the period of insurance cover, in terms of the 'double-anchor' trigger.[59] This is seen as a condition precedent for coverage.[60] As the condition precedent does not form part of South African law, this could be interpreted either as a contractual duty or a suspensive condition, depending on the scope of the duty and the intentions of the parties, as discussed further in this paragraph.[61] The interpretation of the words 'claim' or 'notice' is obviously crucial to determine whether cover is provided.[62]

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[57] In the words of Larsson 529.
[58] See in this regard the extent of the duty to report discussed below.
[59] Siesko & Weiss 42 also emphasise the importance of noting the significant difference between the 'claims-made' and 'claims-made and reported' policies, especially where the operation of notices is concerned as explained in the text above; see also Masters LS "Insurance Coverage for Environmental Liability in the 1990s" 1997 (10) *Environmental Claims Journal* 65 *et seq* on the 'single anchor' where only one occurrence triggers the cover under the policy, and the 'double anchor' construction of these policies where more than one occurrence or action will trigger the policy.
[60] See in this regard Merkin 250, 301; Siesko & Weiss 43 *et seq*.
[61] Reinecke *et al* par 256 explain the nature of this specific type of term in South African law.
[62] Siesko & Weiss 44 discuss case law that holds that it should enjoy its ordinary meaning of 'assertion of a right'.

This issue was dealt with in our law in the case of *Van Immerzeel and another v Santam Ltd*,[63] where professional liability cover was provided under two 'claims-made' policies. A limitation or cap in the first policy included all costs and expenses under the cover provided, whereas it was not included under the second policy. Where the liability claim and related costs and expenses exceeded the cap, the insurers of course claimed that the insured's claim fell under the first policy. The insured took the position that as both policies had the potential to cover the loss, they could elect to choose under which they wanted to claim, which was of course the second with the higher limit. The trigger of the claim was at issue before the courts. The insured was only informed of a potential claim by a third party when the first policy was in force. The court held that this did not qualify as a 'claim'. The insured complied with the required notification procedure once an actual claim by the third party was made when the second policy was in force. The court found that only the second policy with the higher indemnity was triggered and provided cover.[64]

6.3.3.4.2 Problems regarding the practical application of the trigger

Cover may be denied where an insured must give notice of the forthcoming claim 'immediately' or 'as soon as is practical' after the loss occurs, and by failing to do so, causes the insurer to suffer actual prejudice.[65] What is seen as 'immediate' and whether this requirement has been met, will clearly depend on the facts and circumstances of each case, and by application of the 'notice-prejudice' rule that even where the notice is given outside the policy period, the insurer must grant coverage unless he can show that prejudice resulted from the delay.[66]

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[63] 2006 3 SA 349 (SCA).

[64] See also Van Niekerk (2006 *SAMLJ*) 387 for a discussion of the majority and minority judgments in the *Van Immerzeel* case.

[65] Fogleman 1572 is of the opinion that although the term 'immediate' has been strictly interpreted, terms such as 'as soon as possible' or 'promptly' are less demanding and interpreted according to the facts and circumstances of each situation.

[66] Siesko & Weiss 44 identify this as mandatory statutory law in some states in the USA, but in 45–50 discuss case law where it has been contested; see also par 6.3.2 as the rule initially had its origins in 'occurrence-based' policies discussed in par 6.3.3.2 above.

The notice procedure in a policy must therefore be carefully examined. The most demanding notices are those for which an exact time limit is set in the policy. Where the duty to give notice is intended to be a modal clause or contractual duty,[67] failure to comply is a breach of contract and the normal legal consequences for breach apply. This could also affect a claim for reciprocal performance from the other party. Where it is a suspensive condition, the insurer may refuse to pay out any claim until the condition is met within the stipulated time. The insured must provide timely notice in accordance with the prescribed notice procedure and format agreed upon.

Time limits for both lodging a claim against the insurer and for the additional step of initiating court proceedings against the insurer are difficult to meet where the claim is for environmental damage, due to the problems of identifying and quantifying actual damages suffered.[68]

6.3.3.4.3 Additional coverage

It is possible to purchase a policy endorsement that provides cover for extended reporting periods. This is also charmingly known as 'tail coverage'. This additional cover is often obtained only after termination or cancellation of claims-made policies. In some cases a policyholder chooses not to purchase the additional endorsement and simply renews his policy, and then enjoys the cover previously denied.[69]

[67] Also seen as a contractual promise by the insured to notify the insurer.
[68] See the discussion of *Barkhuizen v Napier* 2007 5 SA 323 (CC) par 6.5.2. specifically on the constitutionality of time bar clauses.
[69] See especially *Checkrite Ltd Inc v Illinois Nat Ins Co* 95 F Supp 2d 180 (SD NY 2000) in this context.

6.3.3.5 The 'continuous-trigger' theory

6.3.3.5.1 Nature and application of trigger

In terms of this theory all policies in effect (a) at the time of initial exposure; (b) during any subsequent period of continuing exposure; and (c) at the time of the physical manifestation of the harm or damage provide cover and would have to respond.[70] It combines the effect of all the previous theories.

6.3.3.5.2 Advantages and disadvantages of trigger

As it is usually difficult, if not impossible, to determine the time of initial exposure in a gradual pollution situation, this theory has only limited application. The only component of this trigger that can easily be proven is the time of manifestation of loss or damage. The application of this theory clearly offers policyholders the maximum coverage as in theory all policies are triggered.[71]

In some cases courts adopt a 'double-or-triple trigger' theory, depending on how many policies they find, but allocate the cover in such a way that each of the insurers does not pay more than he would have paid under a single trigger theory.[72]

One has to question whether this can in most cases be acknowledged as a separate trigger, and whether it is not in fact merely an artificial grouping of a number of 'single-trigger' claims that would have existed independently anyway.[73]

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[70] Goodman 283 concedes that this theory cannot be applied successfully to asbestos or toxic mould cases as the exact time of initial exposure is unknown.
[71] *Keene Corp v Insurance Company of North America* 667 F 2d 1034 (DC Cir 1981) 1038.
[72] Goodman 268 illustrates this principle in view of relevant case law.
[73] See in this regard the similar views of Warfel 4 in par 6.3.3.1.1 above.

6.3.4 Statutory Regulation

It is possible to regulate the application of these trigger issues specifically for environmental insurance by statute. The regime of strict and retroactive liability of those held liable for soil pollution or land contamination in the UK can serve as an example of such a statutory regulation.[74] A statutory obligation, in terms of which an insured has to clean up affected sites, even though he was not liable for the initial polluting incident, could also be seen as a basic example.[75]

6.3.5 Allocation of Liability between Insurers

6.3.5.1 Justification for allocation

Where an occurrence extends over more than one policy period and more than one policy has to respond, the allocation of the liability payable by each triggered policy must be determined. The problem becomes more complex where the insured did not have insurance during all the years in which the single occurrence continued. The allocation of loss allocates loss to the insured for the years in which he was self-insured, or was not afforded coverage under existing policies due to the operation of exclusion clauses or for other reasons. It serves the purpose of preventing the policyholder from benefiting from coverage for property damage that took place when it was in reality not paying any premiums for that coverage, or was paying a reduced premium, or for its selection of other less reliable insurers.[76]

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[74] S 57 of the UK Environment Act 1995; also s 78A(2) in terms of which the 'harm and risk' approach is applied. Liability is allocated to a site designated by a local authority where there is 'significant harm that is being caused', or 'where significant possibility of such harm being caused'.

[75] See the full discussion of the position in the UK in chap 7 par 7.3 below.

[76] See Warfel 7 *et seq* for a discussion of the position in various states in the USA on applying the *pro rata* approach.

6.3.5.2 Methods to determine allocation

6.3.5.2.1 Joint and several liability

Fogleman identifies two primary allocation methods that are applied by courts in the USA.[77] The first is a joint and several liability up to policy limits, which entitles the insured to continue selecting policies and claiming under them until the loss is paid or the limits are exhausted.[78] Insurers can claim contribution from other insurers provided that they are entitled to do so.[79] Whether this method of allocation applies, depends strictly on the wording used in the specific policies.

Where the policy states that 'all losses' will be covered, a joint and several liability is justified. This then causes a horizontal stacking of policy limits, where one polluting occurrence extends over more than one policy period, and the insured elects to exhaust the policy for its specific period to its maximum limit before moving on to claim from the policy in the next year. Courts are, however, not keen on allowing this type of allocation unless it appears that there are insufficient funds in any single policy period to cover the loss.[80]

An example of statutory regulation in South Africa that removes the burden of proving causation can be found in The Minerals and Petroleum Resources

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[77] Fogleman 522.

[78] See also Warfel 6 on the merits of applying of this form of liability where there is an indivisible loss, and where technology is not available to determine precisely the amount of property damage caused during each policy year; Winter RA "Liability Insurance, joint tortfeasors and limited wealth" http://www.sciencedirect.com/science?_ob=Article URL&_udi= B6V7M-4KF6BPH- (last accessed on 18 July 2006) 1 is of the opinion that liability insurance decisions are the outcome of a game rather than a single-agent decision problem. He argues at 3 that while expanding joint and several liability which may appear to broaden the scope of an accident victim to claim, in reality care has to be taken as it has the opposite perverse effect in that it reduces compensation paid to victims and reduces incentives for accident avoidance.

[79] For the legal position of classic double insurance and subsequent contribution, see Reinecke *et al* pars 516–522.

[80] Fogleman 536 considers the practical consequences of horizontal stacking, and concludes that in view of the deductibles that exist for each policy period, stacking is not necessarily to the insured's benefit.

Development Act[81] that provides that 'irrespective of the Companies Act[82] or the Close Corporations Act,[83] the directors of a company or the members of a close corporation are held jointly and severally liable for 'any unacceptable negative impact on the environment, including damage, degradation or pollution advertently or inadvertently caused[84] by the company or close corporation which they *represent or represented'*. [85] This is also a good example of the introduction of statutory retroactive causation, as no time limit is set for such a claim.[86]

A brief reference can be made here to the provisions of the latest version of the Consumer Protection Bill,[87] which aims to introduce a joint and several strict statutory product liability. This is in line with the strict product liability found in most countries. The Bill introduces a regime of strict and joint and several liability of producers, importers, distributors and retailers of 'goods',[88] where any consumer is harmed by 'unsafe' goods, which the person liable could not reasonably have discovered.[89] Manufacturers are warned to spend more on insurance to cover their liabilities in anticipation of the enactment of these

[81] Act 28 of 2002, as discussed in par 3.4.4.8 of the text above.
[82] Act 61 of 1973.
[83] Act 69 of 1984.
[84] Own emphasis.
[85] S 38(2).
[86] See also its effect on the trigger of claims in par 6.3.2 above.
[87] Consumer Protection Bill [B 19D-2008]. Although the Bill was signed on 24 April 2009 it will only become operational and fully effective at the end of 2009 or early in 2010, together with the Companies Bill and the Competition Amendment Bill which form the rest of the trilogy of Acts, see http://www.busrep.co.za/index.php?farticleID=4734423&fSection Id=561 "Department of Trade and Industry to improve trade laws" (last accessed on 1 December 2008).
[88] S 1 defines 'goods' as follows: 'includes (a) anything marketed for human consumption; (b) any tangible object not otherwise contemplated in paragraph (a), including any medium on which anything is or may be written or encoded; (c) any literature, music, photograph, motion picture, game, information, data, software, code or other intangible product written or encoded on any medium or a licence to use any such intangible product; (d) a legal interest in land or any other immovable property, other than an interest that falls within the definition.'
[89] S 61(1) states that any consumer who is harmed by unsafe goods, has the right to hold anyone involved in getting the product into the market, irrespective of negligence, liable. for any hazard arising from or associated from such risks; joint and several liability is introduced by s 61(3) and s 61(6). A court determines the extent and monetary value of any damages; specific defences are allowed in s 61(4), where a person acts in compliance with a public regulation; where it would be unreasonable to expect the producer or supplier to discover the hazard at the time of his involvement. 'Harm' in terms of s 61(5) of the Bill includes death, injury, illness, loss of or physical damage to property, any economic loss.

provisions in the near future. Although this type of regime eases the prejudiced party's burden of proving fault and the allocation of liability, it forces producers, manufacturers and the like who are affected by the Bill to increase their insurance cover, which leads to an increase in product prices due to the internalisation of these costs.

It is submitted that this type of regime will contribute towards alleviating the burden of proving fault, especially negligence, but more specifically to provide for a practical allocation mechanism of the loss according to the introduction of statutory joint and several liability.[90] Persons who could potentially cause or contribute to a specific pollution occurrence are to be held jointly and severally liable. A person can only deny his liability where he can prove that the pollution loss was caused solely by the faulty conduct of another. Where he contributed to the loss, he can limit his liability by proving what his share in causing the damage was.

6.3.5.2.2 Proportionate allocation

The second method is a *pro rata* allocation of the claim in accordance with the amounts insured for or the value of the various policies.[91] The requirements for this type of allocation in accordance with the insurer's right to claim contribution include (a) that the insurer claiming contribution must have discharged his liability to the insured; (b) it must have exceeded his proportionate share; (c) it must have been in respect of the interest which is the object of the double insurance

[90] See also par 6.3.5 on the general methods of allocating liability in insurance contracts that is of relevance; see also De Ketelaere 1359 that where a strict liability regime applies, the degree of fault of each of the multiple defendants is irrelevant for purposes of the claim of the prejudiced party. It will only prove relevant where the defendants take recourse against each other.

[91] See the discussion by Reinecke *et al* par 260 on the position where there is a multiplicity of insurers; also par 522 on the right of contribution and apportionment of loss in this situation; Italiano 41 discusses the general approach of a *pro rata* allocation; see also the views of Warfel 7 on the effectiveness of a proportional apportionment.

that existed at the time of loss; and (d) the double insurance must have been for an amount in excess of the loss.[92]

The application of this approach becomes very complicated where both primary and excess policies are involved. Other complications that have to be kept in mind include (a) the varying limits of primary policies; (b) the varying layers of excess policies; (c) the various excess fees and multi-year policies that are involved; and (d) the potential settlement of some of the claims.[93]

6.3.5.2.3 Other methods of allocation

Fogleman identifies at least six approaches to allocate the claim where an occurrence causes progressive environmental damage, namely, (a) the time on which the insurer was at risk, based on a '*pro rata* by years' approach, irrespective of policy limits;[94] (b) possible policy limits, where the aggregate of each policy is added and every insurer pays its share of the loss proportionate to its share in the aggregate;[95] (c) both the time limit on the risk and the policy limits. The aggregate limits are usually apportioned according to both time periods and limits unless the application of another standard is justified;[96] (d) carrying equal shares in the loss, where the loss is simply divided equally between the number of insurers of the risk, up to the limit of each insurer's liability; (e) an equitable apportionment in the discretion of the court depending on the facts and circumstances of each case, which is seen as the general approach unless the policy provides for another allocation; and (f) allocation of

[92] See Reinecke *et al* pars 521.
[93] See these difficulties highlighted by Reinecke *et al* par 522.
[94] Fogleman 526.
[95] See Fogleman 527 for an example of the calculation of such an allocation.
[96] Fogleman 529 *et seq* notes that some courts support this approach as the presumptive rule unless exceptional circumstances justify the application of a different standard, as this approach introduced a degree of certainty and predictability in environmental insurance litigation in continuous-trigger cases due to its mathematical approach. This view has merit and can be supported.

the amount of the damage that occurred during each triggered policy.[97] It is submitted that the solution is not to be found in a single standard method, but that the most suitable one of all these alternatives should be applied by a court according to the specific facts and circumstances of each case where an allocation is required.

Some of these issues can also be addressed under the examination of the principles of causation as discussed directly below.

6.4 Causation and Remoteness of Damages

6.4.1 General

Causation remains an essential requirement for most fault-based and strict liability regimes for pollution damage liability.[98] There must be a causal link between the peril and the loss insured against.[99] In general causation remains a problematic issue for most civil and even for some statutory claims, but it is especially complicated in situations where a pollution damage claim is brought under a liability insurance policy and where causation in insurance context must be determined. Causation in the context of civil liability has been examined in chapter 4 above and should be read together with this discussion.[100]

Regarding the question whether damage or losses are compensable under insurance cover, one has to establish who and what caused the effect, that is, the damage or loss suffered by the prejudiced party. In some cases it is impossible to determine the actual individual identity of the polluter who causes

[97] Fogleman 531 is of the opinion that it is difficult if not impossible in most cases to prorate liability because of the difficulty in determining the exact amount of loss caused in each policy year, and offers no authorities in case law that illustrate the application of this approach.
[98] See in general the discussion of its application in these regimes in Fogleman 1353 *et seq*; see also De Ketelaere 1355 *et seq*.
[99] *Incorporated General Insurances Ltd v Shooter t/a Shooter's Fisheries* 1987 1 SA 842 (A) 861.
[100] See chap 4 par 4.2.5 above

the aptly named 'orphan damage'.[101] These damages rest where they fall, unless another compensation mechanism exists that will allow the persons prejudiced by pollution to obtain compensation.

To prevent the complications posed by issues of causation as discussed below, the USA, for example, relaxes the requirements of causation for claims in terms of CERCLA for both pollution damage as well as natural resource damage. The pollution damage to simply attributed to 'potentially responsible parties' or PRP's in accordance with the proximate cause test, and is discussed in greater detail in chapter 7 below.[102]

Causation is also relevant when the extent of damages has to be allocated, and should be read in conjunction with the discussion of the allocation of the liability of insurers above.[103]

6.4.2 Determining Causation

6.4.2.1 Causation in context of insurance

As regards the method of determining causation, Reinecke states clearly that '[i]f no other intention appears from the contract, it must be assumed that the reference to causation was intended *prima facie* to bear the meaning which is attached to the concept in other areas of the law.'[104] These areas refer to the requirements of causation as applied in the law of delict and the law of contract, discussed extensively in chapter 4 above.[105]

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[101] Winter G, Jans JH, Macrory R & Kramer L "Weighing up the EC Environmental Liability Directive" 2008 (June) *Journal of Environmental Law* 163 (hereinafter 'Winter *et al*'') 172.
[102] See chap 7 par 7.6.2.2.2 below.
[103] See par 6.3.5.
[104] Reinecke MFB, Van der Merwe S, Van Niekerk JP & Havenga P *General Principles of Insurance Law* (2002) (hereinafter 'Reinecke *et al*') par 277.
[105] Chap 4 par 4.2.5, par 4.3.

In general, therefore, causation requires a factual causal link between the conduct that causes the detrimental effect. In insurance law, this is determined by the application of the proximate cause test.[106] Once factual causation has been established, it is limited by a second enquiry, namely whether legal causation was also present.[107]

Parties may limit or adapt the application of the proximate cause rule contractually by tailoring the policy to reflect their intentions in this regard.[108]

6.4.2.2 Application of the criteria

Larsson identifies the fundamental criteria of establishing causation for pollution liability as the following: The prejudiced party has to prove (a) that the damage is associated with the pollutant in time and space and that it is not a unique isolated phenomenon. This criterion is severely influenced by the uncertainty as to time and space, gradual leaching of pollutants, where the incident is a single major catastrophe, and where there is a possible multi-route of persistent non-degradable pollutants; (b) that the incidence and severity of the damage correlates with the concentration and duration of exposure to the pollutant; (c) that these correlations are consistent under similar conditions of exposure; (d) that damage is specifically and uniquely related to one pollutant but not to any other damaging agent. This criterion, however, ignores multiple source pollution;

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[106] As expressed in the rule *in iure non remota causa sed proxima spectatur*; see also Reinecke par 278 for the application of this rule; *Incorporated General Insurances Ltd v Shooter t/a Shooter's Fisheries* 862; see also Merkin 114 pars 5–30 *et seq* for the operation of the proximate cause doctrine in the UK.

[107] Reinecke *et al* par 277 refer to this as the 'remoteness question'; see specifically chap 4 par 4.2.5.3 on the discussion of legal causation; most of the countries examined in the comparative study in chap 7 of this thesis limit factual causation by legal causation, except for Belgium as discussed in chap 7.4 below.

[108] *Napier v Collett* 1995 3 SA 140 (A) 143; Schlemmer E "Oorsaaklikheid in die Versekeringsreg" 1997 (3) *TSAR* 531 537 discusses the principle of *pacta servanda sunt* on the binding effect of these agreements between the insurer and the policyholder on the exact scope of cover provided.

and (e) that epidemiological experience is consistent with experimental evidence, which is not always available.[109]

6.4.3 Burden of Proof

It remains a practical problem to provide scientifically sound proof of the specific source or cause of pollution damage. The nature and extent of the loss often manifests many years after its actual cause causing problems regarding the gathering, presentation and verification of evidence. The insured or prejudiced party bears the burden of proving that the loss was proximately caused by an insured peril, unless a statute has created presumptive liability and placed the burden of disproving liability on the polluter or wrongdoer. The insurer carries the burden of proving a defence such as a contractual exclusion clause or prescription.[110] In situations of subsequent causation, a new intervening cause can either extinguish the original cause completely, or at least limit its effect and subsequently the liability of the wrongdoer.[111]

6.4.4 Multiple Causation

6.4.4.1 General

Most legal systems struggle with the vexed question of multiple causation. A situation where there is multiple causation can exist where the damage is due to various polluting causes, where various individuals contribute to a single cause, or where a combination or synergy of various pollutants causes or increases the effects of the pollution. In general the causes can occur successively or

[109] Larsson 540 offers a concise summary of the relevant principles that should apply to factually determine causation in practice.
[110] See Merkin 308.
[111] See the discussion by Reinecke *et al* par 280 on the operation of a *novus actus interveniens*.

concurrently, which requires the determination of the successive or concurrent proximate cause.[112]

6.4.4.2 Potential solutions

6.4.4.2.1 General

The solution cannot simply be found by the application of the basic legal principles relating to conduct and causation. Where there are several or joint concurrent wrongdoers or tortfeasors who contribute to the loss, one must first determine how far the defendant's acts or omissions are causally linked to the resulting damage, and then to what extent they deviated from the objective norm of the conduct of a *bonus paterfamilias*.[113] Whether it is possible to find a solution by the application of the *conditio sine qua non* test in the case of group actions or 'mass torts' is not clear. The application of the test in these situations has been criticised by various writers.[114]

6.4.4.2.2 Included and excluded perils

Where an excluded peril precedes an included peril in time and the factual causal link is maintained, the initial excluded peril stands as an exclusion from cover. Where an excluded peril succeeds an included peril in time, and the factual

[112] See Goldenberg EM "The Scope of Insurance Coverage for Pollution Claims in Florida: Full Indemnification for Indivisible Clean-up Costs Caused by Multiple Releases" 1999 (Fall) *Nova Law Review* 373 *et seq* for an extensive discussion of USA case law on multiple causation in context of the various trigger theories.
[113] *Jones NO v Santam Bpk* 1956 2 SA 542 (A) 555; see also the evaluation of the norm of legal causation by Schlemmer 532 with specific reference to *Mohlomi v Minister of Defence* 1997 1 SA 124 (CC) and preceding South African case law discussed in the judgment; see also Van der Walt CFC (1995) 431 (Part I); 614 (Part II).
[114] See also the study by Van der Walt CFC (1995) 431–438.

causal link is also still maintained, the initial peril is included and the excluded peril is not recognised as a fresh cause of claim and does not enjoy cover.[115]

6.4.4.2.3 Allocating causation impossible

Where the conduct of one of the members of a group cannot be distinguished from the cumulative loss-causing conduct of the entire group, yet it is a contributing or significant factor to the loss, his conduct in causing the damage should lead to his liability. Where there is more than one possible culprit, structured solutions include, for example, the innovative market-share liability in the Netherlands, and the market share liability in the USA that developed from liability cases in the pharmaceutical industry.[116] The burden of proof clearly benefits the prejudiced party, as he only has to prove the identity of the participants in the specific industry. These potentially responsible parties, also known as 'PRPs' in the USA, are held responsible for clean-up or have to pay substantial civil penalties.[117] In Germany all that is required is a possible involvement in the damage caused within the particular industry in question.[118] Another alternative would be to hold all the potential polluters jointly and severally liable.[119]

The position in terms of CERCLA for the transport of dangerous substances,[120] where the producer, carrier, person exploiting the process or the storage

[115] See again *Incorporated General Insurances Ltd v Shooter t/a Shooter's Fisheries* 862; also Merkin 118 pars 5–36 on case law in the UK dealing with these principles as set for included and excluded perils.
[116] See Snijder E "Van market-share liability naar pollution share liability?" 1990 *TMA* 141; see also chap 7 par 7.6.3.2.1 on the position in the USA.
[117] See Warfel 2 for an examination of the scope of the description.
[118] See in this regard Hoffman 147.
[119] This is also in accordance with s 61(3) of the South African Consumer Protection Bill; see also Wansink JH & Spier J "Joint and Several Liability of DES Manufacturers" 1993 1(6) *International Insurance Law Review* 176 (hereinafter 'Wansink & Spier') 176 for the early position in the Netherlands on the joint and several liability of drug manufacturers, and specifically 180 *et seq* for the views of the authors that joint and several liability could play a significant role in avoiding pollution liability.
[120] S 107.

facilities, current as well as former owners of land on which the substances were dispatched, received or stored, and even the credit providers can potentially incur liability, serves as an example.[121] In Belgium multiple defendants are also held jointly and severally liable and retain a right of recourse against each other.

In the UK, liability is allocated according to the materiality of the wrongdoer's contribution to the risk.[122] Care must be taken not to confuse a double insurance situation, where it is clear that more than one policy covers the same risk, with the situation where successive policies all cover the same liability and the proportionate shares of the liability must be determined.

Common law and statutory law provisions that attribute a share of liability according to the different degrees of fault, for example, in accordance with the degree of contributory negligence of the defendants can also regulate the allocation of damages payable.[123] One should keep in mind that these solutions could lead to arbitrary awards based only on activity or financial involvement and not on the actual contribution to environmental damage caused.[124]

A last complication that deserves to be mentioned in this chapter in the discussion of causation is that an act could be considered too remote in terms of legal causation, to qualify as the effective cause of the loss.[125]

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[121] As stated by De Ketelaere 1358; see also the Belgian *Voorontwerp Decreet Milieubeleid* (hereinafter 'Belgian Voorontwerp') 934.
[122] *Fairchild v Glenhaven Funeral Services Ltd* [2003] 1 AC 32; see also Fogleman 1546 *et seq*.
[123] See examples provided in De Ketelaere 1359; see also the discussion of the apportionment of damages in South African legislation in chap 4 par 4.2.4.4 and par 4.2.6.4 above.
[124] As cautioned in the Belgian *Voorontwerp Decreet Milieubeleid* 841 referred to in chap 7 par 7.4.2.1 below.
[125] See McGee A *The Modern Law of Insurance* 2nd ed (2006) (hereinafter 'McGee') 254 who highlights this complication; see the discussion on the operation of legal causation in South African law in chap 4 par 4.2.5.3 above, in the UK in chap 7 par 7.3.3.2.3, in the Netherlands in chap 7 par 7.5.3.3 and the USA in chap 7 par 7.6.3.2 below. It can be noted that the Belgian law does not require legal causation as a criterion to limit factual causation.

6.5 EXCLUSION, EXCEPTION AND LIMITATION CLAUSES

6.5.1 General

Another current issue relates to the avoidance and the restriction or limitation of claims. Internationally insurers have tried to protect themselves by adding exclusion, exemption or limitation clauses to their policies to escape or limit the risks and their liabilities to provide cover for pollution damage claims.[126] In recent years the enforceability and interpretation of these clauses have engendered considerable litigation between insurers and policyholders.[127] Contractual time limits for bringing claims also place pressure on claimants in environmental damage liability claims, as gathering information and determining the exact scope of the claim are notoriously difficult. Actions of insurers to collude in their actions to exclude these risks in the market have left policyholders with little alternative than to accept these exclusions.[128]

6.5.2 Exclusion Clauses in South African Law

6.5.2.1 General principles

Risk is usually contractually limited by means of exemption, exclusion or limitation clauses. These clauses were already well known in Roman-Dutch

[126] See Reinecke *et al* par 272.In the USA insurance costs rose dramatically as a result of the passing of CERCLA (the Comprehensive Environmental Response, Compensation and Liability Act) in 1980 and ensuing duty to insure; see the detailed discussion of CERCLA in chap 7 par 7.6.2.2 below; see also Kalis *et al* chap 10 par 10.04; and Abraham 614 *et seq*.

[127] *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* 2007 2 SA 26 (SCA); Niekerk JP "The Effect of Insurance on the Imposition of Civil Liability: A Review of and some Preliminary Thoughts on Recent Judicial Announcements" 1999 (11) *SA Merc LJ* (hereinafter 'Van Niekerk (1999)') 514 522 for an early discussion of the influence of insurance on the interpretation of exemption clauses; for an extensive list and details of these cases in the USA, see http://www.wnclaw.com/services/insurance/absolute_pollution_exclusion.cfm (last accessed on 21 February 2008); http://www.bcltlaw.com/articles/en_0204.html (last accessed on 25 February 2008).

[128] Faure & Hartlief 64 plead for control of the 'concurrentie beleid' or competition control to ensure a more varied market.

law.[129] According to the contractual principle of *pacta sunt servanda* or sanctity of contract, public interest requires that contractual clauses, freely agreed to by parties with contractual capacity, are valid and binding upon them and have to be observed.[130] On the other hand, parties also have the freedom to contract, even if it is to their detriment.[131] Contractual autonomy is in the interest of society, allowing a person to trade freely and informing the constitutional value of dignity and equality.[132] Contracts that are contrary to public policy are at common law illegal or, in some cases merely unenforceable.[133] It is, for example, contrary to public policy *per se* to contract out of liability for intentional conduct.[134]

Whether a clause is a limitation clause, or an exception or exclusion clause depends on the intentions of the insurer and the policyholder.[135] Although both have the same purpose and eventual effect in that the risk is restricted, the burden of proof is different and the distinction must be addressed briefly.[136]

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[129] Grotius *Inleidinge tot het Hollandsche Rechts-geleerdheid* 3.14.12, Voet *Commentarius ad Pandectas* 21.1.10, Van Leeuwen *Het Roomsch-Hollandsch Recht* 4.17.2.7; Van der Walt JC & Midgley JR *Principles of Delict* 3rd ed (2005) (hereinafter 'Van der Walt & Midgley') 62; Van Aswegen A *Die Sameloop van Eise om Skadevergoeding uit Kontrakbreuk en Delik* LLD Thesis University of South Africa (1991) 352.

[130] *Barkhuizen v Napier* par 15, 24, 70, 71; *Reddy v Siemens Telecommunications* 2007 2 SA 486 (SCA) 500; Visser C "The principle of *pacta servanda sunt* in Roman and Roman-Dutch law, with specific reference to restraints of trade" 1984 (101) *SALJ* 641.

[131] Van der Merwe *et al* 297; Christie *The Law of Contract in South Africa* 5th ed (2006) 183; *Wells v South African Aluminite Co* 1927 AD 69 at 72; *Barkhuizen v Napier* par 12; *Reddy v Siemens Telecommunications* 496; *Afrox Healthcare Bpk v Strydom* 2002 6 SA 21 (SCA) 38.

[132] Constitution s 7(1), s 10, s 22; *Barkhuizen v Napier* par 15, par 57; *Reddy v Siemens Telecommunications* 496.

[133] *Sasfin (Pty) Ltd v Beukes* 1989 1 SA 1 (A) 7; *South African Forestry Co Ltd v York Timbers Ltd* 2005 3 SA 323 (SCA) 27; Naude T & Lubbe GF "Exemption clauses – a rethink occasioned by *Afrox Healthcare Bpk v Strydom*" 2005 (121) *SALJ* 441 (hereinafter Naude & Lubbe'); *Barkhuizen v Napier* par 34; Van Niekerk (1999) 522 on the role of insurance in the interpretation of contractual exemption clauses; Kalis *et al* chap 6 for a discussion of international public policy considerations in the interpretation of these clauses. Clauses such as restraints of trade that are contrary to public policy are, for example, unenforceable.

[134] *Afrox Healthcare Bpk v Strydom* 34; Van der Walt & Midgley 62; Naude & Lubbe 442; Van der Merwe 298; Christie 184.

[135] Reinecke *et al* par 272; and at 318 state prior to the judgment in the *Barkhuizen* case that 'the validity of contractual time limits may be open to challenge on the grounds that they are unconstitutional'.

[136] *Eagle Star Insurance C Ltd v Willey* 1956 1 SA 330 (A) 334 *et seq*.

6.5.2.2 The impact of the Constitution

As discussed in chapter 3 above, the Constitution has a bearing on the enforceability of all contracts, and especially so where a contract contains an exclusion, exemption or limitation clause (collectively referred to as 'exclusion' clauses for purposes of this discussion) that limits or affects one or more constitutional rights, for example, the right to the environment as addressed in this study. The principle of *pacta sunt servanda* is thus subject to constitutional control and must be interpreted according to constitutional values.[137]

In terms of the limitations clause in the Constitution, a contractual exclusion clause will only be deemed to be constitutionally compliant where it is in line with the spirit, purport and object of the Bill of Rights, such as equality and dignity, and therefore not contrary to public policy.[138] This has been addressed in a variety of cases that were dealt with extensively in chapter 3 above.[139] Some of these clauses infringe upon a variety of constitutional rights, such as the right to equality,[140] property,[141] free access to courts,[142] and the right to freely choose a trade, occupation or profession.[143]

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[137] See the discussion of the limitation of rights in chap 3 par 3.2.3 above; *Barkhuizen v Napier* par 15; also Hopkins K "Insurance policies and the Bill of Rights: rethinking the sanctity of contract paradigm" 2002 (119) *SALJ* 155 160; *Reddy v Siemens Telecommunications* 495; *Carmichele v Minister of Safety and Security and another (Centre for Applied Legal Studies intervening)* 2001 4 SA 938 (CC) pars 54–56; also Christie 18.

[138] S 36; s 172(1)(a): 'When deciding a constitutional matter within its power, a court – (a) must declare that any law *or conduct* [own emphasis] that is inconsistent with the Constitution is invalid to the extent of its inconsistency.'

[139] *Barkhuizen v Napier* above; *Reddy v Siemens Telecommunications* 493, 496, 500; *South African Forestry Co Ltd v York Timbers Ltd*; *Afrox Healthcare Bpk v Strydom; Brisley v Drotsky* 2002 4 SA 1 (SCA); *Johannesburg Country Club v Stott* 2004 5 SA 511 (SCA).

[140] S 22 of the Constitution; which becomes very relevant where an insurer insists that an insured has to sign a standard-form contract to obtain the necessary insurance cover. In these cases the freedom to contract and the right to equality are restricted by this industry practice. See the discussion in chap 3 above. A statute that is intended to promote equality and unfair discrimination is, for example, the Promotion of Equality and the Prevention of Unfair Discrimination Act 4 of 2000.

[141] S 25 of the Constitution.

[142] Above s 34.

[143] Above s 22.

6.5.2.3 Recent case law

As far as exclusion and limitation clauses specifically in insurance contracts are concerned, two recent South African judgments are of great relevance and deserve a more detailed discussion.

In *Barkhuizen v Napier*[144] a suit limitation or time bar clause in an insurance contract that limited the appellant's right to seek the assistance of a court was constitutionally challenged in our courts. The position can be seen as analogous to pollution exclusion clauses. These clauses often occur in statutes and in contracts, yet the principles remain the same. The clause in this specific case read as follows: 'If we (the insurer) reject liability for any claim under this Policy we will be released from liability unless summons is served … within 90 days of repudiation.' The insured averred that the clause was contrary to public policy as it infringed upon his fundamental right of access to the courts.[145] Van der Merwe *et al* correctly argue that such a limitation is subject to the ordinary principles of the law of contract and is not a matter for prescription.[146] The substantive rights of a person are not affected by these clauses, but serve to bar the exercising of available remedies in law to enforce these rights.[147]

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[144] See n 67 above.

[145] S 34: 'Everyone has the right to have any dispute that can be resolved by the application of law decided in a fair public hearing before a court or, where appropriate, another independent and impartial tribunal or forum.' Prior to the Constitution it was held in the case of *Schierhout v Minister of Justice* 1925 AD 417 424 that an agreement that deprives someone of seeking redress in the court for a future injury or wrong, would be an undertaking contrary to the public law of the land and thus contrary to common law; also par 3.2.3 above.

[146] Van der Merwe *et al* 556; Howard MH & Mackowsky MA "Defending claims for environmental damage under first-party property insurance policies" 2002 (Spring) *Tort & Insurance Law Journal* 883 (hereinafter 'Howard & Mackowsky') 915 hold the opposing view as they are of the opinion that the purpose of a suit limitation clause is simply a contractual modification of otherwise applicable statute of limitations; see also the discussion of these suit limitation clauses that are generally found in first-party property policies in chap 5 par 5.3.2.

[147] Hopkins 168 sees these clauses as in fact procedural impediments and not prescription clauses, which is also the view held by Merkin 321 *et seq*.

In the *Barkhuizen* case the court interpreted the norm of public policy according to the constitutional values discussed in chapters 3 and 4 above.[148] The court confirmed that it also remains important and in the interests of justice to limit the time during which litigation may be launched,[149] yet a claimant needs adequate and fair opportunity to see judicial redress, and not an impossible short period of time to do so.[150] Notions of fairness, justice, equity and reasonableness cannot be separated from public policy, as simple justice must be done between individuals.[151]

The court held that time bar clauses are not *per se* unconstitutional, as they too may reflect public policy.[152] One must first determine what the nature and purpose of these clauses are, which then form the substantive part of the enquiry, and then whether its function is sufficiently important to justify the limitation of a fundamental right which is the proportionality part of the enquiry into public policy.[153]

The clause must be evaluated objectively and the equality of bargaining power and the peculiar situation of the bargaining parties must be investigated in order to reach a decision on the constitutionality of such a clause.[154] As the parties were indeed found to have had equal bargaining power, and that no good reason existed why the claimant did not claim within the specified time limit or even within a reasonable time, the majority of the court found that the enforcement of

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[148] *Barkhuizen v Napier* pars 28, 169, 178; as discussed in chap 3 par 3.2.3 and chap 4 par 4.2.3.2.
[149] Par 47, referring to *Mohlomi v Minister of Defence* in that delays in litigation protracts the disputes and prolongs the uncertainty, and that adjudication of cases gone stale is seldom satisfactory as testimony and evidence becomes unreliable or disappears.
[150] See *Barkhuizen v Napier* par 75 on the maxim *lex non cogit ad impossibilia*; see also *Montsisi v Minister van Polisie* 1984 1 SA 619 (A) 638.
[151] *Barkhuizen v Napier* par 54, 99; *Bafana Finance Mabopane v Makwakwa and Another* 2006 4 SA 581 (SCA) par 21.
[152] Par 48 as well as the judgment in the *Mohlomi* case n 112 above.
[153] See the view held by Hopkins 168, 173 that the time bar clauses in short-term insurance policies are unconstitutional and unenforceable has now been proven wrong in view of the judgment in the Barkhuizen case below.
[154] *Barkhuizen v Napier* par 59.

the limitations clause would not be unjust and therefore unconstitutional.[155] The minority, on the other hand, found that the time agreed upon was unreasonably short and the clause too inflexible.[156]

The case of *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* also serves as authority where a clause in an indemnity insurance policy in respect of cover for liability to third parties for their 'property damage', was interpreted and found to include cover for the insured's statutory liability to pay clean-up costs for 'ecological damage' caused.[157] The relevant clause in the policy regarding cover for defined events read as follows: 'Defined events: Any accident caused by or through or in connection with any vehicle described in the schedule or in connection with the loading and/or unloading of such vehicle against all sums including claimant's costs and expenses which the insured and/or any passenger shall become legally liable to pay in respect of … (ii) damage to property other than property belonging to the insured or held in trust by, or in the custody or control of the insured or being conveyed by, loaded into or loaded from such a vehicle.'[158]

The court found that no restriction existed as to the type of costs, expenses or liabilities covered by the policy and that it included statutory liability as well, and stated clearly that where the insurer wished to exclude ecological damage from property damage, it should have done so expressly.[159]

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[155] Above par 86.

[156] Above par 112; see also Wansink JH "Verzekering, een Juridisch Product in een Kritische Buitenwereld – Een Impressie uit Nederland" 1999 (4) *TSAR* 706 714 who states that an additional duty rests on the insurer in the Netherlands to notify the insured of a time bar clause in the policy when the insurer notifies the insured that the latter's insurance claim has been rejected. The acknowledgement of such a duty is to be endorsed, as the insured is often not aware of the time bar clause, and only understands its implications once it is too late to institute legal proceedings.

[157] See also the discussion of the interpretation of 'property damage' and 'natural resource damages' in par 6.6.2.3 and par 6.6.2.5 below.

[158] Pars 7, 9 of the judgment.

[159] Par 23 of the judgment; see also the case note on this case by JP "Case note: *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another*" 2006 (9) *Juta's Insurance Law Bulletin* 194 (hereinafter 'Van Niekerk (2006 *JILB*)').

6.5.2.4 Lack of statutory control

No other legislative measures have been passed in South Africa on the control and limitation of specifically exemption, exclusion or limitation clauses, which not is the case in other countries.[160] The South African Law Reform Commission has been involved in a project on unfair contractual stipulations for some time, which is currently dormant and has not led to the enactment of any final legislative measures.[161]

Some general statutory measures of limited application are in force that could offer some relief to an insured, provided that the contractual exclusion clause falls within the ambit of these statutes.[162]

Where an insurer unfairly discriminates against a specific person, the Promotion of Equality and Prevention of Unfair Discrimination Act may affect the contract. This would be the case where there is an unfair discrimination in the provision of benefits, facilities and services relating to insurance.[163]

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[160] For the position in other countries see example The Unfair Contract Terms Act 1977 of the UK, also chap 7 par 7.2.4.1 below; The European Community Council Directive on Unfair Terms in Consumer Contracts 1993; the Australian Trade Practices Act 1974; and The Contractual Remedies Act 1979 of New Zealand; see also Van der Merwe 326, 300; and Christie 191 on the current position on the fairness of contractual stipulations in the general law of contract.

[161] Project 47 of the South African Law Reform Commission *Discussion Paper 65 Unreasonable Stipulations in Contracts and the Rectification of Contracts*; see also Christie 13.

[162] See, for example, the National Credit Act 34 of 2005 s 90 on unlawful provisions of credit agreements such as waivers of common-law rights and indemnities that deprive a consumer of protection as envisaged by the Act; Gauteng Consumer Affairs (Unfair Business Practices) Act 7 of 1996, in terms of which the Provincial Consumer Court can extend protection to consumers against unfair business practices, described as any business practice which has or is likely to have the effect of unfairly affecting any consumer. What will be held to be fair, will once again depend on interpretation in view of public policy and constitutional considerations; and the third draft of the Consumer Protection Bill as signed on 24 April 2009, yet not operational.

[163] Act 4 of 2000; see Reinecke *et al* par 165 for a brief discussion of the effect of this statute on insurance contracts in general.

6.5.3 History of the Pollution Exclusion Clause

6.5.3.1 General

It is important to do a brief study of the progressive development of exclusion clauses in order to understand the continuous attempts by insurers to exclude pollution claims in reaction to claims brought against them. The increased scope of these clauses illustrated below serves to close all possible loopholes in order to avoid most pollution claims. Although the clauses have evolved over time, most of them still appear in policies worldwide, either in their original form or with slight variations. Policies do not necessarily contain the latest versions issued by the various insurance bodies.

Pollution exclusion clauses were included in policies, and *pro forma* clauses were drafted and published in the international insurance industry, since the 1950s. By the 1970s most liability and property policies contained pollution exemption clauses. A Commercial General Liability insurance policy or 'CGL' is in effect not all that 'Comprehensive' due the inclusion of these pollution exclusion clauses in the body of the policy, and therefore does not necessarily provide a full comprehensive insurance cover for all liability claims, although its identifying title does create that impression. Initial versions excluded all pollution claims for 'sudden and accidental' incidents from cover, which led to extensive litigation in the insurance market.[164]

An early version of the pollution exemption clause contained in the 1973 ISO[165] policy reads as follows: 'The insurance does not apply … to bodily injury or property damage arising out of the discharge, dispersal, release or escape of

[164] See Stempel JW "Reason and Pollution: Correctly construing the 'absolute' exclusion in context and in accord with its purpose and party expectations" *Tort & Insurance Law Journal* 1998 (Fall) 1; for a summary of the pre-1970 position see Wansink JH (ed) *Milieu en Bedrijf: preventie, aansprakelijkheid en verzekering* (1992) 87.
[165] The Insurance Services Office in the USA (hereinafter the 'ISO').

smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any water course or body of water, but this exclusion does not apply if such discharge, dispersal, release or escape is sudden and accidental.'[166]

Over time courts interpreted the phrase 'sudden and accidental' as meaning 'unexpected and unintended', and interpreted it in favour of insurers as it then excluded gradual pollution from cover.[167] It must be noted that the actual discharge of the pollutant must be 'sudden and accidental', and that the 'sudden and accidental' requirement does not refer to or apply to the ensuing environmental damage.

6.5.3.2 The 'absolute pollution exclusion clause'

After extensive litigation, insurers reacted by including absolute pollution exclusion clauses in policies.[168] A new version of a pollution exclusion clause was approved in 1986 and reads as follows: 'The insurance does not apply to bodily injury or property damage arising out of actual, alleged or threatened discharge, dispersal, release or escape of pollutants… at or from the premises

[166] ISO form (GL 00 02 01 73).

[167] *Jackson Township Municipal Utilities Authority v Hartford Accident & Indemnity Company* 186 NJ Super 156, 451 A2d 990 (1982); see Fogleman 539 for the various reasons why courts interpret the term 'sudden' in pollution exclusion clauses as unambiguous and as having only a temporal meaning, as well as alternative wordings that could avoid the issue. Justice Grimes in *Dimmitt Chevrolet, Inc v Southeastern Fidelity Insurance Corporation* 636 So 2d 700 (Fla 1993) 705 expressed his view as follows: 'Try as I will, I cannot wrench the words "sudden and accidental" to mean "gradual and accidental" which must be done in order to provide coverage in this case.'

[168] See Ellison JN, Lewis RP & Valery BT "Recent Developments in the Law Regarding the "Absolute" and "Total" Pollution Exclusions" 2001 (13) *Environmental Claims Journal* 55. 56; see also http://www.wnclaw.com/services/insurance/absolute_pollution_exclusion.cfm (last accessed on 21 February 2008) http://www.bcltlaw.com/articles/en_0204.html (last accessed on 25 February 2008); see also Shelley WP & Mason RC "Application of the Absolute Pollution Exclusion to Toxic Tort Claims: Will Courts choose Policy Construction or Deconstruction?" 1998 (33) *Tort and Insurance Law Journal* 749 (hereinafter 'Shelley & Mason') for a detailed discussion of the history and case law relating to the Absolute Pollution Exclusion clause.

you own, rent or occupy.'[169] The term 'pollutants' was defined seperately as 'any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste'.[170]

The requirement that the incident, event or happening must have been 'sudden and accidental' was removed. This version of the clause is referred to in the industry as the 'absolute pollution exclusion clause'.[171] The name 'comprehensive general insurance' was also changed to 'commercial general liability insurance' in 1986.[172]

6.5.3.3 The 'total pollution exclusion clause'

In 1988 a 'total pollution exclusion clause' that was even wider and also excluded damage caused by heat, smoke and fumes, replaced the 'absolute pollution clause'.[173] The total pollution exclusion clause also barred claims arising from product liability, completed operations as well as specific off-site operations conducted by the insured.[174] In 1997 the wording 'from hostile fire' was also included in these exclusions, and any claims relating to the operation of waste disposal sites were also specifically excluded from the scope of the total

[169] In the words of Shelley & Mason, the terms 'discharge, dispersal, release or escape' are 'environmental terms of art' which demonstrate that the Absolute Pollution Exclusion applies only to Superfund-type liabilities.
[170] ISO form CG 00 01 11 85; see in this regard Mitchell WJ "CGL Pollution Exclusion Provisions and the Sick Building Syndrome" 1999 (January) *Defense Counsel Journal* 124 128.
[171] See Mitchell 128; Ellison *et al* 63 also comment that 'the term 'absolute' is actually a misnomer as not all coverage is excluded.'; see Fogleman 434 *et seq* for the various versions of wording used and comments on the differences in wording used; and also 560–565 on the effect of the absolute exclusion clause in case law on environmental pollution caused by industrial operations in the USA; http:// www.bcltlaw.com/articles/en_0204.html (last accessed on 25 February 2008).
[172] See in this regard Fogleman 431; and 537–548 for extensive case law on the interpretation of the terminology 'sudden and accidental'.
[173] ISO endorsement (CG 21 49).
[174] Fogleman 579 for a comprehensive discussion of the revision and strengthening of the total pollution exclusion clause over time; also chap 4 par 4.2.4.5 specifically on strict product liability; also Merkin 717 on the nature of product liability in an insurance context; once again the term 'total' is, just as is the case with the word 'absolute' a misnomer as not all pollution claims are excluded, but that the use of the word does create that impression.

exclusion clause.[175] In 1996 claims for 'personal injury' was also excluded from the CGL, and in 1997 a mandatory endorsement for the exclusion for bodily injury caused by carbon monoxide followed suit.[176] 'Smoke, fumes vapour and soot' were added to the clause as exclusions in 1998.[177] Due to the increasing threat of damage caused by toxic mould, fungi or bacteria endorsements in this regard were issued in 2002.[178]

6.5.3.4 The 'comprehensive exclusion clause'

The following comprehensive model pollution exclusion clause of the Association of British Insurers[179] is at the moment the most widely used version in industry, and attempts to address most of the issues discussed in this chapter.

'A. This policy excludes all liability in respect of Pollution or Contamination other than caused by a sudden identifiable unintended and unexpected incident which takes place in its entirety at a specific time and place during the Period of Insurance. All Pollution or Contamination, which arises out of one incident, shall be deemed to have occurred at the time such incident takes place.

B. The liability of the Company for all compensation payable in respect of all Pollution or Contamination which is deemed to have occurred during the Period of Insurance shall not exceed $ … in the aggregate.

C. For the purpose of this Endorsement "Pollution or Contamination" shall be deemed to mean (i) all pollution or contamination of buildings or other structures or of water or land or the atmosphere; and (ii) all loss or damage or injury directly or indirectly caused by such pollution or contamination.'[180]

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[175] ISO endorsement (CG 21 55).
[176] ISO endorsement (CG 00 54).
[177] ISO endorsement (CG 21 65).
[178] ISO endorsement (CG 21 67 04 02).
[179] Known as the 'ABI'.
[180] For an extensive discussion of the process of formulating this final version and the reasoning behind the inclusion of each of its components, see Fogleman par 26.2.2.1 and par 27.3.11.1.2.

6.5.3.5 Anti-concurrent or lead-in exclusion clause

It is possible for loss to be caused by a peril that is excluded from cover and by a contributing cause resulting from an included and therefore covered peril. These clauses specifically exclude the entire loss from cover, by stating, for example, that a specific loss is excluded 'even if another peril or event contributed concurrently or in any sequence to cause the loss.'[181]

6.5.3.6 Statutory regulation

Pollution exclusion clauses can also be regulated by governmental legislation, although this is not the case in South Africa.[182] An exclusion clause could be found to be invalid where the insurer (a) fails to comply with any statutory provisions regarding the procedures for the approval of the policy language by the relevant authority; (b) fails to ensure that the insured was informed of the revised language of an endorsement or any renewed policy; and (c) fails to follow any statutory formalities prescribed for certain policies.[183]

6.5.3.7 Bespoke exclusion clauses as a potential solution

Due to the history of these exclusion clauses, it has become necessary to counter the effects of generally-worded exclusion clauses, uncertain as they are, by adding specific carefully-worded and defined endorsements to insurance policies in order to ensure effective insurance coverage. This will create more

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[181] In the words of Chesler RD & Schulman JL "Key Concepts in Property Insurance for Water Loss" 2007 (October) *Environmental Claims Journal* 249 253; see also the view held by the court in *Alamia v Nationwide Mutual Fire Insurance Company* No 06 Civ 2880, 2007 WL 2005575 (SDNY 2007) that the operation of these clauses proves fatal to any claim by the insured.

[182] See the comprehensive discussion of the RCRA and CERCLA in the USA, see chap 7 par 7.6.2 below.

[183] Fogleman 538–584 discusses the position in the USA, and confirms that a court will interpret the clause to reflect the legislation, irrespective of the actual language used in the policy itself.

legal certainty and is also an attempt to prevent insurers from broadly precluding claimants from claiming successfully.[184]

6.5.3.8 'Buy back' and other endorsements

In reaction to the effect of these extensive exclusion clauses, 'coverage extension' or 'buy-back' endorsements were introduced into the market to write back and provide cover at an additional premium for unexpected and unintended bodily injury or property damage caused by a specific polluting incident. Various versions were issued.[185] Most provide cover for only a very specific range of activities or pollutants, and require a strict notice period within which the insured has to report the incident to the insurer to trigger the risk.[186] The policy could also require the insured to notify not his insurer, but another entity such as a state department or other authority of the occurrence that caused damage or harm. This would be in accordance with, for example, statutory notice procedures, or obligations to give notice imposed by permits or licences to operate facilities. As these 'time element pollution endorsements' apply in the context of the trigger of the risk, see also the relevant discussion in this chapter above.[187]

Other general optional endorsements include (a) a 'named peril limited exception for a short-term polluting incident';[188] (b) a 'limited exception for short-term

[184] It is obvious that insurers attempt to exclude every possible eventuality from cover, and rely on the broadest possible interpretation of these exclusions in their favour. Ellison *et al* 56 refer to the case of *Bodine v Fireman's Fund Ins Co* 1992 where the court so aptly described this position: 'Indeed, to take the insurance industry's suggested application of these exclusions to their ultimate conclusion could result in a person being 'polluted' by being struck in the face by a speeding bullet.' For a discussion of specific policies in the market that cater for limited specialised cover for environmental claims, see chap 5 par 5.4 above.

[185] ISO extension endorsement (CG 04 22) in 1986; and the ISO limited exclusion endorsement (CG 24 15) in 1988.

[186] Fogleman 586 provides the following wording as an example of such an endorsement: 'Cover is provided where polluting incident may not last longer than 72 hours, and that is known to the insured within 7 days from its beginning and that must be reported to the insurer within 90 days of its beginning.'

[187] See par 6.3 above.

[188] ISO limited exception pollution endorsement (CG 04 28).

pollution event',[189] (c) an endorsement that provides more extended cover for damage caused by specifically designated pollutants;[190] and (d) buy-back cover for bodily injuries.[191] Where specialised pollution insurance products are available in the insurance market, these endorsements are not necessary.

Globally the interpretation and effect of these clauses has always been the focus of extensive litigation,[192] yet due to the difference in law in various countries, states and jurisdictions, and the facts and circumstances that also impact on the interpretation provided in each specific case, no standard rules exist to offer a general solution for disputes on the content and effect of these clauses. Reference must be made to the discussion of the interpretation of the different components of these exclusion clauses that follows below.[193]

6.5.4 Limitation Clauses

6.5.4.1 General

Claims can also be limited rather than excluded from cover. Internationally insurers have tried to limit their pay-outs even more by adding contractual limitations to escape full liability for huge pollution damage claims in addition to the general exclusion clauses examined above.[194]

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[189] ISO pollution exclusion endorsement (CG 04 29); Both these endorsements are for incidents not lasting longer than 48 hours, and provided that the insurer received notice from the insured within 14 days from the end of the polluting incident; more lenient time element clauses found in the market that are not in accordance with the ISO model clauses provide cover even where the polluting incident does not exceed 168 hours, and where the required notice is given within 90 days.

[190] ISO limited exception for designated pollutants (CG 04 30).

[191] Fogleman 595 provides examples of these 'personal injury endorsements'.

[192] Couch GJ *Couch on Insurance* 3rd ed (1995) 127–132 for a comprehensive discussion; Mitchell 129–134. on, *inter alia, Essex Ins. Co v Avondale Mills* 639 So 2d 1339 1342 (Ala1994); *Bernhardt v Hartford Fire Ins Co* 648 A 2d 1047 (MdApp1995); *Advanced Healthcare Resources Inc v Merchants Ins Co of New Hampshire NY LJ* Oct 2, 1997 (NY SupCt).

[193] See par 6.5.6 below.

[194] See Van Niekerk JP "Maintaining the Principle of Indemnity: Theory and practice" 1996 (3) *TSAR* 572 (hereinafter 'Van Niekerk (1996)') 576 that the law does not require all insurance contracts to absolutely adhere to the principle of strict indemnity to completely indemnify the

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6.5.4.2 Standard limitations

A claim that is included under the cover could be limited contractually by the following standard limitations: (a) a limited amount per 'accident', 'insured event', 'happening' or 'occurrence'. The functions are to determine (a) the temporal coverage of the policy; (b) how many deductibles the insured must bear; as well as (c) the maximum amount claimable as a financial cap is placed on the policy.[195]

It remains difficult in environmental claims to determine whether more than one occurrence took place during multiple policy periods. An insured who has a limit per occurrence would argue that the damage was caused by more than one indivisible continuous occurrence, in order to be able to exhaust not a single, but various limits.[196] Where an insured regularly deposits hazardous waste on a site, the question remains whether each dumping is a separate occurrence, of whether the entire dumping process is one continuous occurrence.[197] This will depend purely on the interpretation of the wording and scope of each policy, specifically the interpretation or what an 'accident' or 'occurrence' entails, as well as on the facts and circumstances of each specific case. Some cases have been decided on reasons of public policy alone.[198] An example of clause that has the potential to avoid these issues, is the following: 'all bodily injury and property damage arising out of continuous or repeated exposure to substantially the same general conditions shall be considered as arising out of one

insured, and therefore allows contractual limitations as deviations from this principle; see also in this regard Abraham KS "Monsanto Lecture: Cleaning up the environmental liability insurance mess" 1993 (27) *Valparaiso University Law Review* 601 614.

[195] See *Coetzee v Attorney's Indemnity Fund* 2003 1 SA 1 (SCA) where a financial cap was placed on the amount of the claim as well as a cost-cap on the costs and expenses incurred by the parties; see also Merkin 353–355 for a detailed discussion of these event limits.

[196] Howard & Mackowsky 900 discuss the limits placed on each 'insurable event' in property policies; see also the relevant descriptions of 'occurrence' in chap 6 par 6.5.6.2 below.

[197] Howard & Mackowsky argue that most courts will find that there is one 'occurrence' where pollution was the result of an uninterrupted continual contamination.

[198] See Fogleman 532 on the reasoning of the courts in various factual situations on this point.

occurrence.'[199](a) a limited amount per 'series of events';[200] (b) an aggregate claims limit; (c) an average clause where the claim is limited due to under-insurance; or (d) a time limit, also known as a time element clause that relates to the trigger of insurance liability as discussed above.[201] Time element clauses are especially relevant for buy-back endorsements discussed above.[202]

6.5.5 Rules of Interpretation

6.5.5.1 Universal rules

6.5.5.1.1 General

'Ordinary rules relating to the interpretation of contracts must be applied in construing a policy of insurance. A court must therefore ascertain the intention of the parties. Such intention is, in the first instance, to be gathered from the language used, which, if clear, must be given effect to. This involves giving the words their plain, ordinary and popular meaning unless the context indicates otherwise. Any provision which purports to place a limitation upon a clearly expressed obligation to indemnify must be restrictively interpreted.'[203]

The insured has the burden of proving that the policy provides cover for a claimed loss. The insurer, who denies the claim by relying on a contractual

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[199] *Metropolitan Life Insurance Company v Aetna Casualty & Surety Company* 255 Conn 295 765 A 2d 891 (2001).

[200] See Spier (1997) 721 for an examination of clauses regulating serial damages known as 'serieschadeclausules' He states that these clauses are prejudicial to policyholders as they limit claims to a single claim for a series of events caused by the same incident, yet cannot be set aside merely because they operate unfairly towards the insured.

[201] See par 6.3; see also Kalis *et al* Part 2 chap 3, and Fogleman 1527 who provide detailed policy examples that serve as practical illustrations.

[202] In par 6.3.3.2.3 and 6.5.3.8 above; see also Fogleman 585–590 for comprehensive examples of various time element endorsements; See in this regard the general discussion of the position in South African law of the legality and enforceability of time bar and other limitation clauses in insurance policies in par 6.5.2 above.

[203] *Fedgen Insurance Ltd v Leyds* 1995 3 SA 33 (A) 28 38; *Walker v Redhouse* 518; *Durban's Water Wonderland (Pty) Ltd v Botha and Another* 1999 1 SA 982 SCA 989.

exclusion or limitation clause, then carries the burden of proving that the policy does not in fact cover the claimed loss.[204] Although the rules of interpretation may vary in different countries and states, the following basic universal rules of interpretation or construction can be examined briefly. One can agree with Merkin that any attempt to lay down the rules of construction for insurance policy documents is fraught with difficulty.[205] One, however, has to attempt to do so for purposes of this study. Another complication is that the fact that there is insurance cover, also has in some cases influenced the interpretation of exemption and exclusion clauses.[206] As the case law dealing with the application of the rules of interpretation is extensive in most jurisdictions, it has been kept to the minimum in this general discussion.

6.5.5.1.2 Intentions of the parties

The universal primary rule of construction or interpretation of the wording of an agreement is to give effect to the intention of the parties to the agreement in accordance with the principle of objectivity.[207]

6.5.5.1.3 Ordinary grammatical meaning of words

Words and phrases must be given their ordinary meaning.[208] Exceptions to this rule include (a) where the word needs to be interpreted differently to serve the

[204] Reinecke *et al* chap 8.4 for the general principles on the interpretation of insurance contract provisions and the basic hierarchy of the rules of interpretation in South African law.
[205] Merkin 55 par 3-02. See as an illustration of issues that are still being debated, the opinion of Howard & Mackowsky 918 that as there is no need for the protection of third-party interests under first-party insurance as is the case in third-party insurance, the scope of coverage should not be decided by the same principles of construction.
[206] See Van Niekerk (1999) 524 on an examination of the case of *Government of the Republic of South Africa (Department of Industries) v Fibre Spinners & Weavers (Pty) Ltd* 1978 2 SA 794 (A) where the scope of the insurance cover was held to the determination of the extent of the exclusion of the liability of a defendant.
[207] Reinecke *et al* par 217 state that this is known as 'the golden rule' of interpretation; see also Stempel 9 who identifies this as an international 'cardinal' rule of interpretation.
[208] See Reinecke *et al* par 220 on this 'first step in interpretation'; Stempel 31 warns that although contract law has a wide deference to actual contract language, one must 'not make a fortress out of a dictionary'.

commercial purpose of the agreement or policy in which it is found; (b) where other clauses in the policy indicate that a different meaning was intended; (c) where a technical meaning other than the ordinary meaning is intended; (d) if the court has previously ruled on an interpretation in a similar case, and the word is used in the same context, it is preferable that the precedent be followed;[209] and (e) the meaning as it is universally understood by custom and practice in the insurance market must apply. In insurance-contract matters the policyholder's reasonable expectations may more readily countermand textual and formal policy language.[210]

6.5.5.1.4 Words or phrases read in context of the contract as a whole.[211]

The pressure by insurers to follow the 'four corners approach' in that construction requires only the narrow scrutiny of the few words in the exclusion clause itself, and not to resort to evidence beyond the face of the document or written contract cannot be supported. Words must not only be read in contractual context alone. 'The overarching principle of contract interpretation is that the court is free to look at all the relevant circumstances surrounding the transaction. The entire agreement, including all writings, should be read together in the light of all the circumstances, even though the effect of this may be to subordinate minor points of grammar or punctuation to the sense of the agreement as a whole.'[212]

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[209] Merkin 56 par 3-03 cautions that as so many variables can be present, one must be reluctant to strictly apply the doctrine of precedent.

[210] Stempel 41, however, advocates that a greater reliance must be placed on the expectations of the policyholder, as well as on those of the insurer; and at 12 stresses that the expectation must clearly at all times be clearly reasonable; see 7–27 for case studies in the USA that serve as an illustration of this rule.

[211] *Drifters Adventure Tours CC v Hircock* 2007 2 SA 83 (SCA) 88; Visser PJ "Case note on *Drifters Adventure Tours CC v Hircock*" 2007 (1) *De Jure* 188 192 agrees in his evaluation with the application of this principle *in casu*; *Van der Westhuizen v Arnold* 2002 6 SA 453 (SCA) 465, on the permissible use of the background and surrounding circumstances regarding the interpretation of a contractual provision in South Africa; and *Charter Reinsurance Company Ltd v Fagan* [1997] AC 313 384 that 'it must be set in the landscape of the instrument as a whole'. See also Reinecke *et al* par 222 as well as Merkin 64 par 3-11 who state that all terms of the contract must be read in conjunction.

[212] Stempel 7 quoting with approval from Farnsworth *Contracts* (1990).

6.5.5.1.5 The contra preferentem rule

Although various secondary rules of interpretation exist,[213] the courts often apply the *contra preferentem-rule.* Where none of the other rules assist or provide a solution, the word or phrase must be construed against the person who drafted it, who typically is the insurer.[214] The general notion of fairness also requires policies to be interpreted to serve their basic purpose of providing indemnity.[215] The rule will not apply where statutory provisions require the term to be drafted in a specific way. This rule is important as it specifically refers to the interpretation of exclusion clauses discussed below.

6.5.6 Interpretation of Specific Elements of Pollution Exclusion Clauses

6.5.6.1 General

Where the insurer relies on a pollution exclusion cause to deny coverage, it has asserted an affirmative defence and bears the burden of proving such a defence.[216] Practice, both nationally,[217] and internationally,[218] requires these

[213] See Reinecke *et al* pars 227–234 for a discussion of the application of secondary rules of interpretation in the construction of insurance documents; for an extensive discussion of all the rules of interpretation of contracts in South African law, see also Cornelius SJ *Principles of the Interpretation of Contracts in South Africa* (2002) (hereinafter 'Cornelius').

[214] Although this is seldom te case, ons must note that where an insured drafted a contract or a specific portion of it, the *contra preferentem* rule should also be used against him; see Wansink JH "Verzekering, een Juridisch Product in een Kritische Buitenwereld – Een Impressie uit Nederland" 1999 (4) *TSAR* 706 711 that the *contra preferentem* rule applies as a general rule in the EU, that serves as a consumer protection rule, and provides legal certainty; see also Fogleman 1525; 476; also 474 on the merits of the reasonable expectations doctrine specifically in the USA, that the insured may expect that the policy wording conforms to public expectations and commercially reasonable standards. Courts may override provisions that are contrary to the insured's reasonable expectations and to interpret the policy wording in favour of the insured.

[215] Saylor RN and Cole AM "The Mother of All Battles: The Dispute over Insurance Coverage for Environmental Contamination in the United States" 1993 E*nvironmental Liability* 29 30 confirm the general principle that the interpretation favourable to the insured will be adopted as in most cases the insurers draft the standard policy documents, and as drafters they had the ability to draft the terms as they saw fit.

[216] See also par 6.1.6.1 above on the burden of proof of the insured and of the insurer; also *Mount Lebanon v Reliance Insurance Co* (2001) PA Super 177.

exclusion, exemption and limitation clauses to be interpreted restrictively or *contra preferentem* in the event of an uncertainty or ambiguity: 'If the language of the disclaimer or exemption clause is such that it exempts the *proferens* from liability in express and unambiguous terms, effect must be given to that meaning. If there is ambiguity, the language must be construed against the *proferens*. But the alternative meaning upon which reliance is placed to demonstrate the ambiguity must be one to which the language is fairly susceptible; it must not be 'fanciful' or 'remote'.'[219]

It should, however, always be applied with caution as it remains an arbitrary method of deciding which interpretation should prevail.[220]

A more detailed discussion on the interpretation of the various elements of the pollution exclusion clauses as found in the international insurance industry follows under separate headings below. It is important to note that issues relating to the interpretation of insurance policy wordings still require a case-by-case interpretation of the individual wordings used, as no statutory guidance exists as to the exact meaning and extent of the scope of wording used.[221] It is proposed

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[217] Cornelius 181; *Drifters Adventure Tours CC v Hircock* 88; *Allianz Insurance Ltd v RHI Refractories Africa (Pty) Ltd* 2008 3 SA 425 (SCA) pars 8, 11; *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* par 23*; Johannesburg Country Club v Stott* 516; *Afrox Healthcare v Strydom* 34; *First National Bank of SA Ltd v Rosenblum* 2001 4 SA 189 (SCA) 195; specifically on the general principle of the law of contract see Van der Merwe *et al* 299, 307, Christie 188.

[218] Kalis *et al* Part 3 par 11.03; Mitchell 129 provides a variety of international examples.

[219] *Durban's Water Wonderland (Pty) Ltd v Botha* 989; *Drifters Adventure Tours CC v Hircock* pars 8–10; *Cape Group Construction (Pty) Ltd t/a Forbes Waterproofing v Government of the United Kingdom* 2003 5 SA 180 (SCA) 186; *Van der Westhuizen v Arnold* 469.

[220] See Cornelius 182; Stempel 44 supports the application of what he calls the 'common sense' comprehensive contract theory when interpreting the pollution exclusion clause; Ellison *et al* 61 evaluate the ethical behaviour of insurers in that they promised regulators that they would not be overzealous in applying the exclusions when they secured approval for both the absolute and total pollution exclusions, but that they are not keeping their promises. They are also at 67 of the opinion that the courts are, in interpreting these terms, attempting to keep the insurers to their promises. This can be supported.

[221] Some insurers feel that interpretation has strayed from ordinary principles of contract law and benefits the insured without merit. Some judgments have been described as 'the product of "deconstruction", invoking the vocabulary of leftist intellectuals (alleged at time to be nihilists) in an attempt to convince the reader that interpretation of the pollution exclusion at odds with that of

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that, as a potential solution to the problems relating to the interpretation and subsequent effect on cover of these clauses, stricter statutory control and regulation of wording allowed in insurance policies should be introduced.[222]

6.5.6.2 Meaning of 'occurrence', 'incident' or 'event'

The term 'occurrence' is interpreted according to its normal everyday meaning as a synonym for a 'happening' or event', unless the policy clearly indicates a different meaning.[223] In the 1973 version it was defined as 'an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.'[224] The 1986 version of the CGL policy extended the definition to also include 'events that take place over an extended period of time'.[225] The 'occurrence' also has to take place during the policy period.[226] Also see the discussion above on the interpretation of limitations specifically for each 'insured event' or 'occurrence'.[227]

In NEMA,[228] in the section on the control of emergency incidents and the steps that need to be taken, an 'incident' is referred to as 'an unexpected sudden occurrence, including a major emission, fire or explosion leading to a serious danger to the public or potentially serious pollution of or detriment to the

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the insurance industry must be the doctrinal equivalent of the Red Menace.' as quoted by Stempel 4.

[222] See the conclusion in par 6.8 below.

[223] *Mann v Lexington Insurance Company* [2001] 1 All ER (Comm) 28; see also Fogleman 1535.

[224] See in this regard Whitney RA "Environmental Contamination and the Application of the Owned Property Exclusion to Insurance Coverage Claims: Can the threat of harm to the property of others ever get real?" 2000 (3) *Northern Kentucky Law Review* 505.

[225] Fogleman 503 provides the full 1966-version of the definition.

[226] Howard & Mackowsky 901 explain the situation that an uninterrupted continuous polluting incident can be seen as a 'single occurrence', but that an 'insured event' can also be caused by multiple causes; see Fogleman 508 *et seq* for the wording of the various versions of the standard CGL policy wording specifically for the period for which cover is provided.

[227] See par 6.5.4 above.

[228] S 30.

environment whether immediate or delayed'.[229] The ECA also defines an 'incident' as 'an unexpected sudden occurrence leading to serious danger to the public or potentially serious pollution of or detriment to the environment, whether immediate or delayed'.[230]

Although the use of the word 'incident' is not common in public liability insurance policies, Fogleman argues that its inclusion might follow the use of this specific word in the same context as the European Commission in the proposed Article 2(2)(b) of the Environmental Liability Directive uses it.[231] Cover under most liability insurance policies is 'event' or 'occurrence-based' and the interpretation of this wording is therefore crucial to prove the trigger and extent of the cover provided.[232]

Cover is also often excluded for damage caused by 'pollution conditions', which is then defined by referring to the incident that causes the damage. The following serves as an example: 'Pollution Conditions means the discharge, dispersal, release or escape of any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapours, fumes, alkalis, toxic chemicals, medical waste or waste products into or on land, or any structure on land, the atmosphere or any watercourse or body of water, including groundwater, provided such conditions are not naturally present in the environment.'[233]

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[229] S 30(1)(a); for an evaluation of the operation and effect of s 30 see *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* par 12.
[230] S 30; see also the discussion of this specific section in *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* par 13 *et seq*.
[231] See the comprehensive discussion of the Directive in chap 7 par 7.2 below.
[232] The effect of this type of trigger is also discussed comprehensively the examination of long-tail liability in par 6.3.2 above.
[233] This is a combination of the various alternatives provided by Fogleman 559.

6.5.6.3 Meaning of 'accident' and 'sudden and accidental'

Environmental damage can be accidental, gradual or caused by old burdens of historic causation.[234] Cover for bodily injury or property damage is often only provided under a policy where the damage was caused by an 'occurrence' that was 'accidental'.[235] In simple terms, an occurrence is accidental if it was not done deliberately.[236] Where the term is not defined under the policy, its interpretation becomes problematic. Faure & Skogh describe an 'accident' as 'a hazard that hits humanity as an unexpected event'.[237] Fogleman also examines various judgments and reaches the conclusion that courts have generally interpreted the word 'accident' to mean 'an unexpected event' and also 'an unexpected happening or consequence from either a known or an unknown cause'.[238] Clarke holds a similar view that 'accidental' means 'unexpected and unintended' in context of what the insured knew or reasonably should have known, and must not be a result of willful misconduct by the insured.[239]

In order to prevent future uncertainties, public liability policies have evolved to include a definition of the word 'accidental' as meaning 'unintended', 'sudden, unforeseen, fortuitous and identifiable', or as 'a sudden occurrence, which is unintentional and unexpected for the policy holder'.[240] The growth of toxic mould

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[234] Larsson 573 identifies these as the three basic types of environmental damages, although the delimitations do not always appear to be clear.

[235] See Wansink JH "Hoe plotseling en onzeker is de verzekeringsdekking voor milieuaansprakelijkheidsrisico's?" in Ten Kate J, Kottenhagen RJP, Van Mierlo AIM, Wansink JH (eds) *Miscellanea Jurisconsulto vero dedicata, Essays offered to Prof. Mr. J.M. van Dunne* (1997) 451–460; see also the description of 'occurrence' in par 6.5.6.2 above.

[236] *IFP&C Insurance Ltd v Silversea Cruises Ltd* [2004] Lloyd's Rep IR 217; see Fogleman 1529–1535 for a variety of judicial interpretations in the UK courts of the words 'accident' and 'accidental' under public liability, motor vehicle, travel policies and under legislation; also 537–548 for extensive USA case law on the interpretation of the terminology 'sudden and accidental'; see also McGee 248.

[237] Faure & Skogh 241.

[238] See also Fogleman 501–502 for a general discussion of USA case law on this point.

[239] Clarke 553 confirms that the knowledge that there was a substantial probability of the occurrence must be the knowledge of the insured that must be determined according to an objective test.

[240] See Wansink JH "Het nieuwe schadeverzekeringsrecht en Oude olielampjes en dwaallichtjes" Oratie van 28 maart 2006 bij de aanvaarding van het ambt van bijzonder hoogleraar op het

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has, for example, been found to be 'sudden and accidental' even though it grows over a longer time, as it is clearly 'unexpected and unintended'.[241]

On the other hand, the court in the South African *Allianz* case held that the words 'unintentional' do not indicate something akin to 'unforeseen' or 'unexpected'.[242] Whether it is 'accidental' or not should be viewed from the insured's perspective, rather from the perspective of the prejudiced party towards whom liability is incurred. The incident that causes the damage must be 'sudden', which has been interpreted as meaning 'abrupt'.[243] It is important to note that this temporal element can only refer to the incident or event and not to the ensuing environmental damage. Determining the timing of the discharge, dispersal, release or escape of pollutants is crucial where the claim is based on the release of a polluting substance from a containment area, for example, and not its eventual entry or migration into subsoil or air.[244]

In the USA the courts have in many cases held that where cover is limited to 'sudden and accidental' incidents, it covers gradual as well as abrupt polluting incidents.[245] This required the inclusion of an express provision or definition that the word 'accident' specifically excludes 'gradual pollution' that occurs, for example, by the slow seepage of polluting or toxic substances into soil or water. The word 'sudden' can refer to two possible scenarios, namely that the

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gebied van het verzekeringsrecht aan de Universiteit van Leiden 2 that the uncertainty of the occurrence must be an uncertainty in the minds of the parties at the time of conclusion of the insurance contract, and not at the time of the loss; for the position in the UK, see *Hawley v Luminar Leisure plc* [2005] Lloyds Rep IR 275; see also Fogleman 1566 for a discussion of the definition that was in dispute in the case of *Jan de Nul (UK) Ltd v NV Royale Belge* [2000] 2 Lloyd's Rep 700; see also Fogleman 547 on USA case law in this regard.

[241] In the words of Goodman 256.

[242] *Allianz Insurance Ltd v RHI Refractories Africa (Pty) Ltd* par 11.

[243] Cagande LF "The 'Sudden' Interpretation: *Northville Industries Corp. v. National Union Fire Insurance Co. of Pittsburgh*" 1999 (16) *Pace Environmental Law Review* 285 294.

[244] Cagande 296; as reiterated by Fogleman 541 *et* seq.

[245] Stempel 28 alleges that insurers did not intend the exclusion to be read literally, but rather that the way in which it is drafted suggests that they knowingly drafted a provision so broad as to make literal reading inappropriate; see also Cagande 306 and Fogleman 538 *et seq* on this 'conspiracy theory' that insurance regulators conspired to fraudulently misrepresent their intentions with coverage; *New Castle County v Hartford Accident and Indemnity Company* 933 F 2d 1192 (3d Cir 1991) 1193.

commencement of the pollution must have been 'sudden', which is usually the intention of the parties, but also that the duration of the pollution must have been 'sudden', meaning 'brief or momentary'.[246]

The facts and circumstances of each case, as well as the nature of the insured's activities and the source, characteristics and effects of a polluting substance will all have to be taken into account to determine the meaning of the words and terms in context. In a Belgian case concerning a polluting incident that lasted over a period of weeks, the incident was interpreted not to be a 'sudden' occurrence.[247] On the other hand, in a case in the USA high winds and slope failures caused toxic tailings of copper, lead and zinc ore at a mine to disperse over a period of 60 to 70 years. The court found that the events, in isolation, could be considered to be 'sudden', even though they occurred continuously over a very long period of time.[248] The difference between these two decisions clearly illustrates the challenges that confront the courts in these situations. It appears from extensive case law that the primary dispute between policyholders and insurers in most cases centers on the single word 'sudden'. Ellison *et al* examine various judgments and conclude that the meaning afforded to the term 'sudden' should be limited to the following possibilities 'unprepared for, unintended and unexpected' or 'abrupt, immediate or of short duration'.[249]

[246] Clarke 556 is, however, of the opinion that the interpretation in terms of the second scenario carries conviction in context of its use in the CGL policies, but for other policies than the CGL the first scenario appears to be preferred, but that in conjunction with the word 'accidental', irrespective of its interpretation, it clearly has the effect of excluding any gradual pollution claims from cover.
[247] *Jan de Nul (UK) Ltd v NV Royale Belge* above.
[248] *Steel v Aetna Casualty & Surety Company* 931 P 2d 127 (Utah 1997).
[249] Ellison JN, Lewis RP & Valery BT "Recent Developments in the Law Regarding the 'Absolute' and 'Total' Pollution Exclusions" 2001 (13) *Environmental Claims Journal* 55 (hereinafter 'Ellison *et al*') 58.

6.5.6.4 Meaning of 'immediate consequences'

Although it could be interpreted to mean that essentially no lapse in time between damage and the occurrence of loss should occur, a preferred alternative is to interpret the term 'immediate' as meaning that no intervening cause is present.[250]

Regarding the control of emergency incidents in terms of the definition in NEMA of an 'incident', the 'incident' is referred to as 'an unexpected sudden occurrence, including a major emission, fire or explosion leading to a serious danger to the public or potentially serious pollution of or detriment to the environment *whether immediate or delayed*'.[251] In terms of this description even delayed consequences fall within the scope of the specific legislative measure.

6.5.6.5 Meaning of 'claim' and 'single claim'

A distinction must also be drawn between the claim brought against the insured by the prejudiced party, and the subsequent claim by the insured against his insurer under a liability insurance policy. The former has correctly been described as the *occurrence or event* of a state of affairs, which justifies a *claim* on an insurer.[252] This 'claim' is the demand for payment by the insured following the loss.[253]

As far as a liability policy is concerned, notice of the circumstances that could give rise to a potential claim by the prejudiced party against the insured is usually required. This is followed by the actual claim against the insured. Where judgment or another form of award is given in the prejudiced party's favour, or a

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[250] This interpretation is preferred by McGee 248; see also *Merchants Marine Insurance Co v Liverpool Marine and General Insurance Co Ltd* (1928) 3 Ll L Rep 45.
[251] S 30(1)(a); own emphasis.
[252] Own emphasis; Fogleman 1553 quoting from the judgment in *Australia and New Zealand Bank v Colonial Warehouses* [1960] 2 Lloyd's Rep.241 (QBD).
[253] Merkin 311; see also *Coetzee v Attorney's Indemnity Fund*.

settlement agreement is reached, the insurer incurs liability to meet the prejudiced party's claim once the quantum has been finalised.[254]

It is possible for the policy to set a maximum limit payable for a single claim. This often limits the claims for environmental loss extensively.[255] The aggregate of all the claims brought under a single policy can also be limited contractually. It should be kept in mind that various policies can be triggered by a single occurrence and that there can then be a single claim under each policy, or that single claims under one policy can be triggered by numerous accidents, occurrences, events or losses. The specific facts and policy limitations in each situation will determine the extent of these limitations.

Care must be taken to determine the trigger for every specific claim under a policy, and after that to determine whether the specific loss is in fact covered under that policy. Factors that can be taken into account include the unity of cause, place and time and the intentions of the parties where there is human intervention.[256]

A contractual claim in terms of a contractual environmental indemnity clause for the reimbursement by the previous owner of property of the remediation costs incurred by his successor on the property for pollution damage, is seen as sufficient to serve as a 'claim' under an indemnity policy as it falls under the definition of a 'pollution claim'.[257]

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[254] As confirmed by *K/S Merc Skandia XXXXII v Certain Lloyd's Underwriters* [2001] 1 Lloyd's Rep 802.

[255] It should be kept in mind that insurance in the form of excess of loss insurance can be taken out to provide indemnity for the losses not covered by the primary insurance policy, due to the inclusion of these limitations.

[256] Fogleman 1551 by referring to the remark by Kerr LJ in the 1972 arbitration award made in *Dawson Field* that '[w]hether or not something which produces a plurality of loss or damage can properly be described as one occurrence therefore depends on the position and viewpoint of the observer and involves the degree of unity in relation to cause, locality, time and, if initiated by human action, the circumstances and purposes of the persons responsible'.

[257] *Cambridge Water Company Ltd v Eastern Countries Leather plc* [1994] 2 AC 264; as confirmed by Fogleman 1557.

Claims settled by an insured are only covered under a policy where this was the express intention of the parties to include these claims in the cover.

6.5.6.6 Meaning of 'legally liable'

In indemnity insurance, the insurer is obliged to indemnify the insured against legal liability for losses covered by the policy. This duty only arises once the insured is in fact 'legally liable', which again emphasises the importance of determining liability for environmental damage as discussed in preceding chapters.[258]

'Liability at law' includes statutory liability, tort liability, whether fault-based or strict liability, as well as liability for breach of contract, provided that the latter was included under the cover provided.[259] The insured has to prove that he was 'legally liable' to pay sums to third-party claimants as damages or compensation in respect of damages or loss suffered by the third party. The existence and amount of liability to a third party must have been established and quantified by an agreement such as a contract or a settlement, or by a judicial process such as an arbitration award or a court order.[260]

It is difficult to determine exactly when a person becomes liable in a situation where a remediation notice is served upon him in terms of a statutory measure. It appears that he can only become 'legally liable' for the remediation costs once the notice has been served, and not from the date of his polluting conduct. The Environment Act in the UK, for example, establishes a strict retrospective pure statutory liability regime for soil pollution or land contamination,[261] and

[258] See chap 3 and 4 for the South African position, and chap 7 for the position in other countries.
[259] See Van Niekerk (2006 *JILB*) 202; see also Merkin 687.
[260] Clarke 547 explains that what is required is simply liability in terms of any action, arbitration or agreement; see also the effect of these agreements and processes regarding the triggers of liability insurance cover in chap 5 par 5.3.4.2.2 as well as the suspension of the prescription of insurance claims in par 5.3.6.
[261] S 57 of the Environment Act 1995; see also in this regard Faure (ed) 87–89.

acknowledges the duty of an 'appropriate person' to clean up affected sites once a remediation notice has been served.[262] He has no insurance claim for legal liability where he incurs the remediation costs in anticipation of the serving of the notice, for example, where payment is based purely on a commercial decision to incur these costs. It has also been held that the costs of remedial works incurred to prevent further damage to third-party property did not constitute a valid claim as the insured had not yet become 'legally liable' to pay these costs.[263] One may, however, reason that in failing to incur preventative costs for an impending loss could lead to civil liability for an omission, which then does qualify as a 'legal liability' and a claim would only then become viable.

6.5.6.7 Meaning of 'pollutants', 'contaminants', 'irritants' and other waste materials'

These terms are seldom defined, unless cover is provided for a very specific named peril. Any material or substance that is potentially harmful to human health or the environment is invariably 'hazardous'.[264] Some exclusion clauses limit claims to known pollutants. It should be noted that the term 'known pollutants' does not refer to the knowledge that the insured has at the time that the substance was a pollutant, but refers to the fact that a specific type of pollutant was generally seen and identifiable as a pollutant that has a hazardous effect on the environment.[265]

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[262] Fogleman 1560 considers whether this duty can be accepted as a 'legal liability' for purpose of a liability insurance claim, before a remediation notice has been served upon such a person. It is submitted that, in view of the wording used, the liability is only certain once the notice has been served.

[263] *Yorkshire Water Services Ltd v Sun Alliance & London Insurance plc* [1997] 2 Lloyd's Rep 21; see also the discussion by Fogleman 1559.

[264] Fogleman 553 discusses the extensive body of case law that confirms that oil, asbestos fibres, insecticides, fumes from paint and even hog manure have been found to be pollutants, yet excessive noise and the lead paint itself in a dwelling have been found not to be 'pollutants' for purposes of a pollution insurance claim.

[265] Clarke 552 confirms that the substance must have at least a 'realistic potential' to cause environmental damage.

Another example of an exclusion clause that includes a description of specific pollutants in the main body of the clause reads as follows: 'This insurance does not apply to bodily injury or property damage which would not have occurred in whole or in part but for an actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of pollutants at any time. Pollutants means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapour, soot, fume, acids, alkalis, chemicals or waste material.'[266]

Descriptions like these have been criticised severely and labelled as being arcane, ambiguous and convoluted. It is submitted that insurers clearly shows a lack of good faith in their drafting practices in this regard. The verbosity, and the broad nature and description of the excluded risks have been the cause of countless disputes regarding the interpretation of the wording and scope of various pollution exclusion clauses.

An excellent example can be found in the continuing debate on whether 'harm'[267] that is caused by sick building syndrome or 'SBS' is included or excluded from the traditional meaning afforded to the term 'pollution conditions'.[268] SBS is mostly caused by inhaling air of poor quality, which is due to contamination by organic and synthetic compounds such as emissions from paints and glues, as well as bacteria, carbon monoxide, microbial organisms and

[266] This specific clause was at issue in the case of *Mount Lebanon v Reliance Insurance Co* 9.

[267] The World Health Organisation has classified the following symptoms under the category of SBS: mucus membrane irritation, toxic symptoms (headaches, nausea, fatigue and irritability), asthma and respiratory infections, skin and mucous membrane dryness, and gastrointestinal complaints. See WHO Regional Office for Europe *World Health Organisation: Indoor air quality research: Report on WHO meeting, Stockholm 27–31 August 1984* (1986) 64; see also Lucey MT "Sick Building Syndrome: Airing insurance coverage issues arising from this new wave of toxic tort litigation"1999 (Spring) *Federation of Insurance and Corporate Counsel Quarterly* 333.

[268] See Mitchell 124; see also Wollner KS "Sick Building Syndrome and a Definition of 'Polluting Conditions'" 2001 (June) *International Risk Management Institute Journal* 1 http://www.irmi.com/Expert/Articles/2001 (last accessed on 15 March 2008); see, for example, *Meridian Mutual Insurance Company v Kellman* 197 F 3d 1178 (6th cir 1999) where a sealant on the floors of a room situated above those of the claimant caused severe respiratory difficulties; also Stempel 54 on whether poor indoor air quality and SBS are excluded from the absolute pollution exclusion clause.

toxic mould[269] that contaminate air vents in buildings. It has the potential to cause both bodily injury and property damage. The identity of the person who is to be held liable in these circumstances for the harm caused is mostly uncertain. It is also not clear whether this type of risk is excluded from insurance cover by the operation of general pollution exclusion clauses. The construction and interpretation of the various components of the pollution exclusion clauses are discussed in this chapter above.[270]

At the moment harmful bacteria, carbon monoxide and toxic mould are not seen as 'known pollutants' or 'waste' in terms of USA law.[271] At the moment no case law on any of these issues exists in South African law.
'Waste' has been described in the absolute exemption pollution clauses simply as 'including materials to be recycled, reconditioned or reclaimed'.[272] Policyholders clearly have an objectively reasonable expectation that any pollution coverage provided to them for purpose of a specific industry includes potential pollution caused by business byproducts.

6.5.6.8 'Damages', 'compensation', 'remedial works', 'clean-up' and 'restoration costs'

The valuation and assessment of the various forms of damage or loss that apply in pollution insurance, link closely to issues on the interpretation of these

[269] Referred to as mould, mildew, or 'that confounding fungus'; http://www2.jsonline.com/homes/build/ jul01/mold (last accessed on 18 February 2008). It is estimated that more than 300 000 law suits have already been filed in the USA for claims based on liability for toxic mould http://www.environmentalinsurance.com/ss04.html (last accessed on 21 February 2008); Goodman 241; also Waldron JT & Palmer TP "Insurance coverage for mold and fungi claims: the next battleground?" 2002 (38) *Tort Trial and Insurance Practice Law Journal* 49.
[270] See chap 6 par 6.5.5 above.
[271] Ellison *et al* 70 discuss case law where the term 'waste' was for example held to mean 'industrial byproducts' and that it did not include bacteria, whereas 'contaminant' was found to include bacteria; Stempel 47 provides case law that supports the views that as carbon monoxide is not a traditional sort of waste discharge, it is not covered by the absolute pollution exclusion.
[272] As quoted by Fogleman 573.

concepts and terms. It therefore deserves a more coherent examination that follows in a separate comprehensive discussion below.[273]

6.5.6.9 'Owned property' exclusions

Public liability policies also evolved by the addition of an 'owned property exclusion', which bars the policyholder from claiming for damage caused to his own property under the liability policy.[274] The purpose is clearly to force the prejudiced party to claim under his first-party property insurance policy.[275]

When pollution has migrated from owned property to a third party's property, the costs incurred for the clean-up of the owned property to prevent further loss to the third-party property, has been held not to be barred from cover under the 'owned property' exclusion in the pollution exclusion clauses.[276] The exclusion can even be extended to bar claims for property that is owned, or under the control or custody of the insured. It is also interesting to note that property alienated by the insured, that at a later stage requires clean-up, has been held not to fall under the 'owned property' bar and does enjoy cover.[277]

[273] See par 6.6.2 below.
[274] Whitney 507 confirms that the purpose of this exclusion is to limit claims brought under liability policies for legal liabilities towards third parties for their property damage, and to force the insured to claim from his first-party property insurance cover.
[275] Fogleman 590 on the position in the USA, and 1569 on the position in the UK foresees the possibility that the remediation of groundwater or soil under one's own land to prevent a continued pollution might not fall within the scope of this exclusion clause, as one technically does not own the water or soil that lies beneath the surface. This can be supported.
[276] Whitney 508 *et seq* reviews the judgment in much-quoted case of *Broadwell Realty Services v Fidelity & Casualty Co* 528 A 2d at 76 78 (NJ Super Ct. App Div 1987).
[277] See *Snyder General Corporation v. Century Indemnity Company* 113 F 3d 536 (5th Cir 1997) on both these issues.

6.6 NATURE AND QUANTIFICATION OF 'DAMAGES' AND 'COMPENSATION'

6.6.1 General

As a general rule, the terms 'damages' and 'compensation' are not defined.[278] The simplest description of the extent of the damage or loss dealt with in this thesis includes damage to the environment in general, as well as damage created *via* the polluted environment.[279] The former then covers damage to non-individual parts of the environment, and damage to public property such as *res communes* and *res nullius*.[280] This only provides a general framework for the discussion that follows, and does not attempt to address or propose a solution for the multitude of problems found in the industry regarding the interpretation and quantification of 'damages' and related concepts.

Although it is easy to determine that damage in fact occurred, it is not always possible to individualise the exact components that were damaged, and very difficult to determine the economic value and quantify the damage caused to each component.[281] It also remains a challenge to determine the origin or cause of each specific component of damage.[282]

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[278] See the early case of *Hall Brothers Steamship Company Ltd v Young* [1939] 1 KB 748 (CA) 751 where 'damages' was defined as 'sums which fall to be paid by reason of some breach of duty or obligation, whether that duty or obligation is imposed by contract, by the general law, or legislation.'; also on the atypical case *Vandenberg v Superior Court of Sacramento County* 21 Cal 4th 815 88 Cal Rptr 2d 366, 982 P 2d 229 (1999) where liability insurance cover against 'damages' was construed as including contractual damages where a breach of contract by a the insured lessee caused the lessor to incur liability to pay clean-up costs.

[279] As held in the conclusion to chap 2 of this thesis; this view is also supported by De Ketelaere 1353.

[280] See specifically Faure & Skogh 61, and see also 319 for their description of the distinction between public goods such as endangered species, and private goods.

[281] For a fully detailed discussion of the economic valuation of damage that is caused by or relates to environmental pollution, see Bowman M & Boyle A *Environmental Damage in International and Comparative Law* (2005) (hereinafter 'Bowman & Boyle') chap 3; Carrette A *Herstel van en vergoeding voor aantasting van nie-toegeeinde milieubestanddelen* (1997) for the valuation of damage to the public environment or natural resource assets; Lin AC "Beyond tort: Compensating victims of environmental toxic injury" 2005 (78) *Cal L Rev* 1439 on the difficulties in proving the toxicity of substances and gathering sufficient evidence to support a toxic tort claim;
Footnote continues on the next page.

Honoré refers specifically to pollution damage when dealing with the divisibility of damage as follows: 'There are a large number of cases, moreover, apart from the destruction of objects which can be counted, weighed and measured, in which the harm can be regarded as divisible. For example, it may have extensive magnitude without being divided into separate items. The collapse of a wall is an instance. It may be that without the tortfeaser's contribution only part of the wall would have collapsed. Other instances are the pollution of a river, and the emission of noise, smoke and stench. In these instances the separate items of harm, if they exist, certainly cannot be counted, yet the notion of more or less harm makes perfectly good sense. Even if the magnitude is intensive (pain, suffering, loss of amenities, discomfort and inconvenience), it is possible in certain cases to say that less pain etc. would have befallen the injured party in the absence of the tortfeaser's conduct. The only problem is that of quantifying the difference in monetary terms.'[283]

6.6.2 Methods of Assessment and Valuation

6.6.2.1 General

Tort compensation is seldom accurate, as can be seen from the discussion on damages in a preceding chapter.[284] As the exact economic valuation or quantification of specifically environmental damages for purpose of a civil claim is not always possible, a prejudiced party should not be faulted for his inability to quantify his damages accurately. Determining the exact damage that was caused to property or the natural environment is also difficult. The courts in this type of

see also in general Reinecke *et al* par 11.1.3 the quantification of loss or damage for insurance claim purposes in South African law.

[282] This is dealt with in the discussions of general causation, and more specifically on aspects of multiple or cumulative causation in chap 4 par 4.2.5 and par 6.4 above.

[283] Honoré AM "Causation and Remoteness of Damage" in Tinc A (ed) *International Encyclopedia of Comparative Law* Part 1 Vol 7 (1983) pars 7–113.

[284] See chap 4 par 4.2.6 above.

situation have no choice but to set an amount based on no more than an informed guess.[285] Absolutely exact valuation may, for example, depend on uncertain future events. Focus in an insurance context should always remain on the principle of indemnity, especially in the event of a claim under an unvalued policy.[286]

It is trite law that questions regarding quantification are not decided on a balance of probability, but rather on the court's assessment based on the facts of a particular case.[287] A best estimate on the available evidential material is thus all that is required.[288] According to Van Niekerk '[n]o hard or fast rules can be laid down as to the method of calculating value and assessing the amount of loss for insurance purposes. The aim is, and should always be, to provide the insured with as near an adequate indemnity as possible so as to enable him to be restored financially to the position he occupied before the loss'.[289] Exact assessment and valuation or quantification is discussed in greater detail under the various headings below.

Where more than one party contributed to the loss or damage, it is sometimes impossible to identify precisely which part or element of the damage each one caused, and a pragmatic approach must then be followed where divisibility cannot be formulated on the grounds of logic or reason. This then requires the court to make a reasonable guess or estimate.[290]

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[285] *SDR Investment Holdings Co (Pty) Ltd, Springgrove Cellar (Pty) Ltd, Zorgvliet Farms & Estates (Pty) Ltd v Nedcor Bank Ltd, Honey & Partners* 2007 4 SA 190 (C) pars 51, 58; see also the discussion of the South African position on quantification of losses in chap 4 par 4.2.6.4.
[286] As stated by Merkin 333 *et seq.*
[287] *De Klerk v ABSA and others* 2003 4 SA 315 (SCA) pars 28, 37, 38.
[288] See in this regard *SDR Investment Holdings Co (Pty) Ltd, Springgrove Cellar (Pty) Ltd, Zorgvliet Farms & Estates (Pty) Ltd v Nedcor Bank Ltd, Honey & Partners* par 58; *De Klerk v ABSA and others* par 29; see also Reinecke *et al* par 300.
[289] Van Niekerk JP "Under-insurance and average" 1981 (3) *MB* (hereinafter 'Van Niekerk (1981)') 125.
[290] See Van Dunne JM (ed) *Transboundary Pollution and Liability: The Case of the River Rhine (Conference Proceedings of the International Conference held at Rotterdam on 19 October 1990*) Instituut Milieuschade Erasmus Universiteit Rotterdam (1991); as confirmed by the judgment in
Footnote continues on the next page.

As the quantification of an insurance claim, whether under first-party or third-party insurance, is problematic, an express reinstatement clause or a valued policy may offer some relief.[291] The reinstatement clause will offer a great benefit to the insured or the third party where the reinstatement refers to the remediation or clean-up of the environment. Cover must then be provided for the actual clean-up or remediation costs incurred. A valued policy will, on the other hand, benefit the insurer in that he is liable for a specific value irrespective of the extensive remediation costs incurred.[292]

6.6.2.2 Extent of 'compensable damage'

Compensable damage entails damages that are (a) certain and specific, (b) proven, and (c) quantifiable. Four steps are required to assess compensable damage. In the first place, the polluting source must be established. This must be followed by the identification of the direct environmental damage caused. Thereafter consequential or future losses and indirect damages must be identified and estimated, provided that they are included in the cover, and in the last instance the total damage must be valued or quantified.[293]

Reinecke formulates the following general principles for the quantification of loss or damage. A comparison between the actual or real monetary value of the affected asset or interest before and immediately after the insured event must be made, at the time and place the loss occurred.[294] As a general principle no

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Wright v Mediclinic 2007 4 SA 327 (C) 371, discussed in chap 4 par 4.2.6.4 on problems in the assessment and quantification of damages is South African delictual liability claims.

[291] See Reinecke *et al* par 300 on the general principles of quantification of a claim and the value of these clauses; specifically pars 35, 307 and 571 on valued policies, and par 36 for policies for new value.

[292] Merkin 337 *et seq* provides an examination on the operation of the different measures of indemnity in valued and unvalued policies.

[293] Larsson 534 *et seq*.

[294] See chap 4 par 4.2.6.4.4 above; also Reinecke *et al* par 306 on the application of quantification methods to determine the value of the loss of an expectation or so-called expectancy.

allowance should be made for sentimental value, prospective profits or expectancies or other consequential losses.[295] It is, however, possible to expressly include these aspects under the cover provided. The chances of succeeding with claims for prospective losses and stigma damages in South African law are slim, as discussed in chapter 4 above.

Depreciation in market value generally serves as the primary instrument of measurement, and restoration, repair or remediation costs serves as a secondary measurement.[296] The latter is of great importance for this study as it is a popular method, and in an environmental context a very appropriate one, to lead evidence of the necessary and reasonable costs of restoring the damaged property to its original position. An insurer can rebut the presumption that these costs reflect the actual depreciation of the value of the property, and therefore the loss, if he can prove the latter. This is discussed as far as clean-up costs and natural resource damages are concerned, in the paragraphs that follow.[297]
Even when damage occurs on private property, the evaluation of environmental damages remains time-consuming and an inexact science and this is especially the case where consequential losses, natural resource damages and the like are concerned.[298] In the words of Reinecke 'the quantification of loss is sometimes clouded by fine points of fact and of law, so that the position of the claimant may

[295] See in this regard *Raubenheimer NO v Trustees, Johannes Bredenkamp Trust and Others* 2006 1 SA 124 (C) where the court rejected the claim that the defendant's conduct that affected a sentimental and emotional attachment to the plaintiff's property was actionable.
[296] *ISEP Structural Engineering & Plating (Pty) Ltd v Inland Exploration Co (Pty) Ltd* 1981 4 SA 1 (A); *Joubert v Santam Versekeringsmaatskappy Bpk* 1978 3 SA 328 (T) 332; *Nafte v Atlas Assurance Co Ltd* 1924 WLD 239 246; Merkin 339 evaluates reinstatement as a quantification method.
[297] See par 6.6.2.3.3, par 6.6.2.5 below.
[298] Many similar measures apply in other countries. For an interesting statutory method of assessment and limit of quantification see the German Environmental Liability Act 1990 that provides for a mechanism in the form of proportionality test for valuation, irrespective of the actual restoration costs. In terms of s 251.2 of German Civil Code 'an owner can ask for restoration of contaminated natural resources only if restoration costs are not disproportionate compared to the value of the property'; On the other hand, see the Norwegian Pollution Control Act 1981 par 58 that no value is placed on individual property interests, but public authorities can claim the refund of 'reasonable costs' incurred to cover existing or future restoration.

be rather invidious.'[299] An investigation of the universal issues relating to the nature and the assessment of the different forms of damages for purpose of an insurance claim in an environmental context follows below.

6.6.2.3 Property damage

6.6.2.3.1 General description

"Damage' in the context of pollution property damage can simply be described as a 'changed physical state' of the property that does not include normal wear and tear, or damage due to a 'mischief done to property.[300] An owner of property has the right to enjoy the use of his property and the profits generated by it, yet also has to bear economic responsibility for that property. Although it is often disputed whether direct physical loss to property includes consequential or intangible loss such as pure economic loss, the scope of damage can in principle be extensive.[301] Consequential loss is usually expressly excluded from cover.

'Property damage' in CGL policies has been defined as 'physical injury to or destruction of tangible property, including all loss of use of that property at any time resulting there from; or loss of use of tangible property that is not physically injured'.[302] Environmental property damage usually consists of soil or groundwater contamination, although it is not limited to these two forms of damage. Damage can also be caused by the reduction in the air quality surrounding the property, as well as to objects such as structures, plants and animals on the property.[303] Water damage, also known as 'water losses' is

[299] Reinecke *et al* 221.
[300] Clarke 551 states that the term 'mischief' indicates that it does not include normal wear and tear.
[301] Howard & Mackowsky 888 discuss case law where it was held that 'non-physical loss' is excluded from cover.
[302] See Whitney 506; Fogleman 496 compares the wording of the earlier 1973 version with this subsequent wording in the 1986 version.
[303] Howard & Mackowsky 883.

usually expressly excluded from cover.[304] Water is also often seen as a shared public resource to which no individual rights can attach, and damage to this type of public resource and the duty to remedy does not fall under the 'owned property' exclusion.[305]

6.6.2.3.2 Scope of damages

Property damage can include the costs of repair or replacement, depreciation of the value of property, compensation for the loss of use[306] or discomfort caused by the harm, and also stigma damages. Stigma damages are caused by the perception of damage, for example, where a depreciation in market value occurs because of the public's perception of the reduced value due to the proximity of the land to the contamination. This will also occur where land was physically damaged yet cleaned up, but a reduction in market value occurs due to the stigma of residual contamination or the knowledge that the land was contaminated.[307]

Building owners, architects, and building contractors can, for example, also be held liable for property damage and bodily injury caused by 'sick building syndrome'.[308]

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[304] See chap 5 par 5.3.2.3.7 for this specific type of exclusion in property policies; see also Chesler & Schulman 250; and 256 that no distinction is made in this regard between flooding and slower gradual water infiltration.

[305] See in this regard Whitney 526 *et seq* on relevant case law on this point.

[306] See for example the Finnish Environmental Damage and Compensation Act 1994 that provides that a 'reasonable' compensation may be provided for a prejudiced party for non-pecuniary loss linked to the reduced use of his property. The term 'reasonable' is to be defined in terms of duration of the nuisance and the degree to which the prejudiced party could have reduced or prevented it. This also incorporates the type of damage claimed in accordance with 'lost trees'-awards.

[307] Fogleman 394; Van Daele 18 describes the situation where a value for 'onzekerheid en angst' relating to one's environment, or the unpleasant side-effect of a bad smell caused by pollution are immeasurable; see also the discussion of 'pure economic losses' in chap 4 par 4.2.6.2.5 above, and par 6.6.2.6 below.

[308] See Mitchell 127.

6.6.2.3.3 Clean-up or reinstatement costs as 'property damage'

In recent South African case law on the interpretation of a statutory description of 'property damage', the interpretation of the term was found to include cover for the insured's liability to pay clean-up costs for ecological damage caused.[309] It was held that where the insurer wished to exclude 'ecological damage' from any other kind of 'property damage', it should have done so expressly.[310] Where the wording states that 'remediation costs must be incurred because of property damage', a case can be made that the insured does not have to limit the claim against his liability insurer to the exact property damage, but only to the damages and compensation incurred because of damage to property.[311] Although the wording of the policy must be interpreted in the context of the policy, it often does not offer clear solutions to address these problems.

The word 'reinstate' usually refers to the repair of damage where there is a partial loss, whereas 'replace' refers to a replacement where there is total loss. 'Restoration' includes both these scenarios. Some policies contain a reinstatement clause, which allows the insurer to elect to reinstate rather than to pay out the value of the loss or damage under the policy. [312]

6.6.2.3.4 'Owned property' exclusion

Reference must again be made to this specific exclusion that refers to 'property'. Public liability policies also include a standard 'owned property exclusion' clause, which bars the insured from claiming for damage caused to his own property under the liability policy and forces him to claim under his first-party property

[309] See *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* 33.
[310] Par 23 of the judgment.
[311] See Fogleman 1541 for various arguments and counter-arguments on this point.
[312] Merkin 358 *et seq* on the benefits of a reinstatement clause and the time limit to exercise the option to reinstate.

insurance cover.[313] Where pollution has migrated from owned property to a third party's property, the costs incurred for the clean-up of the owned property to prevent further loss to the third-party property are often interpreted not to fall within the scope of this specific exclusion, and therefore included under the cover provided.[314] Courts have even held that where a third party's property is merely threatened by the possibility of pollutants migrating to it and causing harm, it is sufficient to find that clean-up costs of the primary site or 'owned property' fall beyond the scope of an 'owned property' exclusion, and does enjoy cover.[315] Whitney is correct in concluding that this is contrary to the intention of providing remediation cover and that cover should be excluded until the damage to third-party property due to the migration becomes 'real'.[316] Remediation costs cannot *per se* include all prevention costs. It should only include prevention costs in the situation where loss to third-party property has already been caused, and where remediation is required to prevent an increase in further losses.

The position regarding the coverage of loss relating to 'after acquired property' remains uncertain. Few courts have considered whether an insured enjoys cover under a policy that was acquired after a policy period had expired, but where the damage to the property occurred during the policy period.[317] It is submitted that as insurers could not have contemplated these losses prior to the insured acquiring the property, they are not liable unless they unambiguously provide for this type of cover.

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[313] Whitney 507 confirms that the purpose of this exclusion is to limit claims brought under liability policies for legal liabilities towards third parties for their property damage, and to force the insured to claim from his first-party property insurance cover.

[314] See Whitney 508 on the judgment in much-quoted case of *Broadwell Realty Services v Fidelity & Casualty Co*; also 509 *et seq* for more case law on this point; see also Fogleman 592 for more case law in the USA on this point.

[315] See in this regard Whitney 540 *et seq* on recent developments in the USA with specific reference to relevant case law.

[316] As stated by Whitney 548 in his conclusion.

[317] Fogleman 518 on the position in the USA courts on this issue.

6.6.2.4 Clean-up and restoration costs

There is little room for misinterpretation where the words 'clean-up costs' or 'restoration costs' are used. Although 'reparation' requires full compensation, it has no single, logically determined, fixed meaning in law.[318] One must ask whether the general term 'damages' also includes these clean-up and salvage costs that are incurred during remedial works, by examining the wording and intention of the entire policy.[319] As reinstatement is a secondary measurement of damage or loss in South African law, this measurement will be appropriate to quantify clean-up costs.[320]

Whereas only one judgment has been given in South African law, diverse judgments have been given on these issues in the UK.[321] The term 'damages' has been interpreted to mean 'sums which fall to be paid by reason of some breach of duty or obligation, whether that duty or obligation is imposed by contract, the general law or by legislation'.[322] On the other hand it has also been held that the principal purpose of interference-with-property cover was to provide protection against claims based on tort, but not also against statutory claims.[323]

In the USA 'clean-up costs' were only accepted as a form of claimable 'damages' from about the 1990s. The 1998 ISO pollution exclusion clause, for example, expressly bars cover for 'any loss, or expense arising out of any request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean-up, remove, contain, treat, detoxify or neutralize, or in any

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[318] Bowman & Boyle 17.
[319] For an extensive discussion of this point, see the Report by the Comit'e Europ'een des Assurances ('CEA') *Study on first-party legal obligations for clean-ups and corresponding insurance covers in European Countries* Paris CEA (21 October 1998).
[320] See the discussion of this measurement in par 6.6.2.2 above.
[321] In *Bartoline Limited v Royal & Sun Alliance Plc and another* [2007] 1 All ER (Comm) 1043 the court rejected a wide interpretation of the word 'damages' and denied a claim under a public liability policy for statutory clean-up costs; see also *King v Brandywine Reinsurance Company (UK) Ltd* [2004] 2 All ER (Comm) 443; see Fogleman 1537 for additional case law in point.
[322] As per J Greene in *Hall Brothers Steamship Company Ltd v Young* 748.
[323] *Bartoline Limited v Royal & Sun Alliance Plc and another* 1043.

way respond to or assess the effects of "pollutants"; or claim or suit by or on behalf of a governmental authority for damages because of these activities'.[324] The general term 'damages' has generally been held to be ambiguous and has often been construed in favour of the insured, therefore including all financial losses that the insured reasonably would have accepted the term 'damages' to cover.[325]

In Belgium the state remains liable for the process of restoring the environment, and can institute a claim for both 'environmental damage'[326] and 'environmental impairment' costs.[327] The latter includes all collective interests as well as all negative consequences caused by pollution. [328]

As mentioned above, South African courts have held that statutory clean-up costs for ecological damage fall within the broad description of 'property damage' under a liability insurance policy.[329]
The term 'compensation' cannot be interpreted as a mere synonym for 'damages', and it also remains open for interpretation whether it includes clean-up costs and expenses. This will be the case provided that it can be read as such in the context of the entire policy.[330]

Currently, policyholders in South Africa as well as in other countries are warned to include cover *eo nomine* for clean-up costs to avoid lack of cover.[331] Again it is suggested that specific reference must be made in the contract on whether

[324] As examined by Fogleman 436.
[325] See Fogleman 492–494 for an extensive list of USA case law on this point; it was held by some courts that as CERCLA makes a distinction between 'clean-up costs' and 'natural resource damages', the former should not be included in the general term 'damages'.
[326] Art 2,7 as 'any loss or disadvantage suffered by an individual or by a legal entity as a result of marine pollution of the marine environment, whatever the cause may be,'
[327] Art 2,7 describes this term as 'any negative influence on the marine environment for as long as it does not constitute damages'.
[328] Belgian Act 12 March 1999 art 2,6; art 3; art 37.
[329] *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* par 13.
[330] In the opinion of Fogleman 1540.
[331] See *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another* par 23; Fogleman (2007) 825 in reaction to the judgement given in the *Bartoline* case.

clean-up costs are included or excluded, as is the case in the ISO policy exclusions and the South African PLIP policies.[332] The extent of these costs and whether it is possible to clean up or restore to exactly the original condition of the environment is dealt with in the evaluation of natural resource damages below.[333]

6.6.2.5 Natural resource damages

6.6.2.5.1 Descriptions

Natural resource damages[334] are those caused to the environment *per se*, for example, damage to biodiversity and to the landscape.[335] The term 'natural resources' is, for example, defined in the Conservation of Agricultural Resources Act[336] as 'the soil, the water sources and the vegetation, excluding weeds and invader plants,' yet this applies only for purpose of this Act.[337] The market value of property does not always reflect the true intrinsic value of the property to the insured. In some cases the asset, although intrinsically valuable, will technically have no market value at all.[338] This makes the secondary measure of loss namely reinstatement to the previous condition a suitable one. See the evaluation of this point under the examination of quantification of damages that follows below.

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[332] Special Risks Underwriters *Yesterday's Policies won't meet tomorrow's needs: The PLIP policies* (1992) 3.
[333] See par 6.6.4 below.
[334] Also known as 'NRD' claims, which have significantly increased over the past decade. See Donnellon T, Rusk G "Natural Resource Damage: Risk Management Implications Associated with Natural Resource Damage Claims" 2005 *Environmental Claims Journal* 249 for a discussion of risk management by insurers and reinsurers and the impact of the increase of these claims on their environmental loss reserves.
[335] As stated by Faure (ed) 138.
[336] Act 43 of 1983.
[337] S 1 item 18.
[338] See Reinecke *et al* par 303 on these shortcomings of market value as the primary method of quantifying damage or loss.

CERCLA considers a 'natural resources'[339] to be damaged where there has been 'a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge of oil or release of a hazardous substances or exposure to a product of reactions resulting from the discharge of oil or release of a hazardous substance'.[340] It then establishes the liability of a potentially responsible person for 'damage for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from such a release'.[341] This description can be endorsed as it is comprehensive, and the wording used is quite certain and clear.

Belgian law distinguishes 'environmental damage' from 'environmental impairment'. The former is defined as 'any loss or disadvantage suffered by an individual or by a legal entity as a result of marine pollution of the marine environment, whatever the cause may be.'[342] Whereas 'environmental impairment' is defined as 'any negative influence on the marine environment for as long as it does not constitute damages.'[343] The latter includes all collective interests as well as all the detrimental consequences caused. The Belgian State is entitled to institute a claim for these damages or impairments, as restoration of the environment remains the primary goal of the State.[344]

The interpretation and extent of a claim for 'harm' or 'loss' as a form of damages is also not clear. One of the best examples that can be used to illustrate this issue is whether 'harm' caused by sick-building syndrome is seen as

[339] See chap 2 par 2.2.3.6 for the definition of 'natural resources'; also the discussion of a claim brought in terms of CERCLA in chap 7 par 7.6.2.2 below.
[340] See the evaluation of this definition provided by Fogleman 305.
[341] § 9607(a)(4)(C).
[342] Belgian legislation Wet van 12 Maart 1999 art 2,6.
[343] Above art 2,7.
[344] Above art 37 and art 3.

environmental or pollution damage.[345] SBS is discussed above.[346] It causes both bodily injury as well as property damage. The identity of the person responsible for the harm caused remains uncertain in most SBS cases. Uncertainty also reigns as to whether the claim falls within the scope of a general pollution exclusion clause and is thus excluded from insurance cover.

6.6.2.5.2 Valuation and quantification methods

Restoration costs must serve as the basic measure of damages where any other quantification or value is absent, although the costs of restoration might be grossly disproportionate to the marginal ecological benefit gained from such restorative actions.[347] It is difficult to put a price tag on public air, water, wildlife and scenery as the market value cannot always reflect the true intrinsic value.[348] Once again, this confirms that the secondary measure of loss, namely reinstatement, is suitable for this kind of situation.

Existence value or use value is clearly to the benefit of individuals, and a claim for its loss is analogous to a civil damages claim for 'pain and suffering'. Animals and plants could be driven to extinction, coral reefs destroyed and air quality reduced, resulting in the destruction of entire ecosystems.[349] This situation does not easily fit into the classic compensation system. This should be made possible especially where the health and well-being of the community is affected.[350]

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[345] See also Mitchell 124, as well as Wollner 1 *et seq*; *Meridian Mutual Insurance Company v Kellman* where a sealant on the floors of a room situated above those of the claimant caused severe respiratory difficulties.
[346] See par 6.5.6.7 above.
[347] *State of Ohio v Department of the Interior* 880 F 2d 432 (DC Cir 1989).
[348] Larsson 545 considers the values placed on 'services provided by natural environments', such as non-consumable recreational activities on 546; see also Sclafane S "Fish gotta swim, birds gotta fly: NRD Claims Muddy Insurance Waters" 2005 (April) *National Underwriter Property &Casualty* 24 that there is no general standard based on what the 'average person' expects to see in nature that can be applied to assess these damages, and the merit of the formula applied by the state of New Jersey to develop a 'settlement number' to force insurers to settle claims.
[349] These all serve as examples of public international goods.
[350] Own translation of the situation where 'volksgezondheid in gedrang kom'.

The valuation of these claims for the spoiling of a natural resource is commonly known as a 'non-use contingent valuation'.[351] 'Indirect' compensation can be awarded for damage to natural resources by the enforcement of restoration or reinstatement measures.[352]

Even when on private property, the valuation of natural resource damage based on a depreciation in property value does not offer an exact valuation of the damage.[353] A change in environmental quality will, however, certainly affect most of the economic values that relate to that property.[354] It should stand to reason that an individual owner can ask for complete restoration of contaminated natural resources only if the restoration costs are not completely disproportionate compared to the value of property.[355]

An issue that affects the extent of the damages is the question as to what degree or condition the resource must be restored. The Water Resources Act[356] in the UK, for example, provides that a person who must remedy or prevent pollution must 'as far as is reasonable practicable to do so [to restore] the waters, including any flora and fauna dependent on the aquatic environment of the waters, to their state immediately before the matter became present in the waters.'[357] It stands to reason that it is not always possible to restore or clean-up to the original state of the environment.[358]

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[351] De Ketelaere 27.
[352] See De Ketelaere 29–39 for a comprehensive examination of valuation methods for environmental damage.
[353] In the opinion of Larsson 545.
[354] As reiterated by De Ketelaere 39.
[355] This is also the position in German law in s 251.2 of the German Civil Code.
[356] Act of 1991; see also the discussion in chap 7 par 7.3 below on this position in the UK.
[357] S 16; see also Fogleman V "The Widening Gap in Cover for Environmental Liabilities in Public Liability policies" 2007 (June) *Journal of Planning and Environmental Law* 816 819.
[358] See the Finnish Environmental Act s 6; Norwegian Pollution Control Act 1981 par 58; Larsson 541 suggests the development of something called 'ambition norms' for purpose of clean-up and restoration.

6.6.2.6 Consequential, prospective and pure economic losses

Consequential loss and prospective loss can take many forms, but loss of profit is the most commonly found form.[359] Under valued policies, it is permissible for the insured to include consequential or prospective loss such as lost profits under his claim, provided that the insurer agreed that the valuation is *prima facie* conclusive and that it is recoverable. Under unvalued policies consequential losses can only be claimed where they were expressly included under the cover provided.[360]

The correct formula to calculate the quantum of prospective damage must be found under the sum-formula approach and the concrete concept of damages, which focuses on the withdrawal or deterioration of a particular part or element of a person's patrimony.[361] The hypothetical element of the sum-formula approach, however, renders it more suitable for the assessment and quantification of prospective losses. The hypothetical position that existed before the damage-causing event that has become unreal, and the hypothetical position after the damage-causing event that has become real must be compared and the difference seen as the quantum of the damage suffered.[362] The court must furthermore discount or capitalise the amount as the plaintiff receives the amount in advance.[363]

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[359] See Visser PJ, Potgieter JM, Steynberg I & Floyd TB *The Law of Damages* 2nd ed (2003) (hereinafter 'Visser *et al*') 121 *et* seq for forms of prospective loss, which include future expenses, loss of future income, loss of business, professional or contractual profit, loss of prospective support and loss of chance; Merkin 345 provides as examples future loss of business, damage to goodwill, loss of prospective lucrative business opportunities and loss of future income.

[360] See the discussion on the inclusion of consequential loss under the cover provided by Merkin 344–347.

[361] Visser *et al* 71; Reinecke MFB "Nabetragting oor die Skadeleer en Voordeeltoerekening" 1988 *De Jure* 221 (hereinafter 'Reinecke (1988)') 226 supports the idea that the concrete approach offers advantages above the abstract approach.

[362] Visser *et al* 119.

[363] *SA Eagle Insurance Co Ltd v Hartley* 1990 4 SA 833 (A) 839.

Where the damage is caused before the accrual of the cause of action or at the time of commencement of the action until the moment of judgment, the calculation of the existence and quantum of the prospective losses are not that complex, as the court has factual evidence at the time of judgment although it was not necessarily available at the time of summons. This must affect the amount of compensable damages ordered.

Pure economic losses are losses that do not directly refer to personal or property injury, for example, the loss of revenue and affected reputation. The question under this discussion of exclusion clauses remains whether the general term 'damages' includes 'pure economic loss'.[364] Again it can be emphasized that best practice requires that the contract or policy document must specifically include or exclude pure economic loss in the wording used to describe the damages or extent of cover, as is the case in the PLIP policies.[365]

As stated previously, because courts are universally reluctant to allow claims for pure financial losses,[366] some countries introduced express legislative provisions to allow insurance claims for these losses.[367] The exception is found in marine

[364] See chap 4 par 4.2.6.2.5.

[365] Special Risks Underwriters *Yesterday's Policies won't meet tomorrow's needs: PLIP policies* 3; see also Fogleman (2007) 821 on the importance of the policy wording, especially in public liability policies are they are as a general rule not standardised.

[366] See the discussion of claims for pure economic losses in South African law in chap 4 par 4.2.6.2.5; Bussani M, Palmer VV & Parisi F "Liability for Pure Economic Loss in Europe: an Economic Restatement" 2003 51) *The American Journal of Comparative Law* 113 that the notion of 'pure economic loss' and liability for this type of loss varies considerably and that Western countries are divided over these issues; see the discussion of this principle, also known as the 'bright-line rule' in Larsson 395; Faure (ed) 136; claims in the USA were disallowed in *Robins Dry Dock & Repair Co v Flint* US Supreme Court 275 US 303 (1927); *General Public Utilities v Glass Kitchens of Lancaster Inc* 374 PaSuper 203 542A 2d 567 (1988); *Adkins v Thomas Solvent Company* 440 Mich 293 487 NW 2d 715 (1992); *Chance v BP Chemicals Inc* 77 Ohio st 3d 17 670 NE 2d 985 (1996); yet claims were allowed in *Local Joint Executive Bd. & Culinary Workers Union, Local No. 226 v Stern* 98 Nev 409 651 P 2d 637 (1982); *Burgess v M/V Tamano* 370 Supp 247 (DMe1973); *Brown v Southeastern Pennsylvania Transportation Authority (In re Paoli Railroad Yard PCB Litigation)* 35 F 3d 717(3d Cir 1994); *Terra-Products Inc v Kraft General Foods Inc* 653 NE 2d 89 (Ind Ct App.1995).

[367] See for example the Outer Continental Shelf Lands Act 43 USCA δ1811; Fisherman's Contingency Fund 43 USCA δδ1841-1846 in the USA; the 1994 Finnish Environmental Act; see specifically also the South African Consumer Protection Bill s 61(5) which provides that 'harm'

Footnote continues on the next page.

pollution claims, where the loss or reduction of professional use of natural resources due to pollution lead to financial losses for fishermen and beach-front tourism operators and are automatically seen to fall under the concept of 'damages'.[368] The position in South African law on whether compensable claims for pure economic loss can be brought is discussed in chapter 4 above.[369]

Assessing pure economic loss, especially where future economic losses are concerned, proves to be difficult. In the words of the court in the *Lim Poh Choo* case, '[t]here is really only one certainty; the future will prove the award to be either too high or too low.' [370]

6.7 *Locus Standi* and Conflict of Laws

Insurance issues are usually of a contractual nature, and the contract in most instances contains clauses on the choice of law, court jurisdiction and enforcement.[371] In international disputes jurisdiction is established where the defendant is domiciled under the Brussels Regulation for EU members,[372] and under the Lugano Convention[373] for non-EU members who are members of the Economic Free Trade Association and also party to the European Economic Area Agreement within the EU.[374] Where a defendant is domiciled in another country the common law of that country prevails.[375] Jurisdiction is not determined

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includes death, injury, illness, loss of or physical damage to property, and *any economic loss* (own emphasis).

[368] Larsson 537 describes pure financial loss in such a situation as including 'certain loss of profit (possibly identifiable as a form of *lucrum cessans*), business interruptions, professional loss of use of natural resources, but not a failure to make a potential future profit'; see also Commité Maritime International *CMI Yearbook:Admissibility and Assessment of Claims for Pollution Damage* Part II (1993) 95.

[369] Chap 4 pars 4.2.6.2.7, 4.2.6.4.4.

[370] *Lim Poh Choo v Camden and Islington AHA* [1980] AC 174; also Harpwood 410–413 on the fairness and efficiency of tort compensation.

[371] McGee 647.

[372] European Council Regulation 44/2001 OJL 12 articles 2,3 and 4 which came in force on 1 March 2002.

[373] Lugano Convention of 1989.

[374] See the explanation by Merkin 37 par 2-01.

[375] Regulation 44/2001 2001 OJ L 12.

by domicile alone, but in matters relating to contract it can also be determined by the place where performance of the obligation has to take place.[376]

Specifically regarding insurance, the insurer may be sued where the insurer or his branch, agency or other establishment, or where the insured is domiciled.[377] In respect of liability insurance or insurance of immovable property, the insurer may be sued where the harmful event occurred.[378] This also applies where both movable and immovable property are covered under the same policy and are adversely affected by the same harmful event.[379] Articles 13 and 14 provide for situations in which it is possible to derogate from the insurance rules.[380] In non-European cases, the court of a member-state has jurisdiction where the applicant, plaintiff or prejudiced party has some form of presence within the jurisdiction.[381]

Insurance policies often also contain an arbitration provision that requires disputes to be heard by an arbitration process in order to avoid costly litigation.[382] Many varying forms of and options for alternative dispute resolution procedures can be found in insurance policies.[383]

Where these provisions require the policyholder to litigate in a foreign jurisdiction the costs can be excessive.[384] Vertical and horizontal fragmentation of pollution

[376] Above article 5.
[377] Above article 9.
[378] Above article 10; see also McGee 650.
[379] Above
[380] For example, for claims relating to ships, sea installations, aircraft and contracts of carriage and goods in transit, or claims covering large commercial risks; see also Merkin 46 par 2-09 for a comprehensive list of the categories of acceptable exclusive jurisdiction agreements.
[381] As stated by McGee 656.
[382] See especially Reinecke *et al* pars 300 who state that matters of quantification are often referred to arbitration; see also 239 par 318 on the agreement between the parties that arbitration is the suitable forum for dispute resolution; see also Merkin 37 par 2-01 on the similar position in the UK which is regulated in terms of s 9 of the Arbitration Act 1996.
[383] See in general Masters 72 for an explanation and examples of typical arbitration provisions specifically in the USA.
[384] In the words of Masters 72 that such a 'traveling road show may increase many fold the cost of an already potentially expensive proposition'.

regulation regimes and the lack of integration of pollution legislation nationally as well as internationally also contribute to this problem, but these issues deserve a study on their own cannot be addressed or examined in greater detail in this thesis.[385]

6.8 CONCLUSION AND RECOMMENDATIONS

It clearly appears from this chapter that although the issues that complicate effective insurance for environmental damage are universal, the solutions or attempts to find them are not. In order to propose effective solutions to and improvements regarding the problems encountered in the South African law, the following issues should be addressed.

Lack of information affects the predictability of environmental risks that the insurer requires for effective risk differentiation. It also affects the prejudiced party's claim against the polluter for damages, as well as the insurance claims under first-party and third-party insurance. This is especially the case where environmental damage is caused by the 'new risks' as addressed in the preceding chapters. It is submitted that the right of access to information as examined in chapter 3 above, will facilitate the risk-differentiation process as well as the abovementioned claims. It is also proposed that mandatory comprehensive public registers must be kept within specified industries and that monitoring via policy and licensing conditions must be increased. Information can also be made available to the public by allowing access to detailed environmental impact assessments and by reports of regular ecological audits by the relevant authorities.

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[385] See in this regard the following opinions of South African writers: Glazewski J *Environmental Law in South Africa* 2nd ed (2005) 550–557; Kidd M "Integrated Pollution Control in South Africa: How Easy a Task?" 1995 (2) *SAJELP* 37–54; Kotzé L "Improving Unsustainable Environmental Governance in South Africa: the Case for Holistic Governance" 2006 *Potchefstroom Electronic Law Journal* 1-44; Nel J & Du Plessis W "Unpacking Integrated Environmental Management – a Step Closer to Effective Co-operative Governance?" 2004 *SA Public Law* 181; Bray E "Fragmentation of the Environment: Another Opportunity Lost for a Nationally Coordinated Approach?" 1995 (10) *SA Public Law* 173.

The insurer only incurs liability towards his insured or a third party once the claim against him vests. The time when the claim vests depends on the relevant trigger theory that applies to that specific policy. Problems occur where there is a delay between the polluting occurrence, the impact of the pollutants, the manifestation of the loss and the institution of the insurance claim. The basic trigger theories relate to these time periods.

The first type of policy is based on the 'acts committed' or 'occurrence based' trigger. The insurance policy in force at that time provides the cover. The disadvantage with this type of trigger is that the insurer is exposed to an unlimited extensive prospective cover, called 'long-tail' liability. Due to the delay between the polluting conduct or occurrence, the eventual manifestation of loss and the subsequent claim, complications arise. Evidence and information may be lost, the insurer or the original insured may not exist anymore, and the cover may prove to have been insufficient to cover these prospective losses. It is also notoriously difficult to determine the exact time at which the polluting occurrence or conduct occurred. Due to these complications it has become general insurance practice to move away from these types of policies.

The second type of policy is the 'manifestation' or 'loss-occurrence' policy. The policy in force at the time of manifestation of loss provides cover irrespective of when the polluting occurrence occurred. Most public liability policies are triggered by the 'occurrence' or 'event' that caused the insured's liability. The insurer who is liable to provide cover was unaware of the risks posed in the past by the actual polluter when he determined the risks and agreed to provide cover.

The third type of policy is issued on a 'claims-made' basis. Although it has been criticised, insurers see it as the most acceptable of the triggers. Because of the danger that the insurer under such a policy could incur an infinite retroactive liability for all past sins, these policies are linked to fixed retroactive dates. It

offers the insurer a finite time of cover, a more predictable risk and no danger of potential future claims in terms of a long-tail liability. These benefits offer the insured the advantage that the premiums are generally lower than those of other policies. He also enjoys the benefit of retroactive cover. He must, however, disclose all knowledge that he has or should have had of any polluting occurrence preceding the inception of the policy. To avoid long-tail liability, the viability of introducing the claims-made trigger for the vesting of claims in specific industries should be considered. As addressed in chapter 4 above, issues of causation and the allocation of liability in multiple and cumulative causation situations deserve urgent attention, and the introduction of the 'claims-made' trigger could address some of these issues.

In some cases the policy is issued on a 'claims-made and reported' basis. The notification of the discovery of loss prior to the claim, as well as the claim itself, must be made within the stipulated time period. Where the policy contains a duty to notify the insurer of the claim, the clause may constitute either a contractual duty or a suspensive condition. Where it is the former, failure to give proper notice when it is due will constitute breach of contract. In most instances, the policy contains a clause that the insured forfeits his right to claim under the policy where he does not give proper notice within a set time limit. In case of the latter, the insured's right to claim from the insurer is suspended until he meets the condition. In both situations the insured is precluded from claiming. In order to prevent uncertainties it is proposed that vague wording in these clauses that notice must be given 'as soon as possible', 'immediately' or 'within a reasonable time' should be prohibited. A specific, realistic time limit should be included. This can also be justified by the saga of *Barkhuizen v Napier* that came before South African courts recently as addressed throughout this chapter.

Where more than one insurer is liable for a loss, they must all respond and the claim must be allocated between them. Sometimes, the insured does not procure insurance cover for a specific period, in which case he must also, as a self-

insurer, be subjected to a specific method of allocation of liability. One method of allocation is a joint and several liability up to the policy limits. An example in South African statutory law of such a joint and several allocation method can be found in the Minerals and Petroleum Resources Development Act. Joint and several liability is also proposed for product liability in the Consumer Credit Bill, and it is submitted that the latter could serve as an example of the implementation of such a liability regime for environmental pollution damage. This allocation method is more to the advantage of the insured as he can decide which one of the various insurers he wants to claim from, leaving the insurers to identify their respective shares in the liability and to claim contribution from each other.

The other method of allocation would be a purely proportionate allocation according to the values of the various policies. Although the calculations are complicated where primary and excess policies apply, this form of allocation could provide a simple solution in that insurers would not be exposed to the whole claim as would be the case where there is a joint and several allocation of liability.

Some of the more problematic issues relate to causation. In some cases it is impossible to prove the identity of the polluter who is responsible for the pollution damage. The USA avoids the issue by attributing the pollution damage to 'potentially responsible parties' or PRP's. This solution is based on the proximate cause test. A similar approach can be found in the South African Consumer Protection Bill on the proposed product liability regime. It is proposed that this could offer a solution to a very relevant issue that has the potential to frustrate many environmental damage claims. In a situation of multiple causation more than one polluter contributes to a single cause of pollution, or a synergy of various pollutants could cause or increase pollution damage. The proximate cause test can also be applied to allocate liability. In the UK liability is allocated according to the materiality of the contribution by each polluter to the risk. In the

USA and in the Netherlands the problem is addressed by the allocation in accordance with a market-share liability. Whether a peril is included or excluded under each of the policies in question must also be considered.

Most insurance policies contain exclusion, exemption and limitation clauses. These clauses may not be contrary to public policy. Where these clauses affect a person's constitutional rights, the norm of public policy must be interpreted in accordance with the values of the Constitution to determine whether the clause in question is unconstitutional and therefore unenforceable or invalid. A time bar clause that denies the insured the right to institute an insurance claim against his insurer is such a clause and could prove to be contrary to the constitutional right of access to the courts.

Exclusion and limitation clauses are not regulated by statute in South African law. In view of the latest case law on the nature of clean-up costs in relation to property damage, and the interpretation of various terms in these exclusion clauses, solutions must be considered. It is proposed that, as a potential solution to the problems relating to the interpretation and subsequent effect on cover of these clauses, stricter statutory control and regulation of the wording of clauses that affect the rights of the insured in insurance policies must be introduced. Standard definitions or descriptions, whether statutory or created by judgments that serve as legal precedent in South African law for terms such as 'occurrence', 'incident', 'event', gradual', 'sudden and accidental', 'pollutant' or 'contaminant', 'property' and 'natural resources' are urgently required. Terminology such as 'all risk cover', 'absolute' or 'total' pollution exclusions, and 'comprehensive' liability cover often creates a misconception in the mind of the insured on the extent of the cover which he procures and should be avoided. The use of these vague and misleading terms should be prevented. The wording used for the provisions in insurance policies have been labelled as being arcane, ambiguous and convoluted, and an attempt should be made to simplify the wording to serve the general man-on-the-street or average consumer with an average education

within his specific environment. Whether the insurance industry will allow the restrictive effect of this type of statutory or regulatory intervention will depend on whether the statutory description will be effective from the viewpoint of both the insured and the insurer. For the insurer, the benefit lies therein that the risk is better defined and that unnecessary and costly disputes can be avoided. For the insured, the benefit lies in the fact that 'what he sees is what he gets', in that the wording that appears in his policy documents has a predetermined meaning and scope.

As the rules of interpretation of contracts do not always offer a comprehensive and generic solution to disputes regarding the wording of policies, basic *pro forma* or model clauses for the specific industries could offer more legal certainty. As the model clauses as discussed in this chapter serve as mere examples and are directive and regulatory rather than peremptory, a stricter proposal of model policy wording may be required to standardise the industry.

The last issue relates to the nature and the quantification of 'damages' and 'compensation' in an environmental context. The assessment and valuation of environmental damage will never be an exact science and will always depend on a court's best reasonable estimate or guess based on the facts and circumstances of each situation. For property loss, a depreciation of market value serves as the most reliable measure. For natural resource damage, the clean-up and restoration costs serve as the best measure. As it is difficult to claim for other losses such as pure economic loss, lost profits, stigma damages, prospective loss and sentimental loss, statutory intervention allowing these claims is required. The proposal in the South African Consumer Credit Bill that allows a claim for 'economic losses' serves as an example. The goal should remain the effective indemnification of the loss and damage caused by pollution, yet not at the cost of a viable and profitable insurance market.

The position in South African law and the universal issues and complications relating to environmental insurance are addressed in this chapter and in the preceding chapters of this study. The next chapter includes a background study of the liability systems and the availability of environmental damage insurance and environmental liability insurance cover in other countries. The position in the EU, specifically the Netherlands, Belgium and the UK, as well as the position in the USA are examined.[386] As the topic is extensive, a true comparative study is not possible and only an *excursus* into the law of each country is provided in the following chapter.

[386] See chap 1 of this study for the reasons why these countries have been chosen.

CHAPTER 7

EXCURSUS: THE POSITION IN THE EUROPEAN UNION AND IN THE USA

7.1. INTRODUCTION

Due to the generic nature of insurance and the universal right to an unpolluted environment, many of the issues discussed in the previous chapters come into play in most other countries with similar effect. This requires a brief discussion of the position in other countries that will enable one to avoid the many pitfalls by learning from the past experiences of others. In order to run parallel to the discussion of the position in South African law, statutory and civil liability regimes for pollution damage in a specific country are discussed first, followed by an investigation into the availability of insurance against pollution damage. The two basic liability regimes include the liability of states or other international persons under international law,[1] and the liability of individual polluters, which could include a state under rules of national law. This study covers only the statutory and civil liability of individuals, and the insurability of the risk of environmental damage and of liability for causing such damage under the various foreign law regimes.

The issues surrounding liability for pollution damage and its insurability currently receive their fair share of attention worldwide. This appears clearly from the implementation of more extensive legislative measures and by an increase in case law on issues relating to liability and the scope and interpretation of insurance policies.[2] As all the aspects of a specific country's

[1] See chap 3 pars 3.3.3 above on international statutory liability.

[2] See Rodler DN 'Carbon Monoxide Ruled to be a Pollutant' 2003 (January 27) *The Legal Intelligencer* 1 for a discussion of the case of *Matcon Diamond Inc v Penn National Insurance Co* No 186 WDA 2002 (Pa Super Jan 2003), where carbon monoxide was found to be a pollutant that therefore fell within the ambit of the pollution exclusion clause in an insurance policy, as per the definition of a 'contaminant' being something that 'renders another thing impure and unsuitable for breathing'. See also *Mount Lebanon v Reliance Insurance Co* 2001

Footnote continues on the next page.

statutory position on environmental matters and the particularities of its liability and insurance law are extensive, a true comprehensive comparative study within the scope of the topic of this study is difficult. Only the primary environmental statutes and the rudimentary features of the principles of liability and insurance of the United Kingdom,[3] Belgium, the Netherlands and the United States of America[4] are addressed in this chapter to serve as a background study to this thesis. As these countries, except for the USA, are members of the European Union,[5] the effect of the recent EU Environmental Liability Directive is addressed briefly below.

7.2 THE EUROPEAN UNION

7.2.1 General

Due to various polluting incidents in Europe during the 1970s and 1980s, calls increased for the European Commission to propose a liability system for the remediation of environmental damage.[6] In June 1990 the Community Heads of State and Government adopted a 'Declaration on the Environment'.[7] It proclaims a 'right to a healthy and clean environment, specifically regarding the quality of air, rivers, lakes, coastal and marine waters, the quality of food and drinking water, protection against noise, protection against contamination of soil, soil erosion and desertification, preservation of habits, flora and fauna,

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PA Super 177 9–11 on liability for chemical emissions and the implication of the specific exemption clause on liability for air pollution.

[3] Hereinafter the 'UK'.

[4] Hereinafter the 'USA'.

[5] Hereinafter the 'EU'.

[6] Incidents included the wide-spread pollution of the Rhine. For a comprehensive discussion of this specific problem see Van Dunne JM (ed) *Transboundary Pollution and Liability: The Case of the River Rhine (Conference Proceedings of the International Conference held at Rotterdam on 19 October 1990*) Instituut Milieuschade Erasmus Universiteit Rotterdam 1991 also referred to in chap 3, 4 and 6 above.

[7] European Council Resolution of June 15, 1990 *Bulletin of the European Communities* par 1.36.

landscape and other elements of natural heritage, the amenity and quality of residential areas'.[8]

Although the positions in the UK, in the Netherlands and in Belgium are discussed extensively below, it may be necessary to comment in passing that mandatory environmental damage insurance, which is complimentary to a liability system, is required in some other EU countries such as Finland and Sweden, as well as for specific industries in Germany.[9] The positions in these countries are not addressed in greater detail below.

7.2.2 The EU Directive

7.2.2.1 Brief history

After a lengthy process and deliberations, the final proposal for the Environmental Liability Directive or 'ELD' on environmental liability regarding the prevention and remediation of environmental damage was eventually adopted in 2004. It only became effective on 30 April 2007 and is currently being implemented as a pan-EU framework for environmental liability.[10]

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[8] For a general discussion of the Declaration, see Kramer L *EC Environmental Law* (2007) 2; see also De Ketelaere K (ed) *et al Handboek Milieu- en Energierecht* (2006) (hereinafter 'De Ketelaere') Part III 207 *et seq*.

[9] The position in these countries is addressed in the studies by Wetterstein P "The Finnish Environmental Compensation Act" 1998 (May) *The Bulletin: Pollution, products and new technologies (AIDA)* 19; Oldertz C "Environmental Liability in Sweden" 1989 (3) *Tijdschrift voor Milieuaansprakelijkheid* 80; Pfennigstorf W "The state of pollution liability insurance in the Federal Republic of Germany" 1989 (3) *Tijdschrift voor Milieuaansprakelijkheid* 73; Hoffman WC "Environmental liability and its insurance in Germany" 1993 (2) (Winter) *Federation of Insurance and Corporate Council Quarterly* 147; Ladeur K "Der 'Umweltshaftungsfonds – ein Irrweg der Flexibilisierung des Umweltrechts?" 1993 *Versicherungsrecht* 257.

[10] Directive 2004/35 CE [2004] O.J. L143/56; see Bratt P *Polluter Pays. A short guide to the Environmental Liability Directive* (2008) (hereinafter 'Bratt') 2 who confirms that the UK, as well as many other countries, to date failed to implement the proposed legislation. See also Fogleman V "The Environmental Liability Directive and its Impacts on English Environmental Law" 2006 (October) *JPL* 1443 for an extensive discussion of the impact on the position once the UK implements the Directive, which it has to date not done; Winter G, Jans JH, Macrory R & Kramer L "Weighing up the EC Environmental Liability Directive" 2008 (June) *Journal of Environmental Law* 163 (hereinafter 'Winter *et al*') 175–6 confirms that a draft Bill in the Netherlands is currently serving before Parliament; they discuss the positions in Germany, Poland, and Spain who have implemented the required legislation.

7.2.2.2 Basic scope of the ELD

The benefit of the ELD lies in its focus on liability for natural resource damages or 'NRD's', as these claims fare badly under traditional civil liability regimes. It introduces a strict liability regime, but has no retroactive operation as it covers environmental damage caused only by designated activities from date of its implementation.[11] It also does not apply to cases of personal injury, damage to private property or to any economic loss, and does not affect any right to claim for these traditional forms of damage. Liability under the Directive qualifies as a 'legal liability' for purposes of an indemnity insurance claim.[12] Aspects dealt with under international treaties, for example, on marine oil spill and nuclear liability, are expressly excluded from the Directive's application.[13]

7.2.2.3 Designated activities

A strict liability regime exists for the liability of operators or controllers of certain designated activities for the environmental damage that they cause. Designated activities include (a) the operation of an installation subject to an environmental permit; (b) waste management operations; (c) discharges into surface and groundwater that require prior authorisation; (d) water extraction and impoundment subject to prior authorisation; (e) manufacture, use or a variety of other actions such as processing or transport of dangerous substances or preparations, plant protection products and biocidal products;[14] (f) transport of dangerous or polluting goods; (g) operation of installations that

[11] Bratt 2 is, however, of the opinion that ongoing impacts due to incidents that occurred prior to the ELD may in fact be covered, but that the Regulations will not apply to damage caused by an incident that took place 30 years or longer before the damage manifests.

[12] Fogleman V *Environmental Liabilities and Insurance in England and the United States* (2005) (hereinafter 'Fogleman') 1559 holds a similar viewpoint that liability under the Directive should be sufficient to serve as a 'legal liability' to trigger insurance cover; see also the discussion in chap 6 par 6.5.6.6 above on these triggers.

[13] See Winter *et al* 173 *et seq* for a consideration of the interaction of the Directive with other liability systems such as the nuclear and marine oil pollution regimes.

[14] Wilson G "The Biocidal Products Directive" 1998 (July) *European Environmental Law Review* 204 provides the following examples of biocidal products: 'wood preservatives, insecticides, pesticides and various anti-foulants and sanitizers.'

combat air pollution caused by industrial plants; and (h) any contained use, transport or placing on the market of GMOs.[15]

7.2.2.4 Description of 'environmental damage'

'Environmental damage' in the proposed regulations includes (a) damage to protected species, natural habitat or sites of scientific interest caused by a 'designated activity'; (b) damage to surface water and groundwater; and (c) contamination of land by substances, preparations, organisms or micro organisms.[16] These must pose a significant risk of an adverse effect on human health.[17]

7.2.2.5 Remediation orders

The operator has a primary duty to act in accordance with the Directive, and a secondary duty to carry any costs incurred. Strict notice procedures apply once there is a threat of environmental damage, or where damage has already been caused. Responsible persons can then be ordered by the relevant authority to take the necessary remediation measures that include (a) primary remediation or clean-up; (b) complementary remediation if resources cannot be returned to their original state; and (c) compensatory remediation that consists of stop-gap measures to compensate for shortage or resources

[15] As found in the Regulations to Sched 2.

[16] Bell S & McGillivray D *Environmental Law* 6th ed (2006) (hereinafter 'Bell & McGillivray') 393 are of the opinion that the narrow scope of the description of 'environmental damage' under the Directive is problematic. Once again, the exact meaning of 'remediation of the environment' remains uncertain and although criteria are given, there is still, in their words, 'an inevitable vagueness about them'. See also 395 for their criticism that the Directive is in essence not environmental and does not provide for civil liability, but that it does offer the benefit of providing improved protection for the 'unowned environment'; see also Winter *et al* 172 for the drawbacks of the Directive because it does not offer any solution where the person responsible for the environmental 'orphan damage' remains unidentified.

[17] Art 2(1) describes 'environmental damage' as including (a) damage to protected species; (b) water damage; and (c) land damage; 'damage' is in general is defined as 'a measurable adverse change in the natural resource or measurable impairment of a natural resource service which may occur directly or indirectly'.

or services until primary and complementary remediation have been completed.[18]

The focus of the Directive is on statutory pollution prevention and clean-up or reparation rather than on the rights of prejudiced parties to claim compensation. Rights are given to affected individuals or bodies to press the regulatory authorities to take action, yet the emphasis remains that it is intended to force the regulator to act and impose clean-up liabilities for purposes of environmental remediation. Where an authority does the actual remediation, the operator remains liable for the costs in terms of his secondary duty. Damages are therefore to be used only for remediation of the environment and not to compensate parties prejudiced by the pollution.

7.2.2.6 Defences

Defences include the following: (a) where the damage was authorised under permits issued; or (b) where the damage was not thought to be likely at the time of the damaging act. Where the polluter has acted intentionally or negligently in his operational activities, he could incur liability for any ensuing environmental damage.[19]

7.2.3 Mandatory Insurance Cover

Very few mandatory insurance schemes exist for EU countries, except for those in the nuclear industry and the insurance that is required where there is a risk of marine oil pollution.[20] The liabilities arising from the nuclear and oil pollution sectors are excluded from the Directive. Provisions requiring

[18] See the statement by Winter *et al* 168 that the establishment of the Directive is purely in the public interest, and does not address private interests; see also Bratt 3 on this point.
[19] Winter *et al* 169 identifies the various provisions and circumstances in which an operator is freed from his primary duties in this regard.
[20] See the brief discussion of the liability regimes and the position of insurance within these industries in chap 3 par 3.3.4.4.2 and par 3.3.4.3.3 above.

mandatory insurance cover for environmental damage were not included in the Directive, yet are to be revisited in a few years.[21]

7.3 THE UNITED KINGDOM

7.3.1 General Introduction

The position in the UK is of great relevance to South Africa as the impact of the UK law on the development of our insurance law over many decades remains undeniable.

Liability for environmental damage has a long history in the UK.[22] In accordance with the Human Rights Act of 1998 on the protection of property, everyone is entitled to the peaceful enjoyment of his possessions, unless it is in the public interest to be deprived of his possessions.[23] Everyone also has the right to respect for private and family life. Interference is only justified where it is in the interest of public safety or the economic wellbeing of the country, or for the protection of the rights and freedoms of others.[24] This will form the basis for the right not to have one's property damaged or one's life interfered with by another's polluting actions. The main environmental statutes and relevant principles of civil liability are discussed below.[25]

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[21] This is confirmed by Bell & McGillivray 395.
[22] See in this regard early cases such as *Bliss v Hall* [1838] 4 Bing NC 183 and the well-known case of *Rylands v Fletcher* [1868] LR 3 HL 330; as well as older legislation such as The Rivers Pollution Prevention Act 1876.
[23] Chap 42 Sched 1 'The Articles' Part II First Protocol Article 1. It was, however, held in *McKenna and Others v British Aluminium Ltd* [2002] Env LR 30 that it was arguable that pollution damage caused by a factory would enable prejudiced parties who did not have a proprietary interest in the affected land, to claim compensation in accordance with the provisions of art 8 of the Human Rights Act 1998.
[24] Part I art 8.
[25] Harpwood V *Modern Tort Law* 6th ed (2005) (hereinafter 'Harpwood') can be recommended for a comprehensive discussion of relevant case law, as only limited references of the extensive body of case law that exists on this point can be included in this thesis.

7.3.2 Statutory Liability

7.3.2.1 General features of environmental legislation

The common features of UK environmental legislation that apply prior to the polluting occurrence are: (a) the compulsory application for permits and authorisations for which potential polluters must pay fees to support the authority's supervisory work;[26] (b) 'best available techniques not entailing excessive cost' to avoid pollution;[27] and (c) imposing criminal sanctions to act as a deterrent.[28]

Once pollution has occurred, features of legislation include the following: (a) authorities have the power to force the polluter to take steps to abate the harm caused to the environment; (b) criminal sanctions take effect, which are usually of a strict character for which no proof of *mens rea* is required; and (c) statutory remedies such as injunctions become available; and (d) a statutory civil liability is created.[29]

7.3.2.2 Environmental Protection Act[30]

The primary legislation for the regulation of environmental matters in the UK is the Environmental Protection Act, complemented by the Environment Act[31] as well as by various codes of practice.[32] It deals with the environment as such, and not with separate environmental media such as air, water and land. Its purpose is to provide an effective administrative system for pollution control

[26] This is in accordance with the polluter-pays principle; see also par 3.3.2.2 above for a general discussion of this principle.
[27] See in this regard a discussion of 'BATNEEC' by Faure M & Skogh G *The Economic Analysis of Environmental Law and Policy* (2003) (hereinafter 'Faure & Skogh') 188.
[28] As summarised by Larsson M *The Law of Environmental Damage: Liability and Reparation* (1999) (hereinafter 'Larsson') 356 *et seq*.
[29] See in this regard Burnett-Hall RH "Emerging Trends in Environmental Law: Non-fault liability: The United Kingdom" 1991 *IBA: Section on Business Law, International Environmental law* 149; also at 153; see also the judgment in *Alphacell Ltd v Woodward* (1972) AC 824.
[30] Act of 1990.
[31] Act of 1995.
[32] For a detailed discussion and commentary on these Acts see Bell & McGillivray 26.

and to impose criminal sanctions in order to promote the enforcement of the Act, and to supplement other statutes that deal with environmental protection.[33]

The Environmental Protection Act also creates a pure statutory nuisance regime that includes liability for the emission of smoke, fumes, gases, dust, smell or other effluvia from industrial or business premises, which are prejudicial to health or which create a nuisance.[34] This Act has the effect that insurers must provide cover for potential liabilities that they did not contemplate when they issued the policy initially, prior to the enactment of the Act.

The Act also establishes a strict retrospective statutory liability regime for soil pollution or land contamination,[35] and acknowledges a retrospective duty of an 'appropriate person' to clean up affected sites once a remediation notice has been served.[36]

Local authorities have extensive powers to inspect areas, identify contaminated lands, to include them in public registers, to determine the identity of potential liable parties, to determine the extent of liability, and to ensure that effective remediation by parties takes place.[37] It does not, however, create any right for a third party to lodge a civil suit for the polluting conduct or for a failure to adhere to any remediation notice.[38] Where persons

[33] The Water Act 1989 and the Clean Air Act 1968.
[34] S 79–82 of the Environmental Protection Act 1990.
[35] S 57 of the Environment Act 1995; see also Faure M (ed) *Tort and Insurance Law Vol 5: Deterrence, Insurability and Compensation in Environmental Liability: Future Developments in the European Union* (2003) (hereinafter 'Faure (ed)') 87– 89.
[36] In s 78A(2) 'contaminated land' is described in terms of the 'harm and risk approach' as 'a site designated by local authority where there is significant harm that is being caused, or a significant possibility of such harm being caused'; in s 78A(9) 'controlled waters' are waters 'where pollution is caused or is likely to be caused where there is entry into or potential entry into controlled water of any poisonous, noxious or polluting matter or any solid waste matter'; s 78F recognises different standards for different classes of persons; see in this regard also the discussion by Faure (ed) 87; Fogleman 1560 questions whether this duty can be accepted as a 'legal liability' for purpose of a liability insurance claim before a remediation notice has been served. It is submitted that the liability is only a certainty once the notice has in fact been served.
[37] S 78B.
[38] As stated by Fogleman 1144 *et seq*; see also1312 in this regard.

who are liable for payment of remediation costs have been identified, the damages may be apportioned among them according to their share in the polluting circumstances.[39] Where this is not possible, damages are to be divided equally.[40] The only defence available is that another recipient has not complied with a remediation notice.[41]

In addition to these pure statutory liabilities, the Environmental Protection Act also creates a statutory civil liability in specific circumstances. It is trite law that the existence of a statutory civil liability claim depends on an express statutory provision that a duty was owed by a particular defendant to a particular claimant. An example of such a duty of care is the duty to control waste from the cradle to the grave that rests upon all persons who produce or are in control of waste.[42] This section also creates a civil liability for payment of damages in addition to the liability to pay clean-up costs and pay criminal penalties. As statutory damages cannot be claimed unless a statute specifically authorises such a claim and unless the damage suffered was the type contemplated in the statute, the Act in this case clearly allows such a claim.

7.3.2.3 The Water Act[43]

This Act creates a strict criminal liability, yet for a civil liability claim the only possibility lies a claim based on the torts of negligence, nuisance or trespass as discussed below.[44]

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[39] Faure (ed) 89 emphasises that it is important to note that this is a proportional and not a joint and several liability.
[40] S 57 Environmental Protection Act.
[41] See also Faure (ed) 89.
[42] See s 34 on the duty of care required; see s 73(6) on civil liability that states that 'any person who unlawfully deposits, or knowingly causes or permits the deposit of waste which causes damage, is liable for that damage unless it: (i) was wholly due to the fault of the person who suffered it; or (ii) was suffered by a person who voluntarily accepted the risk'.
[43] Water Act 1989.
[44] S 107.

7.3.2.4 The Merchant Shipping Act[45]

This Act contains extensive provisions regarding statutory civil liability for the illegal dumping of waste by ships.[46]

7.3.2.5 The Water Industry Act[47]

Where a property owner allows water to escape from his property that harms the environment, he incurs statutory civil liability in accordance with the provisions of this Act.[48]

In addition to these most important statutes, various other minor statutes contain provisions that create statutory liability that are not examined in great detail.[49]

7.3.2.6 Third Parties (Rights against Insurers) Act[50]

Reference must also be made to this specific piece of legislation that confers upon third parties rights for a direct claim against the insurer of third-party risks where the policyholder becomes insolvent or in specified other events, as a form of statutory subrogation.[51] The requirements are that (a) the contract must provide that third parties can enforce it or that it is to their benefit; (b) the third party must be identified by name or class or fall within a

[45] Merchant Shipping Act 1995.
[46] A detailed examination of marine pollution, oil pollution and control of the waste industry is beyond the scope of this thesis.
[47] Water Industry Act 1991.
[48] Part VIII s 209.
[49] See, for example, the Wildlife and Countryside Act 1981; for a comprehensive list and a detailed discussion of other environmental statutes in the UK see Fogleman Part B.
[50] Third Parties (Rights against Insurers) Act 1930.
[51] S 1(1), s 1(4), s 2 state that information that allows a prejudiced party who has a liability claim to discover whether the insolvent wrongdoer has any insurance coverage, must be provided by the liquidator upon demand. This duty to disclose information only arises once liability has been established by an action, arbitration proceeding or agreement.

described or designated group of persons; and (c) the third party must have the capacity and be capable of enforcing the claim under common-law rules.[52]

In the context of the scope of this thesis it should be noted that The Merchant Shipping (Oil Pollution) Act[53] is specifically excluded from the scope of the Third Parties (Rights against Insurers) Act, and the rights of third parties in that specific industry are therefore regulated by the former.[54]

7.3.2.7 The Environmental Liability Directive

Cognisance must also be taken of the effect of relevant EU Directives as they serve the purpose of supra-national law for the UK as well. The Directive has been examined more extensively above.[55]

7.3.3 Civil liability

7.3.3.1 General

In addition to statutory liability, another remedy available to the prejudiced party is a claim based on tort liability. Causes of action include negligence,[56] nuisance,[57] strict liability under the *Rylands v Fletcher* rule,[58] and general trespass.[59]

[52] See Merkin RM *Colinvaux's Law of Insurance* 8th ed (2006) (hereinafter 'Merkin') 325 *et seq* for a detailed discussion of the application of this Act.
[53] The Merchant Shipping (Oil Pollution) Act 1971.
[54] S 12(5).
[55] See par 7.2 above.
[56] See par 7.3.3.2 below.
[57] See par 7.3.3.3 below.
[58] See the discussion in par 7.3.3.4 below.
[59] As discussed in par 7.3.3.4 below.

7.3.3.2 Negligence

7.3.3.2.1 Requirements

Tort liability cases require that (a) the wrongdoer must be under a duty of care, and he must be in breach of the standard of care as imposed under the duty of care; (b) damages that are reasonable and foreseeable must factually have been caused by the breach of duty;[60] (c) the plaintiff as the prejudiced party must demonstrate the tortfeasor's fault;[61] and (d) actual damage to property or physical injury must be suffered.[62] Possible defences include the plaintiff's contributory negligence and inevitable accident or *force majeure*.[63]

The last few years have seen the development of the toxic or environmental tort, of which the following are the key issues.

7.3.3.2.2 Breach of a duty of care

The duty of care required is the standard of care appropriate to the circumstances. Three tests can be applied to determine whether a duty of care exists, namely the test of reasonable foresight by the wrongdoer, the test of proximity of harm, and whether considerations of justice and reasonableness impose such a duty.[64] A case-by-case approach is required. Where a hazard is caused by a natural nuisance without any human intervention, a 'measured duty of care' is still imposed upon a person who

[60] In *Overseas Tankship (UK) Ltd v Morts Dock and Engineering Co Ltd* [1961] 1 All ER 404 (PC) 415A the court held that tortuous liability is founded not on the act that causes the damage, but on the consequences that damage has been done; see also the finding in *Cambridge Water Co v Eastern Countries Leather plc* [1994] 2 AC 264 that merely foreseeing general 'pollution' is insufficient as it is too wide; the views of Bell & McGillivray 371 and their arguments that the nature and extent of the pollution must at least have been foreseen, can be supported.
[61] *Tutton v AD Walker Ltd* [1986] QB 61.
[62] Negligence as an individual tort dates from the case of *Donoghue v Stevenson* [1932] AC 562.
[63] See in this regard Faure (ed) 53 *et seq*.
[64] See the consideration of these three tests in *Donoghue v Stevenson* 575, 580 *et seq*.

knew of the hazard to prevent harm or loss within a reasonable time.[65] In cases where a remedy is available under another compensation system such as a claim against a compensation fund, no duty of care is owed.[66]

The objective 'reasonable man' test is applied to determine whether there was a breach of duty of care in the specific circumstances on a case-by-case approach, as far as the specific activity is concerned.[67] It cannot be expected that it would be reasonable to anticipate unknown risks. Where realistic precautions could have been taken, yet were not, the duty of care has not been met.[68] In some cases, criminal liability can be accepted of proof of breach of duty.[69] The criteria are that (a) the accident must not be easily explained; (b) its cause must be unknown; (c) the incident would not have happened had it not been for lack of proper care; and (d) the defendant must have been in control of the situation.[70]

7.3.3.2.3 Causation and remoteness of damage

The plaintiff bears the burden of proving that the tortfeasor's conduct made a material contribution to the loss suffered. In relevant case law, a victim's asbestosis was caused over a long period of time while he worked for various

[65] See also the Occupiers Liability Act 1957 (for visitors to premises), and the Occupiers Liability Act 1984 (for non-visitors to premises) that place a statutory duty of care upon a person who knows or should have known about a danger on the property that he occupies, that causes harm to another who has access to the premises. Damage or harm can be caused by pollution factors, such as by exposure to poisonous gases or toxic liquids; see also Harpwood chap 10 for a detailed discussion.

[66] In *Matthews v Minister of Defence* [2003] UKHL 4, the victim's exposure to asbestos in his work environment caused serious illness, but as a statutory fund was available for his claim for compensation, the court held that the Crown as his employer did not to owe him a civil duty of care.

[67] See Harpwood 127 *et seq* for other examples of the application of the test of the reasonable man.

[68] This is generally known as the 'state of the art defence'; in *Roe v Minister of Health* [1954] 2 OB 66 the court held that it was not common knowledge that a chemical seepage would occur where specific chemicals were stored in canisters unsuitable for that purpose; see the discussion by Harpwood 318 specifically on the standard duty of care of an employer to provide safe working conditions to his employees; see also in this regard the discussion of statutory mandatory insurance for employer's liability in par 7.3.3.4.2 below.

[69] This situation is analogous to the doctrine of *res ipsa loquitur*, that where a wrongdoer is held criminally liable for pollution damage, the court may draw an inference that negligence in a civil sense was present; see in this regard s 11 of the Civil Evidence Act 1968.

[70] *Scott v London and St Katherine's Docks* [1865] 2 H&C 596; see Harpwood 152–154 for a summary and detailed discussed on the application of these criteria.

employers, yet only half of the employment period was in the respondent's employ. The court held that the respondent was liable for 75% of the loss, even though the exact share of his contribution in causing the loss was not proven. The prejudiced party has to prove that the tortfeasor was responsible for the whole or at least a quantifiable part of the loss suffered. As exact quantification is difficult, the court only has to do the best it can by using common sense.[71]

The 'but for' test is applied to determine a factual chain of causation, although the court may deviate from applying the test where it appears not to be appropriate.[72] Where there is concurrent causation, the wrongful conduct of concurrent tortfeasors could cause a single indivisible injury or the same loss. In this situation a single tortfeasor can be held liable in full to compensate the prejudiced party in full for all the damage suffered in terms of the Civil Liability (Contribution) Act.[73] It is, however, often difficult to prove the requirements of 'single indivisible injury' and 'same damage'. Another scenario is where each tortfeasor caused part of the damage, yet neither caused the whole. Had a single act of tort been proven, liability would have been incurred, yet on the evidence it is impossible to identify with precision what part of the loss was caused by each tortfeasor. This is not a form of true concurrent tort, as it would be unjust to proceed that a tortfeasor be held liable for the whole of the damage, where demonstrably he is not. Even though it is impossible to succeed in making a precise apportionment, the court should make the best estimate it can on the available evidence, making the fullest allowance in favour of the prejudiced party for any uncertainties known to be involved in the apportionment.[74]

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[71] *Holtby v Brigham & Cowan (Hull) Ltd* [2000] 3 All ER 421 (CA) par 20.
[72] See *Chester v Afshar* [2004] UKHL 41 pars 8–14, where it was held that the doctrine of informed consent enjoys priority over the unyielding application of the 'but for' test.
[73] Act 1978 s 1(1); *Rahman v Arearose Ltd and Another* [2001] QB 351 (CA); see also the discussion by Harpwood 165 *et seq*.
[74] *Rahman v Arearose Ltd and Another* pars 19–22; see also *Allen and Others v British Rail Engineering Ltd and Another* [2001] EWCA Civ 242 par 20.

In addition to factual causation, a second requirement is that the damages must not be 'too remote'. This forms the requirements of legal causation.[75] The damages must be a direct consequence of the conduct, and the way in which the wrongdoing occurs as well as the category of harm, must have been foreseeable.[76]

7.3.3.2.4 Fault

The reasonableness of the tortfeasor's conduct has to be evaluated.[77] In view of recent developments in product liability cases, it appears as if the current trend is towards presumptive liability where the tortfeasor has to prove the absence of negligence.[78] This would definitely improve a prejudiced party's chances to succeed with a civil liability claim for pollution damage or loss suffered based on tort. It also assists the prejudiced party by creating presumptions of knowledge for a purchaser of land. Where an owner of land's occupation ceases, his liability also ceases except in the case of positive misfeasance. Liability based on the conduct causing the nuisance remains with the seller who caused the nuisance during his ownership even after the property is sold to another.

7.3.3.2.5 Remedies

Remedies include preventative remedies such as injunctions and compensatory remedies such as damages. Only the latter falls within the scope of this study.

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[75] See the similar requirements in South African law as evaluated in chap 4 par 4.2.5.3 above; see also par 7.5.3.3 for the position in the Netherlands and par 7.4.3.4 for the position in Belgium.

[76] See *Margereson v JW Roberts Ltd, Hancock v Same* [1996] PIQR P358 for case law on asbestos pollution, where the court found that tortfeasors should have foreseen the risk that the asbestos dust that generated from their factory could cause asbestosis.

[77] See Bell & McGillivray 372; see also Faure (ed) 83 for an evaluation of this criterion in that the tortfeasor's conduct must have been below a reasonable standard.

[78] For product liability in general, see also Harpwood chap 15; for a South African perspective see Neethling J, Potgieter JM & Visser PJ *Law of Delict* 5th ed (2006) (hereinafter 'Neethling *et al*') 293, as well as the provisions of the Consumer Protection Bill as considered in chap 4 par 4.2.4.5.2 above.

The purpose of damages is to relieve the prejudiced party rather than to punish the tortfeasor, and is designed to provide indemnity. For damage to property, damages may be claimed for the cost of repair or replacement, depreciation of property value, compensation for the loss of use, and for the discomfort caused by the harm.[79] Even though replacement or restitution costs could offer a solution, the realistic position is that it does not always completely compensate for the loss. This can be illustrated by the recent 'lost trees' awards. A claim for damages to cover the replacement of the loss of 200-year old trees by planting saplings of the same cultivar does not compensate for the loss of the ecological value of the older trees.[80]

Although courts in the UK are also reluctant to allow claims for pure economic loss, they also make the exception in case of marine pollution claims for the loss of the professional use of natural resources due to a polluting incident.[81]

For personal injury, compensation for bodily harm, disability, pain and suffering, emotional distress, loss of quality of life, loss or impairment of wages, loss of present and future earning capacity, reimbursement of medical and other expenses can obviously be claimed.

Where a claim is based on lost opportunity, the court must do the best it can on the basis of available evidential material, even where it makes no more than an informed guess, as no better system has yet been devised to assess the exact loss based on lost opportunity.[82]

Private law claims for pollution damages remain time-consuming, costly, and difficult to institute due to lack of information.[83] Bell & McGillivray also interpret

[79] Commité Maritime International *CMI Yearbook Admissibility and Assessment of Claims for Pollution Damage* Part II (1993) 95.
[80] See Bell & McGillivray 381 for a discussion on these 'lost trees' awards.
[81] Harpwood 88 examines the viability of a claim for pure economic loss resulting from environmental pollution that was caused by a polluter's negligent conduct.
[82] *Allied Maples Group Ltd v Simmons & Simmons* [1995] 1 WLR 1602 (CA).
[83] The access to essential information is addressed by s 20 of the Environmental Protection Act 1990 which creates the duty to maintain public registers of environmental information based on mandatory environmental audits.

the latest judgements as indicative of a reluctance to develop the common law as a mechanism for environmental protection, in anticipation of the development of statutory protection measures.[84] This appears to be a universal tendency.

7.3.3.3 Nuisance

7.3.3.3.1 General

Nuisance is concerned with the unlawful interference with a person's use or enjoyment of land or of some right over or in connection with it, and can be classified as a statutory, a private or a public nuisance.[85]

7.3.3.3.2 Private nuisance

A private nuisance is caused when there is a continuous unlawful and indirect interference,[86] with the use and enjoyment of land or some right over or in connection with it.[87] The basis of a claim for private nuisance is founded on the balance between the reasonableness of the tortfeasor's activity and the impact on the prejudiced party's rights.[88] Balancing factors include (a) the application of the locality doctrine;[89] (b) the nature, duration and intensity of

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[84] In the opinion of Bell & McGillivray 386; this deduction is based on the judgements in the *Cambridge Water Co* case and *Transco v Stockport Metropolitan Borough Council* [2003] UKHL 61 as considered below.

[85] *Cambridge Water Company v East Counties Leather plc* [1994] 2 AC 264; see Purdue M "The Merits of Statutory Nuisance as Means of Cleaning Up Beaches" 1997 (9) *JEL* 103 for a detailed discussion of the topic. Courts have, however, been inclined to combine the torts of negligence and nuisance under a single tort called fault-based liability. This is also the position in the South African law of delict regarding nuisance or the abuse of rights discussed in chap 4 par 4.2.3.4.1.

[86] It is required that nuisance must be of an 'indirect' nature, which is the element that distinguishes nuisance from trespass.

[87] See also Harpwood 246–256 for a comprehensive examination of the various elements contained in this description.

[88] In *Sanders Clark v Grosvenor Mansions Co Ltd* [1900] 2 Ch 373 the court held that '[i]f a person is acting reasonably when using his property the way he wishes to, there is nothing which at law can be considered a nuisance'.

[89] In terms of this doctrine, the location and the boundaries of the locality and the intensity of the activities have to be taken into account; see, for example, *St Helen's Smelting Co v Tipping* [1865] 11 HL Cas 642 where copper fumes caused damage to the trees on an adjoining property.

the nuisance;[90] (c) the prejudiced party's use and state of his land and his sensitivity;[91] (d) fault;[92] and (e) public benefit.[93]

Not every form of nuisance is actionable, as the unreasonable conduct must cause some 'appreciable harm' although proof of damages is unnecessary. The tortfeasor can be anyone who uses or occupies the land, anyone who continues with or adopts the nuisance, or even contributes to it.[94] It must affect a person according to the test known as the 'victim test', which makes a claim for the protection of general ecological interests difficult.[95] Defences include (a) prescription, and (b) statutory authority.[96] It is, however, not a proper defence to aver that the prejudiced party freely came to the nuisance.[97]

Remedies include injunctions, the self-help remedy of abatement and damages to cover for damage to land, personal injuries or substantial inconvenience caused, which is more extensive than a damages claim for public nuisance.[98]

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[90] More than a temporary or once-off occurrence is required, unless it becomes a regular occurrence of isolated incidents; Bell & McGillivray 362 propose that these factors will also prove to be valuable in order to determine which remedy is the most suitable in a specific situation.

[91] Not only must the tortfeasor's land that causes the nuisance be used reasonably, but the prejudiced party's use of his land that is affected by the nuisance must also be reasonable.

[92] It would be unjust if liability depended on whether the occurrence of the specific type of damage was foreseeable, as liability claims based on nuisance would then be stricter than claims brought under negligence.

[93] Conduct that is to the public benefit is less likely to be seen as an actionable nuisance; see in this regard *Dennis v Ministry of Defence* [2003] *Env LR* 34; Bell & McGillivray 365 deduce from case law that 'the courts have been reluctant to allow private interests to be trumped by public interest'.

[94] One may acquire an 'easement', known in South African law as a limited real right or servitude over another's property, by acquisitive prescription for the right to continue with polluting activities after 20 years of continuous, open and lawful polluting use.

[95] See Bell & McGillivray 361 *et seq* on the position taken by the European Commission of Human Rights in cases relating to the 'right to nature' brought before it.

[96] Bell & McGillivray 368 state that this defence hails from the days of strict liability. It is their opinion that the possibility of taking public interest into account may have knock-on consequences in that the approach of the courts to allow this defence will be less favourable.

[97] This would, for example, be the case where a person who buys a property, knowing that it is located in the vicinity of a noisy airport, is precluded from claiming that the noise creates a nuisance; see also the statement in *Bliss v Hall* 1 that '[w]hat the Defendant says in answer, is that he carried on the business for three years before the Plaintiff became possessed of the messuage (houses) he inhabits. That is no answer to the complainant in the declaration; for the Plaintiff came to the house he occupies with all the rights which the common law affords, and one of them is a right to wholesome air'.

[98] See the discussion in par 7.3.3.3.3 below.

7.3.3.3.3 Public nuisance

Public nuisance is a nuisance that materially affects the reasonable comfort and convenience of life of a class of the general public.[99] 'I prefer to look to the reason of the thing and to say that a public nuisance is a nuisance which is so widespread in its range and so indiscriminate in its effect that it would not be reasonable to expect one person to take proceedings… to put a stop to it, but that it should be taken on the responsibility of the community at large.'[100] The value of this potential claim definitely lies therein that it can protect interests other than land rights, which makes it highly suitable as a vehicle for environmental damage claims, and could include any nuisance caused by land, air or water polluting activities. In addition to the normal defences available in tort, statutory authority has proven to be a useful and successful defence.[101]

For public nuisances, the State as the 'guardian of the environment' can act in the public interest against the tortfeasor. Remedies include injunctions and a claim for damages that is of a compensatory nature.

7.3.3.4 The 'rule in *Rylands v Fletcher*'

7.3.3.4.1 Scope of rule

The well-known rule created in the case of *Rylands v Fletcher*[102] imposes a form of strict liability for things and substances accumulated on land by a

[99] Bell & McGillivray 369 describe public nuisance as 'a crime involving nuisance, affecting a section of the general public, although anyone suffering "special damage" beyond that suffered by the public generally has a claim in tort'; according to Harpwood 238, where all persons suffer equally, there appears to be no claim based on public nuisance.
[100] As stated in the judgment in *Attorney-General v PYA Quarries Ltd* [1957] 2 QB 169 191.
[101] See in this regard *Allen v Gulf Oil Refining Ltd* [1981] 1 AC 1001; see also Harpwood 242 *et seq* for the merits of the various defences available.
[102] [1868] LR 3 (AC) 330 (HL) 330; see also Harpwood 264–269 for a comprehensive examination of the rule and its subsequent application in case law.

person for his own purposes that escape and subsequently cause damage on another's land as a natural consequence of its escape.[103]

7.3.3.4.2 Strict liability

The rule does not create a general theory of strict liability and only applies in specific circumstances.[104] To limit extensive liability, this action requires a 'non-natural' use of the defendant's land.[105] 'Natural use' includes anything that is for the general public's benefit. Due to cases dealing with environmental catastrophes, the courts have found it just to impose liability in these situations in the absence of fault.[106]

7.3.3.4.3 Remedies

The claim cannot be used to claim for property damage not relating to the land, or for personal injury,[107] and the damage suffered had to be predictable.[108] Defences include statutory authority, acts of God or third parties, and remoteness of damages. Liability does also not ensue where the plaintiff was wholly at fault. It remains part of tort law even though it has its complications and has been subject to criticism.[109]

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[103] Bell & McGillivray 376 *et seq* provide examples of cases where this rule has been applied in situations where oil, chemicals, colliery spoil, gases, fire and water escaped from property.
[104] Faure (ed) 22 *et seq* identifies the justifications for the introduction of a strict liability rule as the following: (a) it acts as an effective deterrent for potential polluters; (b) it benefits the plaintiff in easing the burden of proving the claim; and (c) it contributes to effective redistribution of losses.
[105] Bell & McGillivray 375 refer to these incidents as 'unnatural nuisances'; in *Transco v Stockport Metropolitan Borough Council* par 36 the court held that the extraordinary use of land must also give rise to an extraordinary degree of risk.
[106] *Transco v Stockport Metropolitan Borough Council* par 6.
[107] See also *Transco v Stockport Metropolitan Borough Council* pars 35, 39.
[108] Regarding the notorious unpredictability of risk, see Faure (ed) 86 with reference to the unreported case of *Empress Car Ltd (Abertillery) v National Rivers Authority* (HL) 05/02/1998.
[109] *Transco v Stockport Metropolitan Borough Council* par 30 *et seq*.

7.3.3.5 Trespass

Trespass can be described simply as the direct interference with personal or proprietary rights without a lawful excuse.[110] Trespass takes place where there is a direct interference in the possession of land. This includes trespass by human conduct and by the presence of animals or substances found on or that migrate onto the land. It is also relevant to note that one could trespass to the ground beneath the surface, and that sub soil pollution could amount to a form of trespass.[111] Placing substances such as waste on another's land is also seen as a form of trespass.[112]

It is actionable *per se* as it does not require proof of damage.[113] There must be proof of some form of 'direct interference', which means that the action of trespassing must be the direct cause of the loss. Loss must not be created via an indirect cause or by an external factor. As it requires intentional or negligent conduct, it is thus a fault-based tort.

Remedies include obtaining an injunction, a claim for the recovery of land or for re-entry and defence of property, a claim for lost profits, for the financial losses caused by the deterioration of the property and the costs of recovering these losses.[114]

[110] See especially the judgment in *Cambridge Water Co v Eastern Countries Leather plc* 53; see also Fogleman 1400 *et seq* for a more extensive examination of the nature and effect of trespass.
[111] This viewpoint is reiterated by Bell & McGillivray 369.
[112] See the judgment in *Department for the Environment, Food & Rural Affairs v Feakins* [2004] EWHC 2785 (Ch) where the placing of animal remains on land that caused environmental damage was held to be a form of trespass.
[113] *League against Cruel Sports v Scott* [1985] 2 All ER 489.
[114] For a consideration of these remedies, see Harpwood 236 *et seq*.

7.3.4 Environmental Insurance Cover in the UK

7.3.4.1 General

Pollution insurance cover was traditionally provided under private insurance for the restitution of first-party interests, such as that found in property and private liability policies. With the growing threat of pollution damage and the reality of extensive insurance claims, insurers reacted by limiting or even excluding cover contractually for specific risks.[115] A contractual exclusion of liability for any other loss or damage is allowed, yet must be fair in order to be enforceable. Although insurance contracts in general are not subject to the provisions of the Unfair Contract Terms Act,[116] contractual exclusions and limitations in insurance contracts are. Contracts are furthermore subject to the 'fairness requirements' under the Unfair Terms in Consumer Contracts Regulations 1999.[117]

7.3.4.2 Pollution exclusion clauses in the UK

Lloyd's Underwriters Non-Marine Association (hereinafter the 'NMA') drafted the first pollution exclusion clauses as early as 1959.[118] The London market started to offer specific environmental insurance products in the 1970s. In 1989 a Department of Environment Working Group on Insurance was established to investigate the possibility that pressure for environmental policies would increase due to a greater statutory duty of care expected from participants in the waste disposal industry, and to examine the insurability of

[115] S 2(1), s 3(1); see also Sched 2 for the relevant guidelines for insurance practice.
[116] Act of 1977; s 2(2) bars any contractual exclusion contained in standard business terms, regarding liability for the death or personal injury of a consumer due to negligent conduct of another; see also s 11 on the test of 'reasonableness' that must be applied in terms of the Act. In the case of *Regus (UK) Ltd v Epcot Solutions Ltd* [2008] EWHC Civ 361 the Appeal Court confirmed the generally permissive approach of English courts towards exclusion and limitation clauses. The criterion of 'reasonableness' must be applied in view of the facts and circumstances before the court when the enforceability of a contractual exclusion clause is in issue.
[117] See Merkin 69 pars 3–19 on the operation and effect of these Regulations on the UK insurance industry.
[118] Lloyd's Underwriters Non-Marine Association Pollution Exclusions version NMA 1333.

environmental risks in general.[119] In 1995 the recommendation was made that the solution would lie in the introduction of a standard comprehensive pollution exclusion clause into public and general liability policies, and to attempt to introduce a Comprehensive Environmental Impairment Liability insurance product into the insurance market.[120] A Joint Pollution Working Group was subsequently created to study the viability of the proposal, which resulted in their 'Report on the Assessment of Pollution Risks' that was published in 1997. The report was followed by the publication of guidelines for the industry in 1998 to enable the industry to implement the proposals.[121] The introduction into the market proved to be unsuccessful, as the proposals were not widely implemented. Various endorsements for extended exclusions as discussed in chapter 6 above followed over the years.[122]

7.3.4.3 Environmental pollution insurance products

As it is the case in most countries, obtaining comprehensive environmental damage and liability cover in the UK remains difficult and expensive. Specific insurance products are available in the international insurance market as examined in chapter 5 above.[123]

7.3.4.4 Statutory mandatory insurance cover

Currently, there are no statutory requirements or other measures that require mandatory insurance cover for general environmental liabilities in the UK, except for the cover that nuclear installations and merchant ships carrying oil must obtain.[124] A form of insurance that is relevant to the topic is the compulsory liability insurance cover that employers must take out to provide cover for their employees. This is not required from employers who are large

[119] House of Commons Select Committee on the Environment (1989).
[120] Hereinafter referred to as 'EIL'; see also Zeller W "How to get off the 'Sudden and Accidental' Time Bomb?" 1995 (4) *NFT* 307.
[121] See Fogleman 1514 for a discussion of the history and extent of the study.
[122] See chap 6 par 6.5.3 above.
[123] See chap 5 par 5.4.4 above.
[124] This is also confirmed by Fogleman 1577, and by Merkin 684.

enough to qualify as their own insurers in terms of specific legislative provisions.[125] This type of insurance will also provide cover for loss or damage caused to employees by polluting factors such as exposure to asbestos and other harmful substances that cause occupational hazards.

Statutes on environmental liabilities in the UK do not specifically mention insurance or the duty to obtain insurance cover, except for the Environmental Protection Act[126] that states only that the existence of insurance cover is irrelevant when applying the exclusion tests and apportionment procedures required for environmental liabilities.[127]

The international position in respect of specific problems and key issues relating to environmental insurance cover also includes those in the UK insurance industry and was dealt with extensively in chapter 6 above. These include the interpretation of words and phrases such as 'sudden and accidental', 'accident', 'property damage', 'natural resource damage' and 'legally liable',[128] issues in respect of the trigger of coverage,[129] and the effect of various policy exclusions and limitations.[130]

7.4. BELGIUM

7.4.1 General Introduction

Due to extensive studies undertaken by authoritative authors in Belgium and the Netherlands on environmental insurance, these two countries have become leaders in the field of environmental pollution liability and

[125] Employer's Liability (Compulsory Insurance) Act 1969; see s 9 for the exemption of certain employers; s 2(1)(b) and s 2(1)(c) expressly prohibit provisions in policies that exclude cover for damage caused by the employer's failure to adhere to his statutory or common law duty of care.
[126] See also the more extensive discussion in par 7.2.2 above.
[127] Part IIA D.35(b).
[128] See specifically chap 6 par 6.5.6 above.
[129] See in this regard chap 6 par 6.3 above.
[130] See also par 6.5 in general above.

insurance.[131] Practical problems and difficulties lead to demands for a separate regime for environmental damage liability, which resulted in substantial law reform by these governments.[132] Various liability regimes as created by international conventions and agreements have also been implemented, the most important being the conventions that address liability for marine damage caused by oil pollution and regarding liability within the nuclear industry.[133]

7.4.2 Statutory Liability

7.4.2.1 General

The most logical approach to repair environmental damage is via civil liability law or 'aansprakelijkheidsrecht'. A commission called the Interuniversitaire Commissie was appointed by the Belgian government to prepare a study on a general environmental policy called the 'Voorontwerp Decreet Milieubeleid'.[134] It advised the government to move away from fault-based liability for environmental damage.[135] The last few decades have seen a universal sharp increase in statutory strict or no-fault liability regimes in a variety of areas. The mere participation in risky activities within specific denominated industries serves as an example.[136] Strict liability regimes were introduced in the following industries and are briefly explained below. It should be stressed at

[131] See, for example, the early publication by Bocken H *Het aansprakelijkheidsrecht als sanctie tegen de verstoren van het leefmilieu* Proefschrift ingediend tot het bekomen van de graad van geaggrereerde voor het hoger onderwijs aan de Rijksuniversiteit Gent (1979), and the extensive number of publications in specialised journals such as the *Tijdschrift voor Milieurecht* (published in Belgium) and *Tijdschrift voor Milieu en Aansprakelijkheid* and *Milieu en Recht* (published in the Netherlands).
[132] See Faure 69 who highlights the issues presented for this argument.
[133] See in this regard chap 3 par 3.3.3 above.
[134] See the Voorontwerp Decreet Milieubeleid published by the Office for Official Publications of the European Communities at http://www.europa.eu.int (accessed 2 March 2000).
[135] See the Interuniversitaire Commissie tot Herziening van het Milieurecht in het Vlaamse Gewest (or 'ICHM') chaired by Prof H Bocken; see also Bocken H, Deloddere S & Ryckbost D *Report of the Interuniversitaire Commissie tot Herziening van het Milieurecht in het Vlaamse Gewest* (1995); this report is also examined in greater detail in De Ketelaere 944; see also 1347 *et seq*.
[136] See Van Daele G *Milieurisico's goed verzekerd* (2001) (hereinafter 'Van Daele') 22 for the denominated industries.

the beginning of the discussion that it is possible to escape statutory liability only where the relevant statute provides for specific defences.[137]

7.4.2.2 Soil pollution

A duty rests upon any person who exploits or participates in any activity relating to land for which a licence, permit or consent is required, to prevent soil pollution in accordance with the Bodemsaneringsdecreet van 22 februari 1995.[138] A strict liability regime applies where the authorised activity causes soil contamination.[139] The owner or any user of the contaminated land, irrespective of whether he uses, participates in the use, or exploits the property, also incurs liability for soil contamination caused, unless he is able to deny liability in terms of specified statutory defences.[140]

7.4.2.3 Waste disposal

In the waste disposal industry, any owner of a waste disposal site incurs strict liability for any waste disposed of on the site under his control. This position as well as the ones below is similar to that in most other countries.[141]

7.4.2.4 Transport or production of dangerous substances

In case of the transport or production of dangerous, hazardous or poisonous substances, gases or waste, the person transporting or producer of the

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[137] Examples include where the polluting incident is (a) a new polluting event known as a 'nieuwe verontreiniging'; (b) a historical polluting event or 'historische bodemverontreiniging', and (c) a mixture of these two known as 'gemengde verontreiniging', which exempt polluters from liability in specific situations. Another defense exists where limitations of use and preventative measures (own translation of 'gebruiksbeperkingen en voorzorgsmaatregelen') prevent restitution. See Van Daele 67–70 for a more detailed explanation.

[138] For an extensive examination of the provisions of the Act, see Ryckbost D "Het Decreet van 22 februari 1995 betreffende de bodemsanering" 1995 (Mei/Juni) *Tijdschrift voor Milieurecht* 178.

[139] Own translation of 'bodemverontreiniging' in terms of the Bodemsaneringsdecreet.

[140] Art 25 Bodemsaneringsdecreet; see also De Ketelaere 1340 *et seq*.

[141] See the Afvalstoffendecreet van 22 juli 2004.

substance, gas or waste incurs strict liability for loss or damage caused.[142]

7.4.2.5 Groundwater recycling and mining activities

A strict liability regime also applies where a person who is responsible for or involved in the recycling of groundwater causes contamination of the water.[143] Specific statutory mining concessions also introduce a strict liability regime for damage caused to the environment by participation in these mining activities.[144]

The Burgerlijk Wetboek under article 1384 provides that 'men aansprakelijk is voor de schade veroorzaakt door de daad van personen voor wie men moet instaan, of van zaken de men onder zijn bewaring heeft'. Deketelaere is of the opinion that this also covers liability for losses caused by omissions in the form of 'latente verontreiniging van de bodem of het water'.[145]

7.4.2.6 Marine pollution

Any person causing damage to the marine environment is held liable unless he can prove that the loss was caused by war or *force majeure*, by the actions of third parties, or is caused only by the wrongful conduct of the government or its failure to act as required.[146]

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[142] '[T]ransport van gevaarlijk of giftig afval' in terms of art 7 of wet van 22 juli 1974; art 13 wet 12 april 1965 on the 'vervoer van gasachtige stoffen'; art 13 wet 18 juli 1975 on the 'exploiteren van ondergrondse bergruimten bestemd voor opslaan van gas', on the transport of gases and the use of underground gas storage facilities.

[143] Recycling of groundwater in accordance with the Grondwaterherwinning wet 10 januari 1977 arts 1–5.

[144] Mine concessions in accordance with art 5. K.B. van Mijnconcessies 13 september 1919.

[145] See De Ketelaere 1337.

[146] Art 37(1) of the Marine wet van 20 januari 1999; see in general Huybrechts MA & Van Dunne KN in Faure MG & Hu J (eds) *Prevention and Compensation for Marine Pollution Damage* (2006) 123 *et seq*.

7.4.3 Civil Liability

7.4.3.1 General

As stated by the Interuniversitaire Commissie[147] the most logical starting point for the repair of environmental damage known as 'milieu schade' is by a claim brought under civil liability law. This type of claim, as is the case in most other countries, poses its own set of unique challenges. As to the requirement of causation, for example, the prejudiced party often cannot prove the nature or source of the pollution,[148] especially where there is a migration of a pollutant, multiple pollutants or a synergy between various pollutants. The determination of the cause and the extent of the pollution as well as the quantum of damages is a time-consuming, specialised and costly procedure. Once conduct, causation and loss are all proven, possible defences and exemptions could frustrate the claim, or the claim could have become prescribed.

7.4.3.2 General principles of liability

Belgian tort liability is governed by the notion of fault. Article 1382 of the Belgian Burgerlijk Wetboek provides that 'any act by which a person causes damage to another compels the person through whose fault the damage occurred to repair or pay compensation for such damage'. Article 1383 states that a person is liable not only for the damage caused by his positive actions, but also for his lack of care in failing to prevent damage.[149] As it became clear that the basic notion of fault liability was insufficient and failed to provide a comprehensive solution for environmental pollution claims the demands for a separate liability regime increased.[150]

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[147] See the reference to the Report of the Interuniversitaire Commissie in par 7.4.2.1 above which eventually led to the enactment of the Bodemsaneringsdecreet as discussed in par 7.4.2.2 above.
[148] Own translation of 'die aard van de verontreiniging'.
[149] Own translations from the discussion in De Ketelaere 1330 .
[150] The study by Bocken (1979) was one of the initial works on this topic, followed by extensive studies and various publications in this field, as referred to in this study.

7.4.3.3 Blameworthy conduct and fault

7.4.3.3.1 Fault

Belgian law requires the notion of blameworthiness or 'toerekenbare fout' namely, that a wrongdoer will be held liable if faulty conduct is imputable to him. The presence of fault is determined in accordance with express legislative provisions or in terms of the general principles of civil liability law where the wrongdoer falls short of the acceptable degree of caretaking.[151]

7.4.3.3.2 Strict liability

Strict liability regimes can apply in the following situations. As is the case in most liability regimes, for example, in the UK, the USA and South Africa, neighbours or persons in close proximity of each other incur strict liability based on nuisance. Liability is based on the unacceptable infringement upon another person's property rights.[152] The well-known strict liability regime for product liability known as the 'aansprakelijkheid voor gebrekkige zaken' also applies in Belgium, yet is not discussed in greater detail here. Again it must be noted that the use of products could lead to environmental or pollution damage and is therefore relevant. The ordinary principles of vicarious liability, for example, the liability of employers for the conduct of their employees and the liability of a principal for the conduct of his agent, apply. Strict liability can also be incurred for damage caused by goods under one's control.[153]

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[151] For legislative provisions see, for example, the Milieuvergunningsdecreet art 22; and the Afvalstoffendecreet art 13; in accordance with civil law principles conduct is tested against a general duty of care or 'algemene zorgvuldigheidsnorm' as described in De Ketelaere 1331.
[152] Also called 'burenhinder' which falls under art 544 of the Belgian *Burgerlijk Wetboek*.
[153] The *Burgerlijk Wetboek* art 1384 provides that 'men aansprakelijk is voor de schade veroorzaakt door de daad van personen voor wie men moet instaan, of van zaken de men onder zijn bewaring heeft'.

7.4.3.3.3 Defences

A *force majeure* event can serve as a defence, yet it is not absolute. Where the wrongdoer knew or should have known about the impending event and failed to take precautionary measures, the eventual *force majeure* occurrence does not serve as a defence.[154]

In Faure's opinion contributory or comparative negligence by the plaintiff should also serve as a defence, even though it is a partial and not an absolute defence and should lead to a proportionate reduction in liability.[155]

The 'first use' defence can also not be considered an absolute defence, as 'first in time' is not in this context necessarily strongest in right. This defence becomes relevant in the situation where a factory was located in an uninhabited area, and a person who, knowing of the existing risk of pollution by the factory, assumes the risk by settling on property adjacent to the factory. The 'newcomer' is then precluded from acting once the risk realises and the polluting event occurs. The determination of liability requires the investigation of the possibility of reducing or preventing harm to the newcomer, the foreseeability of the harm and the possible expansion of the harm after the newcomer has settled.[156] The possession of a licence issued by an authority to allow polluting activities has, however, been rejected as a defence.[157]

7.4.3.4 Causation

Countries such as South Africa, the Netherlands, Germany, France, Austria and Switzerland all take a two-pronged approach to test for causation, where

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[154] Faure (ed) 54 uses the following example as an analogy: A sudden unexpected fog is seen as a *force majeure* event, but not a slow creeping fog where a driver of a motor vehicle has time to react to evade the fog. He is of the opinion that *force majeure* should even remain a defence under a strict liability regime discussed in par 7.4.3.3.2 above.

[155] See Faure (ed) 62; contributory negligence does not only impact on the requirement of fault, but one should keep in mind that it also impacts on the element of causation, dealt with below; see par 7.4.3.4; see also the position in South African law as examined in chap 4 pars 4.2.4.4, 4.2.5.2.2 above.

[156] As stated by Faure (ed) 63 *et seq.*

[157] Known as 'the regulatory compliance defence' as discussed by Faure (ed) 55.

factual causation is limited by the second test for legal causation. In contrast, causation is determined in Belgium by testing only for factual causation by the application of the *conditio sine qua non* test.[158] The second test consists of a test for legal causation in South African law,[159] a test for 'adequate causation' in some European countries,[160] and the test for 'reasonable accountability' in the Netherlands.[161] The lack of a second test of this nature in Belgium has the potential for extensive or unlimited factual liability and has been widely criticized.[162]

7.4.3.5 Damage or loss

7.4.3.5.1 General nature of damages

The conduct must have caused damage or loss that is certain and quantified.[163] The nature of claimable environmental damages and the assessment and quantification once again pose problems in an environmental context as discussed extensively in chapter 6 above.[164] Claims in general include damages for bodily injury suffered, for property damage and other damages such as for loss of profit and pure economic loss.[165]

7.4.3.5.2 Statutory description of damages

In some situations express statutory provisions determine exactly what the extent of the claim is. For marine pollution in terms of the Belgian wet van 20 januari 1999, 'damage' in the context of the Belgian marine environment is

[158] See Boone I "Conditio sine qua non, of mag het iets meer zijn?" in Balthazar T (ed) *Aansprakelijkheidsrecht* (2004) 53; see also De Ketelaere 1330 regarding the test for a 'oorzakelijke fout'.
[159] See the position in South African law in chap 4 par 4.2.5.3 above.
[160] Specifically in Germany, Austria and Switzerland.
[161] The criterion of 'toerekening naar redelijkheid' in the Netherlands.
[162] See the criticism by Boone 54; see also in this regard Bocken H & Boone I "Causaliteit in het Belgische Recht" *TPR* 2003 1625 1627–1633; see also Faure 160 in general on causal uncertainty.
[163] Own translation from Van Daele 17 who describes it as 'zeker en onbetwistbaar'.
[164] See the detailed discussion in chap 6 par 6.6.
[165] See De Ketelaere 1334–1336 for a detailed examination of the various forms of damage that could be actionable.

defined as ‘any loss or disadvantage suffered by an individual or by a legal entity as a result of marine pollution of the marine environment, whatever the cause may be’.[166]

The statute distinguishes environmental marine damage from an ‘environmental impairment’ which is described as ’any negative influence on the marine environment as long as it does not constitute damages’.[167] The latter also includes all collective interests and all negative consequences, which makes the description rather extensive. This Act allows the state to conduct clean-up operations, and to institute a claim for monetary damages against the polluter to cover the clean-up costs. As the primary goal is to restore the environment, the money claimed from the polluter does not provide compensation to cover the losses of the individual who is prejudiced by the pollution.[168]

7.4.3.6 Proposal to introduce a new compensation regime

A study of the viability of a new compensation system for environmental damage was completed in December 1998 upon the instruction of the Belgian government.[169] The recommendations included that any new dispensation should not provide cover for any retroactive damage. It should be based on an objective strict liability in that all persons in control of premises or substances incur liability unless they can prove their specific share in the damage caused. This then creates a presumptive causation.

Although it was not recommended that a mandatory insurance or other mandatory financial security system be introduced, Bocken is of the opinion that liability insurance cover for specific environmental risks should be

[166] Art 2,6.
[167] Art 2,7; own translation of the relevant section.
[168] Art 37, art 3.
[169] See the study by Deketelaere M, Schuyster F & Deketelaere K *Onderzoek naar de Opportuniteit en de Haalbaarheid van een Vernieuwd Vergoedingssysteem voor Milieuschade* (December 1998) as undertaken by the Instituut voor Milieu- en Energierecht Faculteit der Rechstgeleerdheid Katholieke Universiteit Leuven.

compulsory.[170] This is supported as a potential solution as can be seen from the conclusion in chapter 8 below.

In accordance with the general principles of a civil liability 'damage approach' the study proposed that 'compensable damage' should include all forms of natural resource damage, as well as damage to water and soil, traditional property damage and damage to persons that can all be included in the 'dangerous activities' approach.[171]

7.4.4 Insurance and Schemes of Restitution in Belgium

7.4.4.1 Wet op landesverzekeringsovereenkomst [172]

This statute deals only with insurance contract law in Belgium, and not with the supervision of the insurance industry.[173] The Act regulates the relationship between insurers and policyholders in all insurance matters except maritime insurance, which is dealt with in separate legislation.[174] Liability insurance is dealt with in title I and II of the legislation. The statute contains various provisions that apply specifically to environmental liability insurance.[175]

Article 78 is of particular significance as it covers the insurability of long-tail liabilities where claims are instituted only after the insurance has lapsed for

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[170] See the Report by Bocken H *General Report Theme 1B "Alternative Compensation Systems for Environmental Liabilities* presented at the AIDA XIth World Congress New York (2002) (hereinafter 'Bocken (2002)') 7.
[171] In the opinion of De Ketelaere in the Executive Summary 1.
[172] Wet van 25 juni 1992.
[173] The following examples illustrate aspects contained in the Act: art 80 deals with the duty of the policyholder to disclose all documentation and proof of the damage or loss-causing incident to the insurer; art 79, and art 89 cover the insurer's defence against the claim; art 82 deals with the compulsory payment of all expenditure relating to the legal process, costs of defence and statutory interest that exceeds the insured sum; art 34 and art 35 provide prescription periods for general claims and for liability insurance claims; see also Reinecke MFB "Interesting aspects of the new Belgian insurance act: a few comparative remarks from a South African point of view" 1993 (1) *TSAR* 91.
[174] See par 7.4.2.6 above; for criticism of the new Act and its limited application see Couzy H in Huybrechts (ed) *Marine Insurance at the Turn of the Millenium: The European Institute of Maritime and Transport Law* Vol 1 (1999) 379.
[175] Art 77–89.

damage that was caused during the existence of the insurance policy.[176] This section was amended in 1994 to replace the 'acts committed' trigger with the 'loss occurrence' trigger for insurance cover.[177] Parties are entitled to agree to cover on a 'claims-made' basis, provided that the loss also occurred during the policy period. Once parties have agreed to the 'claims-made' basis, the insurer is legally obliged to provide for an additional 36-months subsequent cover following the expiry of the policy, where the risk is not taken up by another insurer. This obligation only exists where the policyholder made a full disclosure to the insurer of all relevant facts relating to potential damage-causing events during the policy period.[178]

Article 86 on the 'eigenrecht van de benadeelde' allows the prejudiced party to claim directly from the insurer.[179] In accordance with Article 87 statutory and contractual exclusions, exceptions and disqualifications cannot be maintained against the prejudiced party, provided that they did not already apply prior to the damage-causing incident.[180]

7.4.4.2 Regulation of policies and financial limits

Insurance policy provisions are also regulated in terms of the Wet van 9 juli 1975 that applies to all insurers.[181] Any clause that does not comply with the provisions of the Act is deemed to be void.

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[176] Called the 'uitloop risico'.
[177] This basis applies to all insurance policies except for motor vehicle liability, family liability or liability in non-industrial fire insurance policies.
[178] See in this regard Rogge J "Belgian Land Insurance Contract Act" 1998 (May) *The Bulletin on Pollution, Products and New Technologies (AIDA)* 17.
[179] This section in the Act regarding the direct right of the third party or 'eigen recht van de benadeelde' creates a statutory right for the prejudiced party to claim directly from the liability insurer. This is also the case in the Netherlands in terms of the new insurance legislation as discussed in par 7.5.4.2 below; see also Reinecke MFB "Interesting aspects of the new Belgian insurance act: a few comparative remarks from a South African point of view" 1993 (1) *TSAR* 91 (hereinafter 'Reinecke (1993)') 106 *et seq* for an evaluation of the rights of third parties against the insurer in Belgian law.
[180] Art 87 § (1); see also Sandrock O "German and European drafts on choice of law rules applicable to delictual liability: the direct claim against the insurer" 1999 (4) *TSAR* 734 753 who reports that EU countries appear to be unanimous in that either the law that governs the delictual liability or the law that governs the insurance contract can be applied.
[181] Art 19.

For civil liability claims not based on contract, specific statutory minimum amounts can be prescribed.[182]

7.4.4.3 Types of insurance cover available

7.4.4.3.1 General availability

First-party property insurance provides cover for environmental damage although most policies contain a standard soil pollution exclusion clause. It is also possible to claim under liability insurance for loss incurred due to liabilities incurred towards third parties, unless the claim is excluded by a pollution exclusion clause.

7.4.4.3.2 Liability insurance cover

The most common insurance cover to be found in the Belgian market is the 'burgerlijke aansprakelijkheid' (hereinafter 'BA'), 'BA gezin' or 'familiale verzekering', that covers any civil liability incurred in a private capacity, and would include cover for liabilities incurred due to damage caused to the environment. For professional liability insurance cover the market offers the 'BA uitbating' policy as well as the 'beroepsaansprakelijkheidsverzekering'.[183]

For environmental losses in particular the 'BA na levering' policy could provide cover for loss or damage caused to the environment after the delivery of goods or services. As can be expected, the time clause that determines the trigger of cover is a key provision in this type of insurance.[184] This is also an 'all risk' policy which covers all risks unless a risk is specifically excluded. These policies all exclude cover for goods referred to as 'toevertrouwd goed',

[182] See, for example, the minimum cover prescribed for each risk occurrence, and the minimum cover for property damage as prescribed by art 2 K.B. 4 juli 2004, and B.S. 22 juli 2004.
[183] See Van Daele 25 *et seq* on the cover provided by this type of policy; see also De ketelaere 1375 *et seq* on the insurance cover against environmental damage provided under the BA uitbating policies.
[184] See the discussion of the various time clauses or triggers of cover in chap 5 par 5.3 above.

for which a separate BA policy exists, which are goods in the possession of another for treatment, maintenance, repair or on which some form of work or service is to be delivered.

Lastly, policies for 'brandverzekering' also include an element of liability insurance that could provide cover for environmental damage in the policy known as 'BA gebouw'. Statutory limits are set in the Burgerlijk Wetboek for the cover provided depending on the type of buildings insured.[185]

7.4.4.3.3 Environmental damage insurance cover

Over the last few years cover has been provided for environmental damage under a specialised policy.[186] This specific cover has various limitations. It can only apply to accidental pollution, the prejudiced party must prove that the polluter was at fault, and claims relating to damages or losses incurred where the polluter fails to obey State regulations and procedures are excluded from cover.[187] The two other absolute exclusions from cover in these policies are war risks and nuclear risks. The specialised types of cover discussed in chapter 5 above are also generally available in the international market.[188]

7.4.4.4 Limitations and exclusions

As discussed in chapter 6 above, other limits and exclusions that are in practice often found in policies are exclusions of claims due to intentional acts; claims relating to asbestos; liability caused by the failure to obtain statutory mandatory insurance cover; limitations regarding the identity or capacity of the insured person; damages caused by breach of contract; and damages to the insured's own assets or property. As standard cover is only provided for 'accidental' pollution, claims for gradual pollution are excluded.

[185] For an examination of these limits, see Van Daele 37 *et seq*.
[186] Called the 'de waarborg pollutie: dekking voor milieuverontreiniging' policy.
[187] See Van Daele 30 *et seq* who highlights these limitations.
[188] See chap 5 par 5.4.4 above.

This last exclusion is extensive in its operation and often counters claims for pollution damage.[189]

7.4.4.5 Mandatory insurance cover

Mandatory or compulsory insurance must be obtained for the transportation of hazardous wastes, for activities by environmental specialists, and for the producers or 'exploitanten' of specific high-risk industries, for example, the waste disposal industry and paint and chemical manufacturers.[190] Although it is costly and difficult to obtain, it is required due to participation in an industry that poses a high pollution risk. This is also the position in most other countries where the waste industry is, due to its high risk rating, heavily regulated. The mandatory policies are of a highly specialised nature and the provisions differ from insurer to insurer, irrespective of whether cover is provided by a national or by an international insurer.

Two authoritative Belgian writers on this topic, namely Bocken and Faure, have completed various studies on alternative methods to provide funding for the remediation of the environment or to ensure compliance with clean-up duties.[191] Some have been implemented with great success in the Belgian market. Various financial instruments such as financial securities and warranties are available that can serve as alternatives to the compensation provided by insurance cover.[192] Although this thesis does not focus on an extensive study of alternatives to insurance, future studies will have to take note of the Belgian development in this context especially in view of the

[189] See the general discussion of 'long-tail' liability in chap 5 par 5.3 and the contractual exclusions from cover par 5.4 above.
[190] Own translation of 'milieudeskundige'; see in this regard De Ketelaere 1370 for the various forms of mandatory insurance cover required in Belgium.
[191] Alternatives to pollution insurance do not fall within the scope of this thesis; see, however, Bocken H "Financial guarantees in the environmental liability directive: Next time better" 2006 (15) *European Environmental Law Review* 13; see also for a more extensive exposition Bocken (2000) 8 who highlights the justification for the implementation of these alternatives; for an earlier study, see Bocken H "Alternatives to liability and liability insurance for the compensation of pollution damages" (Part I) 1987 (4) *Tijdschrift voor Milieuaansprakelijkheid* 83; see also Faure & Skogh 284; see also 226 where they embark upon a detailed economic analysis of these alternative instruments; see also Fogleman chap 14 for alternatives to insurance for environmental pollution damage.
[192] Art 9.1.14 of the Belgian Voorontwerp.

extensive problems experienced in the environmental insurance industry as discussed in chapter 6.[193]

The Belgian government may require operators of installations and activities within designated industries or categories of industries to deliver *ex ante* financial guarantees or pay deposits to cover environmental liabilities, before the required permits or notification certificates that authorise their operations are issued to the operators.[194] Deposits must be paid into separate environmental guarantee funds. Separate guarantees have to be delivered to cover different types of loss, for damage caused by death or personal injury, and for other types of damage to or impairment of the environment.[195] Amounts may only be paid out for purposes of restoring the damage or impairment.[196] Where a financial guarantee is mandatory, it is possible to obtain a second-layer guarantee from an 'optional limit fund' where the primary guarantee proves to be insufficient to cover the losses incurred.[197]

7.5 THE NETHERLANDS

7.5.1 General Introduction

Article 21 of the Dutch Constitution[198] provides the legal basis for the protection of the environment and the right to the environment. The Dutch government was one of the first governments to react to increased pollution damage and established a national clean-up programme for environmental contamination as early as 1978.[199] The general duty not to cause harm, loss

[193] See in this regard Havenga P "Nuwe risiko's in Suid-Afrika: Versekering en alternatiewe vergoedingsmeganismes as antwoord daarop" in Faure & Neethling (eds) 135.
[194] Art 9.1.16 of the Voorontwerp proposes a variety of financial guarantees, for example, guarantees from financial institutions, other forms of personal or collateral security and deposits paid into separate environmental guarantee accounts.
[195] Art 9.1.17 δ (1).
[196] Art 9.1.22.
[197] See Faure 227 *et seq* for a discussion of the implementation of *ex ante* guarantee funds.
[198] Grondwet voor het Koninkrijk der Nederlanden van 24 Augustus 1815.
[199] Fogleman 27 attributes the early development to the reaction to various major incidents, for example, the Lekkerkerk incident where toxic waste in soil was found under a housing
Footnote continues on the next page.

or damage, or to prevent it for occurring, is found throughout the provisions of the Burgerlijk Wetboek.[200] The relevant sections as far as environmental damage is concerned are discussed below.

7.5.2 Statutory Liability

7.5.2.1 General

Various statutes focus on environmental liabilities and obligations to restore or clean up the environment. Statutory liability is mostly a strict liability for which fault is not required.[201]

7.5.2.2 Environmental Management

The general statute that governs environmental issues in the Netherlands is the Wet milieubeheer on environmental management.[202] The Act requires any citizen or the state to take all measures necessary to prevent environmental damage.[203] The Act furthermore requires potential polluters to maintain sufficient insurance cover to secure their financial obligations in terms of regulations issued in terms of the Act.[204] The Act is supplemented by the Besluit financiele zekerheid milieubeheer.[205] The enforcement measures for failure to comply with the statutory provisions can be found in section 18 of the Act. The focus and extent of this legislation correspond to that of the South African NEMA.[206]

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estate, causing the inhabitants of the estate to fall seriously ill. This disaster was similar to the Love Canal disaster in New York as described in par 7.6.2.2.1 below.

[200] Hereinafter referred to as the 'BW'; in general, the law of property is dealt with in Boek 3, the law of obligations is dealt with in Boek 6, and insurance contracts in the latest release of Boek 7 of the BW.

[201] Called 'risico aansprakelijkheid' as opposed to 'skuld aansprakelijkheid'.

[202] Wet milieubeheer van 1992.

[203] Art 1.1(a), art 10.3.

[204] Art 8.15(3).

[205] Wet van 8 februari 2003.

[206] See chap 3 par 3.4.2 above.

7.5.2.3 Soil and water pollution

The Wet bodembescherming van 1986, as supplemented by the Stortbesluit bodembescherming van 1993, is of primary importance for the statutory regulation of soil pollution.[207] In terms of the former, any person who knows or should reasonably have known of actions that cause soil pollution should take all measures to prevent such damage.[208] The state can also claim all costs and expenses from the polluter that the state incurred to remediate the environment.[209] Financial guarantees can be required where a potential soil pollution incident caused by waste matter is identified.[210]

7.5.2.4 Pollution by dangerous or hazardous substances

Another statute that applies to the environment in general is the Wet milieugevaarlijke stoffen 1997 that creates a statutory duty upon persons to prevent substances that have the potential to pollute the environment, to detrimentally affect the environment.[211] This duty to prevent harm or loss is also a general duty as required by the BW.[212] Liability can also be incurred for damage caused by the transport or storage of hazardous or dangerous substances.[213]

7.5.2.5 Air pollution

Liability for air pollution falls in the scope of the Wet inzake de luchtverontreiniging of 1976,[214] as supplemented by the provisions of the

[207] Art 75; see also BW art 6:176.
[208] Art 13; see in this regard Nieuwenhuis JH, Stolker CJJM & Valk WJ (eds) *Vermogensrecht Tekst & Commentaar* (1999) (hereinafter 'Nieuwenhuis *et* al') 1385; see also 1390 for the position on water pollution.
[209] Art 75; see also Nieuwenhuis *et al* 1386 *et seq* for a examination of the extent of the remediation required, and the prescribed procedure to bring such a claim.
[210] Art 2(2).
[211] Art 2 creates a general duty of care, whereas chap 4 of the Act deal with the enforcement of the provisions of the Act.
[212] Art 6:175–6:178 BW.
[213] Art 8:1210 BW; see also in general Wansink JH "Verzekering en milieuschade als gevolg van vervoer/opslag van gevaarlijke stoffen" 1999 (3) *TMA* 77 (hereinafter (Wansink (1999)').
[214] Art 90.

Besluit luchtemissies afvalverbranding 1993 and the Wet op bodembescherming referred to above.[215]

Whether these statutory liabilities are covered under a specific liability policy will depend on the scope of cover provided and on the intentions of the parties.[216] It is generally accepted, especially in terms of the open basis of 'all risk cover' policies, that all losses, even statutory liabilities, are insured unless specifically excluded from cover.[217]

7.5.2.6 The nuclear industry and marine pollution by oil

As is the case with most other countries, the international conventions that regulate these liabilities have been ratified or acceded to.[218]

7.5.3 Civil Liability

7.5.3.1 General requirements

The wrongful act is seen as the most common cause of action to claim compensation for environmental damage. Article 6:162 of the BW provides that a person who commits a blameworthy action or deed that can be attributed to him is obliged to pay compensation to another who suffers damage or loss due to such conduct. He is to be held accountable where the deed can be attributed to him in specific circumstances in law.[219] The

[215] See par 7.5.2.3 above.
[216] See the judgment of the Hof Den Haag van 21 januari 1992 where loss incurred due to the failure to act in terms of a statutory duty was found to be covered under a liability insurance policy. The policy provided for cover for any financial prejudice or 'financiele nadeel' caused to the policyholder, should he incur liability for any direct or indirect damage relating to any activity. The policy did not distinguish between statutory or contractual liability. It also did not specifically exclude wrongful acts ('onrechtmatige daden'), omissions or negative performance ('negatieve wanprestatie') or environmental liability ('milieuaansprakelijkheid').
[217] Wansink 13 confirms the basic principle that 'alle aansprakelijkheden die niet zijn uitgesloten, zijn verzekerd'.
[218] BW Boek 3, and Boek 6; see also Nieuwenhuis *et al* 709 for a discussion of the relevant international conventions within these industries.
[219] Own translation of the relevant section from the BW Boek 6.

requirements that have to be met are wrongful conduct, accountability or fault, damage, and factual as well as legal causation.[220]

7.5.3.2 Wrongful conduct and fault

Both wrongfulness and fault are required for civil liability.[221] Conduct that is contrary to a duty of care, contrary to a statutory duty or conduct that infringes upon a right is deemed to be wrongful.[222] As it is difficult, if not impossible, to provide an exact definition of wrongfulness, one must assess the situation in view of the facts and circumstances of each situation. Liability for wrongful conduct can be avoided where there is a justification for the conduct. Examples of grounds of justification include *force majeure* occurrences, statutory compliance, vandalism, war and so forth.[223] Where damage is caused by an authorised activity, for example, by the operations of a nuclear power station that is to the benefit of the public, the activities must be tolerated by the prejudiced party for the greater good of society. The injured party still, however, retains his right to be compensated for his loss.[224]

Civil liability is also based on the subjective notion of fault. Where wrongfulness relates to or qualifies the conduct, the element of fault relates to the relationship between the wrongdoer's attitude and his conduct. In specific situations a strict liability regime could apply where the absence of fault does not deny a liability claim. This will be the case where a statute or the common law introduces strict liability for a specific infringement. An example would be the strict joint and several product liability regimes that apply in most other

[220] BW art 162 lid 1; see also Nieuwenhuis *et al* 665 where the criterion of legal causation is considered.
[221] Sieburgh CH *Toerekening van een onrechtmatige daad* (2000) (hereinafter 'Sieburgh') 41 *et seq* for a discussion of the distinction between the elements of wrongfulness and fault in the law of the Netherlands.
[222] BW art 6:162 lid 2.
[223] Art 6:162 lid 2; art 6:178.
[224] Called 'gedoogschade'; see the statement by Wansink 19 that '[d]e gedrag in het algemeen belang, of – overeenkomstig art 6:168 BW – op grond van zwaarwegende maatschapelijke belangen behoort te worden geduld'.

countries,[225] or where a high-risk activity, the use or control of a dangerous substances or a vicarious relationship justifies strict liability.[226] The burden of proof rests with the wrongdoer to prove one of the available defences.[227]

7.5.3.3 Causation

Factual causation is tested in accordance with the *conditio sine qua non* test, yet is limited, as is the case in most other countries, by a second criterion regarding legal causation called 'relativiteit'. What is required, is a so-called 'toerekening naar redelijkheid' or legal justification.[228] Where there is multiple causation, the Netherlands has introduced an innovative market-share allocation for the allocation of liability that developed from liability cases in the pharmaceutical industry.[229] 'This idea of alternative causation has been around for a long time.'[230] Wansink & Spier caution that one should always keep in mind that although a regime of joint and several liability clearly benefits the injured party, it could have disastrous consequences for the liable parties.[231]

7.5.3.4 Damage or loss

The wrongful conduct must cause damages in the form of either patrimonial or non-patrimonial damages. Patrimonial losses include direct damages and lost

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[225] See Wansink JH & Spier J "Joint and Several Liability of DES Manufacturers" 1993 1(6) *International Insurance Law Review* 176 (hereinafter 'Wansink & Spier') for a discussion of the principle of joint and several liability of the manufacturers of the DES drug that caused birth defects; for the general position on product liability, see Nieuwenhuis *et al* 734 Afd 3 *et seq*.

[226] BW art 6:162; art 6:178; see in this regard Nieuwenhuis *et al* 671, 673 *et seq*.

[227] BW art 6:195.

[228] BW art 6:98, BW art 6:163.

[229] See Snijder E "Van market-share liability naar pollution share liability?" 1990 *TMA* 141; see also chap 7 par 7.6.3.2.1 on the position in the USA.

[230] In the words of Wansink & Spier 178 on the liability of drug manufacturers in the early DES cases in the Netherlands.

[231] See in general also BW Boek 6 art 99 for the joint and several allocation in civil liability cases; see also Wansink & Spier 180 *et seq* who identify the main complications as those arising from the right of recourse that manufacturers have against each other, for example where they are not all within the same jurisdiction, where some are insolvent or untraceable and so forth.Other complications arise regarding the different triggers of the liability insurance coverage of the defendants, and the contractual limitations of claims.

profits, prevention costs, as well as costs incurred by the prejudiced party for the assessment of the damages and the costs of due legal process to claim and collect the damages. Non-patrimonial losses can only be claimed in accordance with the provisions of Article 6:106 BW and where the claim is sound in law. [232]

Property damage is in general described as the objective impairment of the material structure of the property that, in the general public opinion, characterises the acceptable appearance and intrinsic value of the property.[233]

7.5.4 Insurance and Schemes of Restitution in the Netherlands

7.5.4.1 Title 7.17 *Nieuw Burgerlijk Wetboek*

The new law of insurance as codified in title 7.17 of the BW came into effect on 1 January 2006.[234] The new legislation attempts to provide an even stricter regulation of the relationship between the insured and his insurer.[235] Restrictions regarding the freedom of the parties to contract at will have been introduced. This relates specifically to the inclusion of provisions in favour of the insurer.

7.5.4.2 Statutory regulation of policy conditions

Although the new legislation prohibits the inclusion of certain terms and requires the inclusion of others, the legislator did not want to rigidly prescribe

[232] The general concept of damages under liability insurance is discussed more extensively in Wansink 25 *et seq*.
[233] Own translation; Wansink 47 describes it as 'een objectieve aantasting van de stoffelijke structuur die naar verkeersopvattingen de stoffelijke gaafheid van een zaak kenmerkt'.
[234] See an earlier discussion of the proposed legislation, see Van Mierlo AIM & Wansink JH "Titel 7.17 NBW: l'assurance oblige" 2000 (75) *Nederlandsch juristenblad* 1737 (hereinafter 'Van Mierlo & Wansink'). The authors are of the opinion that the legislation maintains the important social function that insurance serves, and that it provides a greater balance between the interests of the insured and the insurer.
[235] For a more detailed discussion of the long-awaited amended legislation, see Drion PJM (ed), Kamphuisen JGC, Wansink JH, Lauwerier BKM *Bundel titel 7.17 belicht* (2005).

pro forma general policy conditions and left the content of these general clauses open to negotiations between the parties. This legislation requires the inclusion of general descriptive provisions on the nature of the insured object or interest, and the exact scope of the risks covered by the policy. Contractual exclusion, exemption and limitation clauses are also not specifically regulated by statute in the Netherlands and are open to negotiation.[236]

The following statutory provisions of the new legislation apply specifically to liability insurance policies and are relevant as far as environmental insurance claims are concerned. In accordance with Article 7:954 of the BW,[237] the prejudiced party is entitled to claim directly from the liability insurer of the wrongdoer.[238] The injured third party has a *ius agendi* and not an independent claim as is the case with the statutory 'eigenrecht van de benadeelde' in Belgian law.[239] He only has the right to institute the insured's claim against the insurer. He can never claim more than the amount that the insured would have been entitled to claim.

The rights of the third party are furthermore protected by the provisions of Article 7:936 BW, for example, where the insured becomes insolvent.[240]

Article 7:942 BW[241] provides for a statutory prescription period specifically for liability insurance claims. Prescription of the claim against the insurer does not begin unless a period of 6 months has passed after the date on which the claim covered by the liability insurance has been instituted.[242]

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[236] Art 7:951 BW.
[237] Art 7.17.2.99(c) BW.
[238] In the words of Van Mierlo & Wansink 1740, the direct action of the prejudiced party against the insurer is the 'piece de resistance' of the legislation, as it will ensure that as much as possible of the insurance pay-out will reach the prejudiced party.
[239] See par 7.4.4.1 above.
[240] Art 7.17.1.11 BW.
[241] Art 7.17.1.15 BW.
[242] Art 7:942 lid 1 tweede zin BW; see also Wansink JH "Verzekering, een Juridisch Product in een Kritische Buitenwereld – Een Impressie uit Nederland" 1999 (4) *TSAR* 706 714 who states that an additional duty rests on the insurer to notify the insured of a time bar clause in the policy when the insurer notifies the insured that the latter's insurance claim has been rejected.

In terms of Article 7:951 BW an insurer is not liable where the cause of the loss was an inherent vice of the insured property or goods. This may affect claims under first-party cover where the potential polluting cause is interpreted as such an inherent vice.[243]

7.5.4.3 Standardisation by the industry

Even though legislation leaves the cover open to negotiation, standard universal liability insurance policy models have in time developed in the industry.[244] The Afdelingscommissie of the Verbond van Verzekeraars recommended that contractual provisions, as well as the relationship between the insurers in the event of double insurance, be standardised.[245] Insurers may deviate from the recommended standard wording, but must always comply with the relevant provisions of competition law.[246] Although the insurance industry provides specific policy models, in particular model AVB'96 for general AVB or 'aansprakelijkheidsverzekering voor bedrijven' policies and model AVP 2000 for 'aansprakelijkheidsverzekering voor particulieren' as described in greater detail below, insurers may deviate from the wording in these standard versions.[247]

The magnitude of claims for new risks, for example, environmental pollution claims under the EDI policies discussed below,[248] often exceed the financial capacity of insurers. As most insurers did not all have the resources for effective risk determination, insurers were forced to create mutual reinsurance pools to enable them to provide the cover required. The specific environmental pool, called the 'Milieuaansprakelijkheidsverzekering Samenwerkingsverband' or 'MAS', consisted of more than 50 reinsurers. Any

[243] Art 7.17.2.8; see also the explanation by Blom 85 *et seq* on the nature and effect of an 'inherent vice' in the context of pollution liability.
[244] Wansink 4 confirms the principle that 'in dit polismodel opgenomen standaardteksten zijn louter indicatief. Elke individuele verzekeraar kan hiervan tekstueel en/of inhoudelijk afwijken'.
[245] As reported by Wansink 213.
[246] See art 6 of the Wet op mededinging van 22 Mei 1997; also the Mededingingswet van 1 Januarie 1998 in this regard.
[247] See par 7.5.4.7.
[248] See par 7.5.4.6.

individual insurer contracted directly with individuals under a MAS policy, but reinsured within this reinsurance pool. The basis of share in the pool depended on market quota. The mutual pool prescribed uniform policy conditions for policies specifically issued under the scheme, that were strictly followed within the industry yet remained illustrative in nature and were not peremptory. Although the pool was officially dissolved on 1 January 2008, leaving insurers free to reinsure with any other reinsurer, it continues to operate in a specialist advisory capacity that provides expertise on risk assessment and premium determination, and the proposed clauses serve as examples for insurers in the environmental insurance market.[249]

7.5.4.4 Insurable liabilities

The insurable liability for damage caused to a third party in most cases recognises liability for a wrongful act based on fault liability.[250] In lesser cases liability based on breach of contract,[251] and in limited circumstances liability based on unauthorised agency[252] and on unjust enrichment can be included under the insurance cover.[253] Liability should always be judged objectively on its own and should not depend on whether insurance to cover of the specific liability exists.[254] The intentions of the parties and the policy wording are also crucial to determine which liabilities are covered. The latest AVB and AVP liability insurance policies as discussed below, also specifically provide for any claim for damages caused due to non-compliance with any act, statute or

[249] The current status in the market as per information provided in the opinion provided in person by Kremers H Verenigde Assurantiebedrijven Nederland N.V. 28 November 2008; see also Faure (ed) 220 *et seq*.
[250] Referred to as a wrongful act or 'onrechmatige daad'.
[251] Malperformance or 'wanprestatie'.
[252] General liability insurance principles are covered by Art 7:957 (7.17.2.18) BW.
[253] See Wansink 16 for a more detailed discussion of possible liability scenarios where liability based on unjust enrichment is seen as a 'legal liability' for purposes of liability insurance cover. The following serves as a simple example. Where a person buys immovable property for a low price due to environmental damage caused to the property, and after clean-up sells the property for a profit. Art 75 lid 3 provides that clean-up costs can be reclaimed by the state from the polluter, or from the owners or users of the property or other persons with a right to benefit from the property. This would be the person who is enriched by this type of 'bargain-snatching'.
[254] This is emphasised by various writers in South Africa and abroad as discussed in chap 5 above, and also by Sieburgh 227 regarding the position in the Netherlands.

agreement.[255] This would include any general liability incurred due to the criterion of reasonableness and fairness in terms of BW 6:248 lid 1. The requirement remains throughout that loss must in fact be suffered before a claim is possible.[256]

7.5.4.5 Extent of compensable damages

The following are included as forms of damages caused by pollution of the environment, and which can be covered by liability insurance policies: (a) property damage, that includes damage to the soil as well as to air[257] and groundwater,[258] (b) personal damage for bodily damage and the like, (c) pure economic loss, (d) damage to living things, (e) contamination,[259] and (f) total loss of goods.[260] As far as property damage is concerned, it can be described as the objective impairment of the material structure of the property that, in the general public opinion, characterises the acceptable appearance and intrinsic value of the property.[261]

7.5.4.6 Environmental damage insurance cover

7.5.4.6.1 History and nature of cover

Since January 1998 insurers in the Netherlands collectively implemented a specialised environmental liability insurance policy, called Environmental Damage Insurance or EDI.[262] The justification for the implementation of this specific insurance policy was that as liability for pollution claims was excluded

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[255] See par 7.5.4.7.
[256] As confirmed by Wansink 14 *et seq*.
[257] 'Luchtverontreiniging'.
[258] 'Waterverontreiniging'.
[259] Own translation of the term 'vervuiling'.
[260] See Wansink par 2.4 for an examination of the terms 'zaakschade' and 'zaakbeschadiging' in Dutch liability insurance, more specifically regarding environmental pollution damage.
[261] Own translation of the description provided by Wansink 47 that refers to 'een objectieve aantasting van de stoffelijke structuur die naar verkeersopvattinge de stoffelijke gaafheid van een zaak kenmerkt'.
[262] Known as 'Milieu Aansprakelijkheidsverzekering' or MAV, and 'Milieu Schadeverzekering' or 'MSV'; Wansink JH "A new Environmental Damage Insurance Policy (EDI) in the Netherlands" May 1998 *The Bulletin on Pollution, Products and New Technologies (AIDA)* 12 (hereinafter 'Wansink (1998)'); see also Faure (ed) 221 *et seq*.

from most general or standard liability insurance policies, a need for a specialised insurance product to provide this type of cover existed. It was intended to become an essential commodity in the insurance portfolio of most industries.[263] Insurance cover specifically for pollution damage can in principle be obtained on a first-party basis, called 'Milieuschadeverzekering' or Environmental Impairment Insurance and on a third-party basis called 'Milieuaansprakelijkheidsverzekering' or by procuring Environmental Liability Insurance cover under the EDI policy.[264]

In essence the EDI is insurance to the benefit of, or procured on behalf of a third party, with integration, differentiation and a form of direct insurance as its key characteristics.[265] It is a direct insurance taken out by a person who could be held responsible for the insured site and offers comprehensive first-party insurance cover to the third party as the co-insured. Where the third party suffers a loss, he may claim from the insurer regardless of the liability of the policyholder for the loss. Cover is provided only on the contractual terms of the policy and without any influence of tort law. The third party must only prove a causal link between the loss and the loss-causing event as covered by the policy.[266]

It covers claims relating to pollution damage to land and any secondary environmental damage caused due to pollution of the soil or groundwater.[267] All damages as well as clean-up costs and costs for legal defence are covered. The advantages and disadvantages of this type of policy are addressed below.

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[263] As explained by Six JP "Pollution Insurance in the Netherlands" 1998 (July) *The International Journal of Insurance Law* 181 183.

[264] See the more detailed descriptions provided by Wansink (1998) 12.

[265] See the discussion of this type of first-party insurance to the benefit of a third party in chap 5 par 5.3.3 above; see Faure (ed) 219 for a basic examination of the main features of the EDI-policy; see also Six 183–185 for details of the the five different types of sub-policies available under the EDI umbrella policy.

[266] See the universal issues and problems relating to causation as discussed in chapter 6 par 6.4 below.

[267] See in this regard Faure M "Milieuaansprakelijkheidsverzekering vaarwel?" 2002 (5) *Milieu en Recht* 129 (hereinafter 'Faure (2002)').

7.5.4.6.2 Advantages of the EDI policy

The greatest benefit of this policy is that the prejudiced party can claim directly from the insurer who provides the EDI cover. What makes it more attractive is that a policyholder could also insure his own property against environmental damage under the same policy. The EDI was designed to provide the following benefits: (a) As it literally forces potential polluters to obtain this cover, it offers greater financial security to ensure the remediation of environmental damage, which brings it in line with the latest international environmental awareness and increased liability for environmental damage; (b) it provides integrated coverage for all environmental damage that occurs on or originates from the insured site as it provides first-party coverage as well as first-party to the benefit of a third-party coverage. The third party is also placed in the position of a policyholder as a co-insured; (c) the trigger for a claim under the EDI is only the pollution occurrence. This eliminates the requirement to prove civil or other liability; (d) for insurers it provides for a more effective risk selection and individualised risk differentiation *ex ante* the occurrence; (e) applications for insurance against 'bad risks' can be refused, deferred or rejected at a very early stage, and would not lead to disputes as to whether the risks are in fact covered under general liability cover; and (f) that direct action by the third party as policyholder leads to lower costs and eases the burden of proof that rests on the policyholder to prove his claim.

7.5.4.6.3 Disadvantages of the EDI policy

Dutch insurers collectively decided that this policy substitutes the liability insurance cover previously available for these claims. Where a polluter does not have EDI cover, he incurs personal liability to carry the loss and would not be able to claim under any other liability policy. He could also not be able to claim his legal costs, unless he obtains additional legal defence coverage.[268] This extensively limits the insurance cover in the market in an attempt to enforce this type of cover as a form of mandatory insurance.

[268] See Wansink (1998) 14 who highlights these difficulties.

The EDI also has the following disadvantages: (a) Insurance cover is limited only to the agreed limits of cover provided, and provides cover only against specified 'goods risks'. (b) As environmental damage claims can be extensive, under-insurance poses a real danger. Where the cover provided for under the EDI is insufficient, the policyholder is precluded from claiming for his loss under any other policy. It is therefore a real possibility that there could be a shortfall of proper cover for potentially extensive damages that the insured may suffer.[269] (c) Because these policies only provide for soil and groundwater pollution and as they still contain specific exclusions, the cover is still restricted. (d) Clean-up costs are included, yet might not be wide enough to cover all remediation or restoration costs.[270]

7.5.4.6.4 Criticism against EDI policy

Where all insurers together decide to require the implementation of a policy of this nature as standard practice, one may question whether the practice is not contrary to European competition policy and Dutch competition law.[271] Another question would be whether this type of practice complies with the rule that standardised policy conditions should be purely illustrative and remain negotiable. Insurers have, however, agreed not to exclude certain risks as a general rule, but to leave it open to each insurer to negotiate risk cover freely with potential policyholders. [272]

Various authors questioned the effectiveness of this insurance in the insurance market and in practice.[273] As it has shown an annual market share

[269] This is a serious disadvantage in that some risks that were covered in the past could now be uninsured; see also the view of Wansink (1999) 81–82 in this regard.
[270] For a comprehensive evaluation of the EDI insurance see Faure (ed) 223 *et seq.*
[271] Mededingingswet van 1 januari 1998 and common-law principles of competition law.
[272] As stated by Faure (ed) 224.
[273] Even though he voices concerns on this type of insurance, Faure (ed) 223 mentions in his evaluation during 2003 that, according to information provided by the Dutch Insurance Association, this new product works remarkably well. He states that '[w]hether this new product is actually a success is yet more difficult to judge. There is, however, growing interest from the industry for this new environmental damage insurance'. This has been confirmed by Kremers during 2008, as stated in n 240 above. See also the evaluation and criticism by
Footnote continues on the next page.

increase, its introduction does appear to have been successful. As an alternative for high-risk industries, recommendations were made to rather replace the cover with mandatory financial guarantees to enable the state to meet the costs of environmental clean-up or remediation or to introduce mandatory insurance for specific industries.[274] It has been stressed that it should only apply in industries that could have the potential of causing serious damage.[275]

7.5.4.7 Cover under other policies

As stated above, two specific types of liability insurance policies are available, namely the AVP or 'aansprakelijkheidsverzekering voor particulieren' and the AVB or 'aansprakelijkheidsverzekering voor bedrijven' policies that provide cover for sudden risks and occupational health risks related to the environment.[276]

It is possible to take out a general all risk liability insurance cover. This cover can also form part of another policy such as a fire insurance or motor vehicle insurance policy. The description of the risks covered by a policy will determine the extent of losses covered. All risks are included unless a specific risk is excluded. Pollution-related claims are usually excluded by a specific 'pollution exclusion' clause. The policy can also stipulate that cover is only

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Niezen GJ "Nieuwe milieuschadeverzekering – geen panacee" 1998 (4) *Milieu & Recht* 114; Bocken (2002) 39 elaborates on the 'interesting development' of this type of cover and confirms that its success will have to be measured over time, although he is of the opinion that it is unsatisfactory as insurers can exclusively determine the conditions of the cover provided.

[274] In accordance with art 8.15 of the Wet Milieubeheer, financial guarantees for specific industries are required to cover environmental loss caused to third parties. This applies where there is a potential for substantial environmental losses. This solution is, however, heavily criticised by the insurance industry as the feeling is that it remains possible to use liability insurance as an effective instrument to cover risks.

[275] As put by Faure (2002) 129, it should apply only to industries where there is a probability of serious damage or prejudicial consequences. In his words, where there is a possibility of 'ernstige schade of ernstige nadelige gevolgen'.

[276] See in this regard Wansink 1; see also Faure (ed) 219; in respect of the insurability of damage caused by the transport and storage of hazardous substances in the Netherlands, see Wansink (1999) 77–82.

provided for liabilities for environmental damage towards a third party or his property, and not for damage to the property of the policyholder.[277]

Various other insurance policies available in the market include the property insurance cover provided by the CAR verzekering policy for the insurance of goods or property against the risk of material damage, the Nederlandse Beurs Goederen Polis (NBGP) 2006; Nederlandse Beurspolis voor Uitgebreide Gevaren (NBUG) 1998; and fire insurance under the Nederlandse Beurs Brandpolis (NBBP) 1990.[278] The specialised types of cover available in the UK market[279] are also generally available in the international insurance market and accessible for members of most other countries.

7.5.4.8 Limitations and exclusions

As discussed in chapter 6, insurance in the Netherlands is also subject to limitations on the amount of the cover provided. Examples include limits per occurrence; limits for a series of damages or for a complex occurrence; and an aggregate limit for a specific insurance coverage period. Furthermore, policies contain exclusion clauses that exclude specific forms of pollution or sources of pollution from insurance coverage as examined in chapter 6 above.

7.6 THE UNITED STATES OF AMERICA

7.6.1 General Introduction

The insurance law in the USA has over time also provided some persuasive authority in the development of the South African insurance law and could prove authoritative on the risks posed by new technologies and the insurability

[277] As discussed by Wansink 24.
[278] See in this regard Faure (ed) 221.
[279] See par 7.3.4.3 above.

of these risks.[280] It was one of the first countries to react to the increased global environmental awareness due to major polluting incidents,[281] leading to major developments in the environmental insurance field during the 1970s and 1980s.

Individual states and territories regulate the general insurance business in the USA independently.[282] The USA law, however, approaches the issues and problems posed specifically by environmental pollution insurance primarily by the statutory governmental regulation of liability for clean-up costs and natural resource damage caused by pollution. Stringent statutory liability schemes force polluters to prevent pollution or face the duty to carry the costs incurred for clean-up. These can be far more extensive than the compensation payable in terms of tort liability.[283]

A discussion of only the most important federal legislation, as well as basic principles of tort law for claims beyond the scope of the statutory schemes, follows below.

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[280] See in this regard Reinecke MFB, Van der Merwe S, Van Niekerk JP & Havenga P *General Principles of Insurance Law* (2002) par 27 for a discussion of the absorption of the general *lex mercatoria* into the legal systems of various countries; as no South African case law or statutory regulation exists, for example, for SBS claims, it is proposed that the body of case law in the USA could serve as authoritative where such a case is brought before South African courts; see the study by Mitchell WJ "CGL Pollution Exclusion Provisions and the Sick Building Syndrome" 1999 (January) *Defence Council Journal* 124; see also the study by Wollner KS "Sick Building Syndrome and a Definition of 'Polluting Conditions'" 2001 (June) International Risk Management Institute 1 http://www.irmi.com/Expert/Articles/2001 (last accessed on 15 March 2008); see the case of *Meridian Mutual Insurance Company v Kellman* 197 F3d 1178 (6th cir 1999) where air pollution was caused by a floor sealant used in a building; see also Lucey MT "Sick Building Syndrome: Airing insurance coverage issues arising from this new wave of toxic tort litigation" 1999 (Spring) *Federation of Insurance and Corporate Counsel Quarterly* 333. Electro-smog, which is the term used to describe the negative effects of electro-magnetic fields, is also studied more extensively in the USA than in other countries and could be useful where a legal dispute on liability for damage caused exists. For the latest developments, see in general also Cranor CF *Toxic Torts: Science, law and the possibility of justice* (2006) 38 *et seq*.

[281] See chap 1 par 1.1 n 2 above for examples of polluting incidents in the USA.

[282] McCarran-Ferguson Act 15 U.S.C. §§ 1011 *et seq*; see the general discussion by Fogleman 466 on the jurisdiction of the state and federal courts.

[283] Stewart RB in Van Dunne JM (ed) *Transboundary Pollution and Liability: The Case of the River Rhine (Conference proceedings of the International Conference held at Rotterdam 19 October 1990* (hereinafter 'Stewart') 107.

7.6.2 Statutory Liability

7.6.2.1 Federal legislation preceding CERCLA

Various environmental Acts preceded the Comprehensive Environmental Response, Compensation and Liability Act of 1980[284] (hereinafter 'CERCLA'), of which the Rivers and Harbours Act[285] is the oldest. Other important environmental statutes include the Clean Air Act (hereinafter 'CAA') that regulates air pollution,[286] the Clean Water Act (hereinafter 'CWA') that regulates pollution of all surface waters,[287] and the Oil Pollution Act (hereinafter 'OPA') that regulates marine oil pollution.[288] The National Environmental Policy Act[289] of 1969 (hereinafter 'NEPA') was the first to recognise a general national environmental policy for the USA. It governs the actions of federal agencies in dealing with environmental issues, but does not regulate the actions of private persons.[290] These Acts are all still in force.

In the 1970s the Environmental Protection Agency (hereinafter 'EPA') was established to administer and implement federal legislation. [291] Examples of the role that EPA plays in terms of other statutory provisions include the power to issue regulations to establish standards in industries relating to polluting activities in terms of the Resource Conservation and Recovery Act (hereinafter 'RCRA'),[292] and to prevent and monitor the manufacture and distribution of toxic substances in terms of the Toxic Substances Control

[284] Hereinafter referred to as 'CERCLA'.
[285] 1899; this Act creates strict liability for offences committed in terms of this Act.
[286] 42 U.S.C §§ 7401 *et seq*; see Fogleman 15 for detail on the liabilities incurred in accordance with the provisions of this Act.
[287] 33 U.S.C §§ 1251 *et seq*; see Fogleman 17, 62 for detail on the liabilities incurred in accordance with the provisions of this Act.
[288] 33 U.S.C §§ 2701 *et seq*, see Fogleman 19, 94 for detail on the liabilities incurred in accordance with the provisions of this Act.
[289] 42 U.S.C §§ 4321 *et seq*.
[290] Howard MH & Mackowsky MA "Defending claims for environmental damage under first-party property insurance policies" 2002 (Spring) *Tort & Insurance Law Journal* 883 (hereinafter 'Howard & Mackowsky') 884; Fogleman 11, 61.
[291] All these statutes are implemented by the various states under the system of co-operative federalism; Fogleman 36. For more on the structure and functions of the EPA see Fogleman 32–34.
[292] 42 U.S.C §§ 6901 *et seq*; see Fogleman 18, 64 for a more detailed examination of liability for hazardous waste pollution under this Act.

Act.[293] In addition to these statutes and to CERCLA, which is discussed extensively below, a brief reference to a few other significant statutes also follows below.

7.6.2.2 CERCLA

7.6.2.2.1 General

The 1980 Love Canal toxic waste dump disaster in the State of New York[294] finally motivated the enactment of CERCLA.[295] It established a comprehensive clean-up programme, called the 'Superfund program', and created an accompanying liability system for pollution damage caused by the release of hazardous substances excluding oil. This applies to sites not covered specifically in other statutes such as by the RCRA.[296] CERCLA does not automatically supersede or replace the statutes that preceded it, unless an express provision to that effect exists. Damage to property and bodily injuries do not fall within the scope of CERCLA as it only covers claims for clean-up costs and natural resource damage. It is of a remedial rather than regulatory nature.[297]

7.6.2.2.2 Liability in terms of CERCLA

Liability attaches to potentially responsible parties known as 'PRP's' who include owners and operators of sites or facilities from which a substance is

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[293] 15 U.S.C §§ 2601 *et seq*

[294] 21 000 tons of toxic waste, buried since the 1920s, were discovered under Love Canal, a neighbourhood in Niagara Falls in the state of New York. Developers and the local government continued to build housing estates and a school on the land in the 1950s, while they were fully aware of the toxicity of the soil. This caused a huge scandal and public uproar.

[295] Enacted on 11 December 1980; see Fogleman chap 6 for a detailed discussion of the structure of its administration, and statistics relating to the finances and responses of the fund since the 1990s; see http://en.wikipedia.org/wik/Love_Canal (last accessed 26 January 2009).

[296] 42 U.S.C §§ 9601 *et seq*, as amended by the Superfund Amendments and Reauthorisation Act of 1986 (hereinafter 'SARA'); see the discussion by Howard & Mackowsky 884 on the staggering number and size of claims brought under CERCLA up until Spring 2002; Fogleman 25, 81.

[297] Abraham KS "Monsanto Lecture: Cleaning up the environmental liability insurance mess"1993 (27) *Valparaiso University Law Review* 601.

disposed of, treated, released or from which there is a threatened release,[298] as well as transporters and disposers of substances who can also incur clean-up liability. A person can also incur secondary liability on behalf of another, for example, holding companies that incur liability on behalf of their subsidiaries,[299] directors, officers, shareholders and employees of companies, successors-in-title, lenders, trustees, executors, administrators, engineers and contractors.[300] A person who renders care, assistance and advice in clean-up proceedings or fail to do so, is exempted from strict liability, because the potential to incur liability could prove to be an unnecessary deterrent that prevents necessary assistance.[301] Persons who contribute less than specific volumes of pollutants are classified as '*de micromis* responsible parties' and accordingly exempted from clean-up liability.[302]

For a successful claim, the plaintiff has to prove (a) that a site is a 'facility' in terms of CERCLA; (b) from which there was a release or threatened release; (c) of a hazardous substance; (d) into the environment; (e) by a potentially responsible party.[303]

CERCLA imposes a regime of mitigated joint and several and retroactive liability.[304] Potential polluters are held jointly and severally liable unless they can prove that their contribution to the pollution is divisible and distinct or where they can show a reasonable basis for the determination of the contribution of each one of them.[305] This is in an attempt to effectively select a

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[298] § 9607(a); see Warfel WJ "Environmental Insurance Coverage Disputes: Is State Legislation the Solution?" 2005 (September) *CPCU eJournal* 1 on 2 for an examination of the various suits that can be filed against PRPs.

[299] See also chap 4 par 4.2.4.5 on this aspect of vicarious liability in South African law, as well as the case heard in the UK of *Lubbe & Four Others v Cape Plc and related appeals* 27-7-2000 (House of Lords).

[300] See in this regard Fogleman 276–287 for an extensive discussion of these groups of persons and relevant case law.

[301] § 9607(d)(1).

[302] § 9607(o)(1).

[303] See Fogleman 258–275 for a consideration of these requirements and relevant case law.

[304] The court held in *United States v Chem-Dyne Corporation* 572 F Supp 802 (SD Ohio 1983) 805 that even though CERCLA did not contain a specific provision in this regard, liability was intended to be determined from traditional and evolving principles of common law under which joint and several liability exists where harm is divisible and be quantified as such. This position was subsequently endorsed by the enactment of SARA.

[305] *O'Neill v Picillo* 883 F 2d 176 (1st Cir 1989); *United States v Township of Brighton* 153 F3d 307 (6th Cir 1998); see Stewart 107, 111; see also Fogleman 258.

manageable group of financially viable tortfeasors who in the aggregate are responsible for most of the contamination, as well as to keep the Superfund afloat. Liability is retroactive for damage caused prior to the enactment of the legislation.[306]

Liability is strict and does not depend on proof of actual harm.[307] Mere release or threat of release of the substance into the environment is sufficient. The requirement of causation is also relaxed or in some cases even non-existent as the tortfeasor's conduct must merely have been a contributing factor to the loss. The government only has to prove that the tortfeasor generated or transported the substance, or a similar substance as the one on the site, and deposited in onto the land.[308] Defences include only that the damage was caused by a *force majeure* occurrence, by an act of war or by the conduct of unrelated third parties.[309]

The retrospectivity does not apply to natural resource damages, and only applies to clean-up costs.[310] See in this regard the position on a claim for damages to 'natural resources' as discussed below.[311]

There is no time bar in respect of the period between the polluting incident and the proceedings brought under CERCLA for clean-up of the site by the fund. CERCLA, however, contains provisions that limit the time between an actual emergency clean-up or assessment of natural resource damages and the action to recover the clean-up costs or damages, or to bring an action for contribution after a date of judgment or settlement to a period of three

[306] Stewart 109–121.
[307] CERCLA § 107(a)(1) does not directly impose strict liability, but provides for the imposition of the strict liability standard imposed by the Clean Water Act § 311; Fogleman 254 confirms that this eliminates the burden of proving the nature and share of their contribution in causing the contamination.
[308] See the judgments in *United States v Monsanto* 853 F 2d 160 (1988); *United States v South Carolina Recycling and Disposal Inc et al* 653 F Supp 1326 (ED Pa 1983); see also Stewart 110.
[309] § 9607(b); Fogleman 291–302 provides examples of these defences and the categories of persons who qualify as unrelated third parties.
[310] *United States v Olin Corporation* 107 F3d 1506 (11th Cir 1997); for more case discussions on the effect of the retroactivity, see Fogleman 255 *et seq*.
[311] See par 7.6.2.2.4.

years.[312] Although CERCLA contains statutory financial limits for natural resource damage liability, there is no limitation for liability to clean up hazardous waste contamination.[313]

7.6.2.2.3 The CERCLA fund

The 'Superfund' created by CERCLA funds government investigations into pollution occurrences, and any pollution clean-up costs incurred by the authority that remedied the pollution on an emergency-response basis. CERCLA authorises the government to recoup these costs for the cleaning-up of sites on land or of water that were contaminated by the release of hazardous substances, from the potentially responsible person. The government may choose rather to order the person responsible to do the actual clean-up at his own cost. Funds must be used only for the restoration, replacement or for acquiring an equivalent of the affected resource for nature's sake, and not for payment to any prejudiced party as compensation for the damage he suffers.

7.6.2.2.4 Natural resource clean-up claims

CERCLA also authorises claims for the clean-up of injuries or damage to 'natural resources'. As clean-up requires a restoration as close as possible to original condition, the costs include all costs and expenses to reach this goal, which avoids the problematic issue of quantification of damage to the natural environment or some of its components.[314] Under CERCLA 'natural resources' include those resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the government or a governmental authority.[315]

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[312] § 9612(d); § 9613(g).
[313] § 9607(c)(1)(D); see in this regard the evaluation by Fogleman 256 of the judgment in *State of California v Montrose Chemical Corporation* 104 F3d 1507 (9th Cir 1997).
[314] CERCLA § 9610(16) defines 'natural resources' as 'land, fish, biota, air, water, groundwater, and drinking water'; *United States v AVX Corp: In re Acushnet River & New Bedford Harbor* 716 F Supp 676 (D. Mass 1989); see also Stewart 114.
[315] For the wording of this section see also chap 2 par 2.2.5.3 above.

Clean-up costs in respect of privately owned 'natural resources' is therefore excluded from CERCLA, as are claims for property damage and bodily injury. Individuals have to rely on a common law damages claim for natural resource damage caused to private property, in terms of tort law claims as discussed below.[316] CERCLA limits these claims for natural resource damage to a specified amount per release or incident,[317] and limits the time between the assessment of natural resource damage and the action to recover it to a period of three years.[318] There is no control to ensure that damages received are spent on the reinstatement of the natural resource that was damaged, destroyed or lost.[319]

CERCLA provides expressly that it does not prohibit any agreement to insure, hold harmless or indemnify a party against his liabilities in terms of the Act.[320]

7.6.2.2.5 Statutory liability and environmental offences

Three categories of offences exist, namely, civil administrative, civil judicial and criminal offences.[321] Claims by the government are for the enforcement of duties and for payment of civil administrative and judicial penalty amounts to the state.[322] Although most statutes contain citizen suit provisions that enable non-governmental organisations and individuals to bring an action to enforce legislative provisions, they do not cover any claims for damages.[323]

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[316] See par 7.6.3 below; see also chap 6 par 6.6.2.5 on the description in the Federal regulations to CERCLA on when a natural resource is considered to be injured or damaged; see Fogleman 309–313 for details of the relevant DOI environmental regulations.
[317] § 9607(c)(1)(D), at the moment $50 million; see also the evaluation by Fogleman 256 of the judgment in *State of California v Montrose Chemical Corporation* referred to above.
[318] § 9612(d); § 9613(g).
[319] See the opinion of Fogleman 304 in this regard.
[320] § 9607(e)(1); see Fogleman 313 on the possible contractual transfer of liability.
[321] See in this regard Fogleman 46; *United States v Overholt* 307 F3d 1231 (10th Cir 2003) as an example of a claim brought by the USA government.
[322] Fogleman 47–56 provides a detailed discussion of whether this liability to the State can trigger a claim against a liability insurer for payment under pollution insurance cover.
[323] See in this regard the views of Fogleman 58, 89.

7.6.2.3 The Oil Pollution Act[324]

OPA serves three functions. It establishes a program for clean-up and accompanying liability, and contains a regulatory component that aims to provide evidence of financial responsibility for potential polluting incidents. It also establishes and regulates the Oil Spill Liability Trust Fund to cover specific expenditures.[325] OPA imposes liability on a 'responsible party', such as an operator of a ship, for the response and clean-up costs for damage caused to private property or to public natural resources by the threatened or actual discharge of oil into navigable waters, adjoining shorelines or the exclusive economic zone of the USA.[326] It covers damages for the injury to, destruction or loss of use of natural resources, real or personal property, for economic losses, loss of profits and earning capacity resulting from the latter, and also includes the reasonable costs of assessing these damages.[327] The extent of damages is clearly wider than the damages covered by CERCLA.

7.6.2.4 The Clean Water Act[328]

This Act applies to navigable waters of the USA such as rivers and lakes, excluding ponds but including wetlands and territorial seas.[329] It imposes a liability on the owner or operator of an onshore facility or vessel for costs and expenses incurred by the government for the clean-up of natural resources after the discharge of oil or hazardous substances.[330]

7.6.2.5 Statutory pollution exclusions

In some cases the inclusion of a pollution exclusion clause in an insurance policy was in fact required by statute, in order to force the polluter to pay in

[324] §§ 2702(b)(2)(A).
[325] For a discussion of this fund, see Fogleman 31.
[326] OPA s 1002, s 2702(a).
[327] S 2702(b).
[328] See n 275.
[329] § 1362(7).
[330] § 1321(f)(4).

accordance with the polluter-pays principle.[331] Virtually every aspect of the pollution exclusions clauses, whether imposed by statutory or contractual has been the focus of extensive litigation, as discussed in chapter 6 above.[332]

7.6.3 Civil Liability

7.6.3.1 General

As is the case in most other countries, the last few decades have also seen the emergence of a specialised environmental tort law in the USA.[333] Tort law remains predominantly state law, yet variations on the general principles exist in the various states. The Restatement (Second) of Torts 1976 (hereinafter the 'Restatement of Torts') attempted to restate an analysis of the broad general principles of tort law, although it is not binding upon the various states.[334] Fault-based liability is the most common basis of claim where statutory claims to recoup losses are unavailable. In addition to fault-based liability such as negligence and trespass, claims based on strict liability following the rule in *Rylands v Fletcher*[335] as adopted from the UK law, and on nuisance serve as alternatives. In some states these are recognised as private statutory causes of action. Fault is an element of various torts, and is described as 'the wrongful act or omission that breaches a legal duty'.[336] As it would be impossible to cover the position in the law of all of the states, only the rudimentary features of the principles of liability are discussed below.

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[331] See the reference in Mitchell 128 to the Governor's Memorandum on Approval of Chs 765, 766, NY Laws (June 25 1971).
[332] See chap 6 par 6.5; see also Couch GJ *Couch on Insurance* 3rd ed (1995) 127–132 for a comprehensive discussion of relevant USA case law.
[333] In the words of Fogleman 349.
[334] As published by the American Law Institute.
[335] See the UK case of *Rylands v Fletcher* [1868] LR 3 (AC) 330 (HL).
[336] Fogleman 350.

7.6.3.2 Fault-based liability

7.6.3.2.1 Negligence

A person who owes another a duty of care is negligent if his breach of the duty causes property damage or bodily injury that is a foreseeable consequence of the breach. Where a standard of care is determined by a legislative enactment, it is known as 'negligence *per se*'.[337] A civil claim in these situations is only possible if it was the intention of the legislature to indicate that breach of the standard of care affords a prejudiced party a private right of action.[338] It has been held in some cases that manufacturers and suppliers of hazardous substances may be held liable for negligence provided the requirements as set out in the Restatement of Torts for product liability are met.[339] Actions against prior owners or occupiers based on negligence can obviously only succeed where the defendant's owed the plaintiff a direct duty of care, which is often found not to be the case.[340]

Once again issues of causation prove as problematic in the USA as in most other countries. A plaintiff must first prove actual causation or 'cause in fact' by proving on a preponderance of probability that the defendant's conduct or omission exposed the plaintiff to specific substances or pollutants and caused the plaintiff's damages or injury. The plaintiff then has to prove proximate cause as an element of legal causation, that is, that the conduct was a material element and substantial factor in bringing about the alleged injury.[341]

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[337] Restatement of Torts § 288B.
[338] Fogleman 378 is of the opinion that a breach of a statutory standard does not create a negligence *per se*, but can merely serve as evidence to determine ordinary negligence.
[339] § 402A; see the discussion by Fogleman 380 on the merits of this basis of claim.
[340] See Fogleman 381 for an examination of the application of this principle in the various states.
[341] *Donaldson v Central Illinois Public Service Company* 199 Ill 2d 63 262 Ill Dec 854 (2002); Fogleman 351 states that the application and interpretation of legal causation in the different states varies extensively. Internationally the position on legal causation differs from country to country. See however the position in Belgian law in par 7.4.3.4 where there is no form of legal causation criterion that can limit factual causation.

Where there are multiple tortfeasors, the indivisible-damage rule is applied in the USA. The Restatement of Torts provides that liabilities are several and damages are to be apportioned where there is a reasonable basis for determining the contribution of each cause to a single harm.[342] Liability is joint and several, however, where the conduct of more than one tortfeasor causes a single injury or harm.[343] Clearly, a subsequent tortfeasor cannot be held jointly and severally liable for the acts of initial tortfeasors.[344] The criterion for the divisibility of damage must in some cases be formulated only on grounds of logic or reason.

The difficulties in applying the classical theory of joint liability or 'pollution share liability' led to the development of an innovative theory of market share liability.[345] Liability was initially allocated according to this theory in product liability cases.[346] This theory shifts the burden of proving the exact degree of causation and apportionment of damages to the defendants in order to avoid liability. It is not a form of corrective justice, but rather one of distributive justice based purely on a statistical causation.[347] It also addresses the situation where it is not possible to identify the actual individual polluter who functions within a specific polluting industry.[348]

7.6.3.2.2 Trespass

The scope of liability and the cause of action based on the intentional physical entry or invasion of another's interest in land depend on specific state law. There is no general requirement that the trespass must cause loss or injury,

[342] Par 433A s1(b).
[343] See in this regard Fogleman 352.
[344] *Ravo v Rogatnick* 70 NY 2d 305.
[345] See Fleming JG *The American Tort Process* (1988) 255 for an evaluation of the different methods of liability allocation; see also Larsson M *The Law of Environmental Damage: Liability and Reparation* (1999) (hereinafter 'Larsson') 391
[346] *Sindell v Abbott Laboratories* 607 P 2d (1980) 932; see Fogleman 353 on the adoption of a variation of the *Sindell* theory in Washington, Wisconsin, Florida, Hawaii and New York case law, and the rejection of the theory by other states such as New Jersey, Ohio, Oregon, Missouri and Rhodes Island mainly due to criticism that it is contrary to public policy to deviate from the principles of normal tort law; see the evaluations by Larsson 391; and Fleming 258.
[347] The *Sindell* case 938.
[348] A similar viewpoint is reiterated by Larsson 392.

yet a damages claim and ensuing insurance liability would obviously not succeed in its absence.[349] It is interesting to note that trespass does not require the presence of a person, but that the placement or continued presence of an object, for example, a substance or a structure on land can also constitute a trespass. In this case prior owners or occupiers could incur liability for a continuing trespass.[350]

7.6.3.3 Strict liability

7.6.3.3.1 General

Claims under the rule in *Rylands v Fletcher*,[351] common-law claims based on abnormally dangerous or ultra-hazardous activities, trespass as well as nuisance are all strict liability torts. As nuisance enjoys a very broad application in the context of environmental pollution claims, it is discussed in great detail below.[352] Only fault is excluded as an element, and all the other elements of tort must be proven. It must be noted that statutes also create strict environmental liability regimes in specific situations, such as the CERCLA Superfund program for clean-up costs as discussed earlier.[353]

7.6.3.3.2 Rule in Rylands v Fletcher

This form of liability as expressed in the Restatement of Torts was adopted by the courts from the English law in 1983.[354] Strict liability is imposed upon a person who controls land and who allows substances that he brought or accumulated onto land to escape and cause loss to another. The position is

[349] See in this regard Fogleman 384; see also 388 where the possible overlap of a private nuisance claim and a claim based on trespass is examined.
[350] Restatement of Tort § 161.
[351] This claim is adopted from English law; see the discussion in chap 7 par 7.3.3.4 above on the similar position in the UK.
[352] See par 7.6.3.4 below.
[353] See par 7.6.2.2 above.
[354] §§ 519, and 520; as adopted in *State Department of Environmental Protection v Ventron Corporation* 94 NJ 473 468 A 2d 150 (1983) where contamination of a site was caused by production of mercury. The court held that 'those who poison the land must pay for its cure'.

similar to the position in the UK as the escape must be during a 'non natural' use of land.

7.7.3.3.3 Abnormally dangerous activities

The principle of strict liability was also adopted in the Restatement of Torts and applies where participation in abnormally dangerous activities causes loss.[355] It is important to note that a person can be held liable even though he has exercised the utmost care to avoid the harm. The activity must not be a common usage and inappropriate in the place where it is carried on, there must be a high degree of risk and the likelihood of harm, and the value to the community must be outweighed by the dangerous attributes of the activity.[356] An owner or occupier who previously occupied the property can be held liable under this tort for his contribution to past contamination.[357]

7.6.3.4 Nuisance

7.6.3.4.1 General

Nuisance is seen to be at the core of environmental torts and is the most traditional common-law cause of action for pollution claims.[358] Nuisance can be either a public nuisance where a public right[359] is infringed upon, for example, by smoke, dust or water pollution,[360] a private nuisance where one

[355] § 519. This principle was initially included in the first Restatement of Torts § 519 that provides that 'one who carries on an ultra hazardous activity is liable to another whose person, land or chattels the wrongdoer should recognise as likely to be harmed by the unpreventable miscarriage of the activity for harm resulting thereto from that that makes the activity ultra hazardous, although the utmost care is exercised in preventing harm'.

[356] See Fogleman 374 on case law that illustrates the narrow interpretation of the test by the courts due to the onerous nature of the potential liability.

[357] See par 7.6.3.4.2 below that a private nuisance claim against an owner or occupier who previously occupied the property is not possible.

[358] Madden MS & Boston GW *Law of Environmental and Toxic Torts: Cases, material and problems* 3rd ed (2005) (hereinafter 'Madden & Boston') 56; see also in this regard Fogleman 356.

[359] A 'public right' is one common to all members of the general public' as stated by Madden & Boston 59.

[360] The Restatement of Torts § 821B deals with common-law public nuisance; Madden & Boston 56 describe it as 'an unreasonable interference with a right common to the general public'.

individual infringes upon the rights of another, or a statutory nuisance, where a legislative authority declares specific conduct to be a nuisance for which liability can then be incurred.[361] Nuisance is in principle based on the absence of reasonable conduct when exercising one's property rights.

7.6.3.4.2 Private nuisance

A private nuisance occurs when there is a non-trespassing yet substantial invasion of an individual's interest in the use and enjoyment of his property. This requires intentional or negligent, reckless or abnormally dangerous conduct that has the potential to cause extensive damage and that justifies strict liability.[362] The prejudiced party must have either ownership or an interest in possessing the property, and must suffer significant harm.[363] Reasonableness is determined by weighing the gravity of the harm against the utility of the defendant's conduct.[364] A nuisance claim cannot be brought against prior owners or occupiers of contaminated land, unless it is specifically authorised by statute.[365]

7.6.3.4.3 Public nuisance

The Restatement of Torts describes a public nuisance as 'an unreasonable interference with a right common to the general public'.[366] A public nuisance supports a claim where conduct is found to be 'unreasonable' and where (a) the conduct involves a significant interference with public health, safety,

[361] See chap 4 par 4.2.3.4.1 below for a discussion of the application of the doctrine of the abuse of rights and nuisance in South African law.
[362] In *Hoery v United States* 64 P 3d 214 (Colo 2003) 1267 in a case on groundwater contamination, the court reiterated that in the absence of intentional conduct, a nuisance claim requires 'conduct so dangerous to life or property and so abnormal or out-of-place in its surroundings as to fall within the principles of strict liability'; Restatement of Torts § 821D; see Madden & Boston 80; see also Fogleman 357.
[363] Madden & Boston 82 state that it does not include 'slight inconveniences or petty harm'.
[364] *United States v Carroll Towing Co* 159 F 2d 169 (2d Cir 1947).
[365] See Fogleman 360 for a discussion of case law where attempts to extend a claim based on nuisance to prior occupiers proved to be unsuccessful.
[366] S 821B; see *West Virginia ex rel Smith v Kermit Lumber & Pressure Treating Company* 200 W Va 221 488 SE 2d 901 (1997) for another version of a description that uses more general wording that a public nuisance is 'an act or condition that unlawfully operates to hurt or inconvenience an indefinite number of persons'.

peace, comfort or the public convenience; (b) the conduct is prohibited by statute, ordinance or administrative regulation; or (c) the conduct is of a continuing nature or has produced a permanent and long-lasting effect, and, as the wrongdoer knows or has reason to know, has a significant effect upon the public right.[367]

A state government official in the USA usually prosecutes criminal public nuisance claims on behalf of the public in general.

A special injury is required to enable a private person to bring an actionable claim for monetary damages based on a public nuisance. An individual may only claim damages for suffering a public nuisance where his harm was different from that suffered by other members of the public.[368] Where this is not the case the situation justifies a citizen's suit or class action for damages.[369]

7.6.3.4.4 Statutory nuisance

This form of nuisance is also known as a nuisance *per se* or 'absolute nuisance'. A plaintiff may only have a cause of action based on statutory nuisance where any federal or statutory provision was breached and the specific statute makes express provision for such a claim.

7.6.3.4.5 Permanent or continuing nuisance

A nuisance may be classified either as a permanent nuisance, for example, where the construction of a structure causes environmental harm, or as a

[367] Restatement of Torts § 821B(2); Madden & Boston 58 reiterate that only imputed knowledge is required to comply with the requirement in (c); see also 59–62 for extensive case law discussions on public nuisance claims.
[368] See Fogleman 363 for more case law examples on the point in question.
[369] *Nashua Corporation v Norton Company* 1997 WL 204904 (NDNY 1997); *In re the Exxon Valdez; Alaska Native Class v Exxon Corp* 1997 104 F3d 1196; Madden & Boston 67 question the necessity to enforce the onerous special injury requirement for public nuisances as it is not required for private nuisance claims and causes an unnecessary and unfair discrepancy.

continuing nuisance, for example, where there is a gradual seepage of contaminants onto land. The distinction is important for the discussion of prescription below.[370] It is not the length of time that determines the permanent nature of the nuisance, but whether the nuisance is capable of being abated or discontinued. Where recurring incidents cause a nuisance, but the incidents could at some stage cease, it is classified as a continuing nuisance. The abatement of the defendant's wrongful conduct is usually the discontinuation of the nuisance, even though the ill effects might continue indefinitely. Where the conduct will continue or has the potential to continue indefinitely, it is classified as a permanent nuisance.[371]

7.6.3.5 Remedies

7.6.3.5.1 General remedies

A prejudiced party may obtain injunctive relief, or claim for damages, where the latter is an appropriate remedy under the specific circumstances.[372]

A damages claim may be for proprietary or patrimonial loss suffered such as the depreciation of property values or repair and restoration costs, and could also include damages for pain and suffering, emotional distress, for personal inconvenience, discomfort and reduced quality of life caused by the nuisance.[373] Claims for the costs of the process of medical monitoring have also been allowed.[374]

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[370] See par par 7.6.3.6.
[371] Fogleman 366–367.
[372] See Fogleman 371 for a discussion of obtaining an injunction, and see also 370 for examples of various claims for damages in this regard.
[373] See *Ayers v Township of Jackson* 106 NJ 557 525 A 2d 287 (1987) where waste from a landfill migrated onto the plaintiff's land causing them to sue successfully for reduced quality of life; see also Fogleman 391, 399 for the application of the requirements for a damages claim.
[374] See also *Ayers v Township of Jackson*; Fogleman 402–412 for various aspects relating to the valuation of such a claim, for example, the impact of a fear of cancer that justifies medical monitoring and subsequent liability for costs.

As already examined in the discussion of South African law,[375] the traditional principles that relate to a damages claim are difficult to apply in pollution damage cases. This has seen the development of a body of law in the USA on claims for stigma damages.[376] The public's perception of a reduced value of land due to the proximity of contamination, or the actual or residual contamination even after clean-up, are just as real as a factual reduction in the value of land and should be actionable in specific circumstances where an owner, for example, only manages to sell his property for less than an objective market value due to the stigma attached to his property. It remains within the court's discretion to award damages for a depreciation where a plaintiff had prior knowledge of or should have expected potential future developments or a depreciation in the value of property in the area over time as a normal occurrence.[377]

7.6.3.5.2 Class actions

Class actions became notorious during the 1970s due to extensive asbestos claims, and are especially relevant where claims for pollution damage are concerned. A plaintiff can sue as the representative of a larger group of persons in a class action.[378] The introduction of the principles relating to class actions in South African law is based on those that developed *inter alia* in the USA.

Requirements are that members must all be of the same class and that the normal joining of plaintiffs is impractical, the claims are typical for all members of the class and that the representatives will act in the interests of the members of the class.[379] The risk of disallowing a class action could include the risk that varying or inconsistent judgments could be given where the

[375] See chap 4 par 4.2.6 above.
[376] See chap 4 par 4.2.6.2.4 above; Fogleman 394 provides a short explanation of the scope of a claim for stigma damages.
[377] See Fogleman 394–399 for case law of claims for stigma damages in the various states within the USA.
[378] United States of America Federal Rules of Civil Procedure Rule 23.
[379] See Rule 23(a) for the requirements for the institution of a class action.

members sue independently from each other, and potential conflicts of interests between the various members which should be taken into account when allowing a class action.[380]

7.6.3.6 Statute of limitations

The general rule is that a claim prescribes three years from the date on which the injury and the identity of the wrongdoer are known. Where a tort involves a continuing or repeated injury, the statute of limitations begins to run on the date on which the actionable conduct ceases, or on the date on which the last injury was caused, irrespective of the continuation of the ill effects caused.[381] A continuing nuisance generates a cause of action for every day on which the nuisance continues.[382] Where there is a permanent nuisance, the statute of limitations begins to run once a plaintiff knows that the nuisance may have a permanent nature and has the information or imputed knowledge of the required particulars of claim.

7.6.4 Insurance and Schemes of Restitution for Environmental Damage

7.6.4.1 General

Insurance cover is only possible where cover is provided against loss caused by a fortuitous event. The Restatement of Contracts[383] defines such an event for purposes of an insurance contract as 'an event which so far as the parties to the contract are aware, is dependent on chance. It may be beyond the power of any human being to bring the event to pass; it may be within the control of third persons; it may even be a past event, for example, the loss of a vessel, provided that the fact is unknown to the parties'.[384]

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[380] A determination under the provisions of rule 23(b) must also be made.
[381] *West Virginia ex rel Smith v Kermit Lumber & Pressure Treating Company* 245 reiterates that this is in accordance with the continuing tort doctrine.
[382] This viewpoint is reiterated by Fogleman 367.
[383] Restatement (Second) of Contracts of 1981.
[384] §§ 291.

7.6.4.2 Liability insurance cover

In addition to the usual cover provided under first-party insurance, the USA insurance industry has had a long history of providing cover under comprehensive or commercial general liability (hereinafter 'CGL') or other liability policies. Huge claims for clean-up and transaction costs under CERCLA for past polluting incidents were brought against insurers, who never considered these claims when the policies were issued. Claims also increased after the creation of the EPA.[385]

The CGL policies mostly provide for a long-tail liability. Until 1966 the trigger was the 'accident' that caused property damage or bodily injury, which changed after 1966 to an 'occurrence'-based trigger which had the same effect.[386] These policies evolved over time as liabilities increased, and were revised extensively. Insurance regulatory bodies in the USA must approve revisions.[387] Excess policies are also issued that provide cover in excess to that provided under a primary policy. Some 'umbrella policies' offer both an excess cover and cover for new liabilities that are not covered under the primary policy.[388] It is also possible to obtain various endorsements and buy-back options as discussed in chapter 6.[389]

7.6.4.3 Property policies

Property policies cover loss or damage sustained directly by the policyholder against a risk concerning the policyholder's property. Some property policies are for all risks, such as a general homeowner's policy, whereas others are for named perils only, for example, a fire insurance policy. Cover is usually

[385] See par 7.7.2.1 on the EPA; see Fogleman 429 for detail on the recent immense increase of environmental claims.
[386] For the extensive discussion of the various triggers of insurance policies and the issue of long-tail liability, see chap 6 par 6.3 above.
[387] See Fogleman 463 on the process of revision in the various states.
[388] See also chap 5 par 5.3.4.6 on the cover provided under an excess policy.
[389] See par par 6.5.3.8 above.

obtained for the maximum potential loss that the policyholder may suffer.[390] These policies may contain clauses dealing with the option of the insurer to defend. Fogleman argues that due to the lack of a third-party interest that is the case in the context of liability insurance, policies are interpreted strictly against the policyholder, and apply only traditional contractual interpretation principles during the construction of policy provisions. Coverage disputes usually include issues relating to (a) the extent of the 'insured property'; (b) the presence and scope of a 'debris removal' clause; (c) the trigger of risk; (d) whether the policyholder complied with the express policy provisions; and (e) whether the claim is excluded by any exclusion or limitation clause.[391]

As the property is under the policyholder's direct control, the risk of manufactured claims is greater. Cover is usually provided only if damage is discovered during the policy period.[392] Time bar clauses are often included in the policies that preclude action to enforce a rejected claim.

7.6.4.4 Pollution exclusion clauses

Over time, as the number of statutes such as CERCLA that required a clean-up of pollution damage and related insurance claims increased, insurers were forced to include extensive pollution exclusion clauses in policies to limit their liabilities. As the issues concerning these clauses are of a global nature, a comprehensive discussion of these exclusions and related issues can be found in chapter 6.[393]

In the USA, the drafting of a *pro forma* exclusion clause that excluded pollution damage liability claims in 1969 ushered in the general practice of

[390] See Fogleman 622 for an evaluation of the distinction between property and liability policies based on these elements.
[391] See the discussion of these issues in Fogleman 624.
[392] See the detailed discussion in chap 6 par 6.3 on the nature and effect of the various triggers of risk.
[393] See chap 6 pars 6.5.5, 6.5.6 for examples and issues relating to the interpretation of pollution exclusion clauses.

excluding pollution claims under liability policies.[394] Various versions of exclusion clauses were drafted and presented for use in the industry over the years.[395] The availability of CGL in the market declined rapidly once courts started to interpret the words 'sudden and accidental' as meaning 'unexpected and unintended', with the result that it excluded damage caused by gradual pollution from cover.[396]

Over time absolute or total pollution exclusion clauses were included in CGL policies that barred all pollution claims, including claims for gradual pollution, from cover. The name of the CGL policy was also changed from 'comprehensive general liability policy' to 'commercial general liability policy', although the abbreviation used in the industry remained the same. Various other exclusions and subsequent endorsements that excluded cover from these general exclusion clauses and wrote back cover for specific risks, as drafted by the ISO and by other private insurers, followed.

In insurance disputes, the policyholder carries the burden to prove that his claim falls within the cover provided by a policy. The insurer then carries the burden to prove that the claim is in fact excluded by a contractual exclusion clause. Rules of construction or interpretation of insurance policy provisions in the USA are different from normal rules of construction of contracts in general, as insurance contracts are seen as contracts of adhesion in which the policyholder has little bargaining power to negotiate the wording of the policy.[397]

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[394] See in this regard clause IRB–G335 of the Insurance Rating Bureau in the USA, which was one of the first of its kind.
[395] See chap 6 par 6.5.3 for the wording of different versions of pollution exclusion clauses.
[396] See, for example, the judgment in *Jackson Township Municipal Utilities Authority v Hartford Accident & Indemnity Company* 186 NJ Super 156 451 A 2d 990 (1982) in this regard.
[397] As discussed by Fogleman 473; see also 466–472 on the jurisdiction of the courts in the USA in insurance cases.

Specific rules include the application of the 'reasonable expectations doctrine';[398] the *contra preferentem* rule;[399] and the unconscionability rule;[400] refusal to enforce a term that is contrary to public policy; and the application of the doctrine of statutory construction.[401]

7.6.4.5 'Known loss' doctrine

Liabilities that are known to the policyholder are not covered under general liability insurance products in the USA, as these policies only provide cover for liabilities for fortuitous events and risks. Some states have introduced a 'known loss' doctrine, and in some it has even been implemented by statute.[402] The insurer's liabilities under a policy that was at risk once the policyholder became aware of the occurrences, cannot be triggered.[403]

7.6.4.6 Specific environmental insurance policies

Two specific insurance policies were developed in the USA. Environmental Impairment Liability or 'EIL' policies usually provide cover for third-party bodily injury and property damage, clean-up costs and defence costs. Although these policies are expensive and scarce due to their lack of profitability,[404] they indirectly offer an advantage by encouraging acceptable environmental risk management by policyholders. As they are more specific than general liability policies, they allow courts to respect the sanctity of contract during a dispute that requires the interpretation or construction of the contract.[405]

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[398] See the brief discussion of this doctrine in chap 6 par 6.5.5.1.5 above; see also Fogleman 474 for a more detailed discussion of this rule.
[399] See chap 6 par 6.5.5.1.5 for a discussion of this rule.
[400] This entails that the courts may limit a specific term to avoid an unconscionable result in specific circumstances.
[401] See Fogleman 477 on the role of legislative history in applying this doctrine, also known as the doctrine of 'regulatory estoppel'.
[402] See the discussion in Fogleman 607 *et seq* on the position in the various states within the USA.
[403] As the doctrine enjoys a narrow interpretation, claims are not defeated where there is uncertainty as to whether the occurrence will occur again.
[404] Italiano ML "Environmental Impairment: Dealing with the Legalities" 1990 (August) *Risk Management* 38 (hereinafter 'Italiano') 39 confirms this in view of the USA General Accounting Office Report in this regard.
[405] Italiano 40 also identifies this as one of the benefits of the EIL policies.

A special named peril insurance policy, namely the Environmental Remediation Insurance or 'ERI' policy, was developed in response to the effect that CERCLA had in the USA. It is a form of first-party insurance for previously undetected and pre-existing land contamination of commercial properties. It does not provide cover for third-party liability, yet cover can be extended to include off-site clean-up of a third party's property, or enhanced to provide cover for contamination that occurred after the policy was taken up on a 'discovered reported' basis.[406]

Various other instruments are available in the USA market that provide specific coverage for pollution or environmental damage.[407] These include (a) site specific policies, for example, cover against asbestos liability, military base remediation and industry specific sites; (b) policies for professionals such as environmental consultants; (c) contractors policies; (d) road transportation policies; (e) financial assurance policies required for the transportation of hazardous waste, for example.[408] These instruments were examined in greater detail in chapter 5.[409]

7.6.4.7 Choice of law in the USA

Due to its varying state laws, the choice of law in the USA becomes relevant where the policyholder must clean up a site that is not situated within his state of domicile but in another state, where different legal rules apply.[410] Some policies contain a choice of law clause that prevents uncertainty regarding jurisdiction. Once this fails, the court in which the claim is brought must first determine whether there is an actual conflict of the state laws involved, and once it has affirmed the conflict, it can apply the applicable conflict of law rules

[406] See the more detailed discussion of the position in the USA in chap 7 par 7.6 below; see also Larsson 529 in this respect.
[407] For a comprehensive discussion of the history and structure of the USA environmental insurance market, see Fogleman chap 14 670–679.
[408] See Fogleman 652–668 for a detailed exposition of the scope of cover provided by the various instruments.
[409] See par 5.43, par 5.4.4 above.
[410] Fogleman 610.

that apply to these issues in general.[411] In the absence of such a choice of law clause, a party involved in an insurance dispute often does so-called 'forum shopping' and institutes his claim in a state where the substantive law is favourable to his position. Courts do not have to allow these claims brought before them where the jurisdiction is subject to constitutional limitations or where the court is of the opinion that the issue under litigation is insufficient to meet the requirements of due process.[412] Factors that are taken into account to determine jurisdiction include (a) law of the place of conclusion of the contract;[413] (b) the state with the 'most significant relationship', where the most contractual transactions between the parties took place unless another state has an overriding policy-based interest in the application of its own laws;[414] and (c) where an analysis of the governmental interests indicates that the laws of one state should enjoy precedence above those of another.[415]

7.6.4.8 Additional mandatory insurance schemes in the USA

To date no mandatory insurance schemes or policies, other than those required in terms of international regimes, for example, in the nuclear industry, have been implemented in the USA. Various forms of specialised pollution insurance products in the market that were considered in chapter 5, are also available within the USA.[416]

7.6.4.9 Proposals for more effective pollution insurance coverage

Due to the enactment of CERCLA and the increasing liabilities of insurers, an increase in exclusions from cover has rendered insurance rather ineffective and has severely affected the insurance market. Fogleman proposes that trust

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[411] Fogleman 610 warns that care must be taken when determining the nature of the claim brought before the courts, as different rules apply for claims in tort law than for contractual claims.
[412] Peterson J "CERCLA Choice-of-law: Insurer's Attempts to Escape their own Quagmires" 2006 (36) *Environmental Law* 565 for the methodologies involved; see the discussion by Fogleman 611 on the complications and limitations of this type of 'forum shopping'.
[413] The *lex loci contractus*; see also the Restatement of the Law of Conflict of Laws (1943).
[414] Restatement (Second) of the Law of Conflict of Laws (1971) s 188.
[415] See in this regard Fogleman 616.
[416] See chap 5 par 5.4 above.

funds must be established to mitigate the effects of CERCLA and the Superfund and other legislative programs, and to repeal any retroactive liability that insurers did not contemplate when issuing insurance policies, yet have to cover in terms of legislation. Various proposals on law reform in this regard are examined and evaluated.[417] She identifies the existence of both state and federal liability systems as the major stumbling block in the way of establishing alternative systems to insurance.[418]

7.7 CONCLUSION AND RECOMMENDATIONS

It is clear from this study that most issues relating to environmental insurance claims and related insurance matters are generic and universal. The reluctance of courts to develop the common law as a mechanism for environmental protection in anticipation of the development of statutory protection measures appears to be a universal tendency in view of the latest judgments. The South African legal system is presently still in the early stages of development. The experience of other legal jurisdictions in dealing with these matters and in finding solutions to address problems, can greatly assist and inform the South African judiciary, the legislature, governmental departments and other authorities as well as insurers who offer insurance products in South Africa where the law is lagging behind. It is therefore important to briefly consider the position in other countries that can prove informative in the development of the South African law.

In the EU the 'Declaration on the 'Environment' creates the fundamental right to the environment. The EU Environmental Liability Directive came into force recently on 30 April 2007. This Directive attempts to address liability for natural resource damage caused by pollution, because of the problems experienced in holding polluters liable in terms of civil liability regimes. It does

[417] See the discussion in Fogleman 633–649.
[418] Fogleman 649 advocates that a repeal of retroactive liability in the USA could put an end to unnecessary insurance coverage disputes, which can be endorsed and recommended as a solution to this problem encountered in most other countries.

not apply to aspects that are dealt with under international treaties, conventions and other international instruments. The Directive provides a broad description of what 'damage to the environment' entails, by describing different types of damage caused to various parts or elements of the environment that result in a significant risk of an adverse effect on human health. It is not clear whether the description in the Directive or the Declaration as discussed above will enjoy precedence in case of an uncertainty in this regard.

The Directive introduces a strict liability regime for persons involved in designated activities. Defences against liability include damage caused by authorised actions, or where damage was unlikely at the time of conduct.

At present, the Directive does not introduce mandatory insurance cover for specific industries, although there is an expectation that this will be addressed in the near future. Liability under the Directive qualifies as a 'legal liability' for purpose of liability insurance claims.

The shortcomings of the Directive include the following. It does not have any retroactive operation and can only provide guidance for damage caused from the date of its implementation. It does not address liability for damage to private property, personal injury or pure economic loss caused by damage to the natural environment. The Directive has, to date, only been implemented by a minority of EU member countries.

The position in the UK is similar to that in South Africa, except that there is no legislation that creates a fundamental human right to the environment. In addition to statutory liability in terms of specific environmental statutes not to damage the environment and to clean up the environment where required, a civil liability regime exists to accommodate environmental damage claims.

The Environmental Protection Act serves the same purpose as the South African NEMA and the ECA, except for the following positive aspects. It offers the benefit that it creates a general strict statutory liability regime for the

emissions from industrial or business sites that are prejudicial to the health of individuals or that cause a nuisance. It also establishes a retrospective statutory liability regime for soil and land contamination, and introduces the duty of 'appropriate persons' to clean up affected sites. In the last instance it introduces a statutory civil liability to pay damages to a prejudiced party in addition to clean-up costs and criminal penalties.

Civil liability claims include claims based on negligence, on nuisance, both private and public, on a form of strict liability in accordance with the rule in *Rylands v Fletcher* for things or substances accumulated on land, and on trespass. Due to the magnitude and irreversible nature of environmental catastrophes, it appears to be justified to impose liability in these situations in the absence of fault.

Various environmental insurance products are available in the UK market that offer both first-party and third-party insurance cover. The universal issues of these policies were covered in detail in chapter 6. The scope and effect of pollution exclusion clauses are, mostly, the focus of extensive litigation as is the case in other countries. At the moment, there is no mandatory insurance cover required for specific industries in the UK, except for the waste, nuclear and shipping or marine industries.

In Belgium, a variety of statutes address liability for damage caused to the environment. Statutory strict liability regimes apply to soil pollution, to operators within the waste disposal industries, to the carriers and producers of dangerous substances and to groundwater recycling and persons involved in mining activities. Any person who causes damage to the marine environment also incurs strict liability.

It is also possible to claim damages in terms of a fault-based civil liability regime. It is interesting to note that the requirement of factual causation in Belgium is not limited by a requirement of legal causation as is the case in most other countries, including South Africa. A civil claim based on nuisance is also a possibility. This claim is a strict liability claim and fault is not a

requirement. The same liability can be incurred for damage caused by goods under a person's control.

The introduction of a new compensation regime has been studied for some time and various proposals have been made. Recommendations include that it should be based on objective strict liability, that a causative presumption must be created that persons in control of premises from which polluting substances emit or who are in control of polluting substances, are liable. These persons can only escape liability where they can prove that they only partially contributed to the environmental damage.

Insurance schemes in Belgian law allow for claims for environmental damage under both first-party and third-party insurance policies. The relationship between the policyholder and the insurer is statutorily regulated. Any clauses in insurance policies that are contrary to statutory provisions are void.

The 'acts committed trigger' was substituted by the 'loss-occurrence' trigger in terms of the Belgian Wet op landesverzekeringsovereenkomst 25 juni 1992. Parties may, however, agree on insurance cover on a 'claims-made' basis. The latter appears to have become the preferred position in most other countries. The Act also prescribes and regulates the duties of the insurer where the cover is provided on this basis. Statutory financial limits are also placed on civil liability claims for purposes of insurance cover.

Belgian law offers the benefit that it allows a direct statutory claim by a prejudiced party against the insurer of the polluter who provides liability insurance cover for the latter's liabilities in accordance with the abovementioned Act. This benefit is also provided in the Netherlands.

Specialised environmental damage insurance cover is available in the Belgian market, but it only provides cover where the pollution was accidental and not gradual. Claims that relate to a failure by the polluter to obey governmental regulations and procedures, as well as war and nuclear risks, are excluded

from cover. Liability insurance cover for specific environmental risks is mandatory.

Because of the complications that exist as far as insurance claims for environmental pollution damage are concerned, authoritative Belgian writers are of the opinion that alternatives to insurance could be the answer. In view of similar issues in South African law, this possibility has some merit. An alternative that has been proposed is the delivery of mandatory financial guarantees or deposits that have to be made into a separate environmental guarantee fund where specific industries are concerned. Amounts may only be withdrawn from the fund to restore environmental impairment and not to cover loss suffered by prejudiced parties. This, however, should form the focus of an extensive independent study and does not fall within the scope of this thesis.

In the Netherlands, article 21 of the Dutch Constitution provides for a constitutional right to the environment. Various environmental statutes address environmental issues, of which the most important is the Environmental Management Act of 1992. Soil, water, atmospheric pollution and pollution by the release of hazardous substances are also addressed in various specialised statutes.

As is the case in most other jurisdictions, a civil liability claim based on wrongfulness and fault is available to a prejudiced party for damage caused by pollution, unless a strict liability regime applies. This would, for example, be the case where the polluter participates in a high-risk activity or is in control of a dangerous substance and his conduct or failure to act causes damage. Factual causation, as tested in accordance with the *conditio sine qua non* test, is also limited by a second criterion of legal causation based on reasonableness, as is the case in most other countries except for Belgium.

A broad spectrum of forms of damages are actionable, which include patrimonial and non-patrimonial losses, loss of profits, prevention costs and costs of due legal process.

In the Netherlands, insurance policies are statutorily regulated to a greater extent than in South Africa by the provisions of title 7.17 BW. These provisions severely curtail the contractual freedom of insurers and policyholders. The prejudiced party is also, as is the case in Belgian law, entitled to claim directly from the polluter's liability insurer. The rights of the third party are also statutorily protected by legislation, for example, where the insured becomes insolvent. A statutory prescription period for claims under a liability policy is prescribed. Prescription of the claim against the insurer is delayed for six months from the date on which the prejudiced party institutes his liability claim against the insured. This attempts to alleviate the problems experienced by prejudiced parties when claiming damages from a polluter, which the latter can recoup from his insurer under liability insurance cover. The plaintiff who has to collect the required information to present as evidence for his claim is not prejudiced by a relatively short prescription period.

Since 1998 insurers in the Netherlands collectively implemented a specialised and innovative form of environmental insurance called 'Environmental Damage Insurance' or EDI. The comprehensive policy provides for both environmental impairment insurance on a first-party basis, and environmental liability insurance on a first-party to the benefit of a third party basis. Its benefit is that it provides the insured with integrated coverage. As it precludes claims for environmental pollution damage under other first-party policies, potential polluters are forced to obtain this type of cover. The third party is in the position of a policyholder as far as the liability insurance is concerned. The trigger for a claim is the pollution occurrence. It is not necessary to provide proof of civil or other liability, such as statutory liability, for the damage. It offers the benefit to prejudiced third parties that they do not carry the burden of proving claims against the insured. It also offers insurers a more effective risk selection and risk differentiation. This insurance instrument is one of the first of its kind and could offer some solutions to the problems experienced by most countries in the field of insurance claims for environmental damage. As it has shown an annual market share increase, its introduction does appear to have been successful.

The EDI, however, holds the disadvantage that, due to policy limitations and the extensive damage in pollution cases, cover may prove to be inadequate which leaves the prejudiced party without the right of recourse to claim under other insurance policies. Due to the cooperation of the insurers within the industry in this regard, this form of insurance has been criticised as being in conflict with competition law. Care must therefore be taken that such a scheme does not result in illegal collusion between insurers.

As an alternative for high-risk industries, recommendations have also been made in the Netherlands to replace the cover with mandatory financial guarantees. This will enable the State to meet the costs of environmental clean-up or remediation or to introduce mandatory insurance for specific industries.

The USA approaches the problem of environmental damage caused by pollution in a unique way through the introduction of a comprehensive statutory governmental regulation of liability for clean-up costs. This was implemented by the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) that introduced the Superfund program. The fund finances the clean-up of pollution, and then claims the amounts from the polluter. The fund can also instruct a polluter to clean up at his own expense. Environmental reparation is thereby guaranteed, provided of course that the fund remains solvent. The risk of not being able to recoup the costs and expenses of a particular clean-up rests with the fund. Although this seems to offer a very attractive solution, one should, in view of the solvency issues of the South African Road Accidents Fund that has similar goals of ensuring compensation in mind, question whether this would provide a solution in the South African context.

As CERCLA focuses on the restoration and clean-up of the environment, it does not cover claims for damage to property and bodily injuries or for liability claims by third parties to compensate them for these losses. Natural resource damage or ‘NRD’ that goes beyond a claim for clean-up to the original

position is also not compensated by the fund. This avoids the complications of proving the extent and value of NRD's.

In terms of CERCLA, liability attaches to potentially responsible parties for the release of hazardous pollutants from specified sites into the public environment. Claims may not be brought against the fund for damage caused to privately owned 'natural resources'. Liability is incurred merely by the release into the environment, and does not require proof of the exact harm or damage caused. Liability is for restoration and clean-up only, and is a strict retroactive joint and several liability. A responsible party can avoid liability only where he can prove that the cause of the pollution was divisible, and where he can show a reasonable basis for the determination of his contribution to the damage. Defences include only that the damage was caused by a *force majeure* occurrence, by an act of war or by the conduct of unrelated third parties who are not potential responsible parties.
There is no time bar in respect of the polluting incident and the proceedings brought under CERCLA against the fund for the restoration of the polluted environment. There is, however, a time bar period of three years between the emergency clean-up by the fund and the fund's right to claim the clean-up costs from the polluter.

It remains possible to procure insurance to provide cover for one's liabilities under the scheme. The same issues, as discussed in chapter 6 above, then occur in that most insurance policies contain clauses that exclude pollution-related claims from cover or that limit the amounts of claims. The fund does not provide a solution in this regard, yet does avoid the issues relating to a claim for natural resource damage as discussed in the previous chapter.

Various other statutes create and regulate statutory liabilities, such as the Clean Air Act, the Clean Water Act, the Oil Pollution Act and the Toxic Substances Control Act.

CERCLA also limits civil claims against polluters, by prescribing maximum amounts and a time bar period of three years. The compensation awarded does not have to be spent on the restoration of the environmental damage.

Civil liability claims are based on fault-based liability for negligence and trespass, being the most common basis for a liability claim. Strict liability in terms of the rule in *Rylands v Fletcher* which was adopted from the UK law, nuisance, participation in abnormally dangerous activities and statutory strict liability claims serve as alternative causes of action. The Restatement of Torts also provides that where more than one tortfeasor causes harm, the tortfeasors are jointly and severally liable for the damage. In an attempt to avoid problems in the implementation of this 'pollution share liability', the USA developed an innovative market-share liability for environmental damage that was initially applied in product liability cases. It is based purely on a form of statistical causation. Defendants carry the burden of proving the exact degree of causation and apportionment of damages in order to avoid liability. This approach can be investigated for implementation in specific industries in other countries as well.

Claims for stigma damages caused to a property because of its proximity to pollution, or due to its previous polluted state have been allowed in the USA. From relevant case law it has become clear that the extent of the award for a depreciation in the value of the property remains within the court's discretion, depending on the facts and circumstances in each situation.

The USA legal system has seen the institution of many successful class actions, notably for claims brought due to asbestosis. The success of class actions can offer guidance for class actions that are to be instituted in other countries that do not possess legal precedent for these actions.

The body of case law in the USA on the interpretation of exclusion clauses in insurance contracts is extensive. The effect of these clauses internationally, has been addressed in the previous chapter. As no South African case law or statutory regulation exists, for example, for SBS claims, it is proposed that

case law in the USA could serve as authoritative where such a case is brought before a South African court.

Due to the increase in transboundary pollution, and the different positions on civil liability and insurance law under state law, it is important to include a choice of law clause in insurance policies, in order to prevent parties from 'forum shopping'. This applies not only to the USA, but also to most other countries that are exposed to the possibility of transboundary pollution, of which South Africa is definitely one.

It is clear that most international jurisdictions also do not address the complications of claims for damages, as the focus is currently more on protection, on creating deterrents and on measures for environmental restitution, and not on structured civil compensation mechanisms. There is an urgent need for an increase in statutory civil liability and compensation mechanisms to cover claims for environmental damage, or for the introduction of alternatives to insurance.

CHAPTER 8

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

8.1 GENERAL

The risks that arise as a result of environmental pollution damage create universal problems when insurance cover is sought. Environmental damage insurance can be procured under a first-party insurance policy, for example, property insurance, or under a third-party insurance or liability insurance policy. For the latter, the polluter must incur statutory or civil liability towards the party prejudiced by the pollution damage. The determination of liability, especially regarding the polluter's delictual or civil liability remains fraught with complications.

Due to the uncertainty and potential magnitude of pollution-related claims, insurers have attempted to avoid or limit these risks by including special pollution exclusion and limitation clauses in policies. The limitations or exclusions from cover place the insured in a vulnerable position. Various other issues such as the coverage of gradual pollution, the effect of the various triggers of coverage and the potential long-tail liability of insurer, the lack of information and the unpredictability of the risk cause further complications for both the insured and the insurer.

Currently, the focus in South Africa and internationally appears to be more on protection, creating deterrents and providing measures for environmental restitution, rather than on structured civil compensation mechanisms for damage caused to the environment by pollution. There is an urgent need for the expansion and development of statutory civil liability and compensation mechanisms to cover environmental damage suffered. The following conclusions can be drawn from this study and the corresponding recommendations made.

8.2 THE RIGHT TO THE ENVIRONMENT

The exact scope of what 'environmental damage' entails clearly depends on the individual facts and circumstances and the statutes that apply in each instance. The definitions provided in applicable specialised legislation will enjoy precedence. Where there are none, the definitions provided in NEMA and ECTA will serve as default definitions if applicable. Where there is no statutory definition in a specific instance, one can but hope that the judiciary, when interpreting the terms 'environment', 'damage', 'pollution' and related concepts, will provide the broadest possible interpretation to give force and effect to section 24 of the Constitution. Justification for this approach can be found in the fact that the environment should be seen as public goods that deserves protection and restitution for the sake of present and future generations.

The use of the term 'well-being' in section 24 of the Constitution militates against the traditional view that aesthetic nuisance is not actionable, and in view of the tremendous value that the natural environment holds for our country, claims for damage that relate to aesthetic elements should be recognised and encouraged.

8.3 STATUTORY LIABILITY

The Constitution[1] has established a solid foundation for an effective liability regime where the environment is damaged by pollution. The constitutional right to the environment requires citizens to protect the environment, and a failure to comply with this statutory duty causes an actionable omission for purposes of a civil liability claim. Section 24 furthermore informs the open-ended criterion of public policy that is required for the determination of wrongfulness, and also the criterion of legal causation that serves to limit potentially endless factual causation.

[1] The Constitution of the Republic of South Africa 1996.

Where there is a conflict between the fundamental right to the environment and other fundamental rights, or where there is a limitation of the right to the environment, the issue must be dealt with in accordance with section 36 of the Constitution.

In terms of section 38 'appropriate relief' may be granted for the infringement of a constitutional right. Remedies include a declaration of rights that can assist in the interpretation of a statutory provision or a contract, and preventative or mandatory injunctive relief to prevent environmental damage, or to ensure compliance with measures designed to protect and restore the environment. A court may also award constitutional damages for the infringement of the right to the environment. The purpose of an award should not be to address or to substitute civil damages, but should be limited to the clean-up and remediation costs expended in the restoration of the polluted environment.

Section 38 of the Constitution and section 32 of NEMA introduce the possibility of class actions for claims relating to environmental interests. It is submitted that this will prove to be invaluable where a polluter causes damage to the environment that causes harm or loss to a specific group or to a large number of members of a community.

Access to detailed information is crucial in order to succeed with legal proceedings in environmental matters. The right of access to information in terms of section 32 of the Constitution and the provisions of the Promotion of Access to Information Act[2] provide claimants with the necessary rights and procedures to ensure access to information, provided that the disclosure is in the public interest. As 'imminent and serious environmental risk' is a statutory factor that informs the public interest, disclosure of information is justified where claims relating to environmental damage are concerned. Information has become more readily available since the implementation of environmental

[2] Act 2 of 2000.

legislation that requires mandatory environmental impact assessments for designated activities.

South African legislative, judicial and administrative processes should at all times be governed by the distinctive principles of international environmental law, specifically the polluter-pays principle, the preventative principle, the principle of strict liability, the principle of sustainable development and the principle of *restitutio in integrum*.

It is necessary to expand general statutory duties to clean up, with specific focus on reinstatement and the restoration of the environment. Liability should be for the actual costs and expenses incurred, in order to bypass the requirement of proving the extent of 'damages'. Claims for natural resource damages fare especially badly in civil liability regimes due to the difficulties in proving the exact quantum of damages. Statutory recognition that clean-up costs and a reduction in the value of property that include stigma damages and reduced aesthetic value of the property, reflect 'natural resource damage' could provide a solution and will be in accordance with the international environmental polluter-pays principle, as well as the principle of *restitutio in integrum*.

As our environmental allocation law is developing into environmental protection law, it demands an increase in intensive administrative governance, and comprehensive control laws for specific activities and industries such as the control of air pollution.[3] The approach is in accordance with the preventative principle. Stricter statutory safety regulations could also assist judges in the determination of wrongfulness and fault in environmental liability cases. Although the South African legislature is currently addressing these issues, care must be taken against the effects of over-deterrence as it is costly and has the potential of stifling economic growth.

[3] See, for example, the recent South African National Environmental Management: Air Quality Act 39 of 2004.

Governmental regulation should enjoy priority and prevent the lack of legal certainty where new risks arise from the rapid development in technology which has the potential to cause pollution and environmental damage are concerned.

In order to ensure remediation of the environment and to lighten the burden of individuals who are prejudiced by environmental damage, the statutory introduction of a comprehensive environmental remediation fund or smaller funds within specific industries can be recommended. The CERCLA fund in the USA, as discussed in chapter 7 and addressed below, could serve as an example. These funds, to be governed by the State, should remedy environmental damage, or ensure the polluter's compliance with his statutory obligations to do so. As the State should not be expected to cover remediation costs, it should have a statutory right of recourse to recoup the costs and expenses from the responsible polluter, or to expropriate his land as provided for in NEMA and ECTA.[4] It would also be possible to finance the funds from the proceeds of mandatory first-party insurance to the benefit of a third party.

Due to the wide definition of the 'environment' in NEMA, anyone who bases his case on any statutory environmental provision has *locus standi* in accordance with section 32(1) of the Act to present his case.

The increase of comprehensive statutory protection measures cannot, however, address all the problems relating to claims for environmental damages and the insurability of the related risks.

8.4 CIVIL LIABILITY

Although the law of delict offers elastic and adaptable principles that can be applied to novel situations and new risks, it is not always the most effective compensation mechanism. Various delictual requirements such as

[4] NEMA s 28(6); ECTA s 31A.

wrongfulness, causation and the extent of damages prove to be challenging in the context of environmental damage claims.

In order to overcome these restrictions, the statutory regulation of specific aspects of delictual liability for environmental damage should be introduced. The civil law should also be developed in accordance with international environmental principles. The polluter-pays principle requires the development of the general principles of civil liability law to ensure that the polluter is held liable for the damage he causes. The precautionary principle and the principle of preventative action should inform the criterion of wrongfulness for omissions, as does the constitutional right to the environment as discussed above. The principle of strict liability provides justification for the introduction of a strict liability regime for environmental damage. In the last instance, the principle of *restitutio in integrum* can provide guidance where the extent of actionable damages is in issue.

Liability can only ensue where conduct or the failure to act is wrongful. Section 24 of the Constitution, as referred to above, creates a general legal duty to act to protect and not to damage the environment. Failure to do so will be deemed to be wrongful. Actionable omissions in the specific context of liability for environmental damage include an *omissio per commissionem*, failure to control a dangerous object or substance, and the failure to act in accordance with an environmental statute.

In case of nuisance, which has been called the ‘classic environmental tort’, the doctrine of the abuse of rights in South African law provides guidelines for the determination of wrongfulness. Grounds of justification for wrongful conduct include the impossibility of a polluter to prevent the pollution, statutory authority to act, a state of necessity and self-defence.

As there is an international tendency to move towards strict liability for environmental damage, an important step would be to introduce a strict liability regime that is similar to the regime for product liability claims that will be introduced in South Africa in terms of the proposed consumer protection

legislation. Two theories serve as justification for the introduction of strict liability. The first justification is in accordance with the 'risk or danger theory' that is based on a person's participation in a dangerous or risky activity. The mere fact that a person's activities have increased pollution potential justifies liability in the absence of fault. The second justification is based on the interest or profit theory, namely that a person who causes harm or loss while he acts in his own interest or for a profit, should carry the burden of all the advantages as well as disadvantages of his economic activities. It is submitted that where a person directly *exploits* the environment for the primary purpose of operating a profitable commercial venture, but irrespective of whether he succeeds in enjoying an eventual profitable gain, he should accept the ensuing responsibility that the environment could be harmed.

All persons, therefore, who are in control of, responsible for, or who benefit from dangerous or hazardous substances or the premises where these substances are present, incur liability unless they can prove specific defences. Defences include *force majeure*, contributory negligence, statutory authority and inherent vice. It is recommended that a statutory limit be placed on the amount for which the polluter can incur strict liability.

Our courts have already found in principle that the extension of the common-law principles as applied in terms of the doctrine of the abuse of rights in cases of nuisance, regarding claims based on the *actio de pauperie*, and statutory strict liability as introduced by the Genetically Modified Organisms Act[5] and the Consumer Protection Bill[6], for example, are of great value in view of developments within modern society.

The factual test for causation is tempered by the open-ended criterion of legal causation, which in this case, is also informed by the constitutional right to the environment.

[5] Act 15 of 1997.
[6] Consumer Protection Bill 3 [B 19B – 2008].

The apportionment of damages where there is contributory fault will depend on the application of the Apportionment of Damages Act[7] and the court's discretion based on the facts and circumstances of each case. Where there is multiple or cumulative causation, the court should as a general rule, attempt to determine the actual pollution-share liability when assessing damages.

As it is often difficult if not impossible to do, or where the identity of the actual polluter is unknown, the introduction of a statutory joint and several liability regime for all persons who could potentially be responsible for a polluting act or contribute to the pollution, a solution in conformity with the proposed product liability regime in the Consumer Protection Bill, is a viable option. Persons held jointly and severally liable have a right of recovery against each other for the amount in which their contribution exceeded their share in the pollution, provided they can prove their respective shares. Another possibility would be to apply a market-share allocation, or finally a proportional allocation as a last resort. Defences against this type of allocation include *force majeure*, contributory negligence, inherent vice and statutory authority.

The assessment and quantification of damage caused by pollution also prove to be problematic. Actionable damages should include various forms of 'property damage', namely a decrease in the property value, clean-up and remediation costs, compensation for loss of use and enjoyment of the property that includes a claim for damage to the aesthetics of the property, and stigma damages.

Because the Constitution creates a legal duty to act to prevent damage to the environment, which is required to claim for pure economic loss, it is possible to claim for these losses. Because the extent of damage caused by pollution often manifests only in future, it should be possible to claim for prospective losses, provided that the nature and extent of loss is determined at the time of claim. As the assessment of prospective damage will have to depend on a speculative process and because very little jurisprudence exists in this regard,

[7] Act 34 of 1956.

the courts will have to follow a pragmatic approach and base the award on a reasonable estimate.

Express statutory regulation of the types of damage that are actionable where environmental damage is concerned could provide plaintiffs with some relief. The proposed Consumer Protection Bill that allows for claims for 'economic loss' serves as an example.

Prescription starts from the time when the loss or damage manifests itself and the identity of the polluter is known. As three years is a relatively short period to gather information for a claim relating to environmental damage, a solution could be to extend the prescription period for specific claims for longer statutory periods. This is already the case in terms of prescription of liability claims within the nuclear industry.

Although most claims for environmental damage will be based on delictual liability, a claim could also be based on breach of contract or on *negotiorum gestio.* Insurance cover is provided for contractual liability only where the insurer and the insured reach an express agreement to that effect.

Although a delictual claim is seen as an effective form of law enforcement, it can be criticised for being a time-consuming and expensive process. What is clear, however, is that liability law should be maintained and optimized to accommodate new risks, as it is currently the most suitable vehicle for a civil damages claim. Alternative compensation mechanisms should not replace or substitute delictual liability, but should be developed and extended in synchronisation with other enforcement measures to present an efficient compensation regime. The legislature and the judiciary will hopefully develop these aspects to their fullest potential as they are confronted by new challenges in this regard.

8.5 INSURANCE MECHANISMS

Insurance cover for pollution damage can be provided as first-party insurance, in terms of a general policy such as a property or 'all risk' policy, or under a specific environmental insurance policy. The disadvantage is that the insured pays for indemnification, which is not in accordance with the polluter-pays principle.

Cover can be provided for the insured's liabilities towards third parties who are prejudiced by pollution damage where there is third-party insurance cover. A 'legal liability' that triggers insurance cover includes a statutory liability, civil liability, liability based on breach of contract and in terms of *negotiorum gestio*.

A third possibility is for cover in terms of first-party insurance to the benefit of a third party. This type of cover can be provided by the inclusion of extension clauses in first-party insurance policies, or by a specific first-party policy to the benefit of a third party. The EDI insurance in the Netherlands, and the EIL insurance in the USA serve as examples. Where this type of cover is provided it is important for the policy document to reflect the exact nature of the relationship between the insurer, the insured and the third party. Because of the current uncertainties regarding the construction of the *stipulatio alteri*, the time when the third party obtains his rights and the extent of the enforceability of these rights against the insurer and the insured, as well as the nature of the interests of the insured, must be stipulated clearly in the insurance contract.

It is proposed that operators within specific designated industries must obtain industry-specific minimum mandatory insurance cover, provided that the insurance market has the capacity and is willing to provide this type of cover. It appears as if the advantages of mandatory insurance exceed the disadvantages of its implementation. In order to ensure that payment reaches the prejudiced party, the insurance should ideally be structured as first-party insurance to the benefit of a third party, where the third-party is either an

environmental clean-up fund or any other person who is prejudiced by the environmental damage.

Another possibility would be to extend the right of a prejudiced party to claim directly from the insurer of the polluter, as is the position in the Netherlands and Belgium. The right of a third party to claim directly from the liability insurer of an insolvent insured in accordance with the Insolvency Act[8] could serve as an example for such a statutory extension in South Africa.

Due to the difficulties in obtaining sufficient information for a claim and in view of the fact that these periods are generally limited contractually, it might be prudent to investigate the possibility of extending the minimum prescription period for insurance claims that relate to environmental damage claims. This issue is addressed below.

8.6 UNIVERSAL ISSUES CONCERNING ENVIRONMENTAL INSURANCE POLICIES

Various theories exist that address the problematic issue concerning the moment when insurance coverage is triggered. Where a policy is based on an 'act committed' or 'occurrence based' trigger, the insurance policy in force at the time of the polluting occurrence provides cover. This causes long-tail liability for the insurer who can incur liability even after his insurance policy with the insured has lapsed. The modern tendency is to move away from this type of trigger. A policy can be based on a 'loss-occurrence' or 'manifestation' trigger. Cover is triggered irrespective of when the polluting occurrence occurred. This can also cause a long-tail liability for the insurer.

The third type of trigger is the 'claims-made' trigger, which is currently seen to be the most acceptable trigger for coverage. The policy in force at the time of the insurance claim is the policy that must provide cover. In order to avoid

[8] Act 24 of 1936.

infinite retroactive liability, most countries have standardised the trigger for environmental policies to a ‘claims-made’ trigger that is linked to fixed retroactive dates.

Where a policy is issued on a ‘claims-made and reported’ basis, the required notice of the claim by the insured can be interpreted in two ways. The construction is that the duty to notify prior to the institution of the claim is a suspensive duty that suspends the insurer’s duties until proper notice is given. The second is that it is a contractual duty and that the insurer’s obligations are not triggered unless the insured gives proper notice. The notice period is usually prescribed and must reflect a specific realistic time limit. It is submitted that policy wording that states that notice must be given ‘as soon as possible’, ‘within a reasonable time’ or ‘immediately’ should be prohibited. This issue of statutory regulation of policy wording is addressed below.

Many a claim has failed because an ambiguity or uncertainty regarding the wording of insurance policy documents. Because it is impossible to prevent the inclusion of exclusion and limitation clauses in insurance policies, stricter regulation within the insurance industry of prescribed policy wording and especially the prohibition of using misleading terminology such as ‘all risk’ and ‘comprehensive’ insurance, is required. This will avoid costly disputes on issues of interpretation, and will also provide increased consumer protection and legal certainty within an industry that is already heavily regulated. Where there is an increase in detailed specific statutory definitions as recommended above, the standardisation of the wording of insurance policies will only be viable if the prescribed wording runs parallel to the wording prescribed by statute. Terms such as ‘sudden and accidental’, ‘gradual’, ‘incident’ and ‘occurrence’, should be described by statute, where possible. Pro forma policy wording issued by the insurance industry could also provide guidance to prevent disputes that relate to matters concerning interpretation.

Exclusion and limitation clauses may not be contrary to public policy, which is informed by the constitutional right to the environment. A court may hold that clauses that infringe upon this right to such an extent that they do not serve

the public interest are invalid. Any time bar clause that denies a plaintiff his right of access to the courts in accordance with section 34 of the Constitution can be contrary to be public policy and invalid. Care must be taken where contractual exclusions and limitations are concerned, to maintain a balance between the interests of the insurer and his insurance business, and the interests of the insured.

The scope, assessment and quantification of 'damages' and 'compensation' in an environmental context proves challenging. Because it can never be an exact science, the award will be based on the court's reasonable guess or estimate based on the facts and circumstances of each specific situation. The most reliable measure for 'property loss' would be the depreciation in the market value of the property. Clean-up and restoration costs serve as the best measure for the assessment of natural resource damage. Although statutory intervention will allow for claims for pure economic loss, stigma damages, lost profits, prospective and sentimental losses, the exact quantification remains difficult and will depend on the court's discretion in each instance.

The goal should remain the effective indemnification of the loss caused by the pollution, but not at the cost of a profitable and viable insurance market.

8.7 THE POSITION IN OTHER COUNTRIES

The difficulty of holding polluters liable in terms of civil liability regimes is an international phenomenon. The EU Environmental Liability Directive that came into force in 2007 introduces a strict liability regime for natural resource damage caused by pollution. The regime applies only to persons involved in certain designated activities. It does not address liability for private property damage, personal injury or claims for pure economic loss or prospective loss. It also has no retroactive effect and provides no strict liability for past sins.

Most countries have over the past two decades introduced or increased the statutory liability for damage caused to the environment. Many statutes are of

a preventative nature and provide for criminal sanctions and enforcement measures. Very few provide for statutory civil damage claims. There has been a sharp increase in legislation that requires potential polluters to clean up, or that enable the government or other authorities to do so and to recoup the costs and expenses from the polluter. This is the position in the USA as implemented in terms of CERCLA by the introduction of the Superfund.

The civil liability systems in the UK, the Netherlands and in Belgium are similar to the South African system. Most struggle with the issues regarding wrongfulness, fault, causation and actionable damages referred to above. Although most forms of liability are fault-based, it is clear that there is an increase in the introduction of objective strict liability regimes. Nuisance appears to be the most common environmental tort. In situations of multiple or cumulative causation, liability is mostly allocated in accordance with a joint and several liability regime. In some countries the preferred allocation is in accordance with a pollution-share liability, market-share liability and even a simple proportionate allocation.

The Netherlands and Belgium allow the prejudiced party to claim directly from the polluter's liability insurer. Mandatory insurance is required to provide cover for environmental risks in specified industries in most countries. In some cases this requires first-party insurance to the benefit of a third party. The EDI in the Netherlands is a comprehensive policy that provides for integrated first-party and third-party insurance cover. The EIL in the USA provides cover for third-party bodily injury and property damage, clean-up costs and defence costs. These types of cover may offer a potential solution to the problems experienced in our country where there is a lack of insurance cover to provide compensation for damage caused by polluting incidents. The ERI in the USA is a special peril insurance that was developed in response to CERCLA for the remediation of the environment.

Most countries regulate their insurance industries by statute, and in some cases even policy provisions are prescribed by statute. Issues relating to the wording, scope and effect of pollution exclusion clauses appear to be

universal, and were dealt with above. The ‘act committed’ and ‘loss occurrence’ triggers are systematically being replaced with the more advantageous ‘claims-made’ trigger.

8.8 CONCLUDING REMARKS

As a developing society we are exploiting nature which leads to enormous utilization and waste of non-renewable energy sources, in the artificialisation of nature, and lastly in the deposit of toxic and mostly non-degradable pollutants in nature. The focus of current statutory development is on protection, on creating deterrents and on environmental restitution measures, rather than on the structure of civil compensation mechanisms. Strict statutory liability and mandatory clean-up and restoration, and the creative and pro-active use of civil liability and compliance mechanisms are required. Care must however be taken not to over-regulate, as it is expensive to manage and difficult and expensive to reinforce.

As environmental damage claims are so difficult to insure, specific environmental insurance policies are being developed to provide the necessary cover. These policies are, however, usually of a specialised nature, not readily available and expensive. As most potential polluters are unaware of the risks that their activities pose to the environment, and of the extent and magnitude of their potential liability and the lack of insurance cover that they enjoy under traditional policies, the issues addressed in this study will continue to affect many polluter and persons prejudiced by environmental damage in future.

Damage to our environment is being done at a great scale and somewhere in future someone will have to pay. The question remains in each case whether it will be the polluter, the prejudiced party or their respective insurers, or the community at large and future generations who will eventually carry the costs.

BIBLIOGRAPHY

1. BOOKS

Ball S & Bell S *Environmental Law: The Law and Policy relating to the Protection of the Environment* (1994) Blackstone Press (London)

Balthazar T (ed), Bocken H, Boone I, De Wulf H, De Poorter I, Eyskens T, Geers I, Judo F, Meese J, Traest P, Van Camp E, Van Gijseghem G & Van Oevelen A *Aansprakelijkheidsrecht* (2004) Maklu (Antwerpen-Apeldoorn)

Bell S & McGillivray D *Environmental Law* 6th ed (2006) Oxford University Press (Oxford)

Birnie PW & Boyle AE *International Law and the Environment* 2nd ed (2002) Oxford University Press (Oxford)

Blom A *Cousaliteit in het verzekeringsrecht* Serie Verzekeringsrecht (2006) Kluwer BV (Deventer)

Bocken H, Deloddere S & Ryckbost D *Interuniversitaire Commissie tot Herziening van het Milieurecht in het Vlaamse Gewest* (1995) Die Keure (Brugge)

Bocken H *Het aansprakelijkheidsrecht als sanctie tegen de verstoren van het leefmilieu* Proefschrift ingediend tot het bekomen van de graad van geaggrereerde voor het hoger onderwijs aan de Rijksuniversiteit Gent (1979)

Boone I "Conditio sine qua non, of mag het iets meer zijn?" in Balthazar T (ed), Bocken H, Boone I, De Wulf H, De Poorter I, Eyskens T, Geers I, Judo F, Meese J, Traest P, Van Camp E, Van Gijseghem G & Van Oevelen A *Aansprakelijkheidsrecht* (2004) Maklu (Antwerpen-Apeldoorn)

Bowman M & Boyle A *Environmental Damage in International and Comparative Law* (2005) Oxford University Press (Oxford)

Bratt P *Polluter Pays. A short guide to the Environmental Liability Directive* (2008) Hammonds (Elsevier B.V.)

Carrette A *Herstel van en vergoeding voor aantasting van niet-toegeeinde milieubestanddelen* (1997) Intersentia (Antwerpen)

Christie RH *The Law of Contract in South Africa* 5th ed (2006) Lexis Nexis Butterworths (Durban)

Church J & Church J "Nuisance" in Joubert WA (ed) *LAWSA* Vol 19 1st reissue (2002) Butterworths (Durban)

Claassen CJ *Dictionary of Legal Words and Phrases* (Vol 3 J-P) Service issue 5 October (2002) Butterworths (Durban)

Commité Maritime International *CMI Yearbook:Admissibility and Assessment of Claims for Pollution Damage* Part II (1993) Commité Maritime International (London)

Concise Oxford English Dictionary 2nd ed (1991) Oxford University Press (Oxford)

Corbett MM & Honey DP *The Quantum of Damages in Bodily or Fatal Injury Cases* (2001) Juta (Cape Town)

Cornelius SJ *Principles of the Interpretation of Contracts in South Africa* (2002) Lexis Nexis Butterworths (Durban)

Couch GJ *Couch on Insurance* 3rd ed (1995) Clark Boardman Callaghan (New York)

Couzy H & Claasens H *Natuurrampen en Verzekering* (1995) Maklu (Antwerpen-Apeldoorn)

Couzy H in Huybrechts (ed) *Marine Insurance at the Turn of the Millenium: The European Institute of Maritime and Transport Law* Vol 1 (1999) Intersentia (Antwerpen)

Cranor CF *Toxic Torts: Science, law and the possibility of justice* (2006) Cambridge University Press (Cambridge)

Davis DM, Cheadle MH & Haysom NRL *Fundamental Rights in the Constitution: Commentary and Cases* (1997) Juta & Co (Kenwyn); (reissue 2005) LexisNexis Butterworths (Durban)

De Groot H *Inleidinge tot de Hollandsche Rechtsgeleerdheid* (1767) Gillissen (Middelburg)

De Ketelaere K (ed) (and 39 other authors) *Handboek Milieu- en Energierecht* (2006) die keure (Brugge)

Deketelaere M, Schuyster F & Deketelaere K *Onderzoek naar de Opportuniteit en de Haalbaarheid van een Vernieuwd Vergoedingssysteem voor Milieuschade* (1998) published by the Instituut voor Milieu- en Energierecht Faculteit der Rechstgeleerdheid Katholieke Universiteit Leuven

Drion PJM (ed) *Serie Verzekeringsrecht* Kamphuizen JGC, Wansink JH en Lauwerier BKM *Het nieuwe verzekeringsrecht in titel 7.17 BW belicht* (2005) Kluwer (Dordrecht)

Du Bois F & Glazewski J "The environment and the Bill of Rights" in *The Bill of Rights Compendium* (1996) Butterworths (Durban)

Faure M (ed) *Tort and Insurance Law Vol 5: Deterrence, Insurability and Compensation in Environmental Liability: Future Developments in the European Union* (2003) Springer Verlag (Wien)

Faure M & Grimeaud D "Interdependancies Between Liability and Insurance" in in Faure M (ed) chap VIII *Tort and Insurance Law Vol 5: Deterrence, Insurability and Compensation in Environmental Liability: Future Developments in the European Union* (2003) Springer Verlag (Wien)

Faure M & Hartlief T "Aansprakelijkheid en verzekering voor nieuwe risico's" in Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003) Intersentia (Antwerpen)

Faure MG & Hu J (eds) *Prevention and Compensation for Marine Pollution Damage* (2006) Kluwer Law International (Alphen aan den Rijn)

Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003) Intersentia (Antwerpen)

Faure M & Skogh G *The Economic Analysis of Environmental Law and Policy* (2003) Edward Elgar (Cheltenham)

Fisher E, Jones J, & Von Schomberg R *Implementing the Precautionary Principle: Perspectives and Prospects* (2006) Edward Elgar (Cheltenham)

Fleming JG *The American Tort Process* (1988) Oxford University Press (Oxford)

Fogleman V *Environmental Liabilities and Insurance in England and the United States* (2005) Witherby's (London)

Fuggle RF & Rabie MA *Environmental Management in South Africa* (1999) Juta (Cape Town)

Garner BA (ed) *Black's Law Dictionary* 6th ed (1990) West Pub. Co (St. Paul)

Glazewski J *Environmental Law in South Africa* 2nd ed (2005) Butterworths (Durban)

Gourlay KA *World of Waste: Dilemmas of Industrial Development* (1992) Zed Books (London)

Gove PB (ed) *Webster's Third New International Dictionary of the English Language* (1961) Bell (London)

Harms LTC "Negotiorum Gestio" in Joubert WA (ed) Vol 19 *LAWSA* 1st reissue (2002) Butterworths (Durban)

Harpwood V *Modern Tort Law* 6th ed (2005) Cavendish (London)

Havenga P "Nuwe risiko's in Suid-Afrika: Versekering en alternatiewe vergoedingsmeganismes as antwoord daarop" in Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003) Intersentia (Antwerpen)

Henderson PGW *Environmental Laws of South Africa* Vol 1 (1999) Juta (Kenwyn)

Hoffmann LH & Zeffertt DT *The South African Law of Evidence* 4th ed (1988) Butterworths (Durban)

Holdgate MW *A Perspective of Environmental Pollution* (1997) Cambridge University Press (Cambridge)

Honoré AM "Causation and Remoteness of Damage" in Tunc A (ed) *International Encyclopedia of Comparative Law* Part I vol 7 (1983) Martinus Nijhoff Publishers (Leiden)

Hui W in Faure MG & Hu J (eds) *Prevention and Compensation for Marine Pollution Damage* (2006) Kluwer Law International (Alphen aan den Rijn)

Huybrechts MA & Van Dunne KN in Faure MG & Hu J (eds) *Prevention and Compensation for Marine Pollution Damage* (2006) Kluwer Law International (Alphen aan den Rijn)

Huybrechts MA, Van Hooydonk E, & Dieryck C *Marine Insurance at the turn of the Millenium: The European Institute of Maritime and Transport Law* Vol I (1999) Intersentia (Antwerpen)

Jans JH *European Environmental Law* 2nd ed (2000) Europa Law Publishing (Groningen)

Kalis PJ, Reiter TM & Segerdahl JR *Policyholder's Guide to the Law of Insurance Coverage* Part 2 (2004) Aspen Publishers (New York)

Kamphuizen JGC, Wansink JH & Lauwerier BKM *Het nieuwe verzekeringsrecht in titel 7.17 BW belicht* in Drion PJM (ed) *Serie Verzekeringsrecht* (2005) Kluwer (Dordrecht)

Kidd M *Environmental Law, A South African Guide* (2008) Juta & Co (Cape Town)

Klaaren J & Penfold G on "The Right of Access to Information" in Woolman S (ed) *Constitutional Law of South Africa* Chap 62 2nd ed (2006) Juta & Co (Kenwyn)

Kramer L *EC Environmental Law* 2007 Sweet & Maxwell (London)

Larsson M *The Law of Environmental Damage: Liability and Reparation* (1999) Kluwer Law International (Boston)

Liebenberg S in Davis, Cheadle & Haysom *Fundamental Rights in the Constitution: Commentary and Cases* (1997) Juta & Co (Kenwyn)

Madden MS & Boston GW *Law of Environmental and Toxic Torts: Cases, material and problems* 3rd ed (2005) Thomson/West (St Paul)

McGee A *The Modern Law of Insurance* 2nd ed (2006) Butterworths (London)

Merkin RM *Colinvaux's Law of Insurance* 8th ed (2006) Sweet & Maxwell (London)

Merkin RM *Marine Insurance Legislation* 3rd ed (2005) LLP (London)

Neethling J, Potgieter JM & Visser PJ *Law of Delict* 5th ed (2006) LexisNexis Butterworths (Durban)

Nieuwenhuis JH, Stolker CJJM & Valk WJ (eds) *Vermogensrecht Tekst & Commentaar* (1999) Kluwer (Deventer)

Pearsall J (ed) *The Concise Oxford Dictionary* 10th ed (1999) Oxford University Press (Oxford)

Rajamani L *Differential Treatment in International Environmental Law* (2006) Oxford University Press (Oxford)

Reinecke MFB, Van der Merwe S, Van Niekerk JP & Havenga P *General Principles of Insurance Law* (2002) LexisNexis Butterworths (Durban)

Robb CAR (ed) *International Environmental Law Reports* Vol 3 (2001) Cambridge University Press (Cambridge)

Sands Ph *Principles of International Environmental Law* 2nd ed (2003) Cambridge University Press (Cambridge)

Shaw MN *International Law* 5th ed (2003) Cambridge University Press (Cambridge)

Sieburgh CH *Toerekening van een onrechtmatige daad* (2000) Kluwer (Deventer)

Spier J "Apocalyptische scenarios, De prijs van de onzekerheid na de aanslagen in the Verenigde Staten op 11 September 2001 en de daarop volgende economische ellende" in Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectieven* (2003) Intersentia (Antwerpen)

Stewart RB in Van Dunne JM (ed) *Transboundary Pollution and Liability: The Case of the River Rhine (Conference proceedings of the International Conference held at Rotterdam 19 October 1990* Instituut Milieuschade Erasmus Universiteit Rotterdam (1991) Vermande (Lelystad)

Ten Kate J, Kottenhagen RJP, van Mierlo AIM, Wansink JH (eds) *Miscellanea Jurisconsulto vero dedicata, Essays offered to Prof.Mr. J.M.van Dunne* (1997) Kluwer (Deventer)

Tladi D *Sustainable Development in International Law: An analysis of key enviro-economic instruments* (2007) Pretoria University Law Press (Pretoria)

Urdang L (ed) *The Oxford Thesaurus* (1991) Oxford University Press (Oxford)

Van Aswegen A *Die Sameloop van Eise om Skadevergoeding uit Kontrakbreuk en Delik* LLD Thesis University of South Africa (1991) (Pretoria)

Van Daele G *Milieurisico's goed verzekerd* (2001) Standaard Uitgeverij (Antwerpen)

Van der Linde M & Basson E on "The Right to the Environment" in Woolman S (ed) *Constitutional Law of South Africa* Chap 50 2nd ed (2006) Juta (Kenwyn)

Van der Merwe S, Van Huyssteen LF, Reinecke MFB & Lubbe GF *Contract General Principles* 3rd ed (2007) Juta (Lansdowne)

Van der Walt JC & Midgley JR *Principles of Delict* 3rd ed (2005) LexisNexis Butterworths (Durban)

Van der Walt JC & Midgley JR *Principles of Delict* 2nd ed (1997) Butterworths (Durban)

Van der Walt JC *Risiko-aanspreeklikheid uit Onregmatige Daad* LLD Thesis University of South Africa (1974) (Pretoria)

Van Dunne JM (ed), Klinge-van Rooy I, Snijder EEI, & Van AJ *Transboundary Pollution and Liability: The Case of the River Rhine (Conference Proceedings of the International Conference held at Rotterdam on 19 October 1990*) Instituut Milieuschade Erasmus Universiteit Rotterdam (1991) Vermande (Lelystad)

Van Niekerk JP *The Development of The Principles of Insurance Law in the Netherlands from 1500 – 1800* Vol 1 (1998) Juta & Co (Kenwyn)

Visser PJ, Potgieter JM, Steynberg I & Floyd TB *The Law of Damages* 2nd ed (2003) Juta & Co (Kenwyn)

Voet J *Commentarius ad Pandectas* (1707) Apud Abrahamum de Hondt Hagae-Comitum (Den Haag)

Wansink JH *De algemene aansprakelijkheidsverzekering* 3rd ed (2006) Serie Verzekeringsrecht Kluwer (Deventer)

Wansink JH *Het nieuwe schadeverzekeringsrecht en Oude olielampjes en dwaallichtjes* Oratie van 28 maart 2006 bij de aanvaarding van het ambt van bijzonder hoogleraar op het gebied van het verzekeringsrecht aan de Universiteit van Leiden (Universiteit Leiden)

Wansink JH "Hoe plotseling en onzeker is de verzekeringsdekking voor milieuaansprakelijkheidsrisico's?" in Ten Kate *et al* (eds) *Miscellanea Jurisconsulto vero dedicata, Essays offered to Prof.Mr. J.M.van Dunne* (1997) Kluwer (Deventer)

Wansink JH (ed) *Milieu en Bedrijf: preventie, aansprakelijkheid en verzekering* (1992) Academic Service (Schoonhoven)

Weale A *The New Politics of Pollution* (1992) Manchester University Press (Manchester)

Woolman S (ed) *Constitutional Law of South Africa* 2nd ed (2006) Juta (Kenwyn)

2. STATUTES

2.1 National

Animals Protection Act 71 of 1982

Apportionment of Damages Act 34 of 1956

Assessment of Damages Act 9 1969

Close Corporations Act 69 of 1984

Companies Act 61 of 1973

Compensation for Occupational Injuries and Diseases Act 130 of 1993

Conservation of Agricultural Resources Act 43 of 1983

Constitution of the Republic of South Africa 1996

Development Facilitation Act 67 of 1995

Dumping at Sea Control Act 73 of 1980

Electricity Act 41 of 1987

Environment Conservation Act 73 of 1989

Fertilizers, Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947

Game Theft Act 105 of 1991

Gauteng Consumer Affairs (Unfair Business Practices) Act 7 of 1996

Genetically Modified Organisms Act 15 of 1997

Genetically Modified Organisms Amendment Act 23 of 2006

Hazardous Substances Act 15 of 1973

Insolvency Act 24 of 1936

Interim Constitution of the Republic of South Africa Act 200 of 1993

Legal Proceedings against certain Organs of the State Act 40 of 2002

Marine Pollution (Control and Civil Liability) Act 6 of 1981

Marine Pollution (Intervention) Act 64 of 1987

Marine Pollution (Prevention of Pollution from Ships) Act 2 of 1986

Maritime Zones Act 15 of 1994

Mineral and Petroleum Resources Act 28 of 2002

Mine Health and Safety Act 29 of 1996

Mines and Works Act 27 of 1956

National Credit Act 34 of 2005

National Environmental Management Act 107 of 1998

National Environmental Management: Air Quality Act 39 of 2004

National Environmental Management Amendment Act 46 of 2003

National Forests Act 84 of 1998

National Heritage Resources Act 25 of 1999

National Nuclear Regulator Act 47 of 1999

National Parks Act 57 of 1976

National Veld Fire Act 101 of 1998

National Water Act 36 of 1998

Nuclear Energy Act 92 of 1982

Nuclear Energy Act 46 of 1999

Prescription Act 68 of 1969

Promotion of Access to Information Act 2 of 2000

Promotion of Administrative Justice Act 3 of 2000

Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000

Road Accidents Fund Act 56 of 1996

Road Traffic Act 29 of 1989

Sea Birds and Seals Protection Act 46 of 1973

Short-term Insurance Act 53 of 1998

Water Act 54 of 1956

Wreck and Salvage Act 94 of 1996

2.2 National Bills

Consumer Protection Bill 3 [B 19B – 2008]

Merchant Shipping (International Oil Pollution Compensation Fund) Bill 2005

National Environmental Management Amendment Bill 29 of 2003

National Environment Laws Amendment Bill 2007

Waste Management Bill 1832 of 2007

2.3 Government Gazettes

Government Gazette No 29487 (12 January 2007) Waste Management Bill as enacted in GN 1832/2007

Government Gazette No 26942 (29 October 2004) Regulations to the Mineral and Petroleum Resources Development Act enacted in RGN 527/26275/3 (23 April 2004)

Government Gazette No 24839 (9 May 2003) Schedule on Plastic Carrier Bags and Plastic Flat Bags as enacted in GN R625

Government Gazette No 15987 (30 September 1994) The Policy in terms of ECA on Hazardous Waste Management as enacted in GN 1064

Government Gazette No 15428 (21 January 1994) General Policy in accordance with ECTA as enacted in GN 51

Government Gazette No 13717 (10 January 1992) Regulations issued in terms of section 25 of ECA regarding Noise Control as enacted in GN R154

2.4 International

2.4.1 Australia

Australian Environment Protection Act for Tasmania of 1973

Australian Trade Practices Act 1974

Local Government (Planning and Environment) Act for Queensland 1990

The (Australian) Commonwealth Environment Protection (Impact of Proposals) Act 1974

2.4.2 Belgium

Afvalstoffendecreet van 22 juli 2004

Belgian Burgerlijk Wetboek

Begiese Voorontwerp Decreet Milieubeleid (Draft Decree on Environmental Policy by Interuniversity Commission published by the Office for Official Publications of the European Communities http://www.europa.eu.int)

Bodemsaneringsdecreet van 22 februari 1995

Grondwaterherwinning wet van 10 januari 1977

Koninklijke Besluit op Mijnconcessies 13 september 1919

Marine wet van 20 januari 1999

Wet op landesverzekeringsovereenkomst 25 juni 1992

Wet van 12 april 1965 op vervoer van gasachtige stoffen

Wet van 18 juli 1975 op de exploiteren van ondergrondse bergruimten bestemd voor opslaan van gas
Wet van 22 juli 1974 op transport van gevaarlijk of giftig afval

2.4.3 EU Directives and Resolutions

Environmental Liability Directive 2004/35 CE [2004] O.J. L143/56

European Community Council Directive on Unfair Terms in Consumer Contracts 1993

European Council Regulations for EU members 44/2001 OJL 12

European Council Resolution on the Declaration on the Environment1990 *Bulletin of the European Communities* par 1.36.

White Paper on Environmental Liability COM(2000) 66 Final, Brussels 9 February 2000

2.4.4 Finland

Finnish Environmental Damage and Compensation Act 1994

2.4.5 Germany

German Civil Code

German Environmental Liability Act 1990

2.4.6 New Zealand

Contractual Remedies Act 1979 of New Zealand

2.4.7 Norway

Norwegian Pollution Control Act 1981

2.4.8 The Netherlands

Besluit financiele zekerheid milieubeheer van 8 Februari 2003

Grondwet voor het Koninkrijk der Nederlanden van 24 augustus 1815

Mededingingswet van 1 januari 1998

Stortbesluit bodembescherming van 1993

Wet bodembescherming van 1986

Wet inzake de luchtverontreiniging van 1976

Wet milieubeheer van 1992

Wet milieugevaarlijke stoffen van 1997

2.4.9 United Kingdom

Arbitration Act 1996

Civil Evidence Act 1968

Civil Liability (Contribution) Act 1978

Clean Air Act 1968

Employer's Liability (Compulsory Insurance) Act 1969

Environmental Protection Act 1990

Environment Act 1995

Financial Services and Markets Act 2000

Human Rights Act 1998

Merchant Shipping Act 1995

Merchant Shipping (Oil Pollution) Act 1971

Occupiers Liability Act (for visitors) 1957

Occupiers Liability Act 1984 (for non-visitors)

Rivers Pollution Prevention Act 1876.

Third Parties (Rights Against Insurers) Act 1930

Unfair Contract Terms Act 1977

Unfair Terms in Consumer Contracts Regulations 1999

Water Act 1981

Water Act 1989

Water Industry Act 1991

Wildlife and Countryside Act 1981

2.4.10 United States of America

Clean Air Act 42 U.S.C. §§ 7401 *et seq*

Clean Water Act 33 U.S.C §§ 1251 *et seq*

Comprehensive Environmental Response, Compensation and Liability Act of 1980 42 U.S.C §§ 9601 *et seq*

Federal Environmental Regulations

Federal Rules of Civil Procedure

Fisherman's Contingency Fund 43 U.S.C §§1841 *et seq*

Governor's Memorandum on Approval of Chs 765, 766, NY Laws (June 25 1971)

McCarran-Ferguson Act 15 U.S.C. §§ 1011 *et seq*

National Environmental Policy Act of 1970 42 U.S.C §§ 4321 *et seq*

Oil Pollution Act of 1990 33 U.S.C §§ 2701 *et seq*

Outer Continental Shelf Lands Act of 1976 43 U.S.C §§ 1311 *et seq*

Resource Conservation and Recovery Act 42 U.S.C §§ 6901 *et seq*

Restatement (Second) of the Law of Conflict of Laws of 1971

Restatement (Second) of Contracts of 1981

Restatement of the Law of Conflict of Laws of 1943

Restatement (Second) of Torts of 1976

Rivers and Harbours Act of 1899

Superfund Amendments and Reauthorisation Act of 1986

Toxic Substances Control Act of 1976 15 U.S.C. §§ 2601 *et seq*

Unfair Contract Terms Act of 1977

3. CASE LAW

3.1 National

Administrateur, Natal v Trust Bank van Afrika Beperk 1979 3 SA 824 (A)

Administrateur, Transvaal v Van der Merwe 1994 4 SA 347 (A)

Affordable Medicines Trust and others v Minister of Health 2006 3 SA 247 (CC)

Afrox Healthcare Bpk v Strydom 2002 6 SA 21 (SCA)

Allaclas Investments (Pty) Ltd and another v Milnerton Golf Club and others 2008 3 SA 134 (SCA)

Allianz Insurance Ltd v RHI Refractories Africa (Pty) Ltd 2008 3 SA 425 (SCA)

Aruba Construction (Pty) Ltd v Aruba Holdings (Pty) Ltd 2003 2 SA 155 (C)

Auto Protection Insurance Co Ltd v Hanmer-Strudwick 1964 1 SA 349 (A)

Bafana Finance Mabopane v Makwakwa and Another 2006 4 SA 581 (SCA)

Baldric Farms (Pty) Ltd v Wessels 1994 3 SA 425 (A)

Bareki NO and another v Gencor Ltd and others 2006 1 SA 432 (T)

Barkhuizen v Napier 2007 5 SA 323 (CC)

Blackshaws (Pty) Ltd v Constantia Insurance Co Ltd 1989 3 SA 478 (C)

Burger v Union National South British Insurance Company 1975 4 SA 72 (W)

Breede River (Robertson) Irrigation Board v Brink 1936 AD 359

Brisley v Drotsky 2002 4 SA 1 (SCA)

Burger v Union National South British Insurance Company 1975 4 SA 72 (W)

C v Minister of Correctional Services 1996 4 SA 292 (T)

Cape Group Construction (Pty) Ltd t/a Forbes Waterproofing v Government of the United Kingdom 2003 5 SA 180 (SCA)

Cape Town Council v Benning 1917 AD 315

Cape Metropolitan Council v Metro Inspection Services 2001 3 SA 1013 (SCA)

Cape Town Municipality v Bakkerud 2000 3 SA 1049 (SCA)

Carmichele v Minister of Safety and Security 2001 4 SA 938 (CC)

Ciba-Geigy (Pty) Ltd v Lushof Farms (Pty) Ltd 2002 2 SA 447 (SCA)

Coetzee v Attorney's Indemnity Fund 2003 1 SA 1 (SCA)

Coetzee v SAR&H 1933 CPD 565

Colman v Dunbar 1933 AD 141

Croce v Croce 1940 TPD 251

Crookes v Watson 1956 1 SA 277 (A)

Crown Chickens (Pty) Ltd t/a Rocklands Poultry v Rieck 2007 2 SA 118 (SCA)

Da Silva v Coutinho 1971 3 SA 123 (A)

Daniël Mostert v Cape Town City Council 2001 1 SA 105 (SCA)

Dantex Investment Holdings (Pty) Ltd v Brenner 1989 1 SA 390 (A)

De Jongh v Du Pisanie 2005 5 SA 457 (SCA)

De Klerk v ABSA and others 2003 4 SA 315 (SCA)

De Klerk and another v Du Plessis and others 1994 6 BCLR 124 (T)

Deysel v Truter and another 2005 5 SA 598 (C)

Dikoko v Mokhatla 2006 6 SA 235 (CC)

Dippenaar v Shield Insurance Co Ltd 1979 2 SA 904 (A)

Director: Mineral Development Gauteng Region and Sasol Mining (Pty) Ltd v Save the Vaal Environment 1999 2 SA 709 (SCA)

Dorland v Smits 2002 5 SA 374 (C)

Drifters Adventure Tours CC v Hircock 2007 2 SA 83 (SCA)

Durban's Water Wonderland (Pty) Ltd v Botha 1999 1 SA 982 (SCA)

Eagle Star Insurance C Ltd v Willey 1956 1 SA 330 (A)

Earthlife Africa (Cape Town) v Director-General: Department of Environmental Affairs and Tourism 2005 3 SA 156 (C)

East London Western Districts Farmer's Association v Minister of Education and Development Aid 1989 2 SA 63 (A)

Evins v Shield Insurance Co Ltd 1980 2 SA 814 (A)

Ex parte Die Minister van Justisie: In re S v Van Wyk 1967 1 SA 488 (A)
Fedgen Insurance Ltd v Leyds 1995 3 SA 33 (A)

Ferreira v Levin NO & Others 1996 1 SA 984 (CC)

First National Bank of SA Ltd v Rosenblum 2001 4 SA 189 (SCA)

First National Bank of South Africa Ltd v Duvenage 2006 5 SA 319 (SCA)

Flax v Murphy 1991 4 SA 58 (W)

Fose v Minister of Safety and Security 1997 3 SA 786 (CC)

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

General Accident Insurance Co SA Ltd v Summers; Southern Versekeringsassosiasie Bpk v Carstens NO; General Accident Insurance Co SA Ltd v Nhlumayo 1987 3 SA 577 (A)

Gien v Gien 1979 2 SA 1113 (T)

Govender v Minister of Safety and Security 2001 4 SA 273 (SCA)

Government of the Republic of South Africa (Department of Industries) v Fibre Spinners & Weavers (Pty) Ltd 1978 2 SA 794 (A)

Harrington NO and another v Transnet Ltd and others 2007 2 SA 228 (C)

Herschel v Mrupe 1954 3 SA 464 (A)

Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products and others 2004 2 SA 393 (EC)

HL & H Timber Products (Pty) Ltd v Sappi Manufacturing (Pty) Ltd 2001 4 SA 814 (SCA)

Horwowitz v Brock 1988 2 SA 160 (A)

Incorporated General Insurances Ltd v Shooter t/a Shooter's Fisheries 1987 1 SA 842 (A)

International Shipping Co (Pty) Ltd v Bentley 1990 1 SA 680 (A)

ISEP Structural Engineering & Plating (Pty) Ltd v Inland Exploration Co (Pty) Ltd 1981 4 SA 1 (A)

Joel Melamed & Hurwitz v Cleveland Estates (Pty) Lt; Joel Melamed & Hurwitz v Vorner Investments (Pty) Ltd 1984 3 SA 155 (A)

Johannesburg City Council v Television & Electrical Distributors 1997 1 SA 157 (A)

Johannesburg Country Club v Stott 2004 5 SA 511 (SCA)

Johannesburg Municipality v African Realty Trust 1927 AD 163

Jones NO v Santam Bpk 1965 2 SA 542 (A)

Joubert v Impala Platinum Ltd 1998 1 SA 463 (B)

Joubert v Santam Versekeringsmaatskappy Bpk 1978 3 SA 328 (T)

Jowell v Bramwell-Jones 2000 3 SA 274 (SCA)

Kantey & Templer (Pty) Ltd and Another v Van Zyl NO 2007 1 SA 610 (C)

Knop v Johannesburg City Council 1995 2 SA 1 (A)

Kgaleng v Minister of Safety and Security 2001 4 SA 854 (W)

Kruger v Coetzee 1966 2 SA 428 (A)

Lake v Reinsurance Corporation Ltd 1967 3 SA 124 (W)

Lampert v Heever 1955 2 SA 507 (A)

Lascon Properties (Pty) Ltd v Wadeville Investment Co (Pty) Ltd 1997 4 SA 578 (W)

Laskey and Another v Showzone CC and Others 2007 2 SA 48 (C)

LF Boshoff Investments (Pty) Ltd v Cape Town Municipality 1969 2 SA 256 (C)

Liberty Life Association of Africa Ltd v De Waal 1999 4 SA 1177 (SCA)

Lomagundi Sheetmetal and Engineering (Pvt) Ltd v Basson 1973 4 SA 523 (RA)

Loriza Brahman v Dippenaar 2002 2 SA 477 (SCA) 485

Lourens v Colonial Mutual Life Assurance Society Ltd 1986 3 SA 373 (A)

Lubbe & Four Others v Cape Plc and related appeals 27-7-2000 (House of Lords)

Malahe v Minister of Safety and Security 1999 1 SA 528 (SCA)

McCollogh v Fernwood Estate Ltd 1920 AD 204
MEC: Department of Agriculture, Conservation and the Environment Dr ST Cornelius v HTF Developers (Pty) Ltd Case nr CCT 32/07 [2007] ZACC 25

MEC Department of Welfare, Eastern Cape v Kate 2006 4 SA 478 (SCA)

Minister of Community Development v Koch 1991 3 SA 751 (A)

Minister of Finance and others v Gore NO 2007 1 SA 111 (SCA)

Minister of Forestry v Quathlamba (Pty) Ltd 1973 3 SA 69 (A)

Minister of Health and Welfare v Woodcarb (Pty) Ltd and another 1996 3 SA 155 (N)

Minister of Law andOrder v Kadir 1995 1 SA 303 (A)

Minister of Police v Skosana 1977 1 SA 31 (A)

Minister of Safety and Serurity v Carmichele 2004 3 SA 305 (SCA)

Minister of Safety and Security and another v Rudman and another 2005 2 SA 16 (SCA)

Minister of Safety and Security v Van Duivenboden 2002 6 SA 431 (SCA)

Minister of Water Affairs and Forestry v Stilfontein Gold Mining Co and others 2006 5 SA 333 (W)

Minister van Polisie v Ewels 1975 3 SA 590 (A)

Moeketsi v Minister van Justisie 1988 4 SA 707 (T)

Mohlomi v Minister of Defence 1997 1 SA 124 (CC)

Montsisi v Minister van Polisie 1984 1 SA 619 (A)

Mukheiber v Raath 1999 3 SA 1065 (SCA)

Mutual & Federal Insurance v Oudtshoorn Municipality 1985 1 SA 419 (A)

Mutual Life Insurance Co v Hotz 1911 AD 556

MV Stella Tingas Transnet Ltd t/a Portnet v Owners of the MV Stella Tingas 2003 2 SA 473 (SCA)

Myburgh Park Langebaan (Pty) Ltd v Langebaan Municipality and others 2001 4 SA 1144 (C)

Nafte v Atlas Assurance Co Ltd 1924 WLD 239

Napier v Collett 1995 3 SA 140 (A)

National Coalition for Gay and Lesbian Equality & Others v Minister of Home Affairs & Others 2000 2 SA 1 (CC)

National Director of Public Prosecutions and Another v Mahomed NO and Others 2003 4 SA 1 (CC)

Netherlands Insurance Co of SA Ltd v Van der Vyfer 1968 1 SA 412 (A)

Ngcobo v Santam Insurance Co Ltd 1994 2 SA 478 (T)

Ntsomi v Minister of Law and Order 1990 1 SA 512 (C)

O'Callaghan v Chaplin 1927 AD 310

Ocean Accident and Guarantee Corporation Ltd v Koch 1963 4 SA 147 (A)

OK Bazaars (1929) Ltd v Standard Bank of South Africa Ltd 2002 3 SA 688 (SCA)

Olitzki Property Holdings v State Tender Board and another 2001 3 SA 1247 (SCA)

Oosthuizen v Homegas (Pty) Ltd 1992 3 SA 463 (O)

Oslo Land Co Ltd v Union Government 1938 AD 584

Paola v Jeeva NO and Others 2004 1 SA 396 (SCA); 2003 4 All SA 433 (SCA)

Patz v Greene and Co 1907 TS 427

Permanent Secretary, Department of Welfare Eastern Cape and another v Ngxuza and others 2001 4 SA 1184 (SCA)

Petroprops (Pty) Ltd v Barlow and another 2006 5 SA 160 (W)

PGB Boerdery Beleggings (Edms) Bpk and another v Somerville 62 (Edms) Bpk and another 2008 2 SA 428 (SCA)

Pieterse v Shrosbee NO 2005 1 SA 309 (SCA)

Pitt v Economic Insurance Co Ltd 1957 3 SA 284 (D)

Premier Province of Mpumalanga and Another v Executive Committee of the Association of Governing Bodies of State-Aided Schools: Eastern Transvaal 1999 2 BCLR 151 (CC)

Premier Western Cape v Faircape Property Developers (Pty) Ltd 2003 6 SA 13 (SCA)

President Insurance Co Ltd v Mathews 1992 1 SA 1(A)

President of the Republic of South Africa v Modderklip Boerdery (Pty) Ltd (Agri SA and others *amici curiae*) 2005 5 SA 3 (CC)

Protea Insurance Co Ltd v Lamb 1971 1 SA 530 (A)

Rail Commuters Action Group and Others v Transnet Ltd and Others 2006 6 SA 68 (C)

Raubenheimer NO v Trustees, Johannes Bredenkamp Trust and Others 2006 1 SA 124 (C)

Reddy v Siemens Telecommunications 2007 2 SA 486 (SCA)

Regal v African Superslate 1963 1 SA 102 (A)

Rudman v Road Accident Fund 2003 2 SA 234 (SCA)

Russell & Loveday v Collins Submarine Pipelines Africa (Pty) Ltd 1975 1 SA 110 (A)

S v Adams, S v Werner 1981 1 SA 187 (A)

S v Basson 2007 3 SA 582 (CC)

S v Beukes 1988 1 SA 511 (A)

S v Goliath 1972 3 SA 1 (A)

S v Goosen 1989 4 SA 1013 (A)

S v Mokgeti 1990 1 SA 32 (A)

S v Verlander 1975 2 SA 376 (RA)

SA Eagle Insurance Co Ltd v Hartley 1990 4 SA 833 (A)

Santam Insurance Co Ltd v Vorster 1973 4 SA 764 (A)

SAR&H v Edwards 1930 AD 3

SAR&H v Estate Saunders 1931 AD 276

Sasfin(Pty) Ltd v Beukes1989 1 SA 1 (A)

Schierhout v Minister of Justice 1925 AD 417
SDR Investment Holdings Co (Pty) Ltd, Springgrove Cellar (Pty) Ltd, Zorgvliet Farms & Estates (Pty) Ltd v Nedcor Bank Ltd, Honey & Partners 2007 4 SA 190 (C)

Sea Harvest Corporation (Pty) Ltd and another v Duncan Dock Cold Storage (Pty) Ltd and another 2000 1 SA 827 (A)

Sentrachem Bpk v Wenhold 1995 4 SA 312 (A)

Setlogelo v Setlogelo 1914 AD 221

Sibiya & Others v DPP: Johannesburg High Court & Others 2005 5 SA 315 (CC)

Smit v Abrahams 1994 4 SA 1 (A)

South African Forestry Co Ltd v York Timbers Ltd 2005 3 SA 323 (SCA)

Standard Bank v of South Africa Ltd v Coetsee 1981 1 SA 1131 (A)

Standard Chartered Bank of Canada v Nedperm Bank Ltd 1994 4 SA 747 (A)

Steenberg v De Kaap Timber (Pty) Ltd 1992 2 SA 169 (A)

Steenkamp NO v Provincial Tender Board 2006 3 SA 151 (SCA)

Steenkamp NO v The Provincial Tender Board, Eastern Cape 2007 3 121 (CC)

Telematrix (Pty) Ltd t/a Matrix Vehicle Tracking v Advertising Standards Authority 2006 1 SA 461 (SCA)

Thormahlen v Gouws 1956 4 SA 430 (A)

Transnet Ltd v Sechaba Photoscan (Pty) Ltd 2005 1 SA 299 (SCA)

Truck and General Insurance Co Ltd and another v Verulam Fuel Distributors CC and another 2007 2 SA 26 (SCA)

Trust Bank van Afrika Bpk v Eksteen 1964 3 SA 402 (A)

Trustees Two Oceans Aquarium Trust v Kantey & Templer (Pty) Ltd 2006 3 SA 138 (SCA)

Union Government (Minister of Railways and Harbours) v Marais 1920 AD 240

Union Government (Minister of Railways and Harbours) v Matthee 1917 AD 688

Unitas Hospital v Van Wyk and another 2006 4 SA 436 (SCA)

Universiteit van Pretoria v Tommie Meyer Films 1977 4 SA 376 (T)

Van der Eecken v Salvation Army Prop Co and another 2008 4 SA 28 (T)

Van der Westhuizen v Arnold 2002 6 SA 453 (SCA)

Van Eeden v Minister of Safety and Security 2003 1 SA 389 (SCA)

Van Immerzeel and another v Santam Ltd 2006 3 SA 349 (SCA)

Van Rensburg and another NNO v Nelson Mandela Metropolitan Municipality and others 2008 2 SA 8 (SE)

Van Schalkwyk v Van der Wath 1963 3 SA 636 (A)

Van Zyl v Kotze 1961 4 SA 214 (T)

Verulam Fuel Distributors CC v Truck and General Insurance Co Ltd and another 2005 1 SA 70 (W)

Viljoen v Smith 1997 1 SA 301 (A)

Vryenhoek and Others v Powell NO and Others 1996 1 SA 984 (CC)

Walker v Redhouse 2007 3 SA 514 (SCA)

Wassung v Simmons 1980 4 SA 753 (N)

Weber v Santam Versekeringsmaatskappy 1983 1 SA 381 (A)

Wells v South African Aluminite Co 1927 AD 69

Wessels NO v De Jager en ‘n ander NNO 2000 4 SA 924 (SCA)

Wildlife Society of Southern Africa and others v Minister of Environmental Affairs and Tourism of RSA and others 1996 (3) SA 1095 (T)

Wright v Mediclinic Ltd 2007 4 SA 327 (C)

3.2 International

3.2.1 United Kingdom

AB and others v South West Water Services Limited [1993] 2 WLR 507

Allen v Gulf Oil Refining Ltd [1981] 1 AC 1001

Allen and Others v British Rail Engineering Ltd and Another [2001] EWCA Civ 242

Allied Maples Group Ltd v Simmons & Simmons [1995] 1 WLR 1602 (CA)

Alphacell Ltd v Woodward [1972] AC 824

Attorney-General v PYA Quarries Ltd [1957] 2 QB 169 191

Australia and New Zealand Bank v Colonial Warehouses [1960] 2 Lloyd's Rep241 (QBD)

Bartoline Limited v Royal & Sun Alliance Plc and another [2007] 1 All ER (Comm) 1043

Bliss v Hall [1838] 4 Bing NC 183

Cambridge Water Company Ltd v Eastern Countries Leather plc [1994] 2 AC 264

Charter Reinsurance Company Ltd v Fagan [1997] AC 313

Chester v Afshar [2004] UKHL 41

Dennis v Ministry of Defence [2003] Env LR 34

Department for the Environment, Food & Rural Affairs v Feakins [2004] EWHC 2785 (Ch)

Donoghue v Stevenson [1932] AC 562

Empress Car Ltd (Abertillery) v National Rivers Authority (HL) 05/02/1998

Fairchild v Glenhaven Funeral Services Ltd [2003] 1 AC 32

Hall Brothers Steamship Company Ltd v Young [1939] 1 KB 748 (CA)

Hawley v Luminar Leisure plc [2005] Lloyds Rep IR 275

Holtby v Brigham & Cowan (Hull) Ltd [2000] 3 All ER 421 (CA)

IFP&C Insurance Ltd v Silversea Cruises Ltd [2004] Lloyd's Rep IR 217

Jan de Nul (UK) Ltd v NV Royale Belge [2000] 2 Lloyd's Rep 700

Kelly v Norwich Union Fire Insurance Ltd [1990] 1 WLR 139

King v Brandywine Reinsurance Company (UK) Ltd [2004] 2 All ER(Comm) 443

K/S Merc Skandia XXXXII v Certain Lloyd's Underwriters [2001] 1 Lloyd's Rep 802

League against Cruel Sports v Scott [1985] 2 All ER 489

Lim Poh Choo v Camden and Islington AHA [1980] AC 174

Lubbe & Four Others v Cape Plc and related appeals 27-7-2000 [House of Lords]

Margereson v JW Roberts Ltd, Hancock v Same [1996] PIQR P358

Mann v Lexington Insurance Company [2001] 1 All ER (Comm) 28

Martini Investments Ltd v McGinn [2001] Lloyd's Rep IR 374

Matthews v Minister of Defence [2003] UKHL 4

McDonald v Associated Fuels Ltd [1954] 3 DLR 775

McKenna and Others v British Aluminium Ltd [2002] Env LR 30

Merchants Marine Insurance Co v Liverpool Marine and General Insurance Co Ltd [1928] 3 Ll L Rep 45 CA

Monsanto v Tilly [2000] Env LR 313

Overseas Tankship (UK) Ltd v Morts Dock and Engineering Co Ltd [1961] 1 All ER 404 (PC)

P&O Steam Navigation Co v Youell [1997] 2 Lloyd's Rep 136

Rahman v Arearose Ltd and Another [2001] QB 351 (CA)

Regus (UK) Ltd v Epcot Solutions Ltd [2008] EWHC Civ 361 (AC)

Roe v Minister of Health [1954] 2 OB 66

Rylands v Fletcher [1868] LR 3 (AC) 330 (HL)

Sanders Clark v Grosvenor Mansions Co Ltd [1900] 2 Ch 373

Scott v London and St Katherine's Docks [1865] 2 H&C 596

Sofi v Prudential assurance Co Ltd [1993] 2 Lloyd's Rep 559 CA

St Helen's Smelting Co v Tipping [1865] 11 HL Cas 642

Transco v Stockport Metropolitan Borough Council [2003] UKHL 61

Tutton v AD Walker Ltd [1986] QB 61

Vowles v Evans and Another [2003] EWCA Civ 318

Wayne Tank & Pump Co Ltd v Employer's Liability Assurance Corp Ltd [1973] Lloyd's Rep 237 CA

Yorkshire Water Services Ltd v Sun Alliance & London Insurance plc [1997] 2 Lloyd's Rep 21

3.2.2 United States of America

Adkins v Thomas Solvent Company 440 Mich 293487 NW 2d 715 (1992)

Advanced Healthcare Resources Inc v Merchants Ins Co of New Hampshire NY LJ Oct 2 1997 (NY SupCt)

Alamia v Nationwide Mutual Fire Insurance Company No 06 Civ 2880 2007 WL 2005575 (SDNY 2007)

Ayers v Township of Jackson 106 NJ 557 525 A 2d 287 (1987)

Bernhardt v Hartford Fire Ins Co 648 A 2d 1047 (Md App1995)

Broadwell Realty Services v Fidelity & Casualty Co 528 A 2d at 76 78 (NJ Super Ct App Div (1987)

Brown v Southeastern Pennsylvania Transportation Authority (In re Paoli Railroad Yard PCB Litigation) 35 F 3d 717 (3d Cir1994)

Burgess v M/V Tamano 370 Supp 247 (D Me1973)

Chance v BP Chemicals Inc 77 Ohio st3d 17 670 NE 2d 985 (1996)

Checkrite Ltd Inc v Illinois Nat Ins Co 95 F Supp 2d 180 (SD NY 2000)

Columbiaknit Inc v Affiliated FM Insurance Co 1999 WL 619100 (D Or Aug 4 1999)

Dimmitt Chevrolet Inc v Southeastern Fidelity Insurance Corporation 636 So 2d 700 (Fla 1993)

Donaldson v Central Illinois Public Service Company 199 Ill 2d 63 262 Ill Dec 854 (2002)

Escola v Coca-Cola Bottling Co 150 P 2d 436 (Cal 1944) 441

Essex Ins Co v Avondale Mills 639 So 2d 1339 1342 (Ala1994)

General Public Utilities v Glass Kitchens of Lancaster Inc 374 Pa Super 203 542 A 2d 567 (1988)

Hoery v United States 64 P 3d 214 (Colo 2003)

In re the Exxon Valdez; Alaska Native Class v Exxon Corp 104 F 3d 1196 (1997)

Jackson Township Municipal Utilities Authority v Hartford Accident & Indemnity Company 186 NJ Super 156 451 A 2d 990 (1982)

Keene Corp v Insurance Company of North America 667 F 2d 1034 (DC Cir 1981)

Local Joint Executive Bd & Culinary Workers Union Local No 226 v Stern 98 Nev 409 651 P 2d 637 (1982)

Matcon Diamond Inc v Penn National Insurance Co No 186 WDA (2002) PA Super (January 2003)

McKenna and Others v British Aluminium Ltd [2002] Env LR 30

Meridian Mutual Insurance Company v Kellman 197 F 3d 1178 (6th cir 1999)

Metropolitan Life Insurance Company v Aetna Casualty & Surety Company 255 Conn 295 765 A 2d 891 (2001)

Montrose Chemical Corporation of California v Admiral Insurance Company 10 Cal 4th 645 897 P 2d 1 (Cal 1995)

Mount Lebanon v Reliance Insurance Co (2001) PA Super 177

Nashua Corporation v Norton Company 1997 WL 204904 (NDNY 1997)

New Castle County v Hartford Accident and Indemnity Company 933 F 2d 1192 (3d Cir. 1991)

O'Neill v Picillo 883 F 2d 176 (1st Cir 1989)

Petition of Cleveland Tankers Inc (The Jupiter) 791 F Supp 669 (ED Mich 1992)

Philip Morris USA v Williams 2006 US LEXIS 4161

Ravo v Rogatnick 70 NY 2d 305

Robins Dry Dock & Repair Co v Flint US Supreme Court 275 US 303 (1927)

Sindell v Abbott Laboratories 607 P 2d (1980) 932

Snyder General Corporation v Century Indemnity Company 113 F 3d 536 (5th Cir 1997)

State Department of Environmental Protection v Ventron Corporation 94 NJ 473 468 A 2d 150 (1983)

State of California v Montrose Chemical Corporation 104 F 3d 1507 (9th Cir 1997)

State of Ohio v Department of the Interior 880 F 2d 432 (DC Cir 1989)

Steel v Aetna Casualty & Surety Company 931 P 2d 127 (Utah 1997)

SW Energy Corp v Continental Insurance Co 974 P 2d 1239 (Utah 1999)

Terra-Products Inc v Kraft General Foods Inc 653 NE 2d 89 (Ind Ct App1995)

The Municipality of Mount Lebanon v Reliance Insurance Co No 759 WDA 2000 (2001 Pa Super 177)

United States v AVX Corp: *In re* Acushnet River & New Bedford Harbor 716 F Supp 676 (D Mass 1989)

United States v Carroll Towing Co 159 F 2d 169 (2d Cir 1947)

United States v Chem-Dyne Corporation 572 F Supp 802 (SD Ohio 1983)

United States v Georgia No 04-1203 SCt 2006 WL 43973

United States v Monsanto 853 F 2d 160 (1988)

United States v Olin Corporation 107 F 3d 1506 (11th Cir 1997)

United States v Overholt 307 F 3d 1231 (10th Cir 2003)

United States v South Carolina Recycling and Disposal Inc et al 653 F Supp 1326 (ED Pa 1983)

United States v Township of Brighton 153 F 3d 307 (6th Cir 1998)

Vandenberg v Superior Court of Sacramento County 21 Cal 4th 815 88 Cal Rptr 2d 366 982 P2d 229 (1999)

West Virginia ex rel Smith v Kermit Lumber & Pressure Treating Company 200 W Va 221 488 SE 2d 901 (1997)

3.2.3 The Netherlands

Hof Den Haag van 21 januari 1992

3.2.4 Other

Lopez Ostra v Spain 1995 20 EHRR 277

McGinley and Egan v United Kingdom 1998 27 EHRR 1

4. JOURNALS

Abraham KS "Monsanto Lecture: Cleaning up the environmental liability insurance mess"1993 (27) *Valparaiso University Law Review* 601

Abraham KS "Environmental Liability and the Limits of Insurance" 1988 (88) *Columbia Law Review* 942

Anderson M "Transnational Corporations and Environmental Damage: Is Tort Law the Answer?" 2002 (Spring) *Washburn Law Journal* 2

Atkins NG "Contractual liability: Public liability insurance" 1992 (21) *Businessman's Law* 207

Basson DA "Die Nalatige Veroorsaking van Suiwer Ekonomiese Verlies" 1983 (1) *Codicillus* 8

Bocken H "Financial guarantees in the environmental liability directive: Next time better" 2006 (15) *European Environmental Law Review* 13

Bocken H & Boone I "Causaliteit in het Belgische Recht" 2003 *TPR* 1625

Bocken H "Alternatives to liability and liability insurance for the compensation of pollution damages: Part 2" 1988 (1) *Tijdschrift voor Milieuaansprakelijkheid* 3

Bocken H "Alternatives to liability and liability insurance for the compensation of pollution damages" (Part 1) 1987 (4) *Tijdschrift voor Milieuaansprakelijkheid* 83

Bowers JM "A Parent Corporation's Potential Liability for Acts of Its Subsidiaries" http://www.mobar.org/journal/1997/mayjun (last accessed on 26 August 2008)

Bray E "Legal perspectives on Global Environmental Governance" 2005 (68) *THRHR* 357

Bray E "Public participation in environmental law" 2003 (18) *SA Public Law Journal* 121

Bray E "Fragmentation of the Environment: Another Opportunity Lost for a Nationally Coordinated Approach?" 1995 (10) *SA Public Law Journal* 173

Brown OF "A Continuing Impediment to Nuclear Commerce: The Uranium Institute Twenty Fourth annual Symposium" 1999 http://www.world-nuclear.org/sym/1999/brown

Burchell JM "Mistake or Ignorance as to Causal Sequence – A New Aspect of Intention" 1990 (107) *SALJ* 168

Burnett-Hall RH "Emerging Trends in Environmental Law: Non-fault liability: The United Kingdom" 1991 *IBA: Section on Business Law, international Environmental Law* 149

Busenhart J "The insurability of ecological damage" 2004 (March) *Environment Business Magazine* 25

Bussani M, Palmer VV & Parisi F "Liability for Pure Economic Loss in Europe: an Economic Restatement" 2003 (51) *The American Journal of Comparative Law* 113

Cagande LF "The 'Sudden' Interpretation: *Northville Industries Corp. v. National Union Fire Insurance Co. of Pittsburgh*" 1999 (16) *Pace Environmental Law Review* 285

Calitz K "Vicarious Liability of Employers: reconsidering risk as the basis for liability" 2005 (2) *TSAR* 215

Chesler RD & Schulman JL "Key Concepts in Property Insurance for Water Loss" 2007 (October) *Environmental Claims Journal* 249

Clarke M "Liability Insurance on Pollution Damage: Market Meltdown or Grist to the Mill?" 1994 *The Journal of Business Law* 545

Coetzee LC "Onregmatigheid in die afwesigheid van belange-aantasting" 2004 (67) *THRHR* 661

Cowen DV "Toward Distinctive Principles of South African Environmental Law: Some Jurisprudential Perspectives and a Role for Legislation' 1989 (52) *THRHR* 3

De Meo RA, Eldred C, Utiger LA, Scruggs LS "Insuring against Environmental Unknowns" 2007 (Fall) *Journal of Land Use and Environmental Law* 23

Donnellon T, Rusk G "Natural Resource Damage: Risk Management Implications Associated with Natural Resource Damage Claims" 2005 *Environmental Claims Journal* 249

Ebeku KSA "The right to a satisfactory environment and the African Commission" 2003 (3) *African Human Rights Law Journal* 149

Ellison JN, Lewis RP & Valery BT "Recent Developments in the Law Regarding the 'Absolute' and 'Total' Pollution Exclusions" 2001 (13) *Environmental Claims Journal* 55

Fagan A "Rethinking Wrongfulness in the Law of Delict" 2005 (122) *SALJ* 90

Faure M "Milieuaansprakelijkheidsverzekering vaarwel?" 2002 (5) *Milieu en Recht* 129

Ferrey S "Converting brownfield environmental negatives into energy positives" 2007 (34) *Boston College Environmental Affairs Law Review* 417

Fogleman V "The Widening Gap in Cover for Environmental Liabilities in Public Liability policies" 2007 (June) *Journal of Planning and Environmental Law* 816

Fogleman V "The Environmental Liability Directive and its Impacts on English Environmental Law" 2006 (October) *JPL* 1443

Glazewski J "The Environment, Human rights and a New South African Constitution" 1991 (7) *SAJHR* 167

Goldenberg EM "The Scope of Insurance Coverage for Pollution Claims in Florida: Full Indemnification for Indivisible Clean-up Costs Caused by Multiple Releases" 1999 (Fall) *Nova Law Review* 373

Goodman GA "Insurance Triggers as Judicial Gatekeepers in Toxic Mold Litigation" 2004 (57) *Vanderbilt Law Review* 241

Havenga P "A Few Steps Closer Towards Establishing the 'Polluter-Pays' Principle" 1997 (9) *SA Merc LJ* 89

Havenga P "Liability for Environmental Damage" 1995 (7) *SA Merc LJ* 187.

Henderson A "A step forward or a slap in the face? *Lubbe & Four Others v Cape Plc and related appeals* 27-7-2000 (House of Lords)" 2000 (October) *De Rebus Procuratoriis* 47

Hoffman WC "Environmental liability and its insurance in Germany" 1993 (2) (Winter) *Federation of Insurance and Corporate Council Quarterly* 147

Hopkins K “Insurance policies and the Bill of Rights: rethinking the sanctity of contract paradigm” 2002 (119) *SALJ* 155

Howard MH & Mackowsky MA “Defending claims for environmental damage under first-party property insurance policies” 2002 (Spring) *Tort & Insurance Law Journal* 883

International Law Commission Draft Principles on Environmental Liability specifically regarding transboundary pollution damage UN Document A/59/10 as published in *Journal of Environmental Law* 2005 (17) 155

Italiano ML “Environmental Impairment: Dealing with the Legalities” 1990 (August) *Risk Management* 38

Kidd M “The view I behold on a sunshiny day” 2004 (121) *SALJ* 556

Kidd M “Integrated Pollution Control in South Africa: How Easy a Task?” 1995 (2) *South African Journal of Environmental Law and Policy* 37

Knobel JC “Die volgorde waarin delikselemente onregmatigheid en skuld bepaal moet word” 2008 (71) *THRHR* 1

Knobel JC “Die Samehang tussen Onregmatigheid en Skade” 2005 (68) *THRHR* 645

Knobel JC “*Novus Actus Interveniens* and Causation in the Law of Delict: A Reappraisal in Anticipation of New Legislation” 2004 (67) *THRHR* 409

Knobel JC “Inbreukmaking op die estetiese oorlas’ 2003 (66) *THRHR* 500

Knobel JC “HIV-toetse, Toestemming en Onregmatigheidsbewussyn” 1997 (60) *THRHR* 533

Knobel JC “Aanspreeklikheid weens ‘n Late in die Geval van ‘n Munisipaliteit” 1987 (50) *THRHR* 480

Knobel JC & Steynberg L “Vrywillinge aanvaarding van risiko en medewerkende opset” 2003 (66) *THRHR* 695

Knoetze E & Hoctor SV “Liability for Damage caused by and to wild animals” 2000 (21) *Obiter* 177

Kotzé L “Improving Unsustainable Environmental Governance in South Africa: The Case for Holistic Governance” 2006 *Potchefstroom Electronic Law Journal* 1

Kotzé L “Die vervoer van gevaarlike en giftige afval per skip: Suid-Afrika en eise vir suiwer ekonomiese verlies” 2002 *Word and Action* 18

Kuschke B “Insurance against damage caused by pollution” 2000 (3) *TSAR* 494

Ladeur K “Der ‘Umweltshaftungsfonds – ein Irrweg der Flexibilisierung des Umweltrechts?” 1993 *Versicherungsrecht* 257

Lin AC “Beyond tort: Compensating victims of environmental toxic injury” 2005 (78) *Cal. L. Rev* 1439
Loots C “The Impact of the Constitution on Environmental Law” 1997 (4) *South African Journal of Environmental Law and Policy* 57
Loots C “Making Environmental Law Effective” 1994 (1) *South African Journal of Environmental Law and Policy* 17

Lotz JG “The *Sandown Park* Case” 1986 (103) *SALJ* 704

Lucey MT “Sick Building Syndrome: Airing insurance coverage issues arising from this new wave of toxic tort litigation” 1999 (Spring) *Federation of Insurance and Corporate Counsel Quarterly* 333

Masters LS “Insurance Coverage for Environmental Liability in the 1990’s” 1997 (10) *Environmental Claims Journal* 65

Mitchell WJ “CGL Pollution Exclusion Provisions and the Sick Building Syndrome” January (January) *Defense Counsel Journal* 124

Naude T & Lubbe GF “Exemption clauses – a rethink occasioned by *Afrox Healthcare Bpk v Strydom*” 2005 (121) *SALJ* 441

Neels JL “Tussen Regmatigheid en Onregmatigheid: Die Leerstuk van Oorskryding van Regte en Bevoegdhede” (Part I) 1999 (1) *TSAR* 63; (Part II) 2000 (2) *TSAR* 317; (Part III) 2000 (3) *TSAR* 469; (Part IV) 2000 (4) *TSAR* 643

Neels JL “Die Onderskeid tussen Oorlas en die Oorskryding van Eiendosmreg op Onroerende Goedere” 2000 (33) *De Jure* 19

Neethling J “Die *Carmichele*-Sage kom tot ‘n Gelukkige Einde” 2005 (2) *TSAR* 402

Neethling J “Delictual Protection of the Right to Bodily Integrity and Security of the Person against Omissions by the State” 2005 (122) *SALJ* 572

Neethling J “Aanspreeklikheid vir ‘nuwe’ risiko’s: Moontlikhede en beperkinge van die Suid-Afrikaanse deliktereg” 2002 (65) *THRHR* 574

Neethling J “Persoonlike Immaterieelgoedereregte: ‘n Nuwe Kategorie van Subjektiewe Regte?” 1987 (50) *THRHR* 316

Neethling J and Potgieter JM “Statutêre bevoegdheid : Die rol van redelike voorsienbaarheid by onregmatigheid en nalatigheid” 2004 (25) *Obiter* 477

Neethling J and Potgieter JM “Toepassing van die Grondwet op die Deliktereg” 2002 (65) *THRHR* 265

Neethling J and Potgieter JM “Deliktuele Aanspreeklikheid weens Bevrugting as Gevolg van ‘n Nalatige Wanvoorstelling: Die Funksies van Onregmatigheid, Nalatigheid en Juridiese Kousaliteit” 2000 (63) *THRHR* 162

Nel J & Du Plessis W “Unpacking Integrated Environmental Management – a Step Closer to Effective Co-operative Governance?” 2004 (19) *SA Public Law* 181

Neuman S “Adequate Insurance Coverage for Post-Remedial Risks” 2007 (19) *Environmental Claims Journal* 26

Niezen GJ “Nieuwe milieuschadeverzekering – geen panacee” 1998 (4) *Milieu & Recht* 114

Oldertz C “Environmental Liability in Sweden” 1989 (3) *Tijdschrift voor Milieuaansprakelijkheid* 80

Peterson J “CERCLA Choice-of-law: Insurer’s Attempts to Escape their own Quagmires” 2006(36) *Environmental Law* 565

Pfennigstorf W “The state of pollution liability insurance in the Federal Republic of Germany” 1989 (3) *Tijdschrift voor Milieuaansprakelijkheid* 73

Purdue M “The Merits of Statutory Nuisance as Means of Cleaning Up Beaches” 1997 (9) *Journal of Environmental Law* 103

Rabie MA “The need for adequate environmental law” 1971 (September) *De Rebus Procuratoriis* 361

Reinecke MFB “Insurable Interest and Extension Clauses” 1996 (4) *TSAR* 784

Reinecke MFB ”Nabetragting oor die Skadeleer en Voordeeltoerekening” 1988 (21) *De Jure* 221

Reinecke MFB “Interesting aspects of the new Belgian insurance act: a few comparative remarks from a South African point of view” 1993 (1) *TSAR* 91

Reinecke MFB “Die Elemente van die Begrip Skade” 1976 *TSAR* 26

Ryckbost D “Het Decreet van 22 februari 1995 betreffende de bodemsanering” 1995 (Mei/Juni) *Tijdschrift voor Milieurecht* 178

Rodler DN “Carbon monoxide ruled to be a pollutant” 2003 (January 27) *The Legal Intelligencer* 1

Rogge J "Belgian Land Insurance Contract Act" 1998 (May) *The Bulletin on Pollution, Products and New Technologies (AIDA)* 17

Sandrock O "German and European drafts on choice of law rules applicable to delictual liability: the direct claim against the insurer" 1999 (4) *TSAR* 734

Saylor RN and Cole AM "The Mother of All Battles: The Dispute over Insurance Coverage for Environmental Contamination in the United States" 1993 E*nvironmental Liability* 29

Schlemmer E "Oorsaaklikheid in die Versekeringsreg" 1997 (3) *TSAR* 531

Schulze WG "Extension Clauses in Insurance Contracts – A New Angle" 1997 (9) *SA Merc LJ* 216

Schulze WG "Extension Clauses in Insurance Contracts – Uncertainty Rules OK?" 1997 (9) *SA Merc LJ* 64

Sclafane S "Fish gotta swim, birds gotta fly: NRD Claims Muddy Insurance Waters" 2005 (April) *National Underwriter Property & Casualty* 24

Scott S "Cession of Whole Life Insurance Rights" 2003 (14) *Stell Law Review* 89

Scott S "Begunstigdeaanwysings en sessie in lewensversekeringskontrakte" 2002 (4) *TSAR* 766

Scott TJ "Die Onregmatigheidstoets in die Deliktereg in die geval van 'n Late: *Administrateur, Transvaal v Van der Merwe* 1994 4 SA 347 (A)" 1995 (28) *De Jure* 234

Scott TJ "Die Regsplig by 'n Late en die Veroorsaking van Suiwer Ekonomiese Verlies" 1995 (28) *De Jure* 158

Shelley WP & Mason RC "Application of the Absolute Pollution Exclusion to Toxic Tort Claims: Will Courts choose Policy Construction or Deconstruction?" 1998 (33) *Tort and Insurance Law Journal* 749

Siesko DM & Weiss N "Use and Evolution of the Claims-Made Policy Form in Environmental Insurance: Selected Issues" 2008 (20) *Environmental Claims Journal* 39

Six JP "Pollution Insurance in the Netherlands" 1998 (July) *The International Journal of Insurance Law* 181

Snijder E "Van market-share liability naar pollution share liability?" 1990 *TMA* 141

Sonnekus J "Enkele opmerkings om die beding ten behoewe van 'n derde" 1999 (4) *TSAR* 594

Spier J "Aansprakelijkheidsverzekeringen: alles en niets" 1997 (4) *TSAR* 714 721

Springer AL "Towards a meaningful concept of pollution in international law" 1977 (26) *International and Comparative Law Quarterly* 531
Stempel JW "Reason and Pollution: Correctly construing the 'absolute' exclusion in context and in accord with its purpose and party expectations" 1998 (Fall) *Tort & Insurance Law Journal* 1

Van Aswegen A "The Implications of the Bill of Rights for the Law of Contract and Delict' 1995 (11) *SAJHR* 50

Van der Linde M & Louw L "Considering the interpretation and implementation of article 24 of the African Charter on Human and Peoples' Rights in light of the *SERAC* communication" 2003 (3) *African Human Rights Law Journal* 167

Van der Vyfer JD "The private sphere in constitutional litigation" 1994 (57) *THRHR* 378

Van der Walt CFC "Deliktuele aanspreeklikheid weens nadeel deur onbekende lede van 'n groep toegebring" 1995 (58) *THRHR* 421 (Part I); 613 (Part II)

Van der Walt CFC "Die voordeeltoerekeningsreël – Knooppunt van Uiteenlopende Teorieë oor die Oogmerk van Skadevergoeding" 1980 (43) *THRHR* 1

Van der Walt JC "Strict Liability in the South African Law of Delict" 1968 (1) *CILSA* 49

Van Dunne JM 'Transboundary pollution and liability issues: private law vs public international law approaches' 1999 *Acta Juridica* 303

Van Mierlo AIM & Wansink JH "Titel 7.17 NBW: l'assurance oblige" 2000 (75) *Nederlandsch juristenblad* 1737

Van Niekerk B 'The Ecological Norm in Law or the Jurisprudence of the Fight against Pollution' 1975 (92) *SALJ* 78

Van Niekerk JP "Liability Insurance: Successive but Overlapping 'Claims-made' Policies and a Question of Quantum" 2006 (18) *SA Merc LJ* 382

Van Niekerk JP "Case note: *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another*" 2006 (9) *Juta's Insurance Law Bulletin* 194

Van Niekerk JP "The Effect of Insurance on the Imposition of Civil Liability: A Review of and some Preliminary Thoughts on Recent Judicial Announcements" 1999 (11) *SA Merc LJ* 514

Van Niekerk JP "Maintaining the Principle of Indemnity: Theory and practice" 1996 (3) *TSAR* 572

Van Niekerk JP "Under-insurance and average" 1981 (2) *Modern Business Law* 125

Van Oosten FFW "Die Aard en Rol van die Stelreël *lex non cogit ad impossibilia* in die Strafreg" 1986 (49) *THRHR* 375

Visser C "The principle of *pacta servanda sunt* in Roman and Roman-Dutch law, with specific reference to retraints of trade" 1984 (101) *SALJ* 641

Visser PJ "Case note on *Drifters Adventure Tours CC v Hircock*" 2007 (1) *De Jure* 188

Visser PJ "A note on some aspects of prospective loss and factual causation" 2004 (13) *Speculum Iuris* 137

Visser PJ "Die verhouding tussen onregmatigheid en skade" 1991 (54) *THRHR* 782

Visser PJ "*Conditio sine qua non"* 1989 (52) *THRHR* 558

Waldron JT & Palmer TP "Insurance coverage for mold and fungi claims: the next battleground?" 2002 (38) *Tort Trial and Insurance Practice Law Journal* 49

Wansink JH "Verzekering, een Juridisch Product in een Kritische Buitenwereld – Een Impressie uit Nederland" 1999 (4) *TSAR* 706

Wansink JH "Verzekering en milieuschade als gevolg van vervoer/opslag van gevaarlijke stoffen" 1999 (3) *TMA 77*

Wansink JH "A new Environmental Damage Insurance Policy (EDI) in the Netherlands" 1998 (May) *The Bulletin on Pollution, Products and New Technologies (AIDA)* 12

Wansink JH "Ontwikkelingen in de Werkgeversaansprakelijkheid voor Beroepsziekten: Aanleiding voor een nieuwe AVB-polis?" 1996 (6) *Aansprakelijkheid en Verzekering* 140

Wansink JH & Spier J "Joint and Several Liability of DES Manufacturers" 1993 1(6) *International Insurance Law Review* 176

Warfel WJ "Environmental Insurance Coverage Disputes: Is State Legislation the Solution?" 2005 (September) *CPCU eJournal* 1

Wetterstein P "The Finnish Environmental Compensation Act" 1998 (May) *The Bulletin: Pollution, products and new technologies (AIDA)* 19

Whitney RA "Environmental Contamination and the Application of the Owned Property Exclusion to Insurance Coverage Claims: Can the threat of harm to the property of others ever get real?" 2000 (3) *Northern Kentucky Law Review* 505

Wilson G "The Biocidal Products Directive" 1998 (July) *European Environmental Law Review* 204

Winstanley T "Trans-boundary corporate liability" 2000 November *De Rebus Procuratoriis* 56

Winter G, Jans JH, Macrory R & Kramer L "Weighing up the EC Environmental Liability Directive" 2008 (June) *Journal of Environmental Law* 163

Winter G "Perspectives for Environmental Law – entering the Fourth Phase" 1989 *Journal of Environmental Law* 38

Winter RA "Liability Insurance, joint tortfeasors and limited wealth" http://www.sciencedirect.com/science?_ob=ArticleURL&_udi= B6V7M-4KF6BPH-1 (last accessed on 18 July 2006)

Wollner KS "Sick Building Syndrome and a Definition of 'Polluting Conditions'" 2001 (June) *International Risk Management Institute* 1 http://www.irmi.com/Expert/Articles/2001;

Zeller W "How to get off the 'Sudden and Accidental' Time Bomb?" 1995 (4) *Nordisk Försäkringstidskrift* 307

5. PAPERS, POLICIES AND REPORTS

Draft Policy on Hazardous Waste Management enacted in GN 1064 *Government Gazette* 15987 of 30 September 1994

Green Paper for Public Discussion: An Environmental Policy for South Africa dated (October 1996)

International Law Commission Draft Principles on Environmental Liability specifically regarding transboundary pollution damage UN Document A/59/10 as published in the *Journal of Environmental Law* 2005 (17)

Report by Bocken H *General Report Theme 1B "Alternative Compensation Systems for Environmental Liabilities* presented at the AIDA XIth World Congress New York (2002)

Report by Mendelowitz M "Insurance Cover for the Long Tail and the Unforeseeable" presented at the AIDA World Conference Morocco (1998)

Report by the Comit'e Europ'een des Assurances ('CEA') *Study on first-party legal obligations for clean-ups and corresponding insurance covers in European Countries* Paris CEA (21 October 1998)

Report of the Conference Proceedings of the International Conference held at Rotterdam 19 October 1990 as published in Van Dunne JM (ed) Klinge-van Rooy I, Snijder EEI, & Van AJ on *Transboundary Pollution and Liability: The Case of the River Rhine* Instituut Milieuschade Erasmus Universiteit Rotterdam 1991 Vermande Lelystad

Report of the Interuniversitaire Commissie tot Herziening van het Milieurecht in het Vlaamse Gewest by Bocken H, Deloddere S & Ryckbost D (1995) Die Keure (Brugge)

Report on "The Assessment of Limitation on Access to Information in the Promotion of the Access to Information Act and the Danger that Disclosure will become the Exception rather than the Norm" Report 2001 No 5 18 presented by Govender K at the Conference on the Constitutional Right of Access to Information Johannesburg (2000)

Report of the ILC Articles on the Responsibility of States for Internationally Wrongful Acts adopted in 2001 UN Doc. A/56/10 (2001)

Report of the Interuniversitaire Commissie tot Herziening van et Milieurecht in het Vlaamse Gewest or ICHM chaired by Bocken H (1995) Brugge die Keure

Report of the Joint Pollution Working Group (United Kingdom) "Guidelines for the insurance industry' 1998

Report of the Joint Pollution Working Group (United Kingdom) 'Report on the Assessment of Pollution Risks" (1997)

Report of the Planning Committee of the President's Council on priorities between conservation and development PC 5/1984

Report of the Planning Committee on Nature Conservation in South Africa PC 2/1984

Report of the three committees of the President's Council on a national environmental management system PC 1/1991

Report of the World Health Organisation Indoor Air Quality Research: WHO meeting, Stockholm 27 – 31 August 1984 (1986) WHO Regional Office for Europe

Report on the Regional Conference at Ministerial Level on the Follow-Up Report of the World Commission on Environment and Development in the European Commission for Europe Region: Action for a Common Future (Bergen 16 -18 May 1990)

Report on the United Nations Conference on the Human Environment Declaration 1 (A/CONF 48/14) Stockholm June 1972

Report on the UN Conference on Environment and Development (A/CONF.151/6/Rev.1June 13, 1992) Rio June 1992

Report on the United Nations World Commission on Environment and Development *Our Common Future* (also known as the Brundtland Report) 1987

South African Law Reform Commission Project 47 Discussion Paper 65 'Unreasonable Stipulations in Contracts and the Rectification of Contracts'

South African Law Reform Commission Project 96 'The Apportionment of Damages Act 34 of 1956'

UNCED Report A/CONF. 151/26Rev.1 (1993)

UN Security Council Doc. S/AC.26/1991/W.P.20, 20 November 1991

White Paper on an Environmental Management Policy for South Africa as published in the *Government Gazette* Nr 18894 of 15 May 1998

WHO Regional Office for Europe "World Health Organisation: Indoor air quality research: Report on WHO meeting, Stockholm 27 – 31 August 1984" (1986)

6. INTERNATIONAL CONVENTIONS, AGREEMENTS, CHARTERS, PROTOCOLS AND DIRECTIVES

African Charter on Human and Peoples' Rights adopted 27 June 1981, entered into force 21 October 1986 OAU DOC CAB/LEG/67/3/Rev.5

Agenda 21 UNCED Report, A/CONF.151/26Rev.1(1993)

Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of 10 December 1982, relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks; Under negotiation

Antarctic Treaty; Signed on 1 December 1959 and ratified on 21 June 1960

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal; Ratified in May 1994 and acceded on 5 April 1994

Bonn Convention on the Conservation of Migratory Species of Wild Animals (CMS); Acceded in December 1991

Convention on Biological Diversity; Signed in June 1003 and ratified on 2 November 1995

Convention on Prior Information Consent (PIC) – Rotterdam; Signed in September 1998

Convention on Supplementary Compensation for Nuclear Damage of 1998
Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR); Ratified in 1982 and acceded in September 1980

Convention on the Law of the Sea of 1982

EC Directive on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage of the European Parlement and Counsel, adopted on 21 April 2004

ILC Articles on the Responsibility of States for Internationally Wrongful Acts adopted in 2001 UN Doc. A/56/10 (2001)

International Convention for the Prevention of Pollution from Ships 1973, as amended by the Protocol of 1978, and adopted by the Inter-Governmental Maritime Consultative Organisation in London on 17 February 1978 (MARPOL)

International Convention for the Regulation of Whaling (IWC); Under negotiation

International Convention on Civil Liability for Oil Pollution Damage (CLC Convention) under negotiation

International Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea of 1996

International Convention relating to the Intervention on the High Seas in Cases of Oil Pollution Casualties done in Brussels on 29 November 1969

International Law Commission Draft Principles on Environmental Liability specifically regarding transboundary pollution damage UN Document A/59/10

Montreal Protocol for the Protection of the Ozone Layer; Ratified and acceded to on 15 January 1990

OECD Recommendation for the Implementation of a Regime of Equal Right of Access and Non-discrimination in Relation to Transfrontier Pollution C(77)28(Final) of 17 May 1977

OECD Report on The Polluter-Pays Principle' GD(92)81, Environment Directorate of 1992

Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other than Oil of 1973

Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 1992

Ramsar Convention on Wetlands of International Importance, especially Waterfowl Habitat of 1975
United Kingdom, The Department of Environment's Working Group on Financial Guarantees against Environmental Damage in the Waste Management Industry *Financial Guarantees Report* (1991)

United Nations Conference on the Human Environment, Stockholm June 1972 (A/CONF 48/14

United Nations Convention on the Law of the Sea of 10 December 1982 (UNCLOS); Signed in 1994 and ratified on 20 August 1997

United Nations Convention to Combat Desertification in Countries Experiencing Droughts and/or Desertification, Particularly in Africa; Signed on 9 January 1995 and ratified on 30 September 1997

United Nations Framework Convention on Climate Change (UNFCCC); Signed on 15 June 1993 and 27 August 1997, and ratified on 29 August 1997

Vienna Convention on Civil Liability for Nuclear Damage

World Heritage Convention concerning the Protection of the World Cultural and Natural Heritage; ratified on 10 July 1997

7. WEBSITES

http:// www.bcltlaw.com/articles/en_0204.html (last accessed on 25 February 2008)

http://www.busrep.co.za/index.php?fArticleId=4245288 (last accessed on 11 February 2008)

http://www.busrep.co.za/index.php?fArticleId=4265872, Wray Q "Conservationists to reap relief on tax" (published and last accessed on 3 March 2008)

http://www.busrep.co.za/index.php?farticleID=4734423&fSection Id=561 "Department of Trade and Industry to improve trade laws" (last accessed on 1 December 2008)

http://www.dispatch.co.za/article.aspx?id=177209, Van Zyl R "Trevor takes a green stand" (published and last accessed on 3 March 2008)

http://www.environmentalinsurance.com/ss04.html (last accessed on 21 February 2008)

http://www.environment.gov.za/enviro-info/env/intro.htm (last accessed on 27 September 2006 and on 3 March 2008)

http://www.gov.sa/greenpaper/1996/environmental.htm (last accessed on 20 February 2004)
http://www.greenpeace.org/international/press/reports/not-in-our-backyard (published and last accessed on 21 February 2008)

http://www.iaea.org (last accessed on 21 February 2008)

http://www.irmi.com/Expert/Articles/2001 (last accessed on 12 February 2008)

http://www.legalbrieftoday.com:'Tax: changes proposed for 'green tax' laws'(published and last accessed on 21 April 2006)

http://www.mblwhoilibrary.org/heackel/bio.html (last accessed on 12 February 2008)

http://www.mg.co.za/articlePage.aspx?articleid= 284785&area=/ breaking_ news/break (last accessed on 27 September 2006)

http://www.news.bbc.co.uk/2/hi/business/5365728.stm (last accessed on 27 September 2006)

http://www.news24.com/News 24/South Africa/0,,2-7-1442_2044822 (last accessed on 26 February 2007)

http://www.ola.iaea.org/factSheets/CountryDetails.asp?country=ZA (last accessed on 27 February 2008).

http://www.opsi.gov.uk/ACTS/acts (last accessed on various dates for access to all relevant UK legislation)

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi= B6V7M-4KF6BPH-1 (last accessed on 18 July 2006)

http://www.wikipedia.org/wiki.Abiotic (last accessed on 11 September 2006)

http://www.wikipedia.org/wiki.Ecological (last accessed on 11 February 2008)

http://www.wikipedia.org/wiki.Environment (last accessed on 6 September 2006)

http://wikipedia.org/wiki/Love_Canal (last accessed on 26 January 2009)

http://wikipedia.org/wiki/Pollution (last accessed on 21 January 2006)

http://www.wnclaw.com/services/insurance/absolute_pollution_exclusion.cfm (last accessed on 21 February 2008)

http://www.zurichna.com/environmental_liability_insurance.htm.(last accessed on 17 August 2008)

http://www2.jsonline.com/homes/build/ jul01/mold (last accessed on 18 February 2008)

8. NEWSPAPERS AND MAGAZINES

Carvajal D "French Court finds Oil Company Partly Liable for Spill" *The New York Times* 17 January 2008

Huslin A "W.R. Grace to Settle Asbestos Claims for $1.8 Billion, Start New Chapter" *The Washington Post* 16 April 2008

Khanyile S "Assmang back in hot seat for safety violations" *Business Report* 21 April 2008 http://www.busrep.co.za/index.php?farticleId=4361612

Schenker JL "Look out! Inside that PC! It's the KILLER WORM!" *Time* 1 February 2003 61

Urbina I "U.S. Fines Mine Owner $20 Million for Pollution" *The New York Times* 18 January 2008

Waldmeir P "The Freedom to Exclude" *The Financial Times Weekend* 12 April 2003

9. OTHER SOURCES

Insurance Rating Bureau in the USA Clause IRB–G335

Kremers H Verenigde Assurantiebedrijven Nederland N.V. opinion on the EDI provided in person on 28 November 2008

Lloyd's Underwriters Non-Marine Association Pollution Exclusions NMA 1333 (drafted 1959, published 1961)

South African Bureau of Standards 'The Identification and Qualification for Dangerous Substances and Goods' Code 0228/MDG

South African Bureau of Standards 'The Identification and Qualification for Dangerous Substances and Goods: Hazard Ratings' Code 6

Special Risks Underwriters *Yesterday's policies won't meet tomorrow's needs: The PLP policy* (1992)

United States of America Federal Rule of Court 8(8)

ABBREVIATIONS

I. TERMINOLOGY AND SOURCES

AVB	Aansprakelijkheidsverzekering voor bedrijven, The Netherlands
AVP	Aansprakelijkheidsverzekering voor particulieren, The Netherlands
BA	Burgerlijke Aansprakelijkheid policies, Belgium
Belgian Voorontwerp	Belgian Voorontwerp Decreet Milieubeleid
BW	Nieuw Burgerlijk Wetboek, The Netherlands
CAA	Clean Air Act 42 U.S.C. §§ 7401, USA
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980, USA
CGL	Comprehensive General Liability policies
Constitution	The Constitution of the Republic of South Africa 1996, RSA
CWA	Clean Water Act 33 USC §§ 1251, USA
ECA	Environment Conservation Act 73 of 1989, RSA
EIL	Environmental Impairment Liability policy, USA
EPA	Environmental Protection Agency, USA
EU	European Union
GMO	Genetically modified organism
ISO	Insurance Services Office, USA
MAS	Milieuaansprakelijkheidsverzekering Samewerkingsverband
MAV	Milieuaansprakelijkheidsverzekering
MSV	Milieuschadeverzekering
NBBP	Nederlandse Beurs Brandpolis
NBGP	Nederlandse Beurs Goederen Polis
NBUG	Nederlandse Beurspolis voor Uitgebreide Gevaren
NEMA	National Environmental Management Act Act 107 of 1998, RSA

NEPA	National Environmental Policy Act 1969, USA
NRD	Natural resource damage
NMA	Lloyd's Underwriters Non-Marine Association
OPA	Oil Pollution Act 33 USC §§2701, USA
OSCLA	Outer Continental Shelf Lands Act 43 USCA δ 1811, USA
PRP	Potentially responsible person
RCRA	Resource Conservation and Recovery Act 42 USC §§ 6901, USA
Restatement of Contracts	Restatement (Second) of Contracts 1981
Restatement of Torts	Restatement (Second) of Torts 1976, USA
SARA	Superfund Amendments and Reauthorisation Act 1986, USA
UK	United Kingdom
USA	United States of America

II. AUTHORS

Andersen	Andersen M "Transnational Corporations and Environmental Damage: Is Tort Law the Answer?" 2002 (Spring) *Washburn Law Journal* 2
Bell & McGillivray	Bell S & McGillivray D *Environmental Law* 6th ed (2006)
Bocken (2002)	Bocken H "General Report Theme 1B: Alternative Compensation Systems for Environmental Liabilities" presented at the AIDA XIth World Congress New York (2002)
Boyle	Boyle A in Bowman M & Boyle A *Environmental Damage in International and Comparative Law* (2005)
Bowman & Boyle	Bowman M & Boyle A *Environmental Damage in International and Comparative Law* (2005)
Bratt	Bratt P *Polluter Pays. A short guide to the Environmental Liability Directive* (2008)

Bray (2003)	Bray E "Public participation in environmental law" 2003 (18) *SA Public Law Journal* 121
Bussani *et al*	Bussani M, Palmer VV & Parisi F "Liability for Pure Economic Loss in Europe: an Economic Restatement" 2003 (51) *The American Journal of Comparative Law* 113
Chesler & Schulman	Chesler RD & Schulman JL "Key Concepts in Property Insurance for Water Loss" 2007 (October) *Environmental Claims Journal* 249
Cornelius	Cornelius SJ *Principles of the Interpretation of Contracts in South Africa* (2002)
De Ketelaere (ed)	De Ketelaere K (ed) (and 39 other authors) *Handboek Milieu- en Energierecht* (2006)
Ellison *et al*	Ellison JN, Lewis RP & Valery BT "Recent Developments in the Law Regarding the 'Absolute' and 'Total' Pollution Exclusions" 2001 (13) *Environmental Claims Journal* 55
Faure (ed)	Faure M (ed) *Tort and Insurance Law Vol 5: Deterrence, Insurability and Compensation in Environmental Liability: Future Developments in the European Union* (2003)
Faure (2002)	Faure M "Milieuaansprakelijkheidsverzekering vaarwel?" 2002 (5) *Milieu en Recht* 129
Faure & Hartlief	Faure M & Hartlief T "Aansprakelijkheid en verzekering voor nieuwe risico's" in Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003)
Faure & Neethling	Faure M & Neethling J (eds) *Aansprakelijkheid, risico en onderneming: Europese en Zuid-Afrikaanse perspectiven* (2003)
Faure & Skogh	Faure M & Skogh G *The Economic Analysis of Environmental Law and Policy* (2003)
Fogleman	Fogleman V *Environmental Liabilities and Insurance in England and the United States* (2005)
Harpwood	Harpwood V *Modern Tort Law* 6th ed (2005)
Howard & Mackowsky	Howard MH & Mackowsky MA "Defending claims for environmental damage under first-party property insurance policies" 2002 (Spring) *Tort & Insurance Law Journal* 883

Italiano	Italiano ML "Environmental Impairment: Dealing with the Legalities" 1990 (August) *Risk Management* 38
Kidd	Kidd M *Environmental Law, A South African Guide* (2008)
Kidd (2004)	Kidd M "The view I behold on a sunshiny day" 2004 (121) *SALJ* 556
Klaaren & Penfold	Klaaren J & Penfold G on "The Right of Access to Information" in Woolman S (ed) *Constitutional Law of South Africa* Chap 62 2nd ed (2006)
Kramer	Kramer L *EC Environmental Law* (2007)
Larsson	Larsson M *The Law of Environmental Damage: Liability and Reparation* (1999)
Maddon & Boston	Madden MS & Boston GW *Law of Environmental and Toxic Torts: Cases, material and problems* 3rd ed (2005)
McGee	McGee A *The Modern Law of Insurance* 2nd ed (2006)
Merkin	Merkin RM *Colinvaux's Law of Insurance* 8th ed (2006)
Naude & Lubbe	Naude T & Lubbe GF "Exemption clauses – a rethink occasioned by *Afrox Healthcare Bpk v Strydom*" 2005 (121) *SALJ* 441
Neethling *et al*	Neethling J, Potgieter JM & Visser PJ *Law of Delict* 5th ed (2006)
Neethling & Potgieter (2004)	Neethling J and Potgieter JM "Statutêre bevoegdheid : Die rol van redelike voorsienbaarheid by onregmatigheid en nalatigheid" 2004 (25) *Obiter*
Reinecke *et al*	Reinecke MFB, Van der Merwe S, Van Niekerk JP & Havenga P *General Principles of Insurance Law* (2002)
Reinecke (1993)	Reinecke MFB "Interesting aspects of the new Belgian insurance act: a few comparative remarks from a South African point of view" 1993 (1) *TSAR* 91
Sands	Sands Ph *Principles of International Environmental Law* 2nd ed (2003)
Scott (1995)	Scott TJ "Die Regsplig by 'n Late en die Veroorsaking van Suiwer Ekonomiese Verlies" 1995 (28) *De Jure* 158
Shaw	Shaw MN *International Law* 5th ed (2003)
Sieburgh	Sieburgh CH *Toerekening van een onrechtmatige daad* (2000)
Siesko & Weiss	Siesko DM & Weiss N "Use and Evolution of the Claims-Made Policy Form in Environmental Insurance: Selected Issues" 2008 (20) *Environmental Claims Journal* 39
Van Aswegen	Van Aswegen A *Die Sameloop van Eise om Skadevergoeding uit Kontrakbreuk*

	en Delik LLD Thesis University of South Africa (1991)
Van Daele	Van Daele G *Milieurisico's goed verzekerd* (2001)
Van der Merwe *et al*	Van der Merwe S, Van Huyssteen LF, Reinecke MFB & Lubbe GF *Contract General Principles* 3rd ed (2007)
Van der Walt (1968)	Van der Walt JC "Strict Liability in the South African Law of Delict" 1968 (1) *CILSA* 49
Van der Walt & Midgley	Walt JC & Midgley JR *Principles of Delict* 3rd ed (2005)
Van Dunne	Van Dunne JM (ed) *Transboundary Pollution and Liability: The Case of the River Rhine (Conference proceedings of the International Conference held at Rotterdam 19 October 1990*) Erasmus Universiteit Rotterdam (1991)
Van Mierlo & Wansink	Van Mierlo AIM & Wansink JH "Titel 7.17 NBW: l'assurance oblige" 2000 (75) *Nederlandsch juristenblad* 1737
Van Niekerk (2006 *JILB*)	Van Niekerk JP "Case note: *Truck and General Insurance Co Ltd v Verulam Fuel Distributors CC and another*" 2006 (9) *Juta's Insurance Law Bulletin* 194
Van Niekerk (2006 *SAMLJ*)	Van Niekerk JP "Liability Insurance: Successive but Overlapping 'Claims-made' Policies and a Question of Quantum" 2006 (18) *SA Merc LJ* 382
Van Niekerk (1999)	Niekerk JP "The Effect of Insurance on the Imposition of Civil Liability: A Review of and some Preliminary Thoughts on Recent Judicial Announcements" 1999 (11) *SA Merc LJ*
Van Niekerk (1996)	Van Niekerk JP "Maintaining the Principle of Indemnity: Theory and practice" 1996 (3) *TSAR* 572
Van Niekerk (1981)	Van Niekerk JP "Under-insurance and average" 1981 (3) *MB* 125
Visser *et al*	Visser PJ, Potgieter JM, Steynberg I & Floyd TB *The Law of Damages* 2nd ed (2003)
Wansink	Wansink JH *De algemene aansprakelijkheidsverzekering* 3rd ed (2006)
Wansink (1999)	Wansink JH "Verzekering en milieuschade als gevolg van vervoer/opslag van gevaarlijke stoffen" 1999 (3) *TMA* 77
Wansink & Spier	Wansink JH & Spier J "Joint and Several Liability of DES Manufacturers" 1993 1(6) *International Insurance Law Review* 176

Winter *et al*	Winter G, Jans JH, Macrory R & Kramer L "Weighing up the EC Environmental Liability Directive" 2008 (June) *Journal of Environmental Law* 163

ANNEXURE A

Multilateral International Environmental Agreements which South Africa has agreed, ratified or acceded to[1]

1. Agreed Measures for the Conservation of Antarctic Fauna and Flora[2]
2. Agreement on the Privileges and Immunities of the IAEA[3]
3. Antarctic Treaty[4]
4. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal[5]
5. Bonn Convention on the Conservation of Migratory Species of Wild Animals (CMS)[6]
6. Convention for the Conservation of Arctic Seals[7]
7. Convention on the International Regulations for Preventing Collisions at Sea[8]
8. Convention on Biological Diversity[9]
9. Convention on Nuclear Safety (NS)[10]

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[1] See chap 3 for a comprehensive discussion on statutory liabilities, including liability in accordance with international legal principles; http://www.environment.gov.za/enviro-info/env/intro.htm (last accessed on 3 March 2008).

[2] Signed in 1964;http://en.wikipedia.org/wiki/Agreed_Measures_for_the_Conservation_of_Antarctic_Fauna_and_Flora (last accessed on 2 February 2009).

[3] Signed as a party with reservation on 13 September 2002; http://www.iaea.org/Publications/Documents/Infcircs/2007/infcirc703.pdf (last accessed on 2 February 2009).

[4] Signed on 1 December 1959 and ratified on 21 June 1960; http://en.wikipedia.org/wiki/Antarctic_Treaty_System.

[5] Approved on 27 March 1994 and acceded on 5 April 1994. Even though a draft policy for Hazardous Waste Management has been published in GN 1064 *Government Gazette* No 15987 dated 30 September 1994, and Proposed Regulations drafted (undated), no final regulations have been made in line with the model regulations proposed by the Basel Convention; see also Kotzé L "Die vervoer van gevaarlike en giftige afval per skip: Suid-Afrika en eise vir suiwer ekonomiese verlies" 2002 *Word and action* 18; http://www.basel.int/text/con-e-rev.pdf (last accessed on 2 February 2009).

[6] Acceded in December 1991; http://www.cms.int/pdf/convtxt/cms_convtxt_english.pdf (last accessed on 2 February 2009).

[7] Signed 9 June 1972 and ratified 15 August 1972; http://untreaty.un.org/English/UNEP/antarticseals_english.pdf (last accessed on 2 February 2009).

[8] Signed 30 December 1976 and acceded 15 July 1977; http://www.imo.org/Conventions/contents.asp?doc_id=649&topic_id=257 (last accessed on 2 February 2009).

[9] Signed in June 1993 and ratified on 2 November 1995; http://www.cbd.int/ (last accessed on 2 February 2009).

[10] Ratified on 24 December 1996; http://www-ns.iaea.org/conventions/nuclear-safety.htm (last accessed on 2 February 2009).

10. Convention on Supplementary Compensation for Nuclear Damage (SUPP)[11]
11. Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)[12]
12. Convention on the Physical Protection for Nuclear Material (CPPNM)[13]
13. Geneva Convention on Long-Range Transboundary Air Pollution[14]
14. International Convention for the Prevention of Pollution from Ships (MARPOL)[15]
15. International Convention for the Regulation of Whaling (IWC)[16]
16. International Convention on Civil Liability for Oil Pollution Damage (CLC Convention)[17]
17. International Convention on Load Lines[18]
18. International Convention on Salvage 1989[19]
19. Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (RADW)[20]
20. Kyoto Protocol to the New York Convention of 1992 on Climate Change[21]
21. Montreal Protocol for the Protection of the Ozone Layer[22]

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[11] Currently a convention under negotiation; http://www.iaea.org/Publications/Documents/Infcircs/1998/infcirc567.shtml (last accessed on 2 February 2009).
[12] Ratified in 1982 and acceded in September 1980; http://sedac.ciesin.org/entri/texts/antarctic.marine.resources.1980.html (last accessed on 2 February 2009).
[13] Party with reservation signed on 18 May 1981; http://cns.miis.edu/inventory/pdfs/cppnm.pdf (last accessed on 2 February 2009).
[14] Signed 13 November 1979; http://cns.miis.edu/inventory/pdfs/cppnm.pdf (last accessed on 2 February 2009).
[15] Of 1973 as amended in 1978; http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258 (last accessed on 2 February 2009).
[16] Ratified in 1946; http://en.wikipedia.org/wiki/International_Convention_for_the_Regulation_of_Whaling (last accessed on 2 February 2009).
[17] Adopted in 1969 amended in 2003; http://www.austlii.edu.au/au/other/dfat/treaties/1968/23.html (last accessed on 3 February 2009).
[18] Signed 14 December 1966 and acceded 21 July 1968; http://www.imo.org/Conventions/mainframe.asp?topic_id=259&doc_id=687 (last accessed on 3 February 2009).
[19] Agreed to in terms of the Wreck and Salvage Act 94 of 1996; http://www.imo.org/Conventions/mainframe.asp?topic_id=259&doc_id=687 (last accessed on 3 February 2009).
[20] Acceded to on 15 November 2006, and entered into force on 13 February 2007; http://www.iaea.org/Publications/Documents/Conventions/jointconv.html (last accessed on 3 February 2009).
[21] DEC 2002/358 [2002] O.J. L130/1; http://en.wikipedia.org/wiki/Kyoto_Protocol (last accessed on 3 February 2009).
[22] Ratified and acceded to on 15 January 1990; http://www.moe.gov.lb/Corporate/The+ministry/International+Agreements/ (last accessed on 3 February 2009).

22. Paris Convention for the Prevention of Marine Pollution from Land Based Sources.[23]
23. Persistent Organic Pollutants Convention (POP's)[24]
24. Ramsar Convention on Wetlands of International Importance, especially Waterfowl Habitat[25]
25. The Treaty on the Prohibition of the Emplacement of Nuclear Weapons and other Weapons of Mass Destruction on the Seabed and the Ocean Floor and the Subsoil thereof[26]
26. United Nations Convention to Combat Desertification in Countries Experiencing Droughts and/or Desertification, Particularly in Africa[27]
27. United Nations Convention on the Law of the Sea of 10 December 1982 (UNCLOS)[28]
28. United Nations Framework Convention on Climate Change (UNFCCC)[29]
29. Vienna Convention on Civil Liability for Nuclear Damage[30]
30. World Heritage Convention concerning the Protection of the World Cultural and Natural Heritage.[31]

[23] Dec 75/437[1975] O.J. L194/5; http://www.opcw.org/chemical-weapons-convention/related-international-agreements/toxic-chemicals-and-the-environment/marine-pollution-from-land-based-sources/ (last accessed on 3 February 2009).
[24] Currently a convention under negotiation; http://www.chem.unep.ch/pops/ (last accessed on 3 February 2009).
[25] Signed and ratified on 12 March 1975; http://ekh.unep.org/?q=node/678 (last accessed on 3 February 2009).
[26] Ratified 14 November 1973; http://www.un-documents.net/seabed.htm (last accessed on 3 February 2009).
[27] Signed on 9 January 1995 and ratified on 30 September 1997; http://www.unccd.int/convention/text/convention.php?annexNo=0 (last accessed on 3 February 2009).
[28] Signed in 1994 and ratified on 20 August 1997; http://www.unccd.int/convention/text/convention.php?annexNo=0 (last accessed on 3 February 2009).
[29] Signed on 27 August 1997, and ratified on 29 August 1997; http://unfccc.int/2860.php (last accessed on 3 February 2009).
[30] Currently a convention under negotiation; http://www.world-nuclear.org/info/inf67.html (last accessed on 3 February 2009).
[31] Ratified on 10 July 1997; http://portal.unesco.org/en/ev.php- (last accessed on 3 February 2009).